# Sleep Disorder Treatment

| LOB(s): | State(s): |
|---|---|
| ☒ *Commercial*<br>☒ *Medicare* | ☒ *Idaho* ☒ *Montana* ☒ *Oregon* ☒ *Washington* ☐ *Other:* |
| ☒ *Medicaid* | ☒ *Oregon* ☐ *Washington* |

## Enterprise Policy

*Clinical Guidelines are written when necessary to provide guidance to providers and members in order to outline and clarify coverage criteria in accordance with the terms of the Member's policy. This Clinical Guideline only applies to PacificSource Health Plans, PacificSource Community Health Plans, and PacificSource Community Solutions in Idaho, Montana, Oregon, and Washington. Because of the changing nature of medicine, this list is subject to revision and update without notice. This document is designed for informational purposes only and is not an authorization or contract. Coverage determinations are made on a case-by-case basis and subject to the terms, conditions, limitations, and exclusions of the Member's policy. Member policies differ in benefits and to the extent a conflict exists between the Clinical Guideline and the Member's policy, the Member's policy language shall control. Clinical Guidelines do not constitute medical advice nor guarantee coverage.*

## Background

Airway obstruction during sleep is a commonly recognized problem, which may be associated with significant morbidity. Organic related sleep disorders, such as Obstructive Sleep Apnea (OSA), Central Sleep Apnea (CSA), Mixed Sleep Apnea or Upper Airway Resistance Syndrome (UARS) are associated with symptoms of excessive daytime sleepiness, metabolic dysfunction, impaired daytime function and an increased risk of cardiovascular disease. Various diagnostic studies and treatment approaches may be utilized in managing these conditions.

**Types of Sleep Studies:**

1. **Home Sleep Study Testing (HST)** is done using unattended portable monitoring devices. Home sleep studies may be appropriate for patients when an in-laboratory polysomnogram is not possible (e.g., home-bound patients). Home sleep studies are not considered appropriate for patients with chronic obstructive pulmonary disease or suspected sleep complications, such as central apnea or narcolepsy.

2. **Multiple Sleep Latency Tests (MSLT)** measures the time it takes for the subject to fall asleep and is used primarily in cases of suspected narcolepsy.

3. **Nocturnal Polysomnogram (PSG)** is usually done in a hospital setting with a technician present throughout and includes electroencephalography (EEG), electromyography (EMG), electro-oculography (EOG), oral and nasal airflow, chest movements, oxygen saturation, heart rate and rhythm, and snoring intensity measurements. This test is considered to gold standard for diagnosing sleep apnea and distinguishing obstructive from non-obstructive sleep apnea.

4. **Overnight Oximetry** can be done at home or in a hospital setting. It is used primarily to screen for sleep apnea in selected patients. Results may be limited, and additional testing may be indicated.

**Apnea Hypopnea Index (AHI)**

The AHI is the number of apneas or hypopneas recorded during the study per hour of sleep. The severity of obstructive sleep apnea is based on AHI events.

**Classification of Obstructive Sleep Apnea**

- None/Minimal: AHI less than 5 episodes per hour of sleep
- Mild - AHI greater than or equal to 5 and less than 15 episodes per hour of sleep
- Moderate - AHI greater than or equal to 15 and less than 30 episodes per hour of sleep
- Severe - AHI greater than or equal to 30 episodes per hour of sleep

**Treatment Options:**

- CPAP/BiPAP: Nasal continuous positive airway pressure is the treatment of choice for most patients with OSA and subjective daytime sleepiness; adherence is lower in patients who do not experience sleepiness. CPAP improves upper airway patency by applying positive pressure to the collapsible upper airway segment.
- Oral appliances are designed to advance the mandible or, at the very least, prevent retrusion during sleep.
- Surgical treatment of OSA includes multiple procedures and approaches that enlarge and/or stabilize the upper airway. These procedures can be categorized as nasal, upper pharyngeal, lower pharyngeal and global upper airway procedures.

