

**Subject:** Nasal Surgery for the Treatment of Obstructive Sleep Apnea and Snoring  
**Guideline #:** CG-SURG-87  
**Status:** Reviewed

**Publish Date:** 09/27/2023  
**Last Review Date:** 08/10/2023

## Description

This document addresses nasal surgery for the treatment of obstructive sleep apnea (OSA) and snoring.

**Note:** Please see the following related documents for additional information:

- [CG-SURG-18 Septoplasty](#)
- [SURG.00129 Oral, Pharyngeal and Maxillofacial Surgical Treatment for Obstructive Sleep Apnea or Snoring](#)
- [SURG.00079 Nasal Valve Repair](#)

## Clinical Indications

### Not Medically Necessary:

Nasal surgery employing any technique is considered **not medically necessary** for the treatment of snoring.

Nasal surgery employing any technique is considered **not medically necessary** for the treatment of obstructive sleep apnea and other sleep related breathing disorders.

## Coding

*The following codes for treatments and procedures applicable to this guideline are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement policy. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.*

### When services are Not Medically Necessary:

For the following procedure and diagnosis codes or when the code describes a procedure designated in the Clinical Indications section as not medically necessary.

#### CPT

30110	Excision, nasal polyp(s), simple
30115	Excision, nasal polyp(s), extensive
30130	Excision inferior turbinate, partial or complete, any method
30140	Submucous resection inferior turbinate, partial or complete, any method
30465	Repair of nasal vestibular stenosis (eg, spreader grafting, lateral nasal wall reconstruction)
30520	Septoplasty or submucous resection, with or without cartilage scoring, contouring or replacement with graft
30801	Ablation, soft tissue of inferior turbinates, unilateral or bilateral, any method (eg, electrocautery, radiofrequency ablation, or tissue volume reduction); superficial
30802	Ablation, soft tissue of inferior turbinates, unilateral or bilateral, any method (eg, electrocautery, radiofrequency ablation, or tissue volume reduction); intramural (ie, submucosal)
31237	Nasal/sinus endoscopy, surgical; with biopsy, polypectomy or debridement (separate procedure)

#### ICD-10 Procedure

095K0ZZ-095KXZZ	Destruction of nose [by approach; includes codes 095K0ZZ, 095K3ZZ, 095K4ZZ, 095KXZZ]
095L0ZZ-095L8ZZ	Destruction of nasal turbinate [by approach; includes codes 095L0ZZ, 095L3ZZ, 095L4ZZ, 095L7ZZ, 095L8ZZ]
09BK0ZZ-09BKXZZ	Excision of nose [by approach; includes codes 09BK0ZZ, 09BK3ZZ, 09BK4ZZ, 09BKXZZ]
09BL0ZZ-09BL8ZZ	Excision of nasal turbinate [by approach; includes codes 09BL0ZZ, 09BL3ZZ, 09BL4ZZ, 09BL7ZZ, 09BL8ZZ]
09BM0ZZ-09BM4ZZ	Excision of nasal septum [by approach; includes codes 09BM0ZZ, 09BM3ZZ, 09BM4ZZ]
09DL0ZZ-09DL8ZZ	Extraction of nasal turbinate [by approach; includes codes 09DL0ZZ, 09DL3ZZ, 09DL4ZZ, 09DL7ZZ, 09DL8ZZ]
09TL0ZZ-09TL8ZZ	Resection of nasal turbinate [by approach; includes codes 09TL0ZZ, 09TL4ZZ, 09TL7ZZ, 09TL8ZZ]
09TM0ZZ-09TM4ZZ	Resection of nasal septum [by approach; includes codes 09TM0ZZ, 09TM4ZZ]

#### ICD-10 Diagnosis

G47.30-G47.39	Sleep apnea
G47.8	Other sleep disorders
G47.9	Sleep disorder, unspecified
R06.83	Snoring

