



# BlueCross BlueShield of Vermont

*An Independent Licensee of the Blue Cross and Blue Shield Association.*

## Occipital Nerve Stimulation Corporate Medical Policy

File Name: Occipital Nerve Stimulation  
File Code: UM.SPSVC.14  
Origination: 2011  
Last Review: 06/2018  
Next Review: 06/2019  
Effective Date: 10/01/2018

### Description/Summary

Occipital nerve stimulation (ONS) delivers a small electrical charge to the occipital nerve in an attempt to prevent migraines and other headaches in patients who have not responded to medications. The device consists of a subcutaneously implanted pulse generator (in the chest wall or abdomen) attached to extension leads that are tunneled to join electrodes placed across 1 or both occipital nerves at the base of the skull. Continuous or intermittent stimulation may be used.

### Policy

Occipital nerve stimulation is considered **investigational** for all indications.

### Coding Information

Click the links below for attachments, coding tables & instructions.  
[Attachment I- CPT® & HCPCS Code Table & Instructions](#)

### Reference Resources

1. Blue Cross and Blue Shield Association. Occipital Nerve Stimulation. MPRM# 7.01.125. Last review April 2018.
2. Chen YF, Bramley G, Unwin G, et al. Occipital nerve stimulation for chronic migraine--a systematic review and meta-analysis. PLoS One. 2015;10(3):e0116786. PMID 25793740
3. Yang Y, Song M, Fan Y, et al. Occipital nerve stimulation for migraine: a systematic review. Pain Pract. Apr 2016;16(4):509-517. PMID 25865962
4. Saper JR, Dodick DW, Silberstein SD, et al. Occipital nerve stimulation for the treatment of intractable chronic migraine headache: ONSTIM feasibility study. Cephalalgia. Feb 2011;31(3):271-285. PMID 20861241
5. Silberstein SD, Dodick DW, Saper J, et al. Safety and efficacy of peripheral nerve stimulation of the occipital nerves for the management of chronic migraine: results from a randomized, multicenter, double-blinded, controlled study. Cephalalgia. Dec 2012;32(16):1165-1179. PMID 23034698
6. Dodick DW, Silberstein SD, Reed KL, et al. Safety and efficacy of peripheral nerve

stimulation of the occipital nerves for the management of chronic migraine: long-term results from a randomized, multicenter, doubleblinded, controlled study. *Cephalalgia*. Apr 2015;35(4):344-358. PMID 25078718

7. Burns B, Watkins L, Goadsby PJ. Treatment of hemicrania continua by occipital nerve stimulation with a bion device: long-term follow-up of a crossover study. *Lancet Neurol*. Nov 2008;7(11):1001-1012. PMID 18845482
8. Burns B, Watkins L, Goadsby PJ. Treatment of intractable chronic cluster headache by occipital nerve stimulation in 14 patients. *Neurology*. Jan 27 2009;72(4):341-345. PMID 19171831
9. Magis D, Gerardy PY, Remacle JM, et al. Sustained effectiveness of occipital nerve stimulation in drug-resistant chronic cluster headache. *Headache*. Sep 2011;51(8):1191-1201. PMID 21848953
10. Mueller OM, Gaul C, Katsarava Z, et al. Occipital nerve stimulation for the treatment of chronic cluster headache - lessons learned from 18 months experience. *Cen Eur Neurosurg*. May 2011;72(2):84-89. PMID 21448856
11. Fontaine D, Blond S, Lucas C, et al. Occipital nerve stimulation improves the quality of life in medically intractable chronic cluster headache: Results of an observational prospective study. *Cephalalgia*. Oct 03 2016. PMID 27697849
12. Leone M, Proietti Cecchini A, Messina G, et al. Long-term occipital nerve stimulation for drug-resistant chronic cluster headache. *Cephalalgia*. Jun 01 2016. PMID 27250232
13. Miller S, Watkins L, Matharu M. Treatment of intractable chronic cluster headache by occipital nerve stimulation: a cohort of 51 patients. *Eur J Neurol*. Feb 2017;24(2):381-390. PMID 27995704
14. Vadivelu S, Bolognese P, Milhorat TH, et al. Occipital nerve stimulation for refractory headache in the Chiari malformation population. *Neurosurgery*. Jun 2012;70(6):1430-1436; discussion 1436-1437. PMID 22418582
15. Sweet JA, Mitchell LS, Narouze S, et al. Occipital nerve stimulation for the treatment of patients with medically refractory occipital neuralgia: Congress of Neurological Surgeons Systematic Review and Evidence-Based Guideline. *Neurosurgery*. Sep 2015;77(3):332-341. PMID 26125672
16. National Institute for Health and Care Excellence. Occipital nerve stimulation for intractable chronic migraine [IPG452]. 2013; <https://www.nice.org.uk/guidance/ipg452>. Accessed March 11, 2017.

