



BlueCross BlueShield  
of Alabama

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**Name of Blue Advantage Policy:**

**Surgical Treatment of Snoring and Obstructive Sleep Apnea**

Policy #: 621

Latest Review Date: June 2023

Category: Surgical

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**BACKGROUND:**

*Blue Advantage medical policy does not conflict with Local Coverage Determinations (LCDs), Local Medical Review Policies (LMRPs) or National Coverage Determinations (NCDs) or with coverage provisions in Medicare manuals, instructions or operational policy letters. In order to be covered by Blue Advantage the service shall be reasonable and necessary under Title XVIII of the Social Security Act, Section 1862(a)(1)(A). The service is considered reasonable and necessary if it is determined that the service is:*

1. *Safe and effective;*
2. *Not experimental or investigational\*;*
3. *Appropriate, including duration and frequency that is considered appropriate for the service, in terms of whether it is:*
  - *Furnished in accordance with accepted standards of medical practice for the diagnosis or treatment of the patient's condition or to improve the function of a malformed body member;*
  - *Furnished in a setting appropriate to the patient's medical needs and condition;*
  - *Ordered and furnished by qualified personnel;*
  - *One that meets, but does not exceed, the patient's medical need; and*
  - *At least as beneficial as an existing and available medically appropriate alternative.*

*\*Routine costs of qualifying clinical trial services with dates of service on or after September 19, 2000 which meet the requirements of the Clinical Trials NCD are considered reasonable and necessary by Medicare. Providers should bill **Original Medicare** for covered services that are related to **clinical trials** that meet Medicare requirements (Refer to Medicare National Coverage Determinations Manual, Chapter 1, Section 310 and Medicare Claims Processing Manual Chapter 32, Sections 69.0-69.11).*

## **POLICY:**

**For dates of service on or after June 21, 2020:**

**For Implantable Hypoglossal Nerve Stimulator, refer to L38276, A58075.**

**Blue Advantage** will treat palatopharyngoplasty (e.g., uvulopalatopharyngoplasty (UPPP), uvulopharyngoplasty, uvulopalatal flap, expansion sphincter pharyngoplasty, lateral pharyngoplasty, palatal advancement pharyngoplasty, relocation pharyngoplasty ) as a **covered benefit** when treatment options have been discussed with the individual, including but not limited to: weight loss, continuous positive airway pressure (CPAP), bi-level positive airway pressure (BIPAP), medications and alternative surgical procedures. The following conditions and criteria must be met:

- Diagnosis of obstructive sleep apnea is made with a polysomnogram study performed at an approved sleep study center or home study, and there is documentation of an Apnea-Hypopnea Index (AHI)  $\geq 15$ .
- Physical examination that includes but is not limited to: anterior rhinoscopy; endoscopic examination of nose, pharynx, and hypopharynx; evaluation of the nasal septum and nasal turbinates; evaluation of nasal polyps or other masses; Muller's maneuver and evaluation of the tonsillar/adenoidal tissue; anatomical evaluation for cephalometric disproportion.

**Blue Advantage** will treat **laser-assisted uvulopalatoplasty (LAUP)** as a **covered benefit** when treatment options have been discussed with the patient including but not limited to: weight loss, continuous positive airway pressure (CPAP), bi-level positive airway pressure (BIPAP), medications and alternative surgical procedures. The following conditions and criteria must be met:

- Diagnosis of obstructive sleep apnea is made with a polysomnogram study performed at an approved sleep study center and there is documentation of an Apnea-Hypopnea Index (AHI) greater than or equal to 15.
- Physical examination that includes but is not limited to: anterior rhinoscopy; endoscopic examination of nose, pharynx, and hypopharynx; evaluation of the nasal septum and nasal turbinates; evaluation of nasal polyps or other masses; Muller's maneuver and evaluation of the tonsillar/adenoidal tissue; anatomical evaluation for cephalometric disproportion.

