

Subject: Peripheral Nerve Stimulation

Medical Policy: 53.0

Status: Reviewed

Original Effective Date: 03-22-2023

Last Annual Review Date: 03-20-2024

Disclaimer

Refer to the member's specific benefit plan and Schedule of Benefits to determine coverage. This may not be a benefit on all plans or the plan may have broader or more limited benefits than those listed in this Medical Policy.

Description

Peripheral nerve stimulation (PNS), refers to the placement of a lead by a physician (via open surgical or percutaneous approach) near the known anatomic location of a peripheral nerve to lessen chronic pain or treat other peripheral nerve related illnesses or diseases. PNS involves the implantation or external placement of an electrode array adjacent to the effected peripheral nerve.

PNS can be used for occipital nerve stimulation (ONS). PNS delivers a small electrical charge to the occipital nerve region 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 one or both occipital nerves at the base of the skull.

Related policies:

- Gastric Electric Stimulation for the Treatment of Chronic Gastroparesis, MPM 7.2
- Sacral Nerve Stimulation for Urinary and Fecal Incontinence, MPM 51.0

Coverage Determination

Commercial and Medicaid:

PHP has determined Peripheral Nerve Stimulation (PNS) Therapy for treatment of neurogenic pain for non-Medicare is experimental. The implantation of a peripheral occipital nerve stimulation using an implantable device (and related procedures) is considered investigational and not medically necessary for occipital nerve stimulation.

Medicare:

Prior Authorization is required. Logon to Pres Online to submit a request: <https://ds.phs.org/preslogin/index.jsp>

See the description of PNS for treatment of chronic intractable pain National Coverage Determination ([NCD 160.7](#)) and LCD ([L37360](#)) and LCA ([A55531](#)), for the implantation of neurostimulator electrode array. Please see section (A) of this NCD for PNS.

Examples of peripheral stimulation indications with evidence of efficacy that may be covered are:

- PNS of occipital nerves for occipital neuralgia, post-surgical neuropathic pain, cervicogenic headaches and treatment resistant migraines.
- PNS of trigeminal nerves (and branches) for post-traumatic and post-surgical neuropathic pain in the face related to the trigeminal nerves.
- PNS of nerves in upper and lower extremities of complex regional pain syndromes (type 1 and 2), pain due to peripheral nerve injury, post-surgical scar formation, nerve entrapment, painful mononeuropathy, and painful amputation neuromas.
- PNS of intercostal and ilio-inguinal nerves for post-surgical and post-traumatic neuropathic pain involving these nerve distributions.

Note, the NCD, Assessing Patient's Suitability for Electrical Nerve Stimulation Therapy (160.7.1) stipulates the implantation of PNS is only necessary when pain is effectively controlling some forms of chronic pain by percutaneous stimulation (PENS) then implantation of electrodes is warranted.

Implanted devices:

The following device names serve as an example only. It is not intended to be a recommendation of one product over another. The list below is not intended to represent a complete listing of all products presently available.

- Nalu Neurostimulation System
- ReActiv8 Implantable Neurostimulation System

Not every Presbyterian health plan contains the same benefits. Please refer to the member's specific benefit plan and Schedule of Benefits to determine coverage [MPMPPC051001].

- SPRINT® PNS System
- StimQ PNS System
- StimRouter® PNS System

Electronic Cell-Signaling Treatment, (e.g., neoGEN-Series system, Sanexas) is considered investigative and unproven and therefore **NOT COVERED**, for Commercial, Medicare, and Medicaid (see CMS announcement [MLN3612420](#)).

For treatment of other peripheral nerve related illnesses or diseases.

For external upper limb tremor stimulator therapy, also known as transcutaneous afferent patterned stimulation (TAPS) therapy of the peripheral nerves, PHP follows CGS, LCD ([L39591](#)) and companion article LCA ([A59680](#)) - External Upper Limb Tremor Stimulator Therapy for **Medicare only**. External upper limb tremor stimulator of the peripheral nerves of the wrist is covered to treat essential tremor.

Coding

The coding listed in this medical policy is for reference only. Covered and non-covered codes are within this list.