## Document Precedence

Blue Cross and Blue Shield of Vermont (BCBSVT) Medical Policies are developed to provide clinical guidance and are based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. The applicable group/individual contract and member certificate language determines benefits that are in effect at the time of service. Since medical practices and knowledge are constantly evolving, BCBSVT reserves the right to review and revise its medical policies periodically. To the extent that there may be any conflict between medical policy and contract language, the member's contract language takes precedence.

## Audit Information

BCBSVT reserves the right to conduct audits on any provider and/or facility to ensure compliance with the guidelines stated in the medical policy. If an audit identifies instances of non-compliance with this medical policy, BCBSVT reserves the right to recoup all non-compliant payments.

## Administrative and Contractual Guidance

### Benefit Determination Guidance

Prior approval is required for services as outlined in this policy. Benefits are subject to all terms, limitations and conditions of the subscriber contract.

Incomplete authorization requests may result in a delay of decision pending submission of missing information. To be considered complete, see policy guidelines above.

An approved referral authorization for members of the New England Health Plan (NEHP) is required. A prior approval for Access Blue New England (ABNE) members is required. NEHP/ABNE members may have different benefits for services listed in this policy. To confirm benefits, please contact the customer service department at the member's health plan.

Federal Employee Program (FEP): Members may have different benefits that apply. For further information please contact FEP customer service or refer to the FEP Service Benefit Plan Brochure. It is important to verify the member's benefits prior to providing the service to determine if benefits are available or if there is a specific exclusion in the member's benefit.

Coverage varies according to the member's group or individual contract. Not all groups are required to follow the Vermont legislative mandates. Member Contract language takes precedence over medical policy when there is a conflict.

If the member receives benefits through an Administrative Services Only (ASO) group, benefits may vary or not apply. To verify benefit information, please refer to the member's employer benefit plan documents or contact the customer service department. Language in the employer benefit plan documents takes precedence over medical policy when there is a conflict.

### Policy Implementation/Update information

2011	New policy
11/2015	Adoption of BCBSA MPRM# 7.01.125. Code table updates.
11/2017	Updated policy/references from BCBSA MPRM# 7.01.125. Policy statements remain unchanged. Added descriptor to code L8689 added to PA list.
06/2018	Updated policy/references from BCBSA MPRM# 7.01.125. Policy statements remain unchanged.

### Eligible providers

Qualified healthcare professionals practicing within the scope of their license(s).

Joshua Plavin, MD, MPH, MBA  
 Chief Medical Officer

Attachment I  
CPT® & HCPCS Code Table & Instructions

Code Type	Number	Description	Policy Instructions
<b>The following codes will be denied as Not Medically Necessary, Contract Exclusions or Investigational.</b>			
CPT®	61885	Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode array	Prior Approval Required
CPT®	61886	Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to 2 or more electrode arrays	Prior Approval Required
CPT®	64553	Percutaneous implantation of neurostimulator electrode array; cranial nerve	Prior Approval Required
CPT®	64568	Incision for implantation of cranial nerve (eg, vagus nerve) neurostimulator electrode array and pulse generator	Prior Approval Required
CPT®	64569	Revision or replacement of cranial nerve (eg, vagus nerve) neurostimulator electrode array, including connection to existing pulse generator	Prior Approval Required
CPT®	64570	Removal of cranial nerve (eg, vagus nerve) neurostimulator electrode array and pulse generator	Prior Approval Required

HCPCS	L8680	Implantable neurostimulator electrode, each	Prior Approval Required. This code is Investigational for occipital nerve stimulation.
HCPCS	L8681	Patient programmer (external) for use with implantable programmable neurostimulator pulse generator, replacement only	Prior Approval Required. This code is Investigational for occipital nerve stimulation.
HCPCS	L8682	Implantable neurostimulator radiofrequency receiver	Prior Approval Required. This code is Investigational for occipital nerve stimulation.
HCPCS	L8683	Radiofrequency transmitter (external) for use with implantable neurostimulator radiofrequency receiver	Prior Approval Required. This code is Investigational for occipital nerve stimulation.
HCPCS	L8685	Implantable neurostimulator pulse generator, single array, rechargeable, includes extension	Prior Approval Required. This code is Investigational for occipital nerve stimulation.
HCPCS	L8686	Implantable neurostimulator pulse generator, single array, nonchargeable, includes extension	Prior Approval Required. This code is Investigational for occipital nerve stimulation.
HCPCS	L8687	Implantable neurostimulator pulse generator, dual, array, rechargeable, includes extension	Prior Approval Required. This code is Investigational for occipital nerve stimulation.
HCPCS	L8688	Implantable neurostimulator pulse generator, dual array, norechargeable, includes extension	Prior Approval Required. This code is Investigational for occipital nerve stimulation.

HCPCS	L8689	External recharging system for battery (internal) for use with implantable neurostimulator, replacement only	Prior Approval Required. This code is Investigational for occipital nerve stimulation.
<b>The following code is unlisted and requires clinical documentation at time of claims submission. Clinical documentation will be reviewed and coverage determination will be made by a medical director.</b>			
CPT	64999	Unlisted procedure, nervous system	Clinical documentation is required at time of claims submission for medical review.