**Blue Advantage** will treat **laser-assisted uvulopalatoplasty (LAUP)** as a **non-covered benefit** and as **investigational** when used for the **treatment of snoring**.

**Blue Advantage** will treat genioglossal advancement, hyoid suspension and myotomy and other mandibular-maxillary advancement (MMA) as a **covered benefit** for the treatment of obstructive sleep apnea when the following criteria are met:

- AHI  $> 20$  or oxygen desaturations less than 90% as determined by a nocturnal polysomnogram has been performed in an approved facility
- Cephalometric abnormalities

- (Clinically Significant) Hypopharyngeal obstruction
- CPAP/BIPAP trial over a period of time (unless RDI less than 5 cannot be achieved) or patient has immediate intolerance (true claustrophobic reaction)
- Otolaryngologist evaluation with appropriate interventions
- If UPPP performed prior to orthognathic surgery, will need to repeat sleep study demonstrating obstructive sleep apnea

**Blue Advantage** may consider **adenotonsillectomy** as **medically necessary** in pediatric patients with clinically significant OSA and hypertrophic tonsils.

**Blue Advantage** will treat **radiofrequency ablation of palatal tissues or radiofrequency volumetric tissue reduction (Somnoplasty)** as a **non-covered benefit** and as **investigational** for simple snoring, upper airway resistance syndrome and obstructive sleep apnea syndrome.

**Blue Advantage** will treat **uvulectomy** as a **non-covered benefit** and as **investigational** when used for the treatment of snoring.

**Blue Advantage** will treat **midline glossectomy** as a **non-covered benefit** for the treatment of upper airway obstruction syndrome and obstructive sleep apnea syndrome and as **investigational**.

**Blue Advantage** will treat **palatal stiffening procedures**, including but not limited to, cautery assisted palatal stiffening operation, and the implantation of palatal implants, as a **non-covered benefit** in the treatment of snoring alone, and as **investigational** as a treatment for upper airway resistance syndrome or OSA.

**Blue Advantage** will treat **atrial pacing** as a **non-covered benefit** and as **investigational**.

**Blue Advantage** will treat **repose tongue suspension system** as a **non-covered benefit** and as **investigational**.

Simple snoring in the absence of documented obstructive sleep apnea is not considered a medical condition; therefore, **Blue Advantage** will treat **any surgical intervention, such as LAUP, radiofrequency volumetric tissue reduction of the palate, or palatal stiffening procedures**, as a **non-covered benefit** and as **investigational**.

*Medical management of OSA (i.e., CPAP, oral appliances) is discussed in medical policy #065-Medical Management of Obstructive Sleep Apnea Syndrome.*

*Blue Advantage does not approve or deny procedures, services, testing, or equipment for our members. Our decisions concern coverage only. The decision of whether or not to have a certain test, treatment or procedure is one made between the physician and his/her patient. Blue Advantage administers benefits based on the members' contract and medical policies. Physicians should always exercise their best medical judgment in providing the care they feel is most*

*appropriate for their patients. Needed care should not be delayed or refused because of a coverage determination.*

## **DESCRIPTION OF PROCEDURE OR SERVICE:**

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. This evidence review does not address conventional surgical procedures such as uvulopalatopharyngoplasty (UPPP), hyoid suspension, surgical modification of the tongue, maxillofacial surgery, or adenotonsillectomy.

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 individual 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 (i.e., 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.

Terminology and diagnostic criteria for OSA are shown in Table 1.

**Table 1. Terminology and Definitions for Obstructive Sleep Apnea**

<b>Terms</b>	<b>Definition</b>
<b>Respiratory event</b>	
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% or more of pre-event baseline for at least 10 seconds. Due to faster respiratory rates in children, pediatric scoring criteria define an apnea as 2 or more missed