## Discussion/General Information

Studies suggest stimulation of receptors in the nasal airway improves muscle tone in the oropharynx, and increased nasal resistance results in increased negative intraluminal pressure, causing an increased tendency for the soft tissues of the upper airway (soft palate and pharyngeal walls) to collapse. In addition, nasal obstruction may lead to mouth breathing and mouth opening which, in turn,

results in inferior movement of the mandible with associated decrease in pharyngeal diameter. The base of the tongue may also fall backwards reducing the posterior pharyngeal space. The rationale for nasal surgery is to improve nasal patency re-establishing physiological breathing and minimizing oral breathing during sleep; also to reduce nasal resistance and improve the negative intraluminal pressure which generates upper airway collapse.

However, studies have not demonstrated that reducing nasal obstruction and resistance from various causes and using various techniques, (for example, septoplasty, turbinectomy, polypectomy, radiofrequency volumetric tissue reduction [RFVTR] of inferior nasal turbinates) correlates with a significant reduction in objective indicators for obstructive sleep apnea (OSA), such as the Apnea-Hypopnea Index (AHI) or nocturnal oxygen desaturation. Although some case reports have suggested that surgical correction of nasal obstruction may improve subjective daytime complaints in individuals with OSA, studies in general have been flawed by relatively small numbers of study subjects, the fact that nasal surgery is often performed in association with other surgical procedures, and lack of objective data regarding nasal resistance and OSA diagnostic variables.

In their June 2003 review article, Chen and Kushida concluded that, "The exact role obstructed nasal breathing plays in the pathogenesis of OSA type sleep disorders remains presumptive, and robust clinical studies to evaluate the contribution of nasal function remain elusive. More stringently controlled studies are needed." Another review by Rappai concluded that, "To date, there are no compelling data to demonstrate causality between nasal obstruction and persistent sleep disordered breathing." They point out that most of the studies reviewed in their 2003 review article are short term, or only examined subjective outcomes to evaluate the effect on sleep disordered breathing. The authors concluded that further studies are needed to prove specific causality. There continues to be a lack of large, well-designed clinical trials sufficiently powered to support the safety and efficacy of nasal surgical procedures for OSA.

In a Cochrane review, Rimmer and colleagues (2014) found:

The evidence relating to the effectiveness of different types of surgery versus medical treatment for adults with chronic rhinosinusitis with nasal polyps is of very low quality. The evidence does not show that one treatment is better than another in terms of patient-reported symptom scores and quality of life measurements. The one positive finding from amongst the several studies examining a number of different comparisons must be treated with appropriate caution, in particular when the clinical significance of the measure is uncertain. As the overall evidence is of very low quality (serious methodological limitations, reporting bias, indirectness and imprecision) and insufficient to draw firm conclusions, further research to investigate this problem, which has significant implications for quality of life and healthcare service usage, is justified.

Another proposed use of nasal surgical procedures is to improve compliance with continuous positive airway pressure (CPAP) use in individuals with OSA and nasal obstruction requiring high CPAP settings. CPAP intolerance has been investigated in small retrospective studies with some favorable evidence showing reduced postoperative CPAP titration levels by at least 1 cm water. However, variable additional factors also impact CPAP compliance, such as individual perception of symptoms and improvement in sleepiness and daily function from initial use of CPAP. For these reasons, larger, well-designed studies are needed to confirm the durability of any beneficial effect on CPAP compliance from nasal surgical procedures for individuals with OSA (Friedman, 2009; Masdon, 2004; Weaver, 2008; Zonato, 2006).

In a review, Bury and colleague (2015) found that snoring and obstructive sleep apnea have been well researched. While the studies supporting nasal surgery for snoring can improve the quality of life, it may not lead to the resolution of snoring. Likewise, compliance with nasal treatments for OSA may increase the quality of life in some individuals. Further well-designed studies are needed to clarify the role of nasal surgery in OSA, with stratification of individuals who may benefit from nasal intervention.

