MASSACHUSETTS

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Medical Policy

Bi-Level Positive Airway Pressure (BPAP) Devices

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Policy Number: 527

BCBSA Reference Number: NA

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Policy [1]

Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity

Indications for Bi-Level Positive Airway Pressure Devices (BPAP)

Bi-Level Positive Airway Pressure (BPAP) Devices may be considered MEDICALLY NECESSARY for the following conditions:

BPAP (without back-up rate feature)

- Appropriate for patients with OSA who have failed CPAP/APAP or require supplemental ventilatory support due to a hypoventilation syndrome
- Appropriate for patients with established CSA diagnosed by an in-lab sleep study when both of the following (a and b) apply:
    a. OSA has been excluded or treated
    b. A titration study (split-night or whole-night) has demonstrated significant improvement of sleep-related hypoventilation adjusted to the settings that will be prescribed for home use (while breathing the individual's usual FiO2)

BPAP (with back-up rate feature)

- Appropriate for patients with established CSA diagnosed by an in-lab sleep study and all of the following (a–c) apply:
    a. OSA has been excluded or treated
    b. BPAP without back-up rate had been attempted but has not successfully treated episodes of desaturation as evidenced by either of the following:
        - Oxygen saturation level is 88% or less for at least five (5) minutes while the patient breathes his/her usual FiO2; **OR**
        - The patient demonstrates Cheyne Stokes respiration for five (5) continuous minutes with oxygen saturation falling to less than 88% at least once during that 5-minute interval
    c. A titration study (split-night or whole-night) has demonstrated significant improvement of sleep-related hypoventilation adjusted to the settings that will be prescribed for home use (while breathing the individual's usual FiO2)

NOTE: Use of BPAP in Adaptive Servo-Ventilation (ASV) mode for management of patients with CSA is appropriate only when left ventricular ejection fraction (LVEF) is >45%

BPAP (with or without back-up rate feature)

- Appropriate in the management of patients with severe COPD demonstrating either of the following (a or b):
    a. PaCO2 measured by arterial blood gas drawn while the patient is awake and breathing his/her usual FiO2 is 45 mmHg or greater; **OR**
    b. Sleep oximetry demonstrates oxygen saturation of 88% or less for at least five continuous minutes while the patient breathes oxygen at 2L per minute or his/her usual FiO2 (whichever is higher).

BPAP (with or without back-up rate feature)

- Appropriate in the management of patients with certain restrictive thoracic disorders when both a and b below are true
    a. The patient has an established diagnosis of a progressive neuromuscular disease, e.g., amyotrophic lateral sclerosis (ALS) **OR** a severe thoracic cage abnormality; **AND**
    b. One of the following statements is true:
        - PaCO2 measured by arterial blood gas drawn while the patient is awake and breathing his/her usual FiO2 is 45 mmHg or greater.
        - Sleep oximetry demonstrates oxygen saturation of 88% or less for at least five continuous minutes while the patient breathes his/her usual FiO2
        - Maximal inspiratory pressure is less than 60 cm H2O or forced vital capacity is less than 50% of predicted (applies to patients with progressive neuromuscular disease only).

Ongoing treatment with BPAP:

Ongoing treatment is indicated for patients who demonstrate compliance with therapy. Demonstration of compliance is required every 90 days for the first year of treatment and annually thereafter. Compliance is defined as:

1. Use of the BPAP device for greater than or equal to four (4) hours per night on 70% of nights during a consecutive thirty (30) day period within the preceding 90 days; **OR**
2. There is clinical evidence submitted by the treating provider that demonstrates continued clinical benefit from use of the positive airway pressure device.

Prior Authorization Information

Inpatient

- For services described in this policy, precertification/preauthorization **IS REQUIRED** for all products if the procedure is performed **inpatient**.

Outpatient

- For services described in this policy, see below for products where prior authorization **might be required** if the procedure is performed **outpatient**.

	Outpatient
Commercial Managed Care (HMO and POS) **Commercial PPO and EPO**	The requirements of BCBSMA Sleep Management Program may require a precertification/prior authorization via AIM Specialty Health. These requirements are member-specific: Please verify member eligibility and requirements through **Online Services** by logging onto **Provider Central**. Refer to our ***Quick Tip*** for an overview of pre-certification and prior authorization requirements. Ordering clinicians should request pre-certification from **AIM Specialty Health** or call 1-866-745-1783 (when applicable). Prior authorization information for Medicare HMO Blue and Medicare PPO Blue is addressed in medical policy #923, High Technology Radiology and Sleep Disorder Management for Medicare Advantage Products.
Indemnity	Prior authorization is not required.

