

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments



Medical Coverage Policy

Effective Date: 06/22/2023
Revision Date: 06/22/2023
Review Date: 06/22/2023
Policy Number: HUM-0419-031

Page: 1 of 27

Change Summary: Updated Coverage Determination, Coverage Limitations, References

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

Disclaimer Description Coverage Determination Background	Medical Alternatives Provider Claims Codes References
<p>Disclaimer</p> <p>State and federal law, as well as contract language, including definitions and specific inclusions/exclusions, take precedence over clinical policy and must be considered first in determining eligibility for coverage. Coverage may also differ for our Medicare and/or Medicaid members based on any applicable Centers for Medicare & Medicaid Services (CMS) coverage statements including National Coverage Determinations (NCD), Local Medical Review Policies (LMRP) and/or Local Coverage Determinations. Refer to the CMS website. The member's health plan benefits in effect on the date services are rendered must be used. Clinical policy is not intended to preempt the judgment of the reviewing medical director or dictate to health care providers how to practice medicine. Health care providers are expected to exercise their medical judgment in rendering appropriate care. Identification of selected brand names of devices, tests and procedures in a medical coverage policy is for reference only and is not an endorsement of any one device, test or procedure over another. Clinical technology is constantly evolving, and we reserve the right to review and update this policy periodically. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any shape or form or by any means, electronic, mechanical, photocopying or otherwise, without permission from Humana.</p>	
<p>Description</p> <p>Obstructive sleep apnea (OSA) is a common sleep disorder in which the muscles of the soft palate and throat intermittently relax during sleep, creating an obstruction that blocks the upper airway. This causes breathing to become difficult and noisy (snoring). Individuals with OSA experience apnea (cessation of breathing) from 10 to 60 seconds at a time, which can occur up to 120 times an hour during sleep. As a result, oxygen levels in the bloodstream decrease, which may lead to abnormal heart rhythms, heart attack, high blood pressure and/or stroke.</p> <p>Central sleep apnea (CSA) is a disorder characterized by repetitive cessation or decrease of both airflow and ventilatory effort during sleep. It can be primary (idiopathic CSA) or secondary. Examples of secondary CSA include CSA associated</p>	

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 2 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

with Cheyne-Stokes breathing, a medical condition, a drug or substance or high altitude periodic breathing. CSA associated with Cheyne-Stokes breathing is particularly common, especially among individuals who have heart failure or have had a stroke.⁵⁹

Upper airway resistance (UAR) syndrome is a type of sleep-disordered breathing involving increased airflow obstruction causing the individual to wake frequently, which can cause fatigue; however, UAR does not typically cause a decrease in oxygen saturation as does OSA.

Surgical treatments for OSA and other sleep related breathing disorders include, but may not be limited to, the following:

- **Cautery-assisted palatal stiffening operation (CAPSO)** is an office-based procedure, performed under local anesthesia, for the treatment of palatal snoring in which a portion of the soft palate is removed. **(Refer to Coverage Limitations section)**
- **Drug induced sleep endoscopy (DISE)** is a diagnostic test that is done under sedation, usually in an operating room and evaluates the severity of airway blockage related to concentric collapse. If an individual has complete concentric collapse in their airway, both the soft palate (soft part of the roof of the mouth) and sides of the throat completely block the airway. Individuals with complete concentric collapse are not candidates for hypoglossal nerve stimulation.
- **Genioplasty (mentoplasty)** is surgery of the chin where a receding chin is altered with an implant or a prominent chin is reduced. **(Refer to Coverage Limitations section)**
- **Hyoid myotomy and suspension** is 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 may be performed in combination with **genioglossus advancement**, a surgical procedure where the base of the tongue is pulled forward to increase the airway size.

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 3 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

- **Hypoglossal nerve stimulation (HGNS)** (eg, Inspire Upper Airway Stimulation [UAS] System) utilizes an implantable pulse generator, a respiratory-sensing lead and a stimulating lead surgically placed on the hypoglossal nerve. Mild electrical stimulation to the hypoglossal nerve produces selective motor stimulation of the muscle fibers that draw the tongue forward via activation of the genioglossus muscle, which improves upper airway obstruction. The individual uses a remote control to turn the device on before going to sleep and turn it off upon awakening. HGNS is intended to be a lifelong therapy.⁴⁷
- **Injection snoreplasty** is a procedure suggested for the treatment of snoring (not sleep disorders). It involves the injection of a hardening agent into the lining of the palate at the base of the uvula resulting in palatal stiffness, which purportedly reduces palatal flutter or primary snoring. **(Refer to Coverage Limitations section)**
- **Laser-assisted uvulopalatoplasty (LAUP)** removes a portion of the soft palate and uvula with laser ablation to enlarge the naso-oropharyngeal opening. The laser technique reportedly allows surgeons to perform the procedure under local anesthesia on an outpatient basis. **(Refer to Coverage Limitations section)**
- **Nasal surgery of the turbinates** (eg, turbinectomy, laser cauterization, electrocauterization, cryotherapy or submucosal resection) for symptomatic nasal obstruction or turbinate hypertrophy is performed to supposedly reduce the size of the turbinates to decrease airway resistance, while preserving the natural function, which is to clean and humidify the air as it moves through the nose. **(Refer to Coverage Limitations section)**
- **Palatal implants** (eg, Pillar Procedure) are intended to stiffen the structure of the soft palate. Three implants are inserted high up into the soft palate tissue under local anesthesia. The intended result is to change the airflow characteristics of the soft palate by stiffening and cause a reduction in airflow obstruction. **(Refer to Coverage Limitations section)**
- **Phrenic nerve stimulation (PNS)** for moderate to severe CSA uses an implantable device (eg, remede System) that purportedly delivers unilateral transvenous stimulation to deliver diaphragmatic contraction that mimics normal breathing patterns. This approach is believed to help restore normal breathing patterns by

See the [DISCLAIMER](#). All Humana member health plan contracts are **NOT** the same. All legislation/regulations on this subject may not be included. This document is for informational purposes only.