	breaths, regardless of its duration in seconds.
Hypopnea	Hypopnea in adults is scored when the peak airflow drops by at least 30% of pre-event 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% or greater drop in nasal pressure and either a 3% or more decrease in oxygen saturation or an associated arousal.
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
<b>Respiratory event reporting</b>	
AHI	The average number of apneas or hypopneas per hour of sleep
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.
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.
<b>Diagnosis</b>	
OSA	Obstructive sleep apnea is repetitive episodes of upper airway obstruction due to the collapse and obstruction of the upper airway during sleep
<ul style="list-style-type: none"> <li>Mild OSA</li> </ul>	<ul style="list-style-type: none"> <li>In adults: AHI or RDI of 5 to &lt;15</li> <li>In children: AHI <math>\geq 1.0</math> to &lt;5</li> </ul>
<ul style="list-style-type: none"> <li>Moderate OSA</li> </ul>	AHI or RDI of 15 to < 30; Children: AHI of $\geq 5$ to <10
<ul style="list-style-type: none"> <li>Severe OSA</li> </ul>	<ul style="list-style-type: none"> <li>Adults: AHI or RDI <math>\geq 30</math></li> <li>Children: AHI of <math>\geq 10</math></li> </ul>

<b>Treatment</b>	
Positive airway pressure (PAP)	Positive airway pressure may be continuous (CPAP) or auto-adjusting (APAP) or Bi-level (Bi-PAP).
PAP failure	Usually defined as an AHI >20 events per hour while using CPAP
PAP intolerance	CPAP use for <4 hours per night for $\geq 5$ nights per week, or refusal to use CPAP. CPAP intolerance may be observed in patients with mild, moderate, or severe OSA

AHI: Apnea/Hypopnea Index; APAP:auto-adjusting positive airway pressure; Bi-PAP: Bi-level positive airway pressure; CPAP: continuous positive airway pressure; EEG: electroencephalogram; OSA: obstructive sleep apnea; PAP: positive airway pressure; RDI: Respiratory Disturbance Index;REI: Respiratory Event Index; RERA: respiratory event-related arousal

## **KEY POINTS:**

This evidence review has been updated regularly with searches of the PubMed database. The most recent literature update was performed through April 26, 2023.

This review was informed by TEC Assessments on the surgical management and radiofrequency volumetric tissue reduction for obstructive sleep apnea (OSA).

## **Summary of Evidence:**

For individuals who have 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.

For individuals who have OSA who receive a 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 two sham-controlled randomized trials. 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 uvulopalatopharyngoplasty 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 uvulopalatopharyngoplasty improves the net health outcome. 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 hypoglossal nerve stimulation, the evidence includes systematic reviews, 2 RCTs, nonrandomized prospective studies, nonrandomized studies with historical controls, and prospective single-arm studies. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. A double-blind, multicenter RCT of 89 adults with moderate-to-severe OSA who did not tolerate CPAP found significant short-term improvement in AHI, ESS, and quality of life measures with hypoglossal nerve stimulator (HNS) compared to sham stimulation. The study was limited by a short duration of follow-up and lack of diversity among included participants. Another RCT including 138 patients with moderate-to-severe OSA who did not tolerate CPAP compared outcomes for patients who received HNS therapy at 1 or 4 months after implant for the treatment and control groups, respectively. Results demonstrated significant short-term improvement in AHI and ODI when comparing HNS to no HNS at month 4. However, after 11 months of active therapy, the difference between the treatment and control groups was not statistically significant for AHI, but remained significant for ODI in favor of the treatment group. This trial was also limited by a lack of diverse individuals, as well as a lack of a true control group for long-term outcomes. Hypoglossal nerve stimulation has shown success rates for about two-thirds of a subset of patients who met selection criteria that included AHI, BMI, and favorable pattern of palatal collapse across nonrandomized trials. These results were maintained out to 5 years in the pivotal single arm study. The single prospective comparative study of patients who received HNS versus patients who were denied insurance coverage for the procedure has a high potential for performance bias. For children and adolescents with OSA and Down Syndrome who are unable to tolerate CPAP, the evidence includes a systematic review and a prospective study of 42 individuals. The systematic review investigated HNS in adolescents with Down Syndrome and OSA, and demonstrated significant improvement in AHI and OSA-18 survey scores after HNS. The study of 42 individuals with Down Syndrome and OSA found a success rate of 73.2% with 4 device extrusions corrected with replacement surgery. Limitations of the current evidence base preclude determination of who is most likely to benefit from this invasive procedure.