The American Academy of Otolaryngology—Head and Neck Surgery Foundation (2015) published a clinical consensus statement addressing: Septoplasty with or without Inferior Turbinate Reduction. Utilizing the Delphi Method, a panel of specialists considered eight areas, one of which was surgical, addressing septoplasty. Based on an anonymous survey response, the panel reached consensus stating that:

- Septoplasty can improve continuous positive air pressure tolerance for patients with sleep apnea and a deviated septum.

Well-designed, randomized studies are necessary to define appropriate criteria for OSA surgical procedures.

It has been postulated that increased nasal resistance may contribute to, or be causative in, sleep related breathing disorders, such as OSA. Nasal procedures that have been performed for the treatment of OSA include, but are not limited to the following:

- Septal surgery or septoplasty to straighten and thin a deviated or otherwise abnormal nasal septum (using several different techniques);
- Surgery to correct nasal turbinate hypertrophy (enlargement/swelling) or deformity (turbinectomy); this may involve the use of laser or radiofrequency ablation as an alternative to turbinectomy;
- Nasal polypectomy (removal of nasal polyps).

## Definitions

**Chronic:** Refers to persistent conditions with symptoms that last over a long period of time.

**Delphi Method:** A structured communication technique or method originally developed as a systematic, interactive forecasting method which relies on a panel of experts. The experts answer questionnaires in two or more rounds.

**Nasal turbinates:** The scroll-like bony plates with curved margins on the lateral wall of the nasal cavity.

**Sleep apnea:** Temporary stoppage of breathing during sleep, which can result in excessive daytime sleepiness.

**Snoring:** A fluttering sound created by the turbulent airflow vibrations of upper airway soft tissue during sleep.

**Somnoplasty®** (also referred to as radiofrequency ablation [RFA] or radiofrequency volumetric tissue reduction [RFVTR]): These terms refer to a minimally invasive surgical procedure that reduces the excess volume of the surrounding tissues in the upper airway, in order to enlarge the space. These procedures have been purported to reduce the symptoms of OSA and snoring. Although the procedure has been used to remove tissue from the turbinates and tonsils, recent studies of RFA in the treatment of OSA have limited the procedure to the soft palate, uvula and tongue base. The Somnoplasty® System (Somnus Medical Technologies, Sunnyvale, CA) received clearance from the U.S. Food and Drug Administration (FDA) on July 17, 1997 for coagulation of soft tissue, including the uvula/soft palate. The 510(k) summary states that, "The Somnoplasty system may reduce the severity of snoring in some individuals." An expanded approval on November 2, 1998 states that, "The system is intended for the reduction of the incidence of airway obstruction in patients with upper airway resistance syndrome and OSA."