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 4 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

stimulating the phrenic nerve, which innervates the diaphragm, allowing better oxygenation and improving sleep.⁴³ **(Refer to Coverage Limitations section)**

- **Radiofrequency volumetric tissue reduction (RFVTR)**, also referred to as coblation, somnoplasty or submucosal ablation, is a surgical technique that utilizes radiofrequency ablation to produce finely controlled necrotic lesions to tissues of the soft palate, tongue, tonsils and turbinates. The necrosis purportedly leads to the formation of scar tissue, which upon healing should shrink and tighten, thereby reducing snoring and OSA. **(Refer to Coverage Limitations section)**
- **Septoplasty** is the surgical correction of defects and deformities of the nasal septum (the partition between the nostrils). **(Refer to Coverage Limitations section)**
- **Tongue base suspension procedure** (eg, AIRvance Tongue Suspension System, Encore Tongue Suspension System) suspends and repositions the tongue's anterior base and the hyoid bone to the mandible bone using bone screws and suspension sutures purportedly relieving upper airway obstruction.³⁹ **(Refer to Coverage Limitations section)**
- **Tonsillectomy and/or adenoidectomy** are procedures that are performed for airway obstruction, especially in children. Tonsillectomy is the surgical removal of the tonsils, which are a collection of lymphoid tissue covered by mucous membranes located on either side of the throat. An adenoidectomy is the surgical removal of the adenoid glands, which are masses of lymphoid tissue located at the back of the nose in the upper part of the throat. **(Refer to Coverage Limitations section for adenoidectomy as a stand-alone treatment for individuals 17 years of age or younger)**
- **Tracheostomy** is a surgical procedure in which an opening is created through the neck into the trachea (windpipe) and a tube placed through this opening to provide an airway.
- **Transpalatal advancement pharyngoplasty** is a procedure that was designed to surgically treat OSA in individuals that have narrowing in the retropalatal airway. Purportedly, the hard palate is excised and the soft palate is advanced anteriorly,

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 5 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

which supposedly increases the retropalatal size and decreases retropalatal collapsibility. **(Refer to Coverage Limitations section)**

- **Uvulectomy** is the surgical removal of the uvula. It may be performed as part of an uvulopalatopharyngoplasty (UPPP) if the uvula is enlarged in individuals diagnosed with OSA. **(Refer to Coverage Limitations section)**
- **Uvulopalatopharyngoplasty (UPPP)** is the surgical revision of the posterior soft palate and adjacent tissue to relieve partial obstruction of the nasopharyngeal airway that causes OSA. Many surgeons perform this technique, but some perform a modification of it called an **expansion sphincteroplasty**, or expansion sphincter pharyngoplasty (ESP). This technique stiffens the lateral pharyngeal walls and prevents its collapse in patients with OSA. While UPPP involves removal of the uvula, most surgeons performing the modified version preserve the majority if not the entire uvula.

For information regarding **other evaluation methods and treatments for obstructive sleep apnea and other sleep related breathing disorders** not addressed in this policy, please see the following Medical Coverage Policies:

Evaluation Method and/or Treatments	Corresponding Medical Coverage Policy
Orthognathic Surgery	Orthognathic Surgery
PAP Therapy and Other Nonsurgical Treatments	Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Nonsurgical Treatments
Sleep Studies	Sleep Studies, Adult

Coverage Determination

Commercial Plan members: all requests for OSA surgical treatment require review by a medical director.

Pediatric

Humana members 17 years of age or younger may be eligible under the Plan for **tonsillectomy OR tonsillectomy with adenoidectomy** when the following criteria are met:

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 6 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

- Adenotonsillar hypertrophy (greater than or equal to [1+ tonsils](#)); **AND/OR**
- Confirmed diagnosis of moderate to severe OSA (AHI greater than or equal to 5)

Humana members 17 years of age or younger may be eligible under the Plan for **genioglossal advancement, hyoid myotomy and suspension (with or without genioglossal advancement), UPPP or expansion sphincteroplasty** when the following criteria are met:

- Confirmed diagnosis of moderate to severe OSA (AHI greater than or equal to 5); **AND**
- OSA symptoms are persistent following a tonsillectomy/adenoidectomy

Humana members 17 years of age or younger may be eligible under the Plan for **tracheostomy** when the following criteria are met:

- Confirmed diagnosis of severe OSA (AHI greater than 10); **AND**
- Persistent OSA despite other attempted medical or surgical treatments with no other options available

Humana members 13 to 18 years of age with **Down Syndrome** may be eligible under the Plan for a US Food & Drug Administration (FDA)-approved **implantable upper airway hypoglossal nerve stimulation (HGNS) device** (eg, Inspire Upper Airway Stimulation System) when **ALL** of the following criteria are met:

- Absence of any [contraindications](#); **AND**
- Absence of complete concentric collapse at the soft palate level found during drug induced sleep endoscopy; **AND**
- AHI on polysomnogram (PSG) performed within 24 months of first consultation for the HGNS implant demonstrates 10 to 50 events per hour with less than 25% central apneas and mixed apneas; **AND**
- Body mass index (BMI) less than 95th percentile for individual's age and gender per [CDC growth charts](#); **AND**

See the [DISCLAIMER](#). All Humana member health plan contracts are **NOT** the same. All legislation/regulations on this subject may not be included. This document is for informational purposes only.