## **Practice Guidelines and Position Statements**

### **American Academy of Sleep Medicine**

The American Academy of Sleep Medicine (AASM, 2021) published practice guidelines on when to refer patients for surgical modifications of the upper airway for OSA. These guidelines replaced the 2010 practice parameters for surgical modifications. The AASM guidelines note that positive airway pressure (PAP) is the most efficacious treatment for OSA, but effectiveness can be compromised when patients are unable to adhere to therapy or obtain adequate benefit, which is when surgical management may be indicated. The AASM guideline recommendations are based on a systematic review and meta-analysis of 274 studies of surgical interventions, including procedures such as uvulopalatopharyngoplasty (UPPP), modified UPPP, MMA, tongue base suspension, and hypoglossal nerve stimulation. The systematic review deemed most included data of low quality, consisting of mostly observational data. The AASM strongly recommend that clinicians discuss referral to a sleep surgeon with adults with OSA and body mass index (BMI) 35) who are intolerant or unaccepting of PAP, the AASM strongly recommends discussion of referral to a bariatric surgeon, along with other weight loss strategies.

### **American Academy of Pediatrics**

The American Academy of Pediatrics (AAP) published a 2012 clinical practice guideline on the diagnosis and management of childhood OSA. AAP recommends that if a child has OSA, a clinical examination consistent with adenotonsillar hypertrophy, and does not have a contraindication to surgery, the clinician should recommend adenotonsillectomy as the first line of treatment. AAP recommends that patients should be referred for CPAP management if symptoms/signs or objective evidence of OAS persists after adenotonsillectomy or if adenotonsillectomy is not performed. Weight loss should be recommended in addition to other therapy if a child/adolescent with OSA is overweight or obese.

### **American Academy of Otolaryngology–Head and Neck Surgery**

The American Academy of Otolaryngology - Head and Neck Surgery (AAO-HNS; 2014) has a revised position statement on surgical management of OSA. Procedures AAO-HNS supported as effective and not considered investigational when part of a comprehensive approach in the medical and surgical management of adults with OSA include:

- tracheotomy
- nasal and pharyngeal airway surgery,
- tonsillectomy and adenoidectomy,
- palatal advancement,
- uvulopalatopharyngoplasty,
- genioglossal advancement,
- hyoid myotomy,
- midline glossectomy,
- tongue suspension,
- maxillary and mandibular advancement.



In a 2021 position statement, AAO-HNS supported hypoglossal nerve stimulation as an effective second-line treatment of moderate-to-severe OSA.

#### **American Society for Metabolic and Bariatric Surgery**

In 2012, the American Society for Metabolic and Bariatric Surgery published guidelines on the perioperative management of OSA. The guideline states that OSA is strongly associated with obesity with the incidence of OSA in the morbidly obese population being reported to be between 38% and 88%. They recommend bariatric surgery be the initial treatment of choice for OSA in this population, as opposed to surgical procedures directed at the mandible or tissues of the palate.

#### **National Institute for Health and Care Excellence**

National Institute for Health and Care Excellence (NICE) 2017 guidance concluded that evidence on the safety and efficacy of hypoglossal nerve stimulation is limited in quantity and quality, and the procedure should only be used in the context of a clinical trial.

#### **U.S. Preventive Services Task Force Recommendations**

Not applicable

#### **KEY WORDS:**

Uvulopalatopharyngoplasty, UPPP, UP-3, laser-assisted palatoplasty, LAUP, somnoplasty, radiofrequency ablation, uvulectomy, genioglossal advancement, hyoid suspension and myotomy, maxillomandibular advancement, palatal implants, Pillar™, snoring, cautery-assisted palatal stiffening, atrial pacing, ApniCure, Inspire II Upper Airway Stimulation System, hypoglossal nerve stimulation, Adenotonsillectomy, Genio, aura6000

### APPROVED BY GOVERNING BODIES:

The regulatory status of minimally invasive surgical interventions is shown in Table 2.

