

Surgical Treatments for Obstructive Sleep Apnea (OSA), Surgical 18

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All requests for authorization for the services described by this medical policy will be reviewed per Early and Periodic Screening, Diagnostic and Treatment (EPSDT) guidelines. These services may be authorized under individual consideration for Medicaid members under the age of 21-years if the services are judged to be medically necessary to correct or ameliorate the member's condition. Department of Medical Assistance Services (DMAS), Supplement B - EPSDT (Early and Periodic Screening, Diagnosis and Treatment) Manual.*.

Purpose:

This policy addresses the Surgical Treatments for Obstructive Sleep Apnea (OSA).

- Criteria for oral surgeries are listed in Surgical 34, Orthognathic Surgery and Surgical 03, Cosmetic and Reconstructive Surgery.

Description & Definitions:

Drug-induced sleep endoscopy is used to identify patterns of upper airway collapse that occurs in non-awake individuals to aid in treatment decisions.

Hypoglossal nerve stimulation (HNS) - Implantable Upper Airway Stimulation device that is implanted subcutaneously under the skin below the clavicle that delivers a stimulation to the hypoglossal nerve if late respiration is detected. Other name: hypoglossal nerve stimulation (HGNS)

Surgical Obstructive Sleep Apnea (OSA) Treatments are surgical procedures that eliminate tissues or polyps in the nose, throat or in the upper respiratory region that become blocked which cause an individual to pause in breathing during sleep.

Uvulopalatopharyngoplasty (UPPP) is a surgical procedure to remove tissues in the back of mouth and/or top of the throat.

Criteria:

Surgical Treatments for Obstructive Sleep Apnea (OSA) are considered medically necessary for **1 or more** of the following:

- **Drug induced sleep endoscopy (DISE)** may be indicated for **1 or more** of the following:
 - Individual is a child (less than 22 years of age) with indications of **1 or more** of the following:
 - Obstructive sleep apnea
 - Persistent Obstructive sleep apnea following Adenotonsillectomy
 - At the time of Adenotonsillectomy for children at high risk of persistent Obstructive sleep apnea as indicated by **1 or more** of the following:
 - severe baseline disease, defined as an obstructive Apnea hypopnea index >10 events/hour
 - obesity
 - craniofacial syndromes including Down syndrome
 - neuromuscular disorders
 - Individual is an adult (22 years of age or older) with **all of the** following:
 - Evaluation needed for appropriateness of FDA-approved hypoglossal nerve stimulation (i.e. Confirmed absence of complete concentric collapse at the soft palate level)
 - Individual meets the following criteria for implantation of Hypoglossal Nerve Stimulation device for Obstructive Sleep Apnea including **ALL of the** following:
 - Diagnosis of moderate to severe obstructive sleep apnea (OSA)
 - Body mass index (BMI) is less than 35 kg/m²
 - A polysomnography (PSG) demonstrating an apnea-hypopnea index (AHI) of 15 to 65 events per hour within 24 months of initial consultation for hypoglossal nerve stimulation (HNS) implant
 - Individual has predominantly obstructive events (defined as central and mixed apneas less than 25% of the total apnea-hypopnea index (AHI))
 - Shared Decision-Making (SDM) between the Individual, Sleep physician, and qualified otolaryngologist (if they are not the same) who determines that the individual demonstrates **1 or more** of the following:
 - Continuous positive airway pressure (CPAP) failure (defined as apnea-hypopnea index (AHI) greater than 15 despite CPAP usage)
 - Continuous positive airway pressure (CPAP) intolerance (defined as CPAP machine-derived compliance reporting with usage less than 4 hours a night for at least 70% of the nights in 1 month or the CPAP has been returned) despite CPAP interface and/or setting optimizations
 - Absence of anatomical findings that would compromise performance of device (e.g., tonsil size 3 or 4 per standardized tonsillar hypertrophy grading scale)
 - Use of Hypoglossal Nerve Stimulation (HNS) devices with FDA-approval for implantation to treat OSA (e.g., Inspire® II Upper Airway Stimulator)
- **Hyoid myotomy and suspension**, and/or mandibular osteotomy with genioglossus (tongue) advancement for the treatment of obstructive sleep apnea (OSA) is for individuals who have failed treatment with continuous positive airway pressure (CPAP) and have demonstrated significant soft tissue and/or tongue base abnormalities with airway collapse. Evidence of hypopharyngeal obstruction may be documented by either fiberoptic endoscopy or cephalometric radiographs
- **Hypoglossal Nerve Stimulation** for Obstructive Sleep Apnea may be covered for **ALL of the** following:
 - Diagnosis of moderate to severe obstructive sleep apnea (OSA)
 - Individual is 22 years of age or older
 - Body mass index (BMI) is less than 35 kg/m²
 - A polysomnography (PSG) demonstrating an apnea-hypopnea index (AHI) of 15 to 65 events per hour within 24 months of initial consultation for hypoglossal nerve stimulation (HNS) implant
 - Individual has predominantly obstructive events (defined as central and mixed apneas less than 25% of the total apnea-hypopnea index (AHI))
 - Shared Decision-Making (SDM) between the Individual, Sleep physician, and qualified otolaryngologist (if they are not the same) who determines that the individual demonstrates **1 or more** of the following:
 - Continuous positive airway pressure (CPAP) failure (defined as apnea-hypopnea index (AHI) greater than 15 despite CPAP usage)
 - Continuous positive airway pressure (CPAP) intolerance (defined as CPAP machine-derived compliance reporting with usage less than 4 hours a night for at least 70% of the nights in 1 month or the CPAP has been returned) despite CPAP interface and/or setting optimizations
 - Confirmed absence of complete concentric collapse at the soft palate level by a drug-induced sleep endoscopy (DISE) procedure

