

Blue Cross Blue Shield of Massachusetts is an Independent Licenses of the Blue Cross and Blue Shield Association

Medical Policy

Surgical and Non-CPAP Treatment of Snoring and Obstructive Sleep Apnea Syndrome

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Policy Number: 130

BCBSA Reference Number: 7.01.101; 2.01.18 (For Plan internal use only)

Related Policies

Home Cardiorespiratory Monitoring, #224

Policy

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

Palatopharyngoplasty

Palatopharyngoplasty (eg, uvulopalatopharyngoplasty, uvulopalatal flap, expansion sphincter pharyngoplasty, lateral pharyngoplasty, palatal advancement pharyngoplasty, relocation pharyngoplasty) may be considered MEDICALLY NECESSARY for the treatment of clinically significant obstructive sleep apnea (OSA) syndrome in appropriately selected adults who have failed an adequate trial of continuous positive airway pressure (CPAP) or failed an adequate trial of an oral appliance. Clinically significant OSA is defined as those individuals who have:

- Apnea/hypopnea Index (AHI) or Respiratory Disturbance Index (RDI) 15 or more events per hour, OR
- AHI or RDI 5 or more events and 14 or less events per hour with documented symptoms of excessive daytime sleepiness, impaired cognition, mood disorders or insomnia, or documented hypertension, ischemic heart disease, or history of stroke.

Hyoid suspension

Hyoid suspension, surgical modification of the tongue, and/or maxillofacial surgery, including mandibular-maxillary advancement (MMA), may be considered <u>MEDICALLY NECESSARY</u> in appropriately selected adult individuals with clinically significant OSA and objective documentation of hypopharyngeal obstruction who have failed an adequate trial of continuous positive airway pressure (CPAP) or failed an adequate trial of an oral appliance. Clinically significant OSA is defined as those individuals who have:

- AHI or RDI 15 or more events per hour, OR
- AHI or RDI 5 or more events and 14 or less events per hour with documented symptoms of excessive daytime sleepiness, impaired cognition, mood disorders or insomnia, or documented hypertension, ischemic heart disease, or history of stroke.

Adenotonsillectomy

Adenotonsillectomy may be considered <u>MEDICALLY NECESSARY</u> in children (2 -18 years of age) with obstructive sleep apnea and hypertrophic tonsils as determined through individual history and clinical exam. A polysomnography is recommended in individuals with sleep-disordered breathing in certain conditions¹, see below:

The American Academy of Otolaryngology - Head and Neck Surgery <u>Clinical Practice Guideline:</u> <u>Polysomnography for Sleep-Disordered Breathing Prior to Tonsillectomy in Children</u> recommends a polysomnography in the following clinical circumstances.

- The clinician should refer children with sleep-disordered breathing for polysomnography if they exhibit certain complex medical conditions such as obesity, Down syndrome, craniofacial abnormalities, neuromuscular disorders, sickle cell disease, or mucopolysaccharidoses.
- The clinician should advocate for polysomnography prior to tonsillectomy for sleep-disordered breathing in children without any of the comorbidities listed in statement 1 for whom the need for surgery is uncertain or when there is discordance between tonsillar size on physical examination and the reported severity of sleep-disordered breathing.

Surgical treatment of OSA

Surgical treatment of OSA that does not meet the criteria above would be considered **NOT MEDICALLY NECESSARY**.

The following minimally-invasive surgical procedures are considered **INVESTIGATIONAL** for the sole or adjunctive treatment of OSA or upper airway resistance syndrome:

- Laser-assisted palatoplasty or radiofrequency volumetric tissue reduction of the palatal tissues
- Radiofrequency volumetric tissue reduction of the tongue, with or without radiofrequency reduction of the palatal tissues
- Palatal stiffening procedures including, but not limited to, cautery-assisted palatal stiffening operation, injection of a sclerosing agent, and the implantation of palatal implants
- Tongue base suspension
- All other minimally-invasive surgical procedures not described above.