CPT Codes / HCPCS Codes / ICD Codes

Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

The above medical necessity criteria MUST be met for the following codes to be covered for Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity:

HCPCS Codes

HCPCS codes:	Code Description
E0470	Respiratory assist device, bi-level pressure capability, without back-up rate feature, used with non-invasive interface (nasal or facial mask)
E0471	Respiratory assist device, bi-level pressure capability, with back-up rate feature, used with non-invasive interface (nasal or facial mask)
E0561	Humidifier, non-heated, used with positive airway pressure device
E0562	Humidifier, heated, used with positive airway pressure device
E1399	Durable medical equipment, miscellaneous
A4604	Tubing with heating element
A7027	Combination Oral/Nasal Mask used with positive airway pressure device, each
A7028	Oral Cushion, Replacement for Combination Oral/Nasal Mask, each
A7029	Nasal Pillows, Replacement for Combination Oral/Nasal Mask, pair
A7030	Full Face Mask used with positive airway pressure device, each
A7031	Face Mask Cushion, Replacement for Full Face Mask
A7032	Replacement Cushion for Nasal Application Device
A7033	Replacement Pillows for Nasal Application Device, pair
A7034	Nasal Interface (mask or cannula type), used with positive airway pressure device, with/without head strap

A7035	Headgear
A7036	Chinstrap
A7037	Tubing
A7038	Filter, disposable
A7039	Filter, non-disposable
A7044	Oral Interface for Positive Airway Pressure Therapy
A7045	Replacement Exhalation Port for PAP Therapy
A7046	Water chamber for humidifier, replacement, each

Description

This policy is applicable to patients with established sleep disorders (obstructive sleep apnea [OSA], central sleep apnea [CSA], or mixed sleep disorders), severe chronic obstructive pulmonary disease (COPD) and certain restrictive thoracic disorders requiring initial or ongoing therapy with bi-level positive airway pressure systems and associated supplies. Positive airway pressure treatment modalities and add-on devices, reported using CPT code E1399 (including but not limited to the following products: PapNap, Provent, headstraps, certain dental devices, Weaver's masks cloths) not addressed in this policy are considered to be not medically necessary.

Overview

Bi-level positive airway pressure (BPAP) refers to a ventilation modality whereby different levels of positive airway pressure are applied during inspiration and expiration. BPAP may be administered via a non-invasive interface (whole face mask, nasal mask or nasal cushions) or via an invasive interface (endotracheal intubation or tracheostomy). This guideline is limited to the use of BPAP via non-invasive interface. Furthermore, the guideline refers to the chronic use of BPAP in the outpatient setting rather than acute inpatient use. In addition to providing positive airway pressure which varies from inspiration to expiration, some BPAP machines also have a back-up rate feature. The back-up rate feature ensures that the patient receives a minimum number of breaths per minute. Some patients who are candidates for BPAP may also benefit from the back-up rate feature (see specific indications below).

For patients requiring treatment with BPAP, pressure levels need to be titrated to each patient's particular needs. For patients whose diagnostic sleep study is performed in a lab setting, it may be possible to diagnose OSA and perform the titration study in a single night. This approach, known as split-night study, may be used when the apnea/hypopnea index (AHI) exceeds 20 per hour based on the first 2 hours of testing. Those who do not meet criteria for split-night protocol require either a second overnight titration study or temporary use of auto-titrating BPAP as a means of BPAP titration. Titration may not be required if auto-titrating BPAP is selected as the long-term therapeutic approach.

As with other positive airway pressure (PAP) therapies, long term compliance is an issue. Adherence to therapy is defined by the Centers for Medicare & Medicaid Services (CMS) as use of PAP greater than or equal to 4 hours per night on 70% of nights during a consecutive thirty (30) day period. Compliance may be as low as 50% at one year and for this reason compliance monitoring is an important component of the management of patients using BPAP. Every effort should be made to achieve compliance. Newer PAP devices record (and may transmit) use times such that compliance monitoring may be performed remotely. Unless compliance is achieved and documented, the continued use of PAP devices (and the ongoing provision of associated supplies) cannot be considered to be medically necessary.

