Effective Date: 03/16/17



NHS MEDICAL POLICY

Upper Airway Neurostimulator Implantation Procedure 2017-001

Upper airway (hypoglossal nerve) neurostimulator implantation may be indicated when ALL the following are present:

The member is age 22 years or older.

The member's body mass index (BMI) is 32 or less.

Moderate to severe OSA has been diagnosed by polysomnogram. (This is typically defined as AHI 20 to 65 events per hour.)

The member experiences predominantly obstructive events on polysomnogram. (This is typically defined as central and mixed apneas ≤25 percent of AHI.)

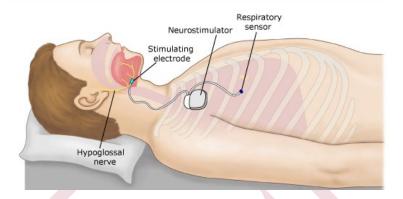
The provider documented that CPAP was tried and failed, was not tolerated or is contraindicated.

The provider documented that screening sleep endoscopy did not demonstrate complete concentric velopharyngeal collapse.

The provider documented that no other anatomical findings exist that would compromise performance of the device. (For example, tonsil size 3+ or 4+)

Note: Upper airway stimulation treats obstructive sleep apnea by activating the protrusion muscles of the tongue via the hypoglossal nerve, opening the lower pharyngeal airway and improving the anatomical coupling of the tongue to the palate. See diagram:

Upper airway stimulation device for obstructive sleep apnea



SOURCES

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- 2. Dedhia RC, et al, Upper Airway Stimulation for Obstructive Sleep Apnea: Past, Present, and Future. Sleep. 2015 Jun 1;38(6):899-906.
- 3. FDA Approval for Inspire® Upper Airway Stimulation (UAS) dated April 30, 2014. http://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/DeviceApprovalsandCleara nces/Recently-ApprovedDevices/ucm398321.htm was accessed Dec 23, 2016.
- 4. Goding GS, et al, Hypoglossal nerve stimulation and airway changes under fluoroscopy, Otolaryngol Head Neck Surg. 2012 Jun;146(6):1017-22.
- 5. Safiruddin F, et al, Effect of upper-airway stimulation for obstructive sleep apnoea on airway dimensions, Eur Respir J. 2015 Jan;45(1):129-38.
- 6. Strollo PJ, et al, Upper-airway stimulation for obstructive sleep apnea, N Engl J Med. 2014 Jan;370(2):139-49.
- 7. UpToDate.com was accessed Dec 23, 2016: Surgical treatment of obstructive sleep apnea in adults
- 8. Vanderveken OM, et al, Evaluation of drug-induced sleep endoscopy as a patient selection tool for implanted upper airway stimulation for obstructive sleep apnea, J Clin Sleep Med. 2013 May;9(5):433-8.
- 9. Woodson BT, et al, Randomized controlled withdrawal study of upper airway stimulation on OSA: short- and long-term effect. STAR Trial. Otolaryngol Head Neck Surg. 2014 Nov;151(5):880-7.
- 10. Woodson BT, et al, Three-Year Outcomes of Cranial Nerve Stimulation for Obstructive Sleep Apnea: The STAR Trial, Otolaryngol Head Neck Surg. 2016 Jan;154(1):181-188.

CODE REFERENCE (This may not be a comprehensive list of codes to apply to this policy.)

CPT: 64568, 64999, 95970

POLICY HISTORY/REVISION INFORMATION

Date	Action/Description
03/14/2018	Annual Review – No Changes
03/13/2019	Annual Review – No Changes
03/12/2020	Annual Review – No Changes
03/12/2021	Annual Review – No Changes
03/28/2022	Annual Review – No Changes
02/22/2023	Annual Review – No Changes
02/20/2024	Annual Review – No Changes