Cohere Medicare Advantage Policy - Obstructive Sleep Apnea Surgeries

Clinical Guidelines for Medical Necessity Review

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Important Notices

Notices & Disclaimers:

GUIDELINES ARE SOLELY FOR COHERE'S USE IN PERFORMING MEDICAL NECESSITY REVIEWS AND ARE NOT INTENDED TO INFORM OR ALTER CLINICAL DECISION-MAKING OF END USERS.

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Other Notices:

Guideline Information:

Specialty Area: Sleep Medicine
Guideline Name: Cohere Medicare Advantage Policy - Obstructive Sleep Apnea Surgeries

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Type: [**X**] Adult (18+ yo) | [**X**] Pediatric (0-17 yo)

Table of Contents

Medical Necessity Criteria

Service: Obstructive Sleep Apnea Surgeries

Benefit Category

Not Applicable

Related CMS Documents

Please refer to CMS Medicare Coverage Database for the most current applicable CMS National Coverage.[1-2]

- Local Coverage Determination (LCD): Surgical treatment of obstructive sleep apnea (OSA) (L34526)
- Billing and Coding: Surgical treatment of obstructive sleep apnea (OSA) (A56905)

Recommended Clinical Approach

Obstructive sleep apnea (OSA) is a condition where multiple episodes of partial or complete closure of the upper airway during sleep may occur. These often frequent episodes may lead to pauses in breathing (apnea or hypopnea) that can last for greater than 10 seconds, and may be followed by awakening or rapid breathing. Diagnostic testing is necessary to determine the presence of OSA. While non-surgical treatments exist (e.g., positive airway pressure [PAP]), surgery may be recommended to reduce the risk of hypertension, atrial fibrillation, heart failure, and other serious associated conditions due to lack of oxygen in the bloodstream. Both adults and children may be affected by OSA.[3-4]

Evaluation of Clinical Harms and Benefits

Cohere Health uses the criteria below to ensure consistency in reviewing the conditions to be met for coverage of obstructive sleep apnea surgeries. This process helps to prevent both incorrect denials and inappropriate approvals of medically necessary services. Specifically, limiting incorrect approvals

reduces the risks associated with unnecessary procedures, such as complications from surgery, infections, and prolonged recovery times.

The potential clinical harms of using these criteria may include:

- Potential risks of OSA surgeries include short-term postoperative complications such as swallowing difficulties, velopharyngeal insufficiency, infection, or taste disturbances. Long-term adverse effects may include failure to provide a cure for the OSA as well as intolerance to PAP therapy (Smith et al. 2015).[5]
- Consideration of potential delays or denials in treatment leading to worsened patient outcomes. Inability to perform OSA surgery due to delays or denials in treatment can result in cardiovascular compromise for the patient as well as decreased quality of life due to inadequate sleep. Individuals with increased body mass index (BMI) may be at greater risk for OSA and its complications, according to a 2021 guideline for the American Academy of Sleep Medicine by Kent et al.[6]
- Increased healthcare costs and complications from the inappropriate use of emergency services and additional treatments.

The potential clinical benefits of using these criteria include:

- Improved patient outcomes through timely and appropriate access to obstructive sleep apnea (OSA) surgeries. OSA surgical approaches may improve sleep quality for individuals who have not been successfully treated with non-surgical interventions such as positive airway pressure (PAP) therapy due to airway obstruction in the palatal and lingual regions.
- Reduction in complications and adverse effects from unnecessary procedures. It is crucial to avoid unnecessary surgery, as future additional invasive management may be required.
- Appropriate management of obstructive sleep apnea which has not been successfully treated by non-surgical interventions. Individuals may not have been able to tolerate PAP therapy due to claustrophobia or other intolerance, or their OSA symptoms may have persisted despite the use of PAP therapy.
- Enhanced overall patient satisfaction and healthcare experience. Individuals may experience better overall health following OSA surgery

as their sleep improves and there is a reduction in cardiovascular complications and improved quality of life.

This policy includes provisions for expedited reviews and flexibility in urgent cases to mitigate risks of delayed access. Evidence-based criteria are employed to prevent inappropriate denials, ensuring that patients receive medically necessary care. The criteria aim to balance the need for effective treatment with the minimization of potential harms, providing numerous clinical benefits in helping avoid unnecessary complications from inappropriate care.

In addition, the use of these criteria is likely to decrease inappropriate denials by creating a consistent set of review criteria, thereby supporting optimal patient outcomes and efficient healthcare utilization.