All interventions, including laser-assisted palatoplasty, radiofrequency volumetric tissue reduction of the palate, or palatal stiffening procedures, are **NOT MEDICALLY NECESSARY** for the treatment of snoring in the absence of documented OSA; snoring alone is not considered a medical condition.

Non-CPAP Medical Treatment of OSA²

The use of an abbreviated daytime sleep session for acclimation to CPAP (PAP-NAP) is considered INVESTIGATIONAL.

The use of a sleep positioning trainer with vibration is considered <u>INVESTIGATIONAL</u> for the treatment of positional OSA.

The use of daytime electrical stimulation of the tongue is considered **INVESTIGATIONAL** for the treatment of OSA.

Nasal expiratory positive airway pressure (EPAP) and oral pressure therapy devices are considered **INVESTIGATIONAL**.

For medically necessary indications on APAP, CPAP, BPAP, see <u>Carelon Medical Benefits Management</u> Clinical Guidelines for Sleep Disorder.

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 <u>might be</u> <u>required</u> if the procedure is performed <u>outpatient</u>.

	Outpatient
Commercial Managed Care (HMO and POS)	Prior authorization is required for sleep apnea surgery (CPT codes 42145, 21193-21199, 21206 and 21685).
	Prior authorization is not required for adenoidectomy and tonsillectomy procedures (CPT codes 42820-42821, 42825-42826, 42830-42831 and 42835-42836).
Commercial PPO	Prior authorization is required for sleep apnea surgery, adenoidectomy or tonsillectomy. (CPT codes 42145, 21193-21199, 21206 and 21685).
	Prior authorization is not required for adenoidectomy and tonsillectomy procedures (CPT codes 42820-42821, 42825-42826, 42830-42831 and 42835-42836).
Medicare HMO Blue SM	Prior authorization is required for sleep apnea surgery (CPT codes 42145, 21193-21199, 21206 and 21685).
	Prior authorization is not required for adenoidectomy and tonsillectomy procedures (CPT codes 42820-42821, 42825-42826, 42830-42831 and 42835-42836).
Medicare PPO Blue SM	Prior authorization is required for sleep apnea surgery (CPT codes 42145, 21193-21199, 21206 and 21685).
	Prior authorization is not required for sleep apnea surgery, adenoidectomy or tonsillectomy procedures (CPT codes 42820-42821, 42825-42826, 42830-42831 and 42835-42836).

Requesting Prior Authorization Using Authorization Manager

Providers will need to use <u>Authorization Manager</u> to submit initial authorization requests for services. Authorization Manager, available 24/7, is the quickest way to review authorization requirements, request authorizations, submit clinical documentation, check existing case status, and view/print the decision letter. For commercial members, the requests must meet medical policy guidelines.

To ensure the service request is processed accurately and quickly:

- Enter the facility's NPI or provider ID for where services are being performed.
- Enter the appropriate surgeon's NPI or provider ID as the servicing provider, not the billing group.

Authorization Manager Resources

Refer to our <u>Authorization Manager</u> page for tips, guides, and video demonstrations.

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 <u>medical necessity criteria MUST</u> be met for the following codes to be covered for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:

CPT Codes

CPT codes:	Code Description
	Reconstruction of mandibular rami, horizontal, vertical, C, or L osteotomy; without bone
21193	graft
	Reconstruction of mandibular rami, horizontal, vertical, C, or L osteotomy; with bone
21194	graft (includes obtaining graft)
	Reconstruction of mandibular rami and/or body, sagittal split; without internal rigid
21195	fixation
21196	Reconstruction of mandibular rami and/or body, sagittal split; with internal rigid fixation
21198	Osteotomy, mandible, segmental
21199	Osteotomy, mandible, segmental; with genioglossus advancement
21206	Osteotomy, maxilla, segmental (e.g., Wassmund or Schuchard)
21685	Hyoid myotomy and suspension
42145	Palatopharyngoplasty (eg, uvulopalatopharyngoplasty, uvulopharyngoplasty)
42820	Tonsillectomy and adenoidectomy; younger than age 12
42821	Tonsillectomy and adenoidectomy; age 12 or over
42825	Tonsillectomy, primary or secondary; younger than age 12
42826	Tonsillectomy, primary or secondary; age 12 or over
42830	Adenoidectomy, primary; younger than age 12
42831	Adenoidectomy, primary; age 12 or over
42835	Adenoidectomy, secondary; younger than age 12
42836	Adenoidectomy, secondary; age 12 or over