CPT Codes	Description
64555	Percutaneous implantation of neurostimulator electrode array; peripheral nerve (excludes sacral nerve)
64575	Open implantation of neurostimulator electrode array; peripheral nerve (excludes sacral nerve)
64590	Insertion or replacement of peripheral or gastric neurostimulator pulse generator or receiver, direct or inductive coupling

CPT Codes	Description <i>Covered for Medicare only</i>
E0734	External upper limb tremor stimulator of the peripheral nerves of the wrist
A4542	Supplies and accessories for external upper limb tremor stimulator of the peripheral nerves of the wrist
For covered diagnosis see LCA (A59680)- External Upper Limb Tremor Stimulator Therapy - Policy Article	

Reviewed by / Approval Signatures

Population Health and Clinical Quality Committee (PHCQC): Gray Clarke MD

Medical Director: Ana Maria Rael MD

Date Approved: 03/20/2024

References

1. CMS, NCD, Electrical Nerve Stimulators, (160.7), V1, effective date: 08/07/1995 [Cited 02/08/2024].
2. CMS, Assessing Patient's Suitability for Electrical Nerve Stimulation Therapy, NCD (160.7.1), V2, effective date: 06-19-2006. [Cited 02/08/2024]
3. MCG Health, (N1607v1), Product MCR, Type: NCD, Title: NCD Electrical Nerve Stimulators (160.7, Version 1, Last Update: 1/11/2024, [Cited 02/08/2024]
4. MCG Health, (A-0716 (AC), Occipital Nerve Stimulation, Ambulatory Care 27th Edition, Last update: 9/21/2023, [Cited 02/08/2024]
5. Hayes, Health Technology Assessment, Electrical Stimulation of the Occipital Nerve for Treatment of Occipital Neuralgia, Dec 29, 2011, Annual Review: Jan 6, 2014 [Cited 02/08/2024]
6. Hayes, Health Technology Assessment, May 5, 2022, Percutaneous Peripheral Nerve Stimulation for Treatment of Chronic Pain, May 5, 2022 | Annual Review: May 31, 2023 [Cited 02/08/2024]
7. Hayes, Occipital Nerve Stimulation for Chronic Migraine Headache Health Technology Assessment, Jun 30, 2020 | Annual Review: Jun 13, 2022 [Cited 02/08/2024]
8. Hayes, Evidence Analysis Research Brief, May 14, 2020, ARCHIVED Jun 14, 2021, **SPRINT** PNS System (SPR Therapeutics) for Chronic Pain Evolving Evidence Review Aug 3, 2021 | Annual Review: Mar 16, 2023 [Cited 02/08/2024]
9. Food and Drug Administration. [K202660](#) for K181422: **SPRINT** Peripheral Nerve Stimulation System. [Cited 02/08/2024]
10. Hayes, Evolving Evidence Review, May 20, 2022, **ReActiv8** Implantable Neurostimulation System (Mainstay Medical Ltd.) for Chronic Low Back Pain, Evolving Evidence Review May 20, 2022 Annual Review: May 31, 2023 [Cited 02/08/2024]
11. Food and Drug Administration. K190047: **StimRouter** Neuromodulation System. Available at: <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMN/pmn.cfm?ID=K190047> Accessed on 02/08/2024.