Policy History

Date	Action
1/2019	Winx device removed from description. The ApniCure Winx device as a treatment for obstructive sleep apnea is no longer available for purchase/use. Effective 1/27/2019. Based on AIM Sleep Disorder Management Diagnostic & Treatment Guidelines. Effective January 27, 2019.
1/2018	Prior authorization information for Medicare HMO Blue and Medicare PPO Blue removed. Prior authorization information for Medicare HMO Blue and Medicare PPO Blue is addressed in medical policy #923, High Technology Radiology and Sleep Disorder

	Management for Medicare Advantage Products. 1/1/2018
11/2017	Medically necessary criteria revised. Effective 11/20/2017. Based on AIM Sleep Disorder Management Diagnostic & Treatment Guidelines. Effective November 20, 2017.
5/2017	Prior Authorization Information clarified. 5/1/2017
5/2017	New medically necessary indications described. Effective 5/15/2017. AIM Sleep Disorder Management Diagnostic & Treatment Guidelines. Effective 5/15/2017
2/2017	BPAP (with back-up rate feature) OSA clarified to CSA. Description clarified. New references added. 2/2/2017 AIM Sleep Disorder Management Diagnostic & Treatment Guidelines. Effective 1/1/2016.
9/2014	Clarified coding information.
5/2014	Clarified coding information.
1/2014	Titration PSG language and qualifying patients for oxygen therapy for Medicare Advantage revised based on L11528. Effective 1/1/2014.
10/2013	Indications clarified. Effective October 2013.
7/2013	Indications for Medicare Advantage clarified. Effective 7/2013.
7/2013	Adopted AIM Program Guidelines on Sleep Disorder Management, January 2013 Version V1.3. Effective 7/1/2013.
2/2013	BCBSA National medical policy review. Changes to policy statements. Effective 2/4/2013.
1/2013	Updated to add new CPT code 95782 and 95783.
11/2011-4/2012	Medical policy ICD 10 remediation: Formatting, editing and coding updates. No changes to policy statements.
12/2011	BCBSA National medical policy review. Changes to policy statements.
4/2011	Reviewed - Medical Policy Group - Cardiology and Pulmonology. No changes to policy statements.
3/2011	Reviewed - Medical Policy Group - Allergy and ENT/Otolaryngology. No changes to policy statements.
7/2010	BCBSA National medical policy review. Changes to policy statements.
9/2010	BCBSA National medical policy review. Changes to policy statements.
6/2010	BCBSA National medical policy review. Changes to policy statements.
5/2010	BCBSA National medical policy review. Changes to policy statements.
3/2010	Reviewed - Medical Policy Group - Allergy and ENT/Otolaryngology. No changes to policy statements.
5/2009	Updated prior authorization information.
3/2009	Reviewed - Medical Policy Group - Allergy and ENT/Otolaryngology. No changes to policy statements.
3/2008	BCBSA National medical policy review. Changes to policy statements.
5/2007	Updated coverage and non-coverage guidelines for oral appliances for sleep apnea.
3/2007	Reviewed - Medical Policy Group - Allergy and ENT/Otolaryngology. No changes to policy statements.
2/2007	BCBSA National medical policy review. Changes to policy statements.

Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

Medical Policy Terms of Use
Managed Care Guidelines
Indemnity/PPO Guidelines
Clinical Exception Process
Medical Technology Assessment Guidelines

References

Specialty Society Guidelines and Systematic Reviews

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2. Aurora RN, Chowdhuri S, Ramar K, et al. The treatment of central sleep apnea syndromes in adults: practice parameters with an evidence-based literature review and meta-analyses. *Sleep*. 2012;35(1):17-40.
3. Balk EM, Moorthy D, Obadan NO, et al. *Diagnosis and Treatment of Obstructive Sleep Apnea in Adults*. Comparative Effectiveness Review No. 32. Prepared by Tufts Evidence-based Practice Center under Contract No. 290-2007-10055-1. AHRQ Publication No. 11-EHC052-EF. Rockville, MD: Agency for Healthcare Research and Quality; July 2011.
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8. Vital FM, Ladeira MT, Atallah AN. Non-invasive positive pressure ventilation (CPAP or bilevel NPPV) for cardiogenic pulmonary oedema. *Cochrane Database Syst Rev*. 2013 May 31;5:CD005351.

Other Literature

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2. Hill NS. Noninvasive ventilation in chronic obstructive pulmonary disease. *Clin Chest Med*. 2000 Dec;21(4):783-797.
3. Keenan SP, Mehta S. Noninvasive ventilation for patients presenting with acute respiratory failure: the randomized controlled trials. *Respir Care*. 2009;54(1):116-26.
4. Ozsancak A, D’Ambrosio C, Hill NS. Nocturnal noninvasive ventilation. *Chest*. 2008;133(5):1275-1286.

Endnotes

[1]Based on AIM Specialty Health: Sleep Disorder Management Diagnostic & Treatment Guidelines Program.