ICD-10 Diagnosis Codes

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ICD-10-CM Diagnosis	
codes:	Code Description
G47.30	Sleep apnea, unspecified
G47.33	Obstructive sleep apnea (adult) (pediatric)

ICD-10 Procedure Codes

ICD-10-PCS	
procedure codes:	Code Description
0CQ70ZZ	Repair Tongue, Open Approach
09QN0ZZ	Repair Nasopharynx, Open Approach
09QN3ZZ	Repair Nasopharynx, Percutaneous Approach
09QN4ZZ	Repair Nasopharynx, Percutaneous Endoscopic Approach
09QN7ZZ	Repair Nasopharynx, Via Natural or Artificial Opening
09QN8ZZ	Repair Nasopharynx, Via Natural or Artificial Opening Endoscopic
09RN0JZ	Replacement of Nasopharynx with Synthetic Substitute, Open Approach
09RN7JZ	Replacement of Nasopharynx with Synthetic Substitute, Via Natural or Artificial Opening
09RN8JZ	Replacement of Nasopharynx with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic
09UN0JZ	Supplement Nasopharynx with Synthetic Substitute, Open Approach
09UN7JZ	Supplement Nasopharynx with Synthetic Substitute, Via Natural or Artificial Opening

09UN8JZ	Supplement Nasopharynx with Synthetic Substitute, Via Natural or Artificial Opening
0CQ20ZZ	Endoscopic Repair Hard Palate, Open Approach
0CQ20ZZ 0CQ23ZZ	Repair Hard Palate, Open Approach Repair Hard Palate, Percutaneous Approach
0CQ30ZZ	Repair Soft Palate, Open Approach
0CQ30ZZ 0CQ33ZZ	Repair Soft Palate, Open Approach Repair Soft Palate, Percutaneous Approach
0CQ33ZZ 0CQ73ZZ	,
	Repair Tongue, Percutaneous Approach
0CQ7XZZ	Repair Tongue, External Approach
0CQM0ZZ	Repair Pharynx, Open Approach
0CQM3ZZ	Repair Pharynx, Percutaneous Approach
0CQM4ZZ	Repair Pharynx, Percutaneous Endoscopic Approach
0CQM7ZZ	Repair Pharynx, Via Natural or Artificial Opening
0CQM8ZZ	Repair Pharynx, Via Natural or Artificial Opening Endoscopic
0CQN3ZZ	Repair Uvula, Percutaneous Approach
0CQNXZZ	Repair Uvula, External Approach
0CS20ZZ	Reposition Hard Palate, Open Approach
0CS30ZZ	Reposition Soft Palate, Open Approach
0CTP0ZZ	Resection of Tonsils, Open Approach
0CTQ0ZZ	Resection of Adenoids, Open Approach
0CU207Z	Supplement Hard Palate with Autologous Tissue Substitute, Open Approach
0CU20JZ	Supplement Hard Palate with Synthetic Substitute, Open Approach
0CU20KZ	Supplement Hard Palate with Nonautologous Tissue Substitute, Open Approach
0CU237Z	Supplement Hard Palate with Autologous Tissue Substitute, Percutaneous Approach
0CU23JZ	Supplement Hard Palate with Synthetic Substitute, Percutaneous Approach
0CU23KZ	Supplement Hard Palate with Nonautologous Tissue Substitute, Percutaneous Approach
0CU307Z	Supplement Soft Palate with Autologous Tissue Substitute, Open Approach
0CU30JZ	Supplement Soft Palate with Synthetic Substitute, Open Approach
0CU30KZ	Supplement Soft Palate with Nonautologous Tissue Substitute, Open Approach
0CU337Z	Supplement Soft Palate with Autologous Tissue Substitute, Percutaneous Approach
0CU33JZ	Supplement Soft Palate with Synthetic Substitute, Percutaneous Approach
0CU33KZ	Supplement Soft Palate with Nonautologous Tissue Substitute, Percutaneous Approach
0CUM07Z	Supplement Pharynx with Autologous Tissue Substitute, Open Approach
0CUM0JZ	Supplement Pharynx with Synthetic Substitute, Open Approach
0CUM0KZ	Supplement Pharynx with Nonautologous Tissue Substitute, Open Approach
0CUM77Z	Supplement Pharynx with Autologous Tissue Substitute, Via Natural or Artificial Opening
0CUM7JZ	Supplement Pharynx with Synthetic Substitute, Via Natural or Artificial Opening
0CUM7KZ	Supplement Pharynx with Nonautologous Tissue Substitute, Via Natural or Artificial Opening
	Supplement Pharynx with Autologous Tissue Substitute, Via Natural or Artificial
0CUM87Z	Opening Endoscopic
0CUM8JZ	Supplement Pharynx with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic
0CUM8KZ	Supplement Pharynx with Nonautologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic
0NQT0ZZ	Repair Right Mandible, Open Approach
0NQT3ZZ	Repair Right Mandible, Percutaneous Approach
0NQT4ZZ	Repair Right Mandible, Percutaneous Endoscopic Approach
0NQTXZZ	Repair Right Mandible, External Approach
0NQV0ZZ	Repair Left Mandible, Open Approach
0NQV3ZZ	Repair Left Mandible, Percutaneous Approach