- Absence of anatomical findings that would compromise performance of device (e.g., tonsil size 3 or 4 per standardized tonsillar hypertrophy grading scale)
- Use of Hypoglossal Nerve Stimulation (HNS) devices with FDA-approval for implantation to treat OSA (e.g., Inspire® II Upper Airway Stimulator)
- **Jaw realignment surgery as a first line treatment** for individuals with a documented severe jaw/facial bony abnormality contributing to obstructive sleep apnea (OSA), including, but not limited to, craniofacial abnormalities, micrognathia, retrognathia or small retro-positioned jaw with associated overbite and small mouth
- **Jaw realignment surgery** (i.e., maxillomandibular advancement) **for individuals who have failed treatment** with continuous positive airway pressure (CPAP) and either Uvulopalatopharyngoplasty (UPPP) or genioglossus advancement and/or hyoid myotomy with suspension or both of these surgical procedures
- **Tracheostomy** for individuals with the most severe obstructive sleep apnea not manageable by other interventions. (Requests for tracheostomy for obstructive sleep apnea (OSA) are subject to Medical Director review)
- **Uvulopalatopharyngoplasty (UPPP)** may be indicated when **ALL of the following** are present:
 - Obstructive sleep apnea, and polysomnography findings confirm apnea-hypopnea index 5 or greater
 - Obstructive sleep apnea symptoms, as indicated by **ALL of the following**:
 - Excessive daytime sleepiness documented using Epworth Sleepiness Scale[A] or other validated scale
 - Excessive daytime sleepiness interferes with daily activity or work (eg, causes safety issues).
 - CPAP trial with well-supported follow-up and involvement by qualified sleep specialist has clearly failed due to **1 or more** of the following:
 - Claustrophobia
 - Difficulty tolerating pressure
 - Failure to improve symptoms
 - Inability to sleep with CPAP device
 - Intolerance of nasal or mouth interface
 - Nasal irritation
 - Removal of CPAP device unintentionally during sleep
 - Isolated oropharyngeal narrowing demonstrated as source of airway obstruction
 - Use of oral appliance has resulted in **1 or more** of the following:
 - Failure to improve symptoms
 - Intolerance to device
 - Physician considers use of dental device inappropriate given patient's anatomy.
 - Weight not a concern, or weight loss tried and failed in obese patient.

Surgical Treatments for Obstructive Sleep Apnea (OSA) are considered **not medically necessary** for any use other than those indicated in clinical criteria, to include but not limited to:

- Cardiac (Atrial) Pacing
- Cautery-Assisted Palatal Stiffening Operation (CAPSO)
- Coblation For Pediatric Lymphatic Malformation In The Oral Cavity
- Electrosleep therapy
- Flexible Positive Airway Pressure
- Injection Snoreplasty
- Nasal surgery employing any technique, including nasal valve surgery, septoplasty, turbinectomy, polypectomy and laser or radiofrequency ablation (volumetric tissue reduction) of the nasal turbinates are **not** covered for the treatment of obstructive sleep apnea.
- Oral surgery which is part of an orthodontic treatment program is not covered.
- Osteotomy required to correct masticatory insufficiency requires Medical Director approval. (See Orthognathic Surgery – Surgical 34).
- Palatal Implants
- Partial Glossectomy
- Radiofrequency ablation of nasal turbinates for chronic nasal obstruction due to hypertrophy of the inferior turbinate is not covered
- Radiofrequency Volumetric Tissue Reduction (RFVTR) of the soft palate and/or the base of the tongue, including Somnoplasty and Coblation for obstructive sleep apnea
- Reconstruction following injury which occurs while an individual is enrolled in the Plan will be covered under Accidental Dental coverage