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 7 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

- Contraindication to or not effectively treated by adenotonsillectomy; **AND**
- PAP [failure or intolerance](#)* despite efforts to increase compliance

Humana members may be eligible for **replacement or removal of an FDA-approved implantable upper airway HGNS** device, generator battery, leads and/or remote when a previously implanted device, generator battery, leads and/or remote is no longer functioning appropriately and the device is no longer under warranty.

Humana members may be eligible under the Plan for a **drug induced sleep endoscopy (DISE)** to determine whether HGNS would be appropriate.

Adults

Humana members 18 years of age or older may be eligible under the Plan for **genioglossal advancement, hyoid myotomy and suspension (with or without genioglossal advancement), tonsillectomy/adenoidectomy, UPPP or expansion sphincteroplasty** when the following criteria are met:

- Confirmed diagnosis of OSA (AHI greater than 15); **AND**
- Documented positive airway pressure (PAP) therapy [failure or intolerance](#)*

Humana members 18 years of age or older may be eligible under the Plan for **tracheostomy** when the following criteria are met:

- Confirmed diagnosis of OSA (AHI greater than 15); **AND**
- Persistent OSA despite other attempted medical or surgical treatments with no other options available

Humana members 18 years of age or older may be eligible under the Plan for a US Food & Drug Administration (FDA) approved **implantable upper airway hypoglossal nerve stimulation (HGNS) device** (eg, Inspire Upper Airway Stimulation System) when **ALL** of the following criteria are met:

- Absence of any [contraindications](#); **AND**

See the [DISCLAIMER](#). All Humana member health plan contracts are **NOT** the same. All legislation/regulations on this subject may not be included. This document is for informational purposes only.

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 8 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

- Absence of complete concentric collapse at the soft palate level found during drug induced sleep endoscopy; **AND**
- AHI on polysomnogram (PSG) performed within 24 months of first consultation for the HGNS implant demonstrates 15 to 100 events per hour with less than 25% central and mixed apneas; **AND**
- Body mass index (BMI) less than or equal to 40; **AND**
- Documentation that demonstrates PAP therapy compliance (greater than 4 hours per night, 5 nights per week for a minimum of 1 month) and subsequent failure defined as:
 - Inability to eliminate OSA (AHI greater than 15) with consistent use of the device; **OR**
 - PAP [failure or intolerance](#)* despite efforts to increase compliance

Humana members may be eligible for **replacement or removal of an FDA-approved implantable upper airway HGNS** device, generator battery, leads and/or remote when a previously implanted device, generator battery, leads and/or remote is no longer functioning appropriately and the device is no longer under warranty.

Humana members may be eligible under the Plan for a **drug induced sleep endoscopy (DISE)** to determine whether HGNS would be appropriate.

*PAP failure or intolerance may be demonstrated by the following:

- Abnormal nasal, sinus or palatal structures (eg, deviated septum, swollen turbinates, high arching upper palate); **OR**
- Continued apneas, despite compliance (greater than 4 hours per night, 5 nights per week for a minimum of 1 month) with prescribed therapy and equipment adjustments including mask and/or pressure settings if medically appropriate; **OR**

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 9 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

- Excessive daytime sleepiness or level of sleepiness as measured by sleep measurement scale (eg, Epworth Sleepiness Scale, Psychomotor Vigilance Task, Stanford Sleepiness Scale); **OR**
- Frequent awakenings (eg, greater than or equal to 5 times in a night); **OR**
- Inability to tolerate the sensation of pressure or noise from the PAP device or a sense of claustrophobia; **OR**
- Persistent nasal or upper airway dryness or congestion; **OR**
- Snoring or choking episodes during sleep

Coverage Limitations

Humana members may **NOT** be eligible under the Plan for **OSA surgical treatments** for any indications or procedures other than those listed above. This includes, but may not be limited to, the following:

- Adenoidectomy as a stand-alone treatment (without tonsillectomy) for OSA in individuals 17 years of age or younger; **OR**
- Cautery assisted palatal stiffening operation (CAPSO); **OR**
- Genioplasty (mentoplasty); **OR**
- Injection snoreplasty; **OR**
- Laser assisted uvulopalatoplasty (LAUP); **OR**
- Nasal turbinate resection; **OR**
- Palatal implants (eg, Pillar Procedure); **OR**
- Radiofrequency volumetric tissue reduction (RFVTR); **OR**
- Septoplasty; **OR**

See the [DISCLAIMER](#). All Humana member health plan contracts are **NOT** the same. All legislation/regulations on this subject may not be included. This document is for informational purposes only.

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 10 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

- Tongue based suspension procedure (eg, AIRvance or Encore Tongue Suspension Systems); **OR**
- Transpalatal advancement pharyngoplasty; **OR**
- Uvulectomy as stand-alone treatment for OSA

These are considered experimental/investigational as they are not identified as widely used and generally accepted for any other proposed uses as reported in nationally recognized peer-reviewed medical literature published in the English language.

