

MEDICAL POLICY STATEMENT North Carolina Marketplace

North Carolina Marketplace				
Policy Name & Number	Date Effective			
Peripheral Nerve Stimulators for the Treatment of Pain-NC MP-MM-1404	04/01/2024			
Policy Type				
MEDICAL				

Medical Policy Statement prepared by CareSource and its affiliates are derived from literature based on and supported by clinical guidelines, nationally recognized utilization and technology assessment guidelines, other medical management industry standards, and published MCO clinical policy guidelines. Medically necessary services include, but are not limited to, those health care services or supplies that are proper and necessary for the diagnosis or treatment of disease, illness, or injury and without which the patient can be expected to suffer prolonged, increased or new morbidity, impairment of function, dysfunction of a body organ or part, or significant pain and discomfort. These services meet the standards of good medical practice in the local area, are the lowest cost alternative, and are not provided manily for the convenience of the member or provider. Medically necessary services also include those services defined in any Evidence of Coverage documents, Medical Policy Statements, Provider Manuals, Member Handbooks, and/or other policies and procedures.

Medical Policy Statements prepared by CareSource and its affiliates do not ensure an authorization or payment of services. Please refer to the plan contract (often referred to as the Evidence of Coverage) for the service(s) referenced in the Medical Policy Statement. If there is a conflict between the Medical Policy Statement and the plan contract (i.e., Evidence of Coverage), then the plan contract (i.e., Evidence of Coverage) will be the controlling document used to make the determination. According to the rules of Mental Health Parity Addiction Equity Act (MHPAEA), coverage for the diagnosis and treatment of a behavioral health disorder will not be subject to any limitations that are less favorable than the limitations that apply to medical conditions as covered under this policy.

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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 reduces 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 nerve is stimulated by implanting a small lead wire with ultrasound guidance to target a specific nerve. The lead is connected to a small, wearable stimulator. The wearer can adjust the level of stimulation using Bluetooth technology.

C. Definitions

- Acute Pain Pain lasting for 4 weeks or less.
- **Chronic Pain** A distressing feeling often caused by intense or damaging stimuli (pain) 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.
 - o **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.
 - o **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

- I. 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. SPRINT PNS System
 - B. Nalu Neurostimulation System
 - C. StimRouter Neuromodulation System
 - D. Moventis PNS
 - E. StimQ PNS System
- E. Conditions of Coverage NA
- F. Related Policies/Rules CareSource Evidence of Coverage Medical Necessity Determinations

G. Review/Revision History

	DATE	ACTION
Date Issued	01/18/2023	
Date Revised	01/17/2024	Annual review, references updated; Approved at Committee
Date Effective	04/01/2024	
Date Archived		

H. References

- 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
- 4. 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 January 2, 2024. www.evidence.hayesinc.com
- 6. Evolving Evidence Review: SPRINT PNS System (SPR Therapeutics) for Chronic Pain. Hayes; 2021. Reviewed March 16, 2023. Accessed January 2, 2024. www.evidence.hayesinc.com
- 7. Health Technology Assessment: Percutaneous Peripheral Nerve Stimulation for Treatment of Chronic Pain. Hayes; 2022. Reviewed May 31, 2023. Accessed January 2, 2024. www.evidence.hayesinc.com
- 8. 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

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



- 9. 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
- 11. 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.000000000002237
- 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
- 13. 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