**NOTE:** Orthognathic procedures are subject to benefit book language and are not addressed in this policy.

## Criteria

### Commercial

**Prior authorization is required.**

**I. Non-surgical Treatment Options for Sleep Disorders**

**A. Oral appliances**

PacificSource may consider oral appliances for the treatment of sleep disorders to be medically necessary when the following criteria are met:

1. A Nocturnal Polysomnogram (PSG) or Home Sleep Study Testing (HST) sleep study within the last 5 years documenting Apnea Hypopnea Index (AHI), Respiratory Event Index (REI) or Respiratory Disturbance Index (RDI) greater than 15 episodes per hour of sleep

**OR**

2. An AHI, REI or RDI greater than or equal to 5 and less than or equal to 15 events per hour plus any **ONE** of the following associated symptoms:

    a. Excessive daytime sleepiness, as documented by either a score of ≥ 10 on the Epworth Sleepiness Scale or inappropriate daytime napping (e.g., during driving, conversation, or eating) or sleepiness interfering with daily activities

    b. Documentation of one of the following:

        - Impaired cognition
        - Mood disorders
        - Hypertension
        - Ischemic heart disease
        - History of stroke

**AND**

3. Requests from orthodontists or dentists require documentation of a recent examination (within the last 12 months) and a prescription or referral from one of the following:

    a. Internal Medicine Physician

    b. Neurologist

    c. Otolaryngologist

    d. Pulmonologist

    e. Primary Care Provider

    f. Eligible Certified Sleep Specialist, who must be one of the following:

        - Diplomats of the American Board of Sleep Medicine (D, ABSM)
        - An individual member of the American Academy of Sleep Medicine (AASM)
        - Certified by the American Academy of Dental Sleep Medicine
        - Subspecialty certification from the American Board of Pediatrics, American Board of Family Medicine or American Board of Psychiatry and Neurology.

**B. Repair of Oral Appliances**

PacificSource may consider repair of an oral appliance to be medically necessary when **ALL** of the following criteria is met:

1. The oral appliance is prescribed for treatment of sleep disorder
2. Repairs will make the appliance serviceable
3. Cost of repair is not greater than the cost of replacement

**C. Replacement of Oral Appliances**

PacificSource may consider replacement of oral appliances to be medically necessary when **BOTH** of the following criteria are met:

1. The oral appliance is prescribed for treatment of sleep disorder
2. At least **ONE** of the following:
    - **a.** The oral appliance is at the end of the 5-year reasonable useful lifetime (RUL)
    - **b.** The oral appliance may be replaced prior to the 5-year RUL if irreparable damage occurs or loss due to a specific incident or natural disaster (e.g., fire, flood)

**Note:** Follow up with dental provider for adjustment of sleep apnea oral appliance is covered.

**The following is not separately reimbursed when billed with oral device/appliance (E0486):**

- AM aligner (Morning Repositioner)

## II. Surgical Treatment Options for Sleep Disorders

### A. Palatopharyngoplasty

PacificSource may consider the following surgical treatment types of Palatopharyngoplasty (e.g., uvulopalatopharyngoplasty (UPPP), uvulopharyngoplasty, uvulopalatal flap, expansion pharyngoplasty, lateral pharyngoplasty, transpalatal advancement pharyngoplasty, relocation pharyngoplasty) to be medically necessary for OSA when **ALL** of the following criteria are met:

1. OSA diagnosis documented by a PSG with an AHI or RDI of at least 15, and/or sustained oxygen desaturation of 85% or less during apneic episodes
2. Documentation that non-surgical alternatives such as CPAP, have been attempted with inadequate response or intolerance (e.g., Intolerance includes claustrophobia, difficulty tolerating pressure, inability to sleep with CPAP device, intolerance of nasal or mouth interface, nasal irritation, or repeated removal of CPAP unintentionally during sleep)

### B. Hyoid Myotomy and Suspension

PacificSource may consider hypoid myotomy and suspension (e.g., AIRvance, Bone Screw System) to be medically necessary when **ALL** of the following criteria (1-4 below) are met:

1. The treatment of OSA is based on either **a** or **b** below:
    - **a.** Apnea Hypopnea Index (AHI) or Respiratory Disturbance Index (RDI) greater than or equal to 15 events per hour

    **OR**

    - **b.** AHI or RDI greater than or equal to 5 events per hour, and less than 15 events per hour with documentation demonstrating any of the following symptoms:
        - Excessive daytime sleepiness, as documented by either a score of greater than 10 on the Epworth Sleepiness scale or inappropriate daytime napping, (for example, during driving, conversation or eating) or sleepiness that interferes with daily activities
        - Impaired cognition or mood disorders

- Hypertension
- Ischemic heart disease or history of stroke
- Cardiac arrhythmias
- Pulmonary hypertension

2. Member has a minimum of one month of CPAP monitoring documentation that demonstrates CPAP failure (defined as AHI greater than 15 despite CPAP usage) or CPAP intolerance (defined as less than 4 hours per night, 5 nights per week)
3. Objective evidence of soft tissue and/or tongue base abnormalities with airway collapse
4. The individual is 18 years of age or older, or there is documentation that skeletal growth is complete

### C. Drug-induced Sleep Endoscopy (DISE)

The Drug-induced Sleep Endoscopy (DISE) is performed to evaluation the appropriateness of hypoglossal nerve stimulation.

PacificSource considers the use of DISE medically necessary when **ALL** the following criteria are met:

1. Suspected multiple level of obstruction (e.g., palate, oropharynx, tongue base, and epiglottis)
2. When criteria (items 1-8) for hypoglossal nerve stimulation are met

### D. Hypoglossal Nerve Stimulation

PacificSource may consider an FDA approved hypoglossal nerve stimulation (e.g., Inspire II System) to be medically necessary when **ALL** of the following is met:

1. Diagnosis of obstructive sleep apnea (OSA)
2. Member is 18 years of age or older
3. Body mass index (BMI) is less than 32 kg/m2
4. A polysomnography (PSG) is performed within 24 months of first consultation for Inspire implant
5. Member has predominantly obstructive events (defined as central and mixed apneas less than 25% of the total AHI)
6. Apnea hypopnea index (AHI) is 15 to 65 events per hour
7. Member has a minimum of one month of CPAP monitoring documentation that demonstrates CPAP failure (defined as AHI greater than 15 despite CPAP usage) or CPAP intolerance (defined as less than 4 hours per night, 5 nights per week)
8. No other anatomical findings that would compromise performance of device (e.g., tonsil size 3 or 4 per tonsillar hypertrophy grading scale)

9. Absence of complete concentric collapse at the soft palate level as seen on a drug induced sleep endoscopy (DISE) procedure

**Exclusions:**

Member benefit books may not include coverage for any treatment or surgical procedures for a diagnosis of snoring and/or upper airway resistance disorders.

### Medicaid

PacificSource Community Solutions follows Guideline Note 27 of the OHP Prioritized List of Health Services and per Oregon Administrative Rules (OAR) 410-122-0202 & 410-122-0205 and Guideline Note 27 of the Oregon Health Plan (OHP) Prioritized List of Health Services for Treatment of Sleep Apnea.

### Medicare

PacificSource Medicare follows Local Coverage Determination L33611 for Oral Appliances and L33718 for Positive Airway Pressure Devices for the treatment of Obstructive Sleep Apnea.

PacificSource Medicare follows L34526 and MCG A:0245 for the Surgical Treatment of Obstructive Sleep Apnea.

PacificSource Medicare follows L38312 for Hypoglossal Nerve Stimulation for the Treatment of Obstructive Sleep Apnea.

## Experimental/Investigation/Unproven

PacificSource considers phrenic nerve stimulation or diaphragm pacing (e.g., Remedē System) to be experimental, investigational, unproven for treatment of central sleep apnea.