Humana members may **NOT** be eligible under the Plan for **hypoglossal nerve stimulation (HGNS)** (eg, Inspire Upper Airway Stimulation System) for any indications other than those listed above or for the following contraindications:

- 17 years of age or younger (unless the individual meets [pediatric criteria for HGNS](#)); **OR**
- Any anatomical finding that would compromise the performance of upper airway stimulation (presence of complete concentric collapse of the soft palate, [tonsil size 3+ or 4+](#)); **OR**
- Any condition or procedure that has compromised neurological control of the upper airway; **OR**
- Central and mixed apneas greater than 25% of the AHI; **OR**
- Individual who is pregnant or plans to become pregnant; **OR**
- Individual who is unable or does not have the necessary assistance to operate the sleep remote; **OR**
- Individual with a condition that requires or is likely to require future magnetic resonance imaging (MRI) (unless the HGNS device is MRI-compatible); **OR**

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 11 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

- Individual with an already implanted device that may be susceptible to unintended interaction with the system

These are considered experimental/investigational as they are not identified as widely used and generally accepted for any other proposed uses as reported in nationally recognized peer-reviewed medical literature published in the English language.

Humana members may **NOT** be eligible under the Plan for **drug induced sleep endoscopy (DISE)** for any indications other than those listed above. All other indications are considered not medically necessary as defined in the member's individual certificate. Please refer to the member's individual certificate for the specific definition.

Humana members may **NOT** be eligible under the Plan for **central sleep apnea (CSA) surgical treatments including, but may not be limited to, phrenic nerve stimulation** (eg, remede System). These are considered experimental/investigational as they are not identified as widely used and generally accepted for the proposed uses as reported in nationally recognized peer-reviewed medical literature published in the English language.

Humana members may **NOT** be eligible under the Plan for the **surgical treatments of upper airway resistance syndrome (UARS)**. These are considered experimental/investigational as they are not identified as widely used and generally accepted for the proposed uses as reported in nationally recognized peer-reviewed medical literature published in the English language.

Background

Additional information about **OSA and other sleep related breathing disorders** may be found from the following websites:

- [American Academy of Otolaryngology-Head and Neck Surgery](#)
- [American Academy of Sleep Medicine](#)
- [American Sleep Apnea Association](#)
- [National Library of Medicine](#)

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 12 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

Medical Alternatives

Alternatives to **OSA and other sleep related breathing disorders surgical treatments** include, but may not be limited to, the following:

- Abstinence from alcohol and hypnotic sedatives, especially at bedtime
- Oral appliances** (please refer to [Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Nonsurgical Treatments](#) Medical Coverage Policy)
- Weight reduction

Physician consultation is advised to make an informed decision based on an individual's health needs.

**Upper airway surgery may supersede the use of oral appliances in individuals for whom these operations are predicted to be highly effective in treating OSA.

Humana may offer a disease management program for this condition. **The member may call the number on his/her identification card to ask about our programs to help manage his/her care.**

Provider Claims Codes

Any CPT, HCPCS or ICD codes listed on this medical coverage policy are for informational purposes only. Do not rely on the accuracy and inclusion of specific codes. Inclusion of a code does not guarantee coverage and or reimbursement for a service or procedure.

CPT® Code(s)	Description	Comments
21120	Genioplasty; augmentation (autograft, allograft, prosthetic material)	Not Covered
21121	Genioplasty; sliding osteotomy, single piece	Not Covered
21122	Genioplasty; sliding osteotomies, 2 or more osteotomies (eg, wedge excision or bone wedge reversal for asymmetrical chin)	Not Covered
21123	Genioplasty; sliding, augmentation with interpositional bone grafts (includes obtaining autografts)	Not Covered
21198	Osteotomy, mandible, segmental;	

See the [DISCLAIMER](#). All Humana member health plan contracts are **NOT** the same. All legislation/regulations on this subject may not be included. This document is for informational purposes only.

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 13 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

21199	Osteotomy, mandible, segmental; with genioglossus advancement	
21206	Osteotomy, maxilla, segmental (eg, Wassmund or Schuchard)	
21685	Hyoid myotomy and suspension	
30130	Excision inferior turbinate, partial or complete, any method	Not Covered if used to report any OSA surgical treatment outlined in Coverage Limitations section
30140	Submucous resection inferior turbinate, partial or complete, any method	Not Covered if used to report any OSA surgical treatment outlined in Coverage Limitations section
30520	Septoplasty or submucous resection, with or without cartilage scoring, contouring or replacement with graft	Not Covered if used to report any OSA surgical treatment outlined in Coverage Limitations section
30801	Ablation, soft tissue of inferior turbinates, unilateral or bilateral, any method (eg, electrocautery, radiofrequency ablation, or tissue volume reduction); superficial	Not Covered if used to report any OSA surgical treatment outlined in Coverage Limitations section
30802	Ablation, soft tissue of inferior turbinates, unilateral or bilateral, any method (eg, electrocautery, radiofrequency ablation, or tissue volume reduction); intramural (ie, submucosal)	Not Covered if used to report any OSA surgical treatment outlined in Coverage Limitations section
31240	Nasal/sinus endoscopy, surgical; with concha bullosa resection	Not Covered if used to report any OSA surgical treatment outlined in Coverage Limitations section
31600	Tracheostomy, planned (separate procedure);	

See the [DISCLAIMER](#). All Humana member health plan contracts are **NOT** the same. All legislation/regulations on this subject may not be included. This document is for informational purposes only.