## References

### Peer Reviewed Publications:

1. Back LJ, Hytonen ML, Roine RP, Malmivaara AV. Radiofrequency ablation treatment of soft palate for patients with snoring: a systematic review of effectiveness and adverse effects. *Laryngoscope*. 2009; 119(6):1241-1250.
2. Bican A, Kahraman A, Bora I, et al. What is the efficacy of nasal surgery in patients with obstructive sleep apnea syndrome? *J Craniofac Surg*. 2010; 21(6):1801-1806.
3. Blumen MB, Chalumeau F, Gauthier A, et al. Comparative study of four radiofrequency generators for the treatment of snoring. *Otolaryngol Head Neck Surg*. 2008; 138(3):294-299.
4. Bury SB1, Singh A. The role of nasal treatments in snoring and obstructive sleep apnea. *Curr Opin Otolaryngol Head Neck Surg*. 2015; 23(1):39-46.
5. Cavaliere M, Mottola G, Iemma M. Monopolar and bipolar radiofrequency thermal ablation of inferior turbinates: 20-month follow-up. *Otolaryngol Head Neck Surg*. 2007; 137(2):256-263.
6. Ceylan K, Emir H, Kizilkaya Z, et al. First-choice treatment in mild to moderate obstructive sleep apnea: single-stage, multilevel, temperature-controlled radiofrequency tissue volume reduction or nasal continuous positive airway pressure. *Arch Otolaryngol Head Neck Surg*. 2009; 135(9):915-919.
7. Chen W, Kushida, CA. Nasal obstruction in sleep disordered breathing. *Otolaryngol Clin North Am*. 2003; 36(3):437-460.
8. Choi JH, Kim EJ, Kim YS, et al. Effectiveness of nasal surgery alone on sleep quality, architecture, position, and sleep-disordered breathing in obstructive sleep apnea syndrome with nasal obstruction. *Am J Rhinol Allergy*. 2011; 25(5):338-341.
9. Franklin KA, Anttila H, Axelsson S, et al. Effects and side-effects of surgery for snoring and obstructive sleep apnea—a systematic review. *Sleep*. 2009; 32(1):27-36.
10. Friedman M, Lin HC, Gurpinar B, Joseph NJ. Minimally invasive single-stage multilevel treatment for obstructive sleep apnea/hypopnea syndrome. *Laryngoscope*. 2007; 117(10):1859-1863.
11. Friedman M, Soans R, Joseph N, et al. The effect of multilevel upper airway surgery on continuous positive airway pressure therapy in obstructive sleep apnea/hypopnea syndrome. *Laryngoscope*. 2009; 119(1):193-196.
12. Gindros G, Kantas I, Balatsouras DG, et al. Comparison of ultrasound turbinate reduction, radiofrequency tissue ablation and submucosal cauterization in inferior turbinate hypertrophy. *Eur Arch Otorhinolaryngol*. 2010; 267(11):1727-1733.
13. Harrell WC, Pillsbury HC, McGuirt WF, Stewart MG. Radiofrequency turbinate reduction: a NOSE evaluation. *Laryngoscope*. 2007; 117(11):1912-1919.
14. Hytonen ML, Bäck LJ, Malmivaara AO, Roine RP. Radiofrequency thermal ablation for patients with nasal symptoms: a systematic review of effectiveness and complications. *Eur Arch Otorhinolaryngol*. 2009; 266(8):1257-1266.
15. Kizilkaya Z, Ceylan K, Emir H, et al. Comparison of radiofrequency tissue volume reduction and submucosal resection with microdebrider in inferior turbinate hypertrophy. *Otolaryngol Head Neck Surg*. 2008; 138(2):176-181.
16. Koutsourelakis I, Georgouloupoulos G, Perraki E, et al. Randomized trial of nasal surgery for fixed nasal obstruction in obstructive sleep apnea. *Eur Respir J*. 2008; 31(1):110-117.
17. Li HY, Lin Y, Chen NH, et al. Improvement in quality of life after nasal surgery alone for patients with obstructive sleep apnea and nasal obstruction. *Arch Otolaryngol Head Neck Surg*. 2008; 134(4):429-433.
18. Li HY, Wang PC, Chen YP, et al. Critical appraisal and meta-analysis of nasal surgery for obstructive sleep apnea. *Am J Rhinol Allergy*. 2011; 25(1):45-49.
19. Lin H, Friedman M, Chang H, et al. The efficacy of multilevel surgery of the upper airway in adults with obstructive sleep apnea/hypopnea syndrome. *Laryngoscope*. 2008; 118(5):902-908.
20. Masdon JL, Magnuson JS, Youngblood G. The effects of upper airway surgery for obstructive sleep apnea on nasal continuous positive airway pressure settings. *Laryngoscope*. 2004; 114(2):205-207.
21. Nakata S, Noda A, Yagi H, et al. Nasal resistance for determinant factor of nasal surgery in CPAP failure patients with obstructive sleep apnea syndrome. *Rhinology*. 2005; 43(4):296-299.
22. Neace JM, Krempel GA. Radiofrequency treatment of turbinate hypertrophy, a randomized, blinded, placebo-controlled clinical trial. *Otolaryngol Head Neck Surg*. 2004; 130(3):291-299.
23. Nelson LM, Barrera JE. High energy single session radiofrequency tongue treatment in obstructive sleep apnea surgery. *Otolaryngol Head Neck Surg*. 2007; 137(6):883-888.
24. Olson EJ, Park JG, Morgenthaler TI. Obstructive sleep apnea-hypopnea syndrome. *Prim Care*. 2005; 32(2):329-359.
25. Singh A, Patel N, Kenyon G, Donaldson G. Is there objective evidence that septal surgery improves nasal airflow? *J Laryngol Otol*. 2006; 120(11):916-920.
26. Steward DL. Effectiveness of multilevel (tongue and palate) radiofrequency tissue ablation for patients with obstructive sleep apnea syndrome. *Laryngoscope*. 2004; 114(12):2073-2084.
27. Stewart MG, Smith TL, Weaver EM, et al. Outcomes after nasal septoplasty: results from the Nasal Obstruction Septoplasty Effectiveness (NOSE) study. *Otolaryngol Head Neck Surg*. 2004; 130(3):283-290.
28. Stuck BA, Sauter A, Hormann K, et al. Radiofrequency surgery of the soft palate in the treatment of snoring. A placebo controlled trial. *Sleep*. 2005; 28(7):847-850.
29. Weaver TE, Grunstein RR. Adherence to continuous positive airway pressure therapy: the challenge to effective treatment. *Proc Am Thorac Soc*. 2008; 5(2):173-178.
30. Zonato AI, Bittencourt LR, Martinho FL, et al. Upper airway surgery: the effect on nasal continuous positive airway pressure titration on obstructive sleep apnea patients. *Eur Arch Otorhinolaryngol*. 2006; 263(5):481-486.