Medical Necessity Criteria

Indications

- **Obstructive sleep apnea (OSA) surgeries** are considered appropriate if **ALL** of the following are **TRUE**[1, 7-11]:
  - **ANY** of the following procedures[1, 8-9]:
    - Hyoid myotomy and suspension[12-13]; **OR**
    - Tongue base suspension, permanent suture technique[1]; **OR**
    - Palatopharyngoplasty (uvulopalatopharyngoplasty, uvulopharyngoplasty); **OR**
    - Pharyngoplasty; **AND**
  - Confirmed diagnosis* of OSA[1, 10, 14]; **AND**
  - Respiratory disturbance index or apnea-hypopnea index greater than 15 (moderate to severe OSA)[1, 15]; **AND**
  - Documented counseling by a physician, with recognized training in sleep disorders about the potential benefits and risks of the surgery[1]; **AND**
  - **ANY** of the following:
    - Evidence of retrolingual, retropalatal, or combination retropalatal/retrolingual obstruction as the cause of the OSA[1]; **OR**
    - History of prior UPPP, and **ALL** of the following are **TRUE**:
      - Failure of previous UPPP[1]; **AND**

        - The request is for hyoid myotomy and suspension; **AND**
    - Failure or intolerance of positive airway pressure (PAP) therapy or other appropriate non-invasive treatment. [1, 5,-6, 16-17]

***NOTE:** OSA diagnosis has been confirmed by a physician specializing in sleep disorders by polysomnography in a facility-based laboratory or with a home-based study using a technically adequate device under the supervision of a physician specializing in sleep disorders.[18]

Non-Indications

- ➔ **Obstructive sleep apnea surgeries** are not considered appropriate if **ANY** of the following is **TRUE**[1, 3, 8]:
    - PAP and/or oral appliance therapy have not been attempted; **OR**
    - Non-obstructive sleep apnea has been documented.

Level of Care Criteria

Outpatient

Procedure Codes (CPT/HCPCS)

CPT/HCPCS Code	Code Description
21685	Hyoid myotomy and suspension
41512	Tongue base suspension, permanent suture technique
42145	Palatopharyngoplasty (eg, uvulopalatopharyngoplasty, uvulopharyngoplasty)
42950	Pharyngoplasty (plastic or reconstructive operation on pharynx)

Disclaimer: G, S, I, and N Codes are non-covered per CMS guidelines due to their experimental or investigational nature.

Medical Evidence

The American Academy of Sleep Medicine (AASM) (Kent et al.) published a 2021 guideline for referral of adults with OSA for surgical consultation. The committee concluded with a strong recommendation that patients with OSA and a body mass index greater than 40 kg/m^2, when unaccepting or intolerant of PAP therapy, be referred to a sleep surgeon. A strong recommendation was given for discussion of referral to a bariatric surgeon for adults with OSA and BMI greater than or less than 35 kg/m^2. Conditional recommendations were given for sleep surgeon referrals for adults with OSA and BMI less than 40 kg/m^2 with inadequate PAP adherence due to side effects and a PAP trial as initial therapy in adults with OSA and a major upper airway anatomic abnormality prior to surgical consult.[6]

Aurora et al. (2010) developed practice parameters for surgical modifications of the upper airway for obstructive sleep apnea in adults for the American Academy of Sleep Medicine (AASM). In this systematic review, the group recommended diagnosis of sleep apnea before initiating surgery, and included procedures such as tracheostomy, maxillo-mandibular advancement (MMA), laser-assisted uvulopalatoplasty (LAUP), uvulopalato-pharyngoplasty (UPPP), radiofrequency ablation (RFA), and palatal implants. UPPP as a sole procedure was stated not to reliably normalize the apnea-hypopnea index (AHI) in moderate to severe OSA syndrome. The other procedures evaluated were stated generally to be acceptable following a trial of positive airway pressure (PAP) therapy, although the group concluded that there is a lack of rigorous data evaluating outcome measures and which populations would benefit from these surgical treatments.[11]

Ong et al. (2017) conducted a retrospective study of 19 patients who underwent hyoid myotomy and suspension (HMS) without concurrent palatal or tongue base sleep surgery. The apnea-hypopnea index (AHI) was required to be greater than 30 indicating severe sleep apnea, and the mean BMI in these patients was 30.6 (range of 22.9-43.4). The mean age of patients studied was 55.3 years (range of 31-76 years of age). Endoscopic sinus surgery and septoplasty were the most commonly performed concurrent procedures. Following the procedure, mean AHI improved in these patients

from 39.7 to 22.6. Surgical success was defined as a greater than 50% reduction in AHI and postoperative AHI less than 20 events per hour, and was achieved in 47.4% of patients (9 of 19). The effect on daytime sleepiness was unclear.[12]

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Clinical Guideline Revision History/Information

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