0NQV4ZZ	Repair Left Mandible, Percutaneous Endoscopic Approach
0NQVXZZ	Repair Left Mandible, External Approach
0NUT07Z	Supplement Right Mandible with Autologous Tissue Substitute, Open Approach
0NUT0JZ	Supplement Right Mandible with Synthetic Substitute, Open Approach
0NUT0KZ	Supplement Right Mandible with Nonautologous Tissue Substitute, Open Approach
0NUT37Z	Supplement Right Mandible with Autologous Tissue Substitute, Percutaneous Approach
0NUT3JZ	Supplement Right Mandible with Synthetic Substitute, Percutaneous Approach
0NUT3KZ	Supplement Right Mandible with Nonautologous Tissue Substitute, Percutaneous Approach
0NUT47Z	Supplement Right Mandible with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
0NUT4JZ	Supplement Right Mandible with Synthetic Substitute, Percutaneous Endoscopic Approach
0NUT4KZ	Supplement Right Mandible with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach
0NUV0JZ	Supplement Left Mandible with Synthetic Substitute, Open Approach
0NUV0KZ	Supplement Left Mandible with Nonautologous Tissue Substitute, Open Approach
0NUV3JZ	Supplement Left Mandible with Synthetic Substitute, Percutaneous Approach
0NUV3KZ	Supplement Left Mandible with Nonautologous Tissue Substitute, Percutaneous Approach
0NUV4JZ	Supplement Left Mandible with Synthetic Substitute, Percutaneous Endoscopic Approach
0NUV4KZ	Supplement Left Mandible with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach

The following CPT and HCPCS codes are considered investigational for <u>Commercial Members:</u> <u>Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:</u>

CPT Codes

CPT codes:	Code Description
41512	Tongue base suspension, permanent suture technique
41530	Submucosal ablation of the tongue base, radiofrequency, 1 or more sites, per session

HCPCS Codes

HCPCS	
codes:	Code Description
A7047	Oral interface used with respiratory suction pump, each
E0492	Power source and control electronics unit for oral device/appliance for neuromuscular electrical stimulation of the tongue muscle, controlled by phone application
E0493	Oral device/appliance for neuromuscular electrical stimulation of the tongue muscle, used in conjunction with the power source and control electronics unit, controlled by phone application, 90-day supply
E0530	Electronic positional obstructive sleep apnea treatment, with sensor, includes all components and accessories, any type
S2080	Laser-assisted uvulopalatoplasty (LAUP)