### Government Agency, Medical Society, and Other Authoritative Publications:

1. American Academy of Otolaryngology-Head and Neck Surgery. Clinical Consensus Statement. Septoplasty with or without inferior turbinate reduction. 2015; 153(5):708-720.
2. American Academy of Otolaryngology -- Head and Neck Surgery. Position Statement: Nasal Surgery and OSAS. April 22, 2021. Available at: <https://www.entnet.org/node/548>. Accessed on July 10, 2023.
3. American Academy of Otolaryngology -- Head and Neck Surgery. Position Statement: Surgical Management of Obstructive Sleep Apnea. April 22, 2021. Available at: <https://www.entnet.org/resource/position-statement-surgical-management-of-obstructive-sleep-apnea/>. Accessed on July 10, 2023.
4. American Academy of Otolaryngology -- Head and Neck Surgery. Position Statement: Treatment of Obstructive Sleep Apnea. April 22, 2021. Available at: [Position Statement: Treatment of obstructive sleep apnea - American Academy of Otolaryngology-Head and Neck Surgery \(AAO-HNS\)](https://www.entnet.org/resource/position-statement-treatment-of-obstructive-sleep-apnea/). Accessed on July 10, 2023.
5. Aurora RN, Casey KR, Kristo D, et al. American Academy of Sleep Medicine (AASM). Practice parameters for the surgical modifications of the upper airway for obstructive sleep apnea in adults. *Sleep*. 2010; 33(10):1408-1413.
6. Epstein LJ, Kristo D, Strollo PJ, et al. American Academy of Sleep Medicine (AASM). Clinical guideline for the evaluation, management and long-term care of obstructive sleep apnea in adults. *J Clin Sleep Med*. 2009; 5(3):263-276.
7. Kapur VK, Auckley DH, Chowdhuri S, et al. American Academy of Sleep Medicine (AASM). Clinical practice guideline for diagnostic testing for adult Obstructive Sleep Apnea: An AASM Clinical Practice Guideline. *J Clin Sleep Med*. 2017; 13(3):479-