12. Food and Drug Administration. [K203547](#): **Nalu** Neurostimulation System. Available at: Accessed on 02/08/2024.
13. MLN, Electronic Cell-Signaling Treatment, [MLN3612420](#) April 2023, [Cited 02/08/2024]
14. Hayes, neoGEN-Series System (RST-Sanexas) for Treatment of Neuropathic Pain, Evolving Evidence Review, Jan 05, 2023. [Cited 02/08/2024]
15. CMS, Noridian Healthcare Solution. LCD (L37360) Peripheral Nerve Stimulation, Revision date: 12/01/2019, R4 -related article, LCA (A55531), Revision date: 01/04/2024 R6. [Cited 02/08/2024]
Hayes, Peripheral Nerve Field Stimulation for Treatment of Chronic Low Back Pain, Health Technology Assessment, Apr 22, 2021, | Annual Review: Mar 16, 2023 [Cited 02/08/2024]
16. Cala Trio Nerve Stimulation Device, External Upper Limb Tremor Stimulator of the Peripheral Nerves of the Wrist
 - a) CMS, Medicare Benefit Policy Manual, Chapter 15, covered Medical and Other Health Services, 110.8 DMEPOS Benefit Category Determinations (Rev11769, Issued: 12-30-2022, Effective: 01-31-2023, Implementation: 01-31-23) [Cited 05/07/2024]
 - b) Hayes, Cala Trio (Cala Health, Inc.) for Treatment of Essential Tremor, Annual Review 1/19/24. [Cited 05/07/2024]
 - c) Pricing, Data Analysis and Coding (PDAC)-Medicare Contractor, DMECS, © 2023 PALMETTO GBA, LLC, VERSION: PROD-V37. [Cited 05/07/2024]
 - d) Aetna, Functional Electrical Stimulation and Neuromuscular Electrical Stimulation, [# 0677](#), Last review 11/01/2022, Next review: 07/21/2022 [Cited 05/07/2024]
 - e) Humana, Code Compendium (Musculoskeletal and Neurologic), #HUM-0584-009, Effective Date: 06/23/2022 [Cited 05/07/2024]
 - f) LCD External Upper Limb Tremor Stimulator Therapy (L39591), Effective 4/7/2024, LCA (A59680). Codes A4542/E0734 [Cited 05/07/2024]

Publication History

03-22-23 Original effective date. New Policy. Medical Policy & Technology Assessment Committee reviewed on Jan 17, 2023. Reviewed by PHP Medical Policy Committee on 01/25/2023 and have determined the use of PNS of the occipital nerve for treatment of occipital neuralgia as a covered benefit for Medicare only. PNS is mentioned in NCD (160.7) under section (A) in which directs to see NCD (160.7.1) before implant of PNS. PNS codes: 64590, 64555 and 64575 will require PA for ALOB. Electronic Cell-Signaling Treatment, is considered investigational.

03-24-24 Annual review: Reviewed by PHP Medical Policy Committee on 02/14/2024. Continue coverage for Medicare only with PA. Coverage expanded: Updated policy to remove coverage is only “for occipital neuralgia” and replaced to include “other neurogenic pain” as outlined vaguely in (NCD 160.7). Removed language “for Occipital Neuralgia” within the title and throughout the policy. Added examples of conditions that are considered medically necessary when using peripheral stimulation that is found in LCD (L37360). Added to also see LCD (L37360) and LCA (A55531) to help understand coverage information implied vaguely in NCD 160.7. The LCD supplements additional information that NCD 160.7 does not provide.

Updated on 05/22/2024: Previously PHP had considered the external upper limb tremor stimulator therapy (codes E0734 and A4542) as experimental under MPM 36.0 for ALOB. Upon this review PHP will allow coverage based on the recently released, effective for services performed on or after 04/07/2024 for Medicare only for treatment of other peripheral nerve related illnesses or diseases, such as external upper limb tremor stimulator of the wrist to treat essential tremor. Commercial and Medicaid is still considered experimental. PHP will follow CGS: External Upper Limb Tremor Stimulator Therapy LCD (L39591) and LCA (A59680) for codes (E0734 and A4542). Codes (E0734 and A4542) will be configured to pay for diagnoses listed in LCA (A59680).

This Medical Policy is intended to represent clinical guidelines describing medical appropriateness and is developed to assist Presbyterian Health Plan and Presbyterian Insurance Company, Inc. (Presbyterian) Health Services staff and Presbyterian medical directors in determination of coverage. The Medical Policy is not a treatment guide and should not be used as such.

For those instances where a member does not meet the criteria described in these guidelines, additional information supporting medical necessity is welcome and may be utilized by the medical director in reviewing the case. Please note that all Presbyterian Medical Policies are available online at: [Click here for Medical Policies](#)

Web links:

At any time during your visit to this policy and find the source material web links has been updated, retired or superseded, PHP is not responsible for the continued viability of websites listed in this policy.

When PHP follows a particular guideline such as LCDs, NCDs, MCG, NCCN etc., for the purposes of determining coverage; it is expected providers maintain or have access to appropriate documentation when requested to support coverage. See the References section to view the source materials used to develop this resource document.