PacificSource considers neuromuscular electrical stimulation (NMES) using eXciteOSA® to be experimental, investigational, or unproven for the treatment of mild obstructive sleep apnea.

PacificSource considers the following sleep disorder treatments and procedures to be experimental, investigational or unproven for all indications:

- Actigraphy testing
- Advance System (an adjustable tongue-advancement device)
- AIRvance Tongue Suspension
- Apnea-triggered muscle stimulation
- Cardiac (atrial) pacing
- Cautery-Assisted Palatal Stiffening Operation (CAPSO)
- Coblation (radiofrequency ablation of the nasal passages and soft palate)
- Cold knife uvulectomy
- Devices for positional therapy (e.g., the Lunoa System or the Zzoma Positional Device)

- Disposable nasal expiratory positive airway pressure (EPAP) device (Provent Sleep Apnea Therapy)
- Encore Tongue Base Suspension
- Endoscopically-Assisted Surgical Expansion (EASE)
- Epiglottidectomy or partial epiglottidectomy
- Genioplasty and Genial Tubercle Advancement
- Injection Snoreplasty (injection of sclerosing agent into the soft palate)
- Laser-assisted uvulopalatoplasty (LAUP)
- Mandibular Distraction Osteogenesis
- Nasal dilators
- Pillar™ Palatal Implant System
- Radiofrequency tissue volume reduction (RFTVR)
- Rapid Maxillary Expansion
- Remotely controlled mandibular positioner as a predictive screening tool for oral appliances
- Respiratory muscle therapy (e.g., breathing exercises, oropharyngeal exercises, and wind musical instruments)
- Somnoplasty (radiofrequency ablation of the tongue base, uvula or soft palate)
- Surgical palatal expansion
- Transcutaneous electrical nerve stimulation (TENS)
- Tongue base reduction procedures (e.g., midline glossectomy, lingualplasty).
- Winx therapy system/oral pressure therapy.

## Definitions

**Adaptive servo-ventilation (ASV)** - modality provided by the VPAP Adapt SV™ which uses a small, varying amount of inspiratory pressure superimposed on a low level of CPAP. The VPAP is a BiPAP machine.

**Apnea** - cessation of airflow for at least 10 seconds. Apnea is considered obstructive if there is effort to breathe during the episode.

**Apnea Hypopnea Index (AHI)** - the average number of episodes of apnea and hypopnea per hour as documented in a sleep study. This term is used synonymously with "Respiratory Disturbance Index" (RDI) in the American Academy of Sleep Medicine (AASM) Practice Parameters.

**Auto-titrating Positive Airway Pressure (APAP)** - also called auto PAP, auto-set, and auto adjusting CPAP. APAP devices change treatment pressure based on feedback from several patient measures such as airflow, pressure fluctuations, or measures of airway resistance. APAP machines are coded as CPAP (E0601).

**Bilevel Positive Airway Pressure (BiPAP or BPAP)** - modality which provides higher ventilatory pressure airflow than CPAP. Lower pressure is applied to during the expiratory phase so that the total pressure applied to the airway is reduced when compared to CPAP. BiPAP may be used as an alternative to CPAP in patients who have OSA and coexisting respiratory conditions such as chronic obstructive pulmonary disease (COPD).

**Central Sleep Apnea (CSA)** – apnea caused by the brain failing to send the right signals to the muscles that control breathing during sleep, but there is no airway blockage.

**Continuous Positive Airway Pressure (CPAP)** - modality in which pressurized airflow is delivered using a nasal mask held tight to the face with straps or other headgear. Full face masks or nasal pillows may be used if nasal masks are unsatisfactory to the patient (E0601).

**Drug-Induced Sleep Endoscopy (DISE) -** is a diagnostic test, which is done under sedation and assesses the upper airway of snorers and obstructive sleep apnea patients in conditions that mimic natural sleep.

**Hypopharyngeal obstruction –** an obstruction that may be caused by the prominence or relaxation of the base of the tongue, lateral pharyngeal wall, and occasionally, the aryepiglottic folds or epiglottis.