According to the policy statement above, the following HCPCS codes are considered investigational for the conditions listed for <u>Commercial Members: Managed Care (HMO and POS)</u>, <u>PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:</u>

HCPCS Codes

HCPCS	Code Description
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codes:	
E0600	Respiratory suction pump, home model, portable or stationary, electric
A7002	Tubing, used with suction pump, each
E0490	Power source and control electronics unit for oral device/appliance for neuromuscular electrical stimulation of the tongue muscle, controlled by hardware remote
E0491	Oral device/appliance for neuromuscular electrical stimulation of the tongue muscle, used in conjunction with the power source and control electronics unit, controlled by hardware remote, 90-day supply

Description

Obstructive Sleep Apnea

Obstructive sleep apnea (OSA) is characterized by repetitive episodes of upper airway obstruction due to the collapse and obstruction of the upper airway during sleep. The hallmark symptom of OSA is excessive daytime sleepiness, and the typical clinical sign of OSA is snoring, which can abruptly cease and be followed by gasping associated with a brief arousal from sleep. The snoring resumes when the patient falls back to sleep, and the cycle of snoring/apnea/arousal may be repeated as frequently as every minute throughout the night. Sleep fragmentation associated with the repeated arousal during sleep can impair daytime activity. For example, adults with OSA-associated daytime somnolence are thought to be at higher risk for accidents involving motorized vehicles (ie, cars, trucks, heavy equipment). OSA in children may result in neurocognitive impairment and behavioral problems. In addition, OSA affects the cardiovascular and pulmonary systems. For example, apnea leads to periods of hypoxia, alveolar hypoventilation, hypercapnia, and acidosis. This, in turn, can cause systemic hypertension, cardiac arrhythmias, and cor pulmonale. Systemic hypertension is common in individuals with OSA. Severe OSA is associated with decreased survival, presumably related to severe hypoxemia, hypertension, or an increase in automobile accidents related to overwhelming sleepiness.

There are racial and ethnic health disparities seen for OSA, impacting the prevalence of disease and accessibility to treatment options, particularly affecting children. Black children are 4 to 6 times more likely to have OSA than White children. Among young adults 26 years of age or younger, African American individuals are 88% more likely to have OSA compared to White individuals. Another study found that African American individuals 65 years of age and older were 2.1 times more likely to have severe OSA than White individuals of the same age group. These health disparities may affect accessibility to treatment for OSA and impact health outcomes. One analysis of insurance claims data, including over 500,000 patients with a diagnosis of OSA, found that increased age above the 18- to 29- year range (p<.001) and Black race (p=.020) were independently associated with a decreased likelihood of receiving surgery for sleep apnea. Lee et al (2022) found that Black men had a continuous mortality increase specifically related to OSA over the study period (1999 to 2019; annual percentage change 2.7%; 95% confidence interval, 1.2 to 4.2) compared to any other racial group. Shape of the study period (1999 to 2019; annual percentage change 2.7%; 95% confidence interval, 1.2 to 4.2) compared to any other racial group.

Terminology and diagnostic criteria for OSA are shown in Table 1

Table 1. Terminology and Definitions for Obstructive Sleep Apnea

Terms	Definitions
Respiratory Event	
Apnea	The frequency of apneas and hypopneas is measured from channels assessing oxygen desaturation, respiratory airflow, and respiratory effort. In adults, apnea is defined as a drop in airflow by ≥90% of pre-event baseline for at least 10 seconds. Due to faster respiratory rates in children, pediatric scoring criteria define an apnea as ≥2 missed breaths, regardless of its duration in seconds.
Hypopnea	Hypopnea in adults is scored when the peak airflow drops by at least 30% of preevent baseline for at least 10 seconds in association with either at least 4% arterial oxygen desaturation or an arousal. Hypopneas in children are scored by a ≥50% drop in nasal pressure and either a ≥3% decrease in oxygen saturation or an associated arousal.

