

## Medical Policy

### Hypoglossal Nerve Stimulation for Obstructive Sleep Apnea

**Policy Number:** 028

	Commercial and Qualified Health Plans	MassHealth
Authorization required	X	
No Prior Authorization		
Not covered		X

#### Overview

The purpose of this document is to describe the guidelines Mass General Brigham Health Plan utilizes to determine medical necessity for implantation of an FDA approved hypoglossal nerve stimulation (HGNS) device, for obstructive sleep apnea (OSA).

#### Coverage Guidelines

Mass General Brigham Health Plan covers implantation of an FDA approved hypoglossal nerve stimulator device for obstructive sleep apnea in members when ALL the following are met:

- The member is 18 years of age or older with a diagnosis of obstructive sleep apnea; and
- The member's apnea hypopnea index (AHI) is greater than or equal to 15 with predominantly obstructive events (defined as central and mixed apneas less than 25% of the total AHI); and
- There is absence of complete concentric collapse at the soft palate level as seen on a drug-induced sleep endoscopy procedure; and
- The member's body mass index (BMI) is less than 32 kg/m<sup>2</sup>; and
- There is documentation by a Board-Certified Sleep Medicine Specialist of continuous positive airway pressure (CPAP) trial and failure or intolerance (defined as use less than 4 hours per night, five nights per week).

#### Exclusions

- When the member does not meet the coverage criteria;
- The device is not an FDA-approved hypoglossal nerve stimulation system

#### Definitions

**Hypoglossal nerve stimulation (HGNS):** HGNS, also known as upper airway stimulation, is a treatment that works by stimulating the hypoglossal nerve to restore tone to (or stiffen) the key tongue muscles that when relaxed, can block the airway causing obstruction that reduces or stops breathing during the night. The implantable pulse generator (and battery) is implanted into the chest, the respiratory sensor is implanted in the ribcage, and the stimulation cuff is implanted in the neck around the hypoglossal nerve. The sensing lead and stimulation lead wires are then tunneled to the chest incision and connected to the implantable pulse generator. The fully implanted system is then controlled with the use of a remote.

**Obstructive Sleep Apnea:** OSA is characterized by recurrent, functional collapse of the upper airway during sleep, causing substantially reduced or complete cessation of airflow despite ongoing respiratory effort. This leads to episodic hypoxemia and fragmented sleep due to arousals. When untreated, these result in short term quality of life impairment, such as excessive daytime sleepiness, and increased long term cardiovascular and neurocognitive morbidity and mortality.

## Codes

Authorized Codes	Code Description
64582	Open implantation of hypoglossal nerve neurostimulator array, pulse generator, and distal respiratory sensor electrode or electrode array
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
64568	Incision for implantation of cranial nerve (eg, vagus nerve) neurostimulator electrode array and pulse generator

## Effective

July 2022: Annual update. References updated.

January 2022: Code update.

July 2021: Annual update. Under coverage guidelines, changed member age requirement from 22 to 18 years of age.

July 2020: Annual update. References updated.

January 2020: Effective Date

## References

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