**Hyoid Myotomy and Suspension** – a surgical procedure where an incision is created in the neck and the hyoid bone, which is connected to the tongue base and epiglottis, is advanced and secured in order to stabilize the airway. This procedure is meant to make it less likely for the base of the tongue to block the airway during sleep.

**Hypopnea** - an abnormal respiratory event lasting at least 10 seconds with at least a 30% reduction in thoracoabdominal movement or airflow as compared to baseline, and with at least a 4% oxygen desaturation.

**Mixed Sleep Apnea** - (AKA Complex sleep apnea syndrome), as the name implies, is a combination of both Obstructive Sleep Apnea and Central Sleep Apnea.

**Obstructive Sleep Apnea (OSA)** – is characterized by frequent episodes of hypopnea or apnea during sleep when throat muscles relax and a person's tongue and soft palate collapse against the back of the throat during sleep, closing the airway.

**Phrenic Nerve Stimulation –** an implantable device that stimulates the phrenic nerve in the chest which sends signals to the diaphragm to restore a normal breathing pattern.

**Respiratory Disturbance Index (RDI)** - the average number of respiratory disturbances (obstructive apneas, hypopneas, and respiratory event–related arousals [RERAs]) per hour as documented in a sleep study.

**Respiratory Event Index (REI)** - the average number of respiratory disturbances (obstructive apneas and hypopneas) per hour of recording time in a sleep study.

**Sleep Studies** - Some contracts require sleep studies to be ordered by a pulmonologist, neurologist, otolaryngologist, or certified sleep medicine specialist. Sleep studies ordered by family practice or internal medicine physicians, nurse practitioners and physicians assistants are coverable per this policy.

**Upper Airway Resistance Syndrome (UARS)** - partial collapse of the upper airway results in decreased oxygen uptake but does not interrupt breathing.

## Coding Information

The following list of codes are for informational purposes only and may not be all-inclusive. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.

0424T Insertion or replacement of neurostimulator system for treatment of central sleep apnea; complete system (transvenous placement of right or left stimulation lead)

0425T Insertion or replacement of neurostimulator system for treatment of central sleep apnea; sensing lead only

0426T Insertion or replacement of neurostimulator system for treatment of central sleep apnea; stimulation lead only

0427T Insertion or replacement of neurostimulator system for treatment of central sleep apnea; pulse generator only

0428T Removal of neurostimulator system for treatment of central sleep apnea; pulse generator only

0429T Removal of neurostimulator system for treatment of central sleep apnea; sensing lead only

0430T Removal of neurostimulator system for treatment of central sleep apnea; stimulation lead only

0431T Removal and replacement of neurostimulator system for treatment of central sleep apnea, pulse generator only

0432T Repositioning of neurostimulator system for treatment of central sleep apnea; stimulation lead only

0433T Repositioning of neurostimulator system for treatment of central sleep apnea; sensing lead only

0434T Interrogation device evaluation implanted neurostimulator pulse generator system

0435T Programming device evaluation of implanted neurostimulator pulse generator system for central sleep apnea; single session

0436T Programming device evaluation of implanted neurostimulator pulse generator system for central sleep apnea; during sleep study