8. Main C, Liu Z, Welch K, et al. Surgical procedures and non-surgical devices for the management of non-apneic snoring: a systematic review of clinical effects and associated treatment costs. *Health Technol Assess*. 2009; 13(3):iii, xi-xiv, 1-208.
9. Rimmer J, Fokkens W, Chong LY, Hopkins C. Surgical versus medical interventions for chronic rhinosinusitis with nasal polyps. *Cochrane Database of Syst Rev*. 2014;(12):CD006991.
10. U.S. Food and Drug Administration (FDA). Center for Devices and Radiological Health Circulatory System Devices Panel. Somnoplasty System (Somnus Medical Technologies, Sunnyvale, CA). Summary of Safety and Effectiveness. No. K971450. July 17, 1997. Available at: [http://www.accessdata.fda.gov/cdrh\\_docs/pdf/K971450.pdf](http://www.accessdata.fda.gov/cdrh_docs/pdf/K971450.pdf). Accessed on July 10, 2023.
11. U.S. Food and Drug Administration (FDA). Center for Devices and Radiological Health Circulatory System Devices Panel. Gyrus G I1 Radio-frequency workstation & accessories (Gyrus Medical Inc., Bartlett, TN). Summary of Safety and Effectiveness. No. K021777. August 26, 2002. Available at: [http://www.accessdata.fda.gov/cdrh\\_docs/pdf2/k021777.pdf](http://www.accessdata.fda.gov/cdrh_docs/pdf2/k021777.pdf). Accessed on July 10, 2023.

## Websites for Additional Information

1. American Academy of Sleep Medicine (AASM). Available at: <https://aasm.org/clinical-resources/practice-standards/practice-guidelines/>. Accessed on July 10, 2023.

## Index

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 Volumetric Tissue Reduction of Nasal Turbinates

**The use of specific product names is illustrative only. It is not intended to be a recommendation of one product over another, and is not intended to represent a complete listing of all products available.**

## History

Status	Date	Action
Reviewed	08/10/2023	Medical Policy & Technology Assessment Committee (MPTAC) review. Updated References and Websites for Additional Information.
Revised	08/11/2022	MPTAC review. Information related to absorbable nasal implant (Latera) and nasal valve surgery moved to SURG.00079 Nasal Valve Repair. Updated Description, Rationale, References, Websites for Additional Information, Index and History sections. Updated Coding section to remove CPT code 30468 now addressed in SURG.00079.
Reviewed	05/13/2021	MPTAC review. Definitions and References were updated. Reformatted Coding section; removed 30999 no longer applicable.
	12/16/2020	Updated Coding section with 01/01/2021 CPT and HCPCS changes; added 30468, code C9749 deleted 12/31/2020.
Reviewed	05/14/2020	MPTAC review. References were updated.
Reviewed	06/06/2019	MPTAC review. The Discussion and References sections were updated.
New	07/26/2018	MPTAC review. Moved content of SURG.00074 Nasal Surgery for the Treatment of Obstructive Sleep Apnea and Snoring to new clinical utilization management guideline document with the same title. Removed acronym (OSA) from the title. The References section was updated.

Federal and State law, as well as contract language, and Medical Policy take precedence over Clinical UM Guidelines. We reserve the right to review and update Clinical UM Guidelines periodically. Clinical guidelines approved by the Medical Policy & Technology Assessment Committee are available for general adoption by plans or lines of business for consistent review of the medical necessity of services related to the clinical guideline when the plan performs utilization review for the subject. Due to variances in utilization patterns, each plan may choose whether to adopt a particular Clinical UM Guideline. To determine if review is required for this Clinical UM Guideline, please contact the customer service number on the member's card.

Alternatively, commercial or FEP plans or lines of business which determine there is not a need to adopt the guideline to review services generally across all providers delivering services to Plan's or line of business's members may instead use the clinical guideline for provider education and/or to review the medical necessity of services for any provider who has been notified that his/her/its claims will be reviewed for medical necessity due to billing practices or claims that are not consistent with other providers, in terms of frequency or in some other manner.

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