Terms	Definitions		
Respiratory Even	Respiratory Event		
RERA	Respiratory event-related arousal is defined as an event lasting at least 10 seconds associated with flattening of the nasal pressure waveform and/or evidence of increasing respiratory effort, terminating in an arousal but not otherwise meeting criteria for apnea or hypopnea		
Respiratory event	reporting		
Apnea/Hypopnea Index (AHI)	The average number of apneas or hypopneas per hour of sleep		
Respiratory Disturbance Index (RDI)	The respiratory disturbance index is the number of apneas, hypopneas, or respiratory event-related arousals per hour of sleep time. RDI is often used synonymously with the AHI.		
Respiratory event index (REI)	The respiratory event index is the number of events per hour of monitoring time. Used as an alternative to AHI or RDI in home sleep studies when actual sleep time from EEG is not available.		
Diagnosis			
Obstructive sleep apnea (OSA)	Repetitive episodes of upper airway obstruction due to the collapse and obstruction of the upper airway during sleep		
Mild OSA	In adults: AHI of 5 to <15. In children: AHI ≥1 to 5		
Moderate OSA	AHI of 15 to < 30. Children: AHI of > 5 to 10		
Severe OSA	Adults: AHI ≥30. Children: AHI of >10		
Treatment			
Positive airway pressure (PAP)	Positive airway pressure may be continuous (CPAP) or auto-adjusting (APAP) or Bilevel (Bi-PAP).		
PAP Failure	Usually defined as an AHI greater than 20 events per hour while using PAP		
PAP Intolerance	PAP use for less than 4 h per night for 5 nights or more per week, or refusal to use CPAP. CPAP intolerance may be observed in individuals with mild, moderate, or severe OSA		

OSA: obstructive sleep apnea; PSG: Polysomnographic

Summary

Description

Obstructive sleep apnea (OSA) syndrome is characterized by repetitive episodes of upper airway obstruction due to the collapse of the upper airway during sleep. For individuals who have failed conservative therapy, established surgical approaches may be indicated. This evidence review addresses minimally invasive surgical procedures for the treatment of OSA. They include laser-assisted uvuloplasty, tongue base suspension, radiofrequency volumetric reduction of palatal tissues and base of tongue, palatal stiffening procedures, and hypoglossal nerve stimulation (HNS). This evidence review does not address conventional surgical procedures such as uvulopalatopharyngoplasty (UPPP), hyoid suspension, surgical modification of the tongue, maxillofacial surgery, or adenotonsillectomy.

Summary of Evidence

For individuals who have obstructive sleep apnea (OSA) who receive laser-assisted uvulopalatoplasty, the evidence includes a single randomized controlled trial (RCT). Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. The trial indicates reductions in snoring, but limited efficacy on the Apnea/Hypopnea Index (AHI) or symptoms in patients with mild-to-

moderate OSA. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have OSA who receive radiofrequency volumetric reduction of palatal tissues and base of tongue, the evidence includes 2 sham-controlled randomized trials and a prospective, single-arm cohort study. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. Single-stage radiofrequency to palatal tissues did not improve outcomes compared with sham. Multiple sessions of radiofrequency to the palate and base of tongue did not significantly (statistically or clinically) improve AHI, and the improvement in functional outcomes was not clinically significant. The prospective cohort study included 56 patients with mild-to-moderate OSA who received 3 sessions of office-based multilevel RFA. Results demonstrated improvement in AHI and Oxygen Desaturation Index (ODI) at the 6-month follow up. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have OSA who receive palatal stiffening procedures, the evidence includes 2 sham-controlled randomized trials and several case series. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. The 2 RCTs differed in their inclusion criteria, with the study that excluded patients with Friedman tongue position of IV and palate of 3.5 cm or longer reporting greater improvement in AHI (45% success) and snoring (change of -4.7 on a 10-point visual analog scale) than the second trial. Additional studies are needed to corroborate the results of the more successful trial and, if successful, define the appropriate selection criteria. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have OSA who receive tongue base suspension, the evidence includes a feasibility RCT with 17 patients. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. The single RCT compared tongue suspension plus UPPP with tongue advancement plus uvulopalatopharyngoplasty (UPPP) and showed success rates of 50% to 57% for both procedures. Additional RCTs with a larger number of subjects are needed to determine whether tongue suspension alone or added to UPPP improves the net health outcome. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Policy History