**Table 2. Minimally Invasive Surgical Interventions for Obstructive Sleep Apnea**

<b>Interventions</b>	<b>Devices (predicate or prior name)</b>	<b>Manufacturer (previously owner)</b>	<b>Indication</b>	<b>PMA/ 510(k)</b>	<b>Year</b>	<b>FDA Product Code</b>
LAUP	Various					
Radiofrequency ablation	Somnoplasty®		Simple snoring and for the base of the tongue for OSA	K982717	1998	GEI
Palatal Implant	Pillar® Palatal Implant	Pillar Palatal (Restore Medical/ Medtronic)	Stiffening the soft palate which may reduce the severity of snoring and incidence of airway obstructions in patients with mild-to-moderate OSA	K040417	2004	LRK
Tongue base suspension	AIRvance® (Repose)	Medtronic	OSA and/or snoring. The AIRvance TM Bone Screw System is also suitable for the performance of a hyoid suspension	K122391	1999	LRK

<b>Interventions</b>	<b>Devices (predicate or prior name)</b>	<b>Manufacturer (previously owner)</b>	<b>Indication</b>	<b>PMA/ 510(k)</b>	<b>Year</b>	<b>FDA Product Code</b>
Tongue base suspension	Encore™ (PRELUDE III)	Siesta Medical	Treatment of mild or moderate OSA and/or snoring	K111179	2011	ORY
Hypoglossal nerve stimulation	Inspire II® Upper Airway Stimulation	Inspire Medical Systems	Patients ≥ 18 years with AHI ≥15 and ≤65 who have failed (AHI >15 despite CPAP usage) or cannot tolerate (<4 h use per night for ≥5 nights per week) CPAP and do not have complete concentric collapse at the soft palate level. Patients between ages 18 and 21 should also be contraindicated for or not effectively treated by adenotonsillectomy.	P130008, S039	2014	MNQ
Hypoglossal nerve stimulation	aura6000®	ImThera Medical		IDE	2014	
Hypoglossal nerve stimulation	Genio™	Nyxo		European CE Mark	2019	

<b>Interventions</b>	<b>Devices (predicate or prior name)</b>	<b>Manufacturer (previously owner)</b>	<b>Indication</b>	<b>PMA/ 510(k)</b>	<b>Year</b>	<b>FDA Product Code</b>
Hypoglossal nerve stimulation	Apnex System®	Apnex				

AHI: Apnea/Hypopnea Index; CPAP: continuous positive airway pressure; IDE: investigational device exemption; LAUP: Laser-assisted uvulopalatoplasty; OSA: obstructive sleep apnea.

The expanded indication for hypoglossal nerve stimulation in patients age 18 to 21 was based on patients with Down Syndrome and is contingent on a post-approval study of the Inspire® UAS in this age group. The post-approval study will be a multicenter, single-arm, prospective registry with 60 pediatric patients age 18 to 21. Visits will be scheduled at pre-implant, post-implant, 6 months, and yearly thereafter through 5 years.

**BENEFIT APPLICATION:**

Coverage is subject to member's specific benefits. Group-specific policy will supersede this policy when applicable.

**CURRENT CODING:****CPT Codes:**

21120	Genioplasty; augmentation (autograft, allograft, prosthetic material)
21121	Genioplasty; sliding osteotomy, single piece
21122	Genioplasty; sliding osteotomies, two or more osteotomies (e.g., wedge excision or bone wedge reversal for asymmetrical chin)
21123	Genioplasty; sliding, augmentation with interpositional bone grafts (includes obtaining autografts)
21199	Osteotomy, mandible, segmental with genioglossal advancement
21299	Unlisted craniofacial and maxillofacial procedure
21685	Hyoid myotomy and suspension
41120	Glossectomy; less than one-half tongue
41130	Glossectomy; hemiglossectomy
41512	Tongue base suspension, permanent suture technique
41530	Submucosal ablation of the tongue base, radiofrequency, one or more sites, per session
42120	Resection of palate or extensive resection of lesion
42140	Uvulectomy, excision of uvula
42145	Palatopharyngoplasty (e.g., uvulopalatopharyngoplasty, uvulopharyngoplasty)
42299	Unlisted procedure, Palate or Uvula
42820-	Tonsillectomy and adenoidectomy, code range