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 14 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

31601	Tracheostomy, planned (separate procedure); younger than 2 years	
41512	Tongue base suspension, permanent suture technique	Not Covered
41530	Submucosal ablation of the tongue base, radiofrequency, 1 or more sites, per session	Not Covered
42140	Uvulectomy, excision of uvula	Not Covered if used to report uvulectomy as stand-alone treatment for OSA
42145	Palatopharyngoplasty (eg, uvulopalatopharyngoplasty, uvulopharyngoplasty)	
42299	Unlisted procedure, palate, uvula	Not Covered if used to report any OSA surgical treatment outlined in Coverage Limitations section
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	Not Covered if used to report any OSA surgical treatment outlined in Coverage Limitations section
42831	Adenoidectomy, primary; age 12 or over	Not Covered if used to report any OSA surgical treatment outlined in Coverage Limitations section

See the [DISCLAIMER](#). All Humana member health plan contracts are **NOT** the same. All legislation/regulations on this subject may not be included. This document is for informational purposes only.

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 15 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

42835	Adenoidectomy, secondary; younger than age 12	Not Covered if used to report any OSA surgical treatment outlined in Coverage Limitations section
42836	Adenoidectomy, secondary; age 12 or over	Not Covered if used to report any OSA surgical treatment outlined in Coverage Limitations section
42950	Pharyngoplasty (plastic or reconstructive operation on pharynx)	Not Covered if used to report any OSA surgical treatment outlined in Coverage Limitations section
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 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	
64568	Incision for implantation of cranial nerve (eg, vagus nerve) neurostimulator electrode array and pulse generator	
64569	Revision or replacement of cranial nerve (eg, vagus nerve) neurostimulator electrode array, including connection to existing pulse generator	
64570	Removal of cranial nerve (eg, vagus nerve) neurostimulator electrode array and pulse generator	
64582	Open implantation of hypoglossal nerve neurostimulator array, pulse generator, and distal respiratory sensor electrode or electrode array	

See the [DISCLAIMER](#). All Humana member health plan contracts are **NOT** the same. All legislation/regulations on this subject may not be included. This document is for informational purposes only.

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 16 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

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	
64585	Revision or removal of peripheral neurostimulator electrode array	
64999	Unlisted procedure, nervous system	Not Covered if used to report any OSA surgical treatment outlined in Coverage Limitations section
95970	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 brain, cranial nerve, spinal cord, peripheral nerve, or sacral nerve, neurostimulator pulse generator/transmitter, without programming	
95971	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 spinal cord or peripheral nerve (eg, sacral nerve) neurostimulator pulse generator/transmitter programming by physician or other qualified health care professional	
CPT® Category III Code(s)	Description	Comments

See the [DISCLAIMER](#). All Humana member health plan contracts are **NOT** the same. All legislation/regulations on this subject may not be included. This document is for informational purposes only.

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 17 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

0424T	Insertion or replacement of neurostimulator system for treatment of central sleep apnea; complete system (transvenous placement of right or left stimulation lead, sensing lead, implantable pulse generator)	Not Covered
0425T	Insertion or replacement of neurostimulator system for treatment of central sleep apnea; sensing lead only	Not Covered
0426T	Insertion or replacement of neurostimulator system for treatment of central sleep apnea; stimulation lead only	Not Covered
0427T	Insertion or replacement of neurostimulator system for treatment of central sleep apnea; pulse generator only	Not Covered
0428T	Removal of neurostimulator system for treatment of central sleep apnea; pulse generator only	Not Covered
0429T	Removal of neurostimulator system for treatment of central sleep apnea; sensing lead only	Not Covered
0430T	Removal of neurostimulator system for treatment of central sleep apnea; stimulation lead only	Not Covered
0431T	Removal and replacement of neurostimulator system for treatment of central sleep apnea; pulse generator only	Not Covered
0432T	Repositioning of neurostimulator system for treatment of central sleep apnea; stimulation lead only	Not Covered
0433T	Repositioning of neurostimulator system for treatment of central sleep apnea; sensing lead only	Not Covered
0434T	Interrogation device evaluation implanted neurostimulator pulse generator system for central sleep apnea	Not Covered
0435T	Programming device evaluation of implanted neurostimulator pulse generator system for central sleep apnea; single session	Not Covered
0436T	Programming device evaluation of implanted neurostimulator pulse generator system for central sleep apnea; during sleep study	Not Covered
HCCPS Code(s)	Description	Comments
C1767	Generator, neurostimulator (implantable), nonrechargeable	
C1778	Lead, neurostimulator (implantable)	

See the [DISCLAIMER](#). All Humana member health plan contracts are **NOT** the same. All legislation/regulations on this subject may not be included. This document is for informational purposes only.