21085 Impression & Custom Preparation; Oral Surgical Splint: “Unbundled” when billed with E0486

21120 Genioplasty; Augmentation (Autograft, Allograft, Prosthetic Material)

21121 Genioplasty; sliding osteotomy, single piece

21122 Genioplasty; sliding osteotomies, two or more, wedge excision

21123 Genioplasty; sliding, augmentation w/bone grafts w/obtaining autograft

21125 Augmentation, mandibular body/angle; Prosthetic material

21127 Augmentation, mandibular, with bone graft/Onlay/Interpositional W/Obtaining Autograft

21198 Osteotomy, mandible, segmental

21199 Osteotomy, mandible, with genioglossus advancement

21685 Hyoid myotomy and suspension

41512 Tongue base suspension, permanent suture technique

41530 Submucosal radiofrequency tissue/volume reduction/sleep apnea

41599 Unlisted Proc, Tongue, Mouth Floor

42140 Uvulectomy, excision of uvula

42145 Palatopharyngoplasty

42299 Unlisted Proc, Palate, Uvula

42950 Pharyngoplasty (plastic or reconstructive operation on pharynx)

42975 Drug-induced sleep endoscopy, with dynamic evaluation ofvelum, pharynx, tongue base, and larynx for evaluation of sleep disordered breathing, flexible, diagnostic--

61886 Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to 2 or more electrode arrays

61888 Revision or removal of cranial neurostimulator pulse generator or receiver

64553 Percutaneous implantation of neurostimulator electrode array; cranial nerve

64555 Percutaneous implantation of neurostimulator electrode array; peripheral nerve (excludes sacral nerve)

64568 Open implantation of cranial nerve (e.g., vagus nerve) neurostimulator electrode array and pulse generator

64569 Revision or replacement of cranial nerve (e.g., vagus nerve) neurostimulator electrode array, including connection to existing pulse generator

64570 Removal of cranial nerve (e.g., vagus nerve) neurostimulator electrode array and pulse generator

64575 Incision for Open implantation of neurostimulator electrode array; peripheral nerve (excludes sacral nerve)

64580 Incision for Open implantation of neurostimulator electrode array; neuromuscular

64582 Open implantation of hypoglossal nerve neurostimulator array, pulse generator, and distal respiratory sensor electrode or electrode array

64583 Revision or replacement of hypoglossal nerve neurostimulator array and distal respiratory sensor electrode or electrode array, including connection to existing pulse generator P

64584 Removal of hypoglossal nerve neurostimulator array, pulse generator, and distal respiratory sensor electrode or electrode array

64585 Revision or removal of peripheral neurostimulator electrode array

64590 Insertion or replacement of peripheral or gastric neurostimulator pulse generator or receiver, direct or inductive coupling

64999 Unlisted procedure, nervous system

94799 Unlisted Pulmonary Service/Procedure

95803 Actigraphy testing, recording, analysis, interpretation, and report

C1767 Generator, neurostimulator (implantable), nonrechargeable

C1787 Patient programmer, neurostimulator

C1823 Generator, neurostimulator (implantable), non-rechargeable, with transvenous sensing and stimulation leads

C9727 Insertion of implants into the soft palate; minimum of 3 implants

E0485 Oral device/appliance used to reduce upper airway collapsibility, adjustable or nonadjustable, prefabricated, includes fitting and adjustment

E0486 Oral device/appliance used to reduce upper airway collapsibility, adjustable or nonadjustable, custom fabricated, includes fitting and adjustment

E1399 Durable Medical Equipment Miscellaneous

K1001 Electronic positional obstructive sleep apnea treatment, with sensor, includes all components and accessories, any type

K1027 Oral device/appliance used to reduce upper airway collapsibility, without fixed mechanical hinge, custom fabricated, includes fitting and adjustment

K1028 Power source and control electronics unit for oral device/appliance for neuromuscular electrical stimulation of the tongue muscle for the reduction of snoring and obstructive sleep apnea, controlled by phone application

K1029 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

L8679 Implantable neurostimulator, pulse generator, any type

L8688 Implantable neurostimulator pulse generator, dual array, non-rechargeable, includes extension

S2080 Laser-assisted uvulopalatoplasty (LAUP)

## Related Policies

Care of the Surgical Patient

Documentation Requirements for Health Practitioners

New and Emerging Technologies - Coverage Status

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## Appendix

**Policy Number:**

**Effective:** 1/1/2021 **Next review:** 7/1/2023

**Policy type:** Enterprise

**Author(s):**

**Depts.:** Health Services, Claims, Customer Service

**Applicable regulation(s):**

**Commercial Ops:** 4/2023

**Government Ops**: 3/2023