42821	
42825-42826	Tonsillectomy, primary or secondary, code range
42830-42831	Adenoidectomy, primary, code range
42835-42836	Adenoidectomy, secondary, code range
42950	Pharyngoplasty (plastic or reconstructive operation on pharynx)
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
64582	Hypoglossal nerve neurostimulator implantation; open (Effective 01/01/2022)
64583	Hypoglossal nerve neurostimulator revision or replacement (Effective 01/01/2022)
64584	Hypoglossal nerve neurostimulator removal (Effective 01/01/2022)
95976	Electronic analysis of implanted neurostimulator pulse generator/transmitter (eg, contact group[s], interleaving, amplitude, pulse width, frequency [Hz], on/off cycling, burst, magnet mode, dose lockout, patient selectable parameters, responsive neurostimulation, detection algorithms, closed loop parameters, and passive parameters) by physician or other qualified health care professional; with simple cranial nerve neurostimulator pulse generator/transmitter programming by physician or other qualified health care professional
95977	Electronic analysis of implanted neurostimulator pulse generator/transmitter (eg, contact group[s], interleaving, amplitude, pulse width, frequency [Hz], on/off cycling, burst, magnet mode, dose lockout, patient selectable parameters, responsive neurostimulation, detection algorithms, closed loop parameters, and passive parameters) by physician or other qualified health care professional; with complex cranial nerve neurostimulator pulse generator/transmitter programming by physician or other qualified health care

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#### HCPCS Codes:

S2080	Laser-assisted Uvulopalatoplasty (LAUP)
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#### PREVIOUS CODING:

0466T	Insertion of chest wall respiratory sensor electrode or electrode array, including connection to pulse generator (Deleted 12/31/2021)
0467T	Revision or replacement of chest wall respiratory sensor electrode or electrode array, including connection to existing pulse generator(Deleted 12/31/2021)
0468T	Removal of chest wall respiratory sensor electrode or electrode array(Deleted 12/31/2021)

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## **POLICY HISTORY:**

Adopted for Blue Advantage, January 2016

Medical Policy Group, August 2016

Medical Policy Group, December 2016

Medical Policy Group, January 2017

Medical Policy Group, September 2017

Medical Policy Group, April 2018

Medical Policy Group, June 2018

Medical Policy Group, January 2019

Medical Policy Group, February 2019

Medical Policy Group, November 2019

Medical Policy Group, July 2020

Medical Policy Group, November 2020

Medical Policy Group, April 2021: Updated coding to include 95976/95977.

Medical Policy Group, June 2021

Medical Policy Group, November 2021: 2022 Annual Coding Update. Added CPT 64582-64584 to the Current coding section. 0466T-0468T moved to the Previous Coding section, Revised 64568.

Medical Policy Group, June 2022

Medical Policy Group, March 2023

Medical Policy Group, June 2023

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*This medical policy is not an authorization, certification, explanation of benefits, or a contract. Eligibility and benefits are determined on a case-by-case basis according to the terms of the member's plan in effect as of the date services are rendered. All medical policies are based on (i) research of current medical literature and (ii) review of common medical practices in the treatment and diagnosis of disease as of the date hereof. Physicians and other providers are solely responsible for all aspects of medical care and treatment, including the type, quality, and levels of care and treatment.*

*This policy is intended to be used for adjudication of claims (including pre-admission certification, pre-determinations, and pre-procedure review) in Blue Cross and Blue Shield's administration of plan contracts.*