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 18 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

C1787	Patient programmer, neurostimulator	
C1823	Generator, neurostimulator (implantable), nonrechargeable, with transvenous sensing and stimulation leads	Not Covered
C1827	Generator, neurostimulator (implantable), non-rechargeable, with implantable stimulation lead and external paired stimulation controller	Not Covered if used to report any procedure outlined in Coverage Limitations section New Code Effective 01/01/2023
C9727	Insertion of implants into the soft palate; minimum of three implants	Not Covered
L8680	Implantable neurostimulator electrode, each	
L8688	Implantable neurostimulator pulse generator, dual array, nonrechargeable, includes extension	
S2080	Laser-assisted uvulopalatoplasty (LAUP)	Not Covered

References

1. Agency for Healthcare Research and Quality (AHRQ). Comparative Effectiveness Review. Tonsillectomy for obstructive-sleep disordered breathing or recurrent throat infection in children. <https://www.ahrq.gov>. Published January 2017. Accessed June 1, 2023.
2. Agency for Healthcare Research and Quality (AHRQ). Comparative Effectiveness Review (ARCHIVED). Diagnosis and treatment of obstructive sleep apnea in adults. <https://www.ahrq.gov>. Published July 2011. Accessed June 1, 2023.
3. American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS). Clinical practice guideline: tonsillectomy in children. <https://www.entnet.org>. Published 2011. Updated February 5, 2019. Accessed June 1, 2023.
4. American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS). Expert consensus statement: drug-induced sleep endoscopy. <https://www.entnet.org>. Published January 5, 2021. Accessed June 2, 2023.

See the [DISCLAIMER](#). All Humana member health plan contracts are **NOT** the same. All legislation/regulations on this subject may not be included. This document is for informational purposes only.

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 19 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

5. American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS). Expert consensus statement: management of pediatric persistent obstructive sleep apnea after adenotonsillectomy. <https://www.entnet.org>. Published January 26, 2023. Accessed June 1, 2023.
6. American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS). Position statement: hypoglossal nerve stimulation for treatment of obstructive sleep apnea. <https://www.entnet.org>. Published October 2014. Updated November 13, 2019. Accessed June 1, 2023.
7. American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS). Position statement: midline glossectomy for OSA. <https://www.entnet.org>. Published May 4, 2011. Updated September 28, 2013. Accessed June 1, 2023.
8. American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS). Position statement: nasal surgery and OSAS. <https://www.entnet.org>. Published May 3, 2010. Updated September 8, 2017. Accessed June 1, 2023.
9. American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS). Position statement: submucosal ablation of the tongue base for OSAS. <https://www.entnet.org>. Published May 3, 2010. Updated December 8, 2012. Accessed June 1, 2023.
10. American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS). Position statement: surgical management of obstructive sleep apnea. <https://www.entnet.org>. Published June 28, 1997. Updated March 2, 2014. Accessed June 1, 2023.
11. American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS). Position statement: tongue based procedures. <https://www.entnet.org>. Published July 31, 2014. Accessed June 1, 2023.
12. American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS). Position statement: tongue suspension. <https://www.entnet.org>. Published December 8, 2012. Updated September 17, 2016. Accessed June 1, 2023.

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 20 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

13. American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS). Position statement: tonsil and adenoid surgery. <https://www.entnet.org>. Published November 1, 2007. Updated August 11, 2020. Accessed June 1, 2023.
14. American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS). Position statement: tonsillectomy and OSAs. <https://www.entnet.org>. Published May 3, 2010. Updated March 2, 2014. Accessed June 1, 2023.
15. American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS). Position statement: treatment of obstructive sleep apnea. <https://www.entnet.org>. Published May 5, 2010. Updated June 9, 2021. Accessed June 1, 2023.
16. American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS). Position statement: uvulopalatopharyngoplasty. <https://www.entnet.org>. Published May 6, 1991. Updated January 11, 2019. Accessed June 1, 2023.
17. American Academy of Pediatric Dentistry (AAPD). Policy on obstructive sleep apnea. <https://www.aapd.org>. Published 2021. Accessed June 1, 2023.
18. American Academy of Pediatrics (AAP). Clinical Practice Guideline. Diagnosis and management of childhood obstructive sleep apnea syndrome. <https://www.aap.org>. Published September 2012. Accessed June 1, 2023.
19. American Academy of Sleep Medicine (AASM). Clinical guideline for the evaluation, management and long-term care of obstructive sleep apnea in adults. <https://www.aasm.org>. Published June 15, 2009. Accessed June 1, 2023.
20. American Academy of Sleep Medicine (AASM). Practice parameters for the surgical modifications of the upper airway for obstructive sleep apnea in adults. <https://www.aasm.org>. Published May 2010. Accessed June 1, 2023.
21. American Academy of Sleep Medicine (AASM). The treatment of central sleep apnea syndromes in adults: practice parameters with an evidence-based

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 21 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

literature review and meta-analyses. <https://www.aasmnet.org>. Published August 2011. Accessed June 1, 2023.

