

MEDICAL POLICY STATEMENT Michigan Medicaid

 Policy Name & Number
 Date Effective

 Peripheral Nerve Stimulators for Treatment of Pain-MI MCD-MM-1522
 09/01/2024

 Policy Type
 MEDICAL

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A. Subject

Peripheral Nerve Stimulators for the Treatment of Pain

B. Background

The role of peripheral nerves as sources of pain and avenues of treatment when conservative therapy has failed is being more extensively explored than in previous years. Neuromodulation of peripheral nerves to treat refractory pain is one such area of interest. The neuromodulation of peripheral nerves to reduce pain, known as peripheral nerve stimulation (PNS), has been developed as a minimally invasive pain management modality intended to manage acute and chronic pain.

The proposed mechanism of action, referred to as the gate control theory, involves a method by which stimulation of large-diameter sensory neurons reduce transmission of painful stimuli from small nociceptive fibers to the brain. The stimulation system is placed adjacent to the nerve, a process commonly known as remote selective targeting. The lead is connected to a small, wearable stimulator. Depending on the device, the wearer may be able to adjust the level of stimulation using Bluetooth technology.

C. Definitions

- Acute Pain Pain lasting 4 weeks or less.
- **Chronic Pain** A distressing feeling often caused by intense or damaging stimuli lasting more than 3 months, considered beyond normal healing time.
- **Conservative Therapy** A multimodality plan of care for treating pain nonsurgically, including active and inactive conservative therapies.
 - Active A type of action or activity to strengthen supporting muscle groups and target key spinal structures, including physical therapy, occupational therapy, a physician-supervised home exercise program (HEP), and/or chiropractic care.
 - **Inactive** Lack of activity on behalf of the patient that aids in treating symptoms associated with pain but not necessarily the underlying source, including rest, ice, heat, medical devices, acupuncture, and/or prescription medications.
- **Minimally Invasive** Procedures involving entry into the body through small incisions to lessen recovery time, level of pain, and risk of infection.
- Sub-Acute Pain Pain lasting between 4 and 12 weeks.
- D. Policy
 - Any drug, biologic, device, diagnostic, product, equipment, procedure, treatment, service, or supply used in or directly related to the diagnosis, evaluation, or treatment of a disease, injury, illness, or other health condition which CareSource determines in its sole discretion to be experimental or investigational is not covered by CareSource.
 - II. Peripheral nerve stimulators are considered experimental and investigational and are unproven for all indications for the reduction of acute, sub-acute, and chronic pain.



- III. Peripheral nerve stimulators are not covered. This includes but is not limited to:
 - A. IB-Stim
 - B. SPRINT PNS System
 - C. Nalu Neurostimulation System
 - D. StimRouter Neuromodulation System
 - E. Moventis PNS
 - F. StimQ PNS System
- E. Conditions of Coverage N/A
- F. Related Policies/Rules Medical Necessity Determinations Experimental and/or Investigational Item or Service

G. Review/Revision History

	DATE	ACTION
Date Issued	09/13/2023	New policy. Approved at Committee
Date Revised	03/13/2024 06/05/2024	Review, no changes. Approved at Committee Revised Background, added D. III. A. Approved at Committee
Date Effective	09/01/2024	
Date Archived		

- H. References
 - 1. Abd-Elsayed A, Keith MK, Cao NN, Fiala KJ, Martens JM. Temporary peripheral nerve stimulation as treatment for chronic pain. *Pain Ther*. 2023;12(6):1415-1426. doi:10.1007/s40122-023-00557-3
 - 2. Albright-Trainer B, Phan T, Trainer RJ, et al. Peripheral nerve stimulation for the management of acute and subacute post-amputation pain: a randomized, controlled feasibility trial. *Pain Manage*. 2022;12(3):357-369. doi:10.2217/pmt-2021-0087
 - 3. Char S, Jin MY, Francio VT, et al. Implantable peripheral nerve stimulation for peripheral neuropathic pain: a systematic review of prospective studies. *Biomed.* 2022;10(10)2606. doi:10.3390/biomedicines10102606
 - D'Souza RS, Jin MY, Abd-Elsayed A. Peripheral nerve stimulation for low back pain: a systematic review. *Curr Pain Headache Rep.* 2023;27:117-128. doi:10.1007/s11916-023-01109-2
 - 5. Evidence Analysis Research Brief: Peripheral Nerve Stimulation for Treatment of Chronic Pain. Hayes; 2021. Accessed March 4, 2024. www.evidence.hayesinc.com
 - Evolving Evidence Review: IB-Stim (NeurAxis) for Treatment of Pain Associated with Irritable Bowel Syndrome in Adolescents. Hayes; 2022. Reviewed July 31, 2023. Accessed April 30, 2024. www.evidence.hayesinc.com
 - 7. Evolving Evidence Review: SPRINT PNS System (SPR therapeutics) for Chronic Pain. Hayes; 2021. Reviewed March 16, 2023. Accessed March 4, 2024. www.evidence.hayesinc.com

The MEDICAL Policy Statement detailed above has received due consideration as defined in the MEDICAL Policy Statement Policy and is approved.



- Health Technology Assessment: Percutaneous Peripheral Nerve Stimulation for Treatment of Chronic Pain. Hayes; 2022. Reviewed May 31, 2023. Accessed March 4, 2024. www.evidence.hayesinc.com
- 9. Helm S, Shirsat N, Calodney A, et al. Peripheral nerve stimulation for chronic pain: a systematic review of effectiveness and safety. *Pain Ther.* 2021;10(2):985-1002. doi:10.1007/s40122-021-00306-4
- Kaye AD, Ridgell S, Alpaugh ES, et al. Peripheral nerve stimulation: a review of techniques and clinical efficacy. *Pain Ther*. 2021;10(2):961-972. doi:10.1007/s40122-021-00298-1
- Li AH, Gulati A, Leong MS, et al. Considerations in permanent implantation of peripheral nerve stimulation (PNS) for chronic neuropathic pain. an international cross-sectional survey of implanters. *Pain Pract.* 2022;22(5):508-515. doi:10.1111/papr.13105
- Smith BJ, Twohey EE, Dean KP, D'Souza RS. Peripheral nerve stimulation for the treatment of postamputation pain: a systematic review. *Am J Phys Med Rehabil*. 2023;102(9):846-854. doi:10.1097/PHM.00000000002237
- 13. Strand N, D'Souza RS, Hagedorn JM. Evidence-based clinical guidelines from the American Society of Pain and Neuroscience for the use of implantable peripheral nerve stimulation in the treatment of chronic pain. *J Pain Res.* 2022;15:2483-2504. doi:10.2147/JPR.S362204
- 14. Xu J, Sun Z, Wu J, et al. Peripheral nerve stimulation in pain management: a systematic review. *Pain Physician*. 2021;24(2):E131-E152. Accessed January 2, 2024. www.painphysicianjournal.com