- The Pillar system
- The Repose System
- Transoral robotic surgery (TORS)
- Transpalatal Advancement Pharyngoplasty
- Tongue Base Reduction Surgery
- Tongue Base Suspension Surgery (-AIRvance system, Repose system, and Encore Tongue Suspension System)
- Uvulectomy and Laser Assisted Uvuloplasty (LAUP)

Coding:

Medically necessary with criteria:

Coding	Description
21031	Excision of torus mandibularis
21198	Osteotomy, mandible, segmental;
21199	Osteotomy, mandible, segmental; with genioglossus advancement
21206	Osteotomy, maxilla, segmental (eg, Wassmund or Schuchard)
21685	Hyoid myotomy and suspension
42145	Palatopharyngoplasty (eg, uvulopalatopharyngoplasty, uvulopharyngoplasty)
42975	Drug-induced sleep endoscopy, with dynamic evaluation of velum, pharynx, tongue base, and larynx for evaluation of sleep-disordered breathing, flexible, diagnostic
61886	Insertion or replacement of cranial neurostimulator 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 Removal of component(s) of a HNS for treatment of OSA
64568	Incision for implantation of cranial nerve (eg, 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 an existing pulse generator, when performed
64570	Removal of cranial nerve (e.g. vagus nerve) neurostimulator electrode array and pulse generator, when performed
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
64584	Removal of hypoglossal nerve neurostimulator array, pulse generator, and distal respiratory sensor electrode or electrode array

L8679	Implantable neurostimulator, pulse generator, any type
L8680	Implantable neurostimulator electrode, each
L8681	Patient programmer (external) for use with implantable programmable neurostimulator pulse generator, replacement only
L8682	Radiofrequency transmitter (external) for use with implantable neurostimulator radiofrequency receiver
L8685	Implantable neurostimulator pulse generator, single array, rechargeable, includes extension
L8686	Implantable neurostimulator pulse generator, single array, nonrechargeable, includes extension
L8688	Implantable neurostimulator pulse generator, dual array, nonrechargeable, includes extension

Considered Not Medically Necessary:

Coding	Description
41512	Tongue base suspension, permanent suture technique
42140	Uvulectomy, excision of uvula
42299	Unlisted procedure, palate, uvula
S2080	Laser-assisted uvulopalatoplasty (LAUP)

U.S. Food and Drug Administration (FDA) - approved only products only.

Document History:

Revised Dates:

- 2024: January
- 2022: May, September
- 2021: November
- 2020: January,
- 2016: February
- 2015: April
- 2013: August
- 2012: November
- 2011: August
- 2010: September
- 2009: August
- 2008: August
- 2002: September
- 1998: September
- 1995: March

Reviewed Dates:

- 2023: September
- 2019: November
- 2018: April
- 2017: February

- 2015: August
- 2014: August
- 2012: August
- 2010: August
- 2007: December
- 2005: August
- 2004: September, December
- 2003: September
- 2001: November
- 2000: November
- 1999: October
- 1996: August

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- April 1994

References:

Including but not limited to: Specialty Association Guidelines; Government Regulations; Winifred S. Hayes, Inc; UpToDate; Literature Review; Specialty Advisors; National Coverage Determination (NCD); Local Coverage Determination (LCD).

(2023). Retrieved Aug 16, 2023, from Department of Medical Assistance Services: <https://vamedicaid.dmas.virginia.gov/manuals/provider-manuals-library#gsc.tab=0&gsc.q=Sleep%20Apnea&gsc.sort=>

Hypoglossal Nerve Stimulation For The Treatment Of Obstructive Sleep Apnea. (2022, Dec 27). Retrieved Aug 16, 2023, from Hayes, Inc: <https://evidence.hayesinc.com/report/dir.hypoglossal2981>

Inspire Medical Systems, Inc. (2023, Jun 08). Retrieved Aug 17, 2023, from U.S. Food and Drug Administration: <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpma/pma.cfm?id=P130008S090>

LCD: Hypoglossal Nerve Stimulation for Obstructive Sleep Apnea (L38276). (2023, Apr 13). Retrieved Aug 16, 2023, from Centers for Medicare and Medicaid Services: <https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdid=38276&ver=8&keyword=sleep%20apnea&keywordType=starts&areald=s53&docType=NCA,CAL,NCD,MEDCAC,TA,MCD,6,3,5,1,F,P&contractOption=all&sortBy=relevance&bc=1>