22. American Association of Oral and Maxillofacial Surgeons (AAOMS). Position Paper. Evaluation and management of obstructive sleep apnea – overview. <https://www.aaoms.org>. Published 2013. Accessed June 1, 2023.
23. American College of Physicians (ACP). Management of obstructive sleep apnea in adults: a clinical practice guideline from the American College of Physicians (ARCHIVED). <https://www.acponline.org>. Published October 1, 2013. Accessed June 1, 2023.
24. ClinicalKey. Bauer R, Dedhia R. Maxillomandibular advancement for obstructive sleep apnea. In: Myers EN, Snyderman CH. *Operative Otolaryngology Head and Neck Surgery*. 3rd ed. Elsevier; 2018:407-412.e1. <https://www.clinicalkey.com>. Accessed June 6, 2023.
25. ClinicalKey. Claman D, Gomez A. Sleep apnea. In: Ferri FF. *Ferri's Clinical Advisor 2023*. Elsevier; 2023:1416-1421.e1. Accessed June 6, 2023.
26. ClinicalKey. Goldstein NA. Evaluation and management of pediatric obstructive sleep apnea. In: Flint PW, Francis HW, Haughey BH, et al. *Cummings Otolaryngology: Head and Neck Surgery*. 7th ed. Elsevier; 2021:2798-2807.e3. <https://www.clinicalkey.com>. Accessed June 6, 2023.
27. ClinicalKey. Huyett P, Soose RJ. Rationale and indications for surgical treatment. In: Friedman M, Jacobowitz O. *Sleep Apnea and Snoring*. 2nd ed. Elsevier; 2020:66-69. <https://www.clinicalkey.com>. Accessed June 6, 2023.
28. ClinicalKey. Redline S. Sleep-disordered breathing and cardiac disease. In: Libby P, Bonow R, Mann D, et al. *Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine*. 12th ed. Elsevier; 2022:1678-1686. <https://www.clinicalkey.com>. Accessed June 6, 2023.
29. ClinicalKey. Sarber KM, Lam DJ, Ishman SL. Sleep apnea and sleep disorders. In: Flint PW, Francis HW, Haughey BH, et al. *Cummings Otolaryngology: Head*

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 22 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

and Neck Surgery. 7th ed. Elsevier; 2021:215-235.e4.
<https://www.clinicalkey.com>. Accessed June 6, 2023.

30. ClinicalKey. Sidell DR, Messner AH. Evaluation and management of the pediatric airway. In: Flint PW, Francis HW, Haughey BH, et al. *Cummings Otolaryngology: Head and Neck Surgery*. 7th ed. Elsevier; 2021:3053-3067.e5.
<https://www.clinicalkey.com>. Accessed June 6, 2023.
31. ECRI Institute. Clinical Evidence Assessment. Inspire Upper Airway Stimulation System (Inspire Medical Systems, Inc.) for treating obstructive sleep apnea.
<https://www.ecri.org>. Published January 24, 2014. Updated November 15, 2021. Accessed May 25, 2023.
32. ECRI Institute. Clinical Evidence Assessment. Radiofrequency ablation for treating obstructive sleep apnea. <https://www.ecri.org>. Published April 7, 2004. Updated September 28, 2020. Accessed May 25, 2023.
33. ECRI Institute. Clinical Evidence Assessment. Remede System (Respicaardia, Inc.) for treating moderate to severe central sleep apnea.
<https://www.ecri.org>. Published September 17, 2018. Updated June 23, 2021. Accessed May 25, 2023.
34. ECRI Institute. Hotline Response (ARCHIVED). Genioglossus advancement with hyoid myotomy for treating obstructive sleep apnea. <https://www.ecri.org>. Published April 7, 2004. Updated December 30, 2011. Accessed May 30, 2023.
35. ECRI Institute. Hotline Response (ARCHIVED). Laser-assisted uvulopalatoplasty for treating obstructive sleep apnea and upper airway resistance syndrome.
<https://www.ecri.org>. Published April 7, 2004. Updated July 24, 2013. Accessed May 30, 2023.
36. ECRI Institute. Hotline Response (ARCHIVED). Neurostimulation therapy for central sleep apnea. <https://www.ecri.org>. Published March 18, 2016. Accessed May 30, 2023.

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 23 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

37. ECRI Institute. Hotline Response (ARCHIVED). Palatal implants for treating obstructive sleep apnea. <https://www.ecri.org>. Published October 21, 2004. Updated January 31, 2013. Accessed May 30, 2023.
38. ECRI Institute. Hotline Response (ARCHIVED). Radiofrequency ablation for treating nasal hypertrophy of the inferior turbinates. <https://www.ecri.org>. Published January 30, 2014. Accessed May 30, 2023.
39. ECRI Institute. Product Brief. Encore Suspension System (Siesta Medical, Inc.) for treatment of obstructive sleep apnea. <https://www.ecri.org>. Published October 20, 2019. Accessed May 30, 2023.
40. Hayes, Inc. Clinical Research Response. AirLift procedure using the Encore Suspension System (Siesta Medical Inc) for the treatment of obstructive sleep apnea. <https://evidence.hayesinc.com>. Published January 6, 2023. Accessed May 30, 2023.
41. Hayes, Inc. Evidence Analysis Research Brief. Preoperative drug-induced sleep endoscopy in adults with obstructive sleep apnea. <https://evidence.hayesinc.com>. Published May 17, 2023. Accessed May 30, 2023.
42. Hayes, Inc. Evidence Analysis Research Brief. Uvulectomy for treatment of obstructive sleep apnea. <https://evidence.hayesinc.com>. Published May 23, 2023. Accessed May 30, 2023.
43. Hayes, Inc. Health Technology Assessment. Phrenic nerve stimulation (remede System) for central sleep apnea. <https://evidence.hayesinc.com>. Published April 22, 2022. Updated May 26, 2023. Accessed May 30, 2023.
44. Hayes, Inc. Health Technology Brief (ARCHIVED). Pillar palatal implant system (Medtronic Xomed Inc.) for obstructive sleep apnea. <https://evidence.hayesinc.com>. Published January 28, 2010. Updated January 26, 2012. Accessed May 30, 2023.
45. Hayes, Inc. Health Technology Brief (ARCHIVED). Powered intracapsular tonsillectomy and adenoidectomy (PITA) for treatment of obstructive sleep

See the [DISCLAIMER](#). All Humana member health plan contracts are **NOT** the same. All legislation/regulations on this subject may not be included. This document is for informational purposes only.