Date	Action
1/2024	Clarified coding information.
10/2023	Clarified coding information.
9/2023	Policy clarified to include prior authorization requests using Authorization Manager.
8/2023	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
3/2023	AIM Specialty Health changed its name to Carelon Medical Benefits Management.
9/2022	Hypoglossal nerve stimulation for obstructive sleep apnea (OSA) retired from policy 130. Effective 9/11/2022. For coverage information, see AIM Specialty Health Clinical Appropriateness Guidelines for Sleep Disorder Management. Clarified coding information.
8/2022	Annual policy review. References added. Minor editorial refinements to policy statements; intent unchanged. Policy statements unchanged.
6/2022	Prior authorization information clarified for PPO plans. Effective 6/1/2022.
4/2022	Clarified coding information.
1/2022	Clarified coding information and prior authorization table.
11/2021	Annual policy review. New investigational indications described for Non-CPAP Medical Treatment of OSA: Daytime Tongue Stimulation; Daytime sleep study (PAP-NAP); Nasal Expiratory Positive Airway Pressure; eXciteOSA; and NightBalance Sleep Position Trainer. Clarified coding information. Title changed. Effective 11/2021.
1/2021	Medicare information removed. See MP #132 Medicare Advantage Management for local coverage determination and national coverage determination reference.
8/2020	Annual policy review. Description, summary and references updated. Policy

	statement(s) unchanged.
4/2020	Local Coverage Determination (LCD): Hypoglossal Nerve Stimulation for the Treatment of Obstructive Sleep Apnea (L38387) added. Effective 4/1/2020.
8/2019	Annual policy review. The indication for hypoglossal nerve stimulation was clarified to indicate apnea/hypopnea index of ≥15 for alignment with the Food and Drug Administration-approved indication.
5/2019	Annual policy review. New medically necessary indications described. Hypoglossal nerve stimulation is medically necessary under specified conditions. Clarified coding information. Effective 5/1/2019.
2/2019	Policy statements on adenotonsillectomy in children with obstructive sleep apnea and hypertrophic tonsils revised. Effective 2/1/2019.
6/2018	Clarified coding information.
1/2018	Clarified coding information.
10/2017	New references added from Annual policy review.
5/2017	Annual policy review. Medically necessary policy statement revised to include variants of palatopharyngoplasty. New references added. Effective 5/1/2017.
1/2017	Clarified coding information for the 2017 code changes.
6/2016	Clarified coding information.
10/2014	Annual policy review. New investigational indications described. Coding information clarified. Effective 10/1/2014.
5/2014	Updated Coding section with ICD10 procedure and diagnosis codes. Effective 10/2015.
3/2014	Coding information clarified.
11/2011-	Medical policy ICD 10 remediation: Formatting, editing and coding updates. No
4/2012	changes to policy statements.
12/2010	Annual policy review. Changes made to policy statement.
9/1/2010	Annual policy review. Changes made to policy statement.
8/1/2009	Medical Policy 130 developed effective 8/1/2009.
5/2008	Updated to clarify coverage exclusion of radiofrequency volumetric tissue reduction of
	the palatal tissues with coblation technology.
2/2008	Annual policy review. No 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

Surgical Treatment of Snoring and Obstructive Sleep Apnea Syndrome

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Endnotes

¹ Based on expert opinion and the American Academy of Otolaryngology - Head and Neck Surgery Clinical Practice Guideline: Polysomnography for Sleep-Disordered Breathing Prior to Tonsillectomy in Children. Ootolaryngology Head Neck Surg. 2011 Jul;145.