LCD: Surgical Treatment of Obstructive Sleep Apnea (OSA) (L34526). (2023, Jul 27). Retrieved Aug 16, 2023, from Centers for Medicare and Medicaid Services: <https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdid=34526&ver=22&keyword=sleep%20apnea&keywordType=starts&areald=s53&docType=NCA,CAL,NCD,MEDCAC,TA,MCD,6,3,5,1,F,P&contractOption=all&sortBy=relevance&bc=1>

Paruthi, S. (2023, Jul 18). Management of obstructive sleep apnea in children. Retrieved Aug 16, 2023, from UpToDate: https://www.uptodate.com/contents/management-of-obstructive-sleep-apnea-in-children?search=obstructive%20sleep%20apnea&source=search_result&selectedTitle=3~150&usage_type=default&display_rank=3#

Referral of adults with obstructive sleep apnea for surgical consultation: an American Academy of Sleep Medicine clinical practice guideline. (2021, Dec 01). Retrieved Aug 16, 2023, from Academy of Sleep Medicine: <https://jcsa.aasm.org/doi/10.5664/jcsa.9592#d1e483>

Sec. 882.5860 Implanted neuromuscular stimulator. (2023, Jun 07). Retrieved Aug 17, 2023, from Code of Federal Regulations (National Archives): <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?fr=882.5860&SearchTerm=nerve%20stimulation>

Sleep Disorder Management. (2023, Feb 02). Retrieved Aug 16, 2023, from Carelon Medical Benefits Management: <https://guidelines.carelonmedicalbenefitsmanagement.com/sleep-disorder-management-2023-02-11/>

Weaver, E., & Kapur, V. (2023, Jun 12). Surgical treatment of obstructive sleep apnea in adults. Retrieved Aug 16, 2023, from UpToDate: https://www.uptodate.com/contents/surgical-treatment-of-obstructive-sleep-apnea-in-adults?search=obstructive%20sleep%20apnea&topicRef=7695&source=see_link#H126399556

Special Notes: *

This medical policy express Sentara Health Plan's determination of medically necessity of services, and they are based upon a review of currently available clinical information. These policies are used when no specific guidelines for coverage are provided by the Department of Medical Assistance Services of Virginia (DMAS). Medical Policies may be superseded by state Medicaid Plan guidelines. Medical policies are not a substitute for clinical judgment or for any prior authorization requirements of the health plan. These policies are not an explanation of benefits.

Medical policies can be highly technical and complex and are provided here for informational purposes. These medical policies are intended for use by health care professionals. The medical policies do not constitute medical advice or medical care. Treating health care professionals are solely responsible for diagnosis, treatment and medical advice. Sentara Health Plan members should discuss the information in the medical policies with their treating health care professionals. Medical technology is constantly evolving and these medical policies are subject to change without notice, although Sentara Health Plan will notify providers as required in advance of changes that could have a negative impact on benefits.

The Early and Periodic Screening, Diagnostic and Treatment (EPSDT) covers services, products, or procedures for children, if those items are determined to be medically necessary to "correct or ameliorate" (make better) a defect, physical or mental illness, or condition (health problem) identified through routine medical screening or examination, regardless of whether coverage for the same service or support is an optional or limited service under the state plan. Children enrolled in the FAMIS Program are not eligible for all EPSDT treatment services. All requests for authorization for the services described by this medical policy will be reviewed per EPSDT guidelines. These services may be authorized under individual consideration for Medicaid members under the age of 21-years if the services are judged to be medically necessary to correct or ameliorate the member's condition. *Department of Medical Assistance Services (DMAS), Supplement B - EPSDT (Early and Periodic Screening, Diagnosis and Treatment) Manual.*

Keywords:

Oral Surgery, Uvulopalatopharyngoplasty, UPPP, Surgical Obstructive Sleep Apnea, OSA, Surgical 18, jaws, mouth, lips, tongue, hard palates, soft palates, temporomandibular Joint disease, arthroscopic joint repair, open joint repair, excision of the joint, fractures, facial bones, mandible, maxilla, malignant tumors, symptomatic tumors, cysts, gums, cheeks, salivary glands, tori, exostoses, soft tissue breakdown, sinuses, salivary ducts, periodontal structures, Cleft Palate repair, Osteotomy, Orthodontic treatment, congenital deformities, tumor, functional defect, Apnea-hypopnea index, AHI, respiratory disturbance index, RDI, Hypertension, cardiac arrhythmias, Pulmonary hypertension, ischemic heart disease, Impaired cognition, mood disorders, history of stroke, Excessive daytime sleepiness, Epworth Sleepiness Scale, CPAP, continuous positive airway pressure, Hyoid myotomy, mandibular osteotomy, Jaw realignment surgery, Tracheostomy