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 24 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

apnea. <https://evidence.hayesinc.com>. Published November 28, 2007. Updated December 13, 2009. Accessed May 30, 2023.

46. Hayes, Inc. Health Technology Brief (ARCHIVED). Repose tongue and hyoid suspension system (Medtronic Xomed, Inc.) for obstructive sleep apnea. <https://evidence.hayesinc.com>. Published January 31, 2010. Updated January 31, 2012. Accessed May 30, 2023.
47. Hayes, Inc. Medical Technology Directory. Hypoglossal nerve stimulation for the treatment of obstructive sleep apnea. <https://evidence.hayesinc.com>. Published October 30, 2018. Updated December 27, 2022. Accessed May 30, 2023.
48. Hayes, Inc. Medical Technology Directory (ARCHIVED). Radiofrequency tissue volume reduction for the treatment of upper airway obstruction. <https://evidence.hayesinc.com>. Published March 30, 2007. Updated March 28, 2011. Accessed May 30, 2023.
49. Hayes, Inc. Medical Technology Directory (ARCHIVED). Sleep apnea treatment, surgical. <https://evidence.hayesinc.com>. Published September 13, 2005. Updated October 19, 2009. Accessed May 30, 2023.
50. MCG Health. Adenoidectomy. 26th edition. <https://www.mcg.com>. Accessed May 9, 2023.
51. MCG Health. Mandibular osteotomy. 26th edition. <https://www.mcg.com>. Accessed May 9, 2023.
52. MCG Health. Maxillomandibular osteotomy and advancement. 26th edition. <https://www.mcg.com>. Accessed May 9, 2023.
53. MCG Health. Tongue base ablation, radiofrequency and other tongue procedures. 26th edition. <https://www.mcg.com>. Accessed May 9, 2023.
54. MCG Health. Tonsillectomy. 26th edition. <https://www.mcg.com>. Accessed May 9, 2023.

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 25 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

55. MCG Health. Turbinate resection. 26th edition. <https://www.mcg.com>. Accessed May 9, 2023.
56. MCG Health. Uvulopalatopharyngoplasty (UPPP). 26th edition. <https://www.mcg.com>. Accessed May 9, 2023.
57. MCG Health. Uvulopalatopharyngoplasty (UPPP), alternative procedures. 26th edition. <https://www.mcg.com>. Accessed May 9, 2023.
58. UpToDate, Inc. Adenotonsillectomy for obstructive sleep apnea in children. <https://www.uptodate.com>. Updated April 2023. Accessed May 30, 2023.
59. UpToDate, Inc. Central sleep apnea: treatment. <https://www.uptodate.com>. Updated April 2023. Accessed May 30, 2023.
60. UpToDate, Inc. Management of obstructive sleep apnea in children. <https://www.uptodate.com>. Updated April 2023. Accessed May 30, 2023.
61. UpToDate, Inc. Obstructive sleep apnea in pregnancy. <https://www.uptodate.com>. Updated April 2023. Accessed May 30, 2023.
62. UpToDate, Inc. Obstructive sleep apnea: overview of management in adults. <https://www.uptodate.com>. Updated April 2023. Accessed May 30, 2023.
63. UpToDate, Inc. Surgical treatment of obstructive sleep apnea in adults. <https://www.uptodate.com>. Updated April 2023. Accessed May 30, 2023.
64. UpToDate, Inc. Tonsillectomy and/or adenoidectomy in children: indications and contraindications. <https://www.uptodate.com>. Updated May 2023. Accessed May 30, 2023.
65. UpToDate, Inc. Tonsillectomy in adults: indications. <https://www.uptodate.com>. Updated April 2023. Accessed May 30, 2023.
66. UpToDate, Inc. Upper airway imaging in obstructive sleep apnea in adults. <https://www.uptodate.com>. Updated April 2023. Accessed May 30, 2023.

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 26 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

67. US Department of Veterans Affairs (VA). VA/DoD Clinical Practice Guideline. The management of chronic insomnia disorders and obstructive sleep apnea. <https://www.va.gov>. Published 2019. Accessed June 1, 2023.
68. US Food & Drug Administration (FDA). Summary of safety and effectiveness data: Inspire upper airway stimulation (UAS). <https://www.fda.gov>. Published March 20, 2023. Accessed June 8, 2023.

Obstructive Sleep Apnea and Other Sleep Related Breathing Disorders Surgical Treatments

Effective Date: 06/22/2023

Revision Date: 06/22/2023

Review Date: 06/22/2023

Policy Number: HUM-0419-031

Page: 27 of 27

Humana's documents are updated regularly online. When printed, the version of this document becomes uncontrolled. Do not rely on printed copies for the most up-to-date version. Refer to [Medical and Pharmacy Coverage Policies](#) to verify that this is the current version before utilizing.

Appendix A

Standardized Tonsil Grading Scale⁶⁵

Grade 0	Tonsils absent or atrophied
Grade 1+	Tonsils fill 0 to 25 percent of the oropharyngeal diameter
Grade 2+	Tonsils fill 25 to 50 percent of the oropharyngeal diameter
Grade 3+	Tonsils fill 50 to 75 percent of the oropharyngeal diameter
Grade 4+	Tonsils fill 75 to 100 percent of the oropharyngeal diameter
Kissing tonsils	Tonsils fill 100 percent of the oropharyngeal diameter and touch each other