

MEDICAL POLICY STATEMENT Arkansas PASSE

| Policy Name & Number | Date Effective |
|---|----------------|
| Peripheral Nerve Stimulators for Treatment of Pain-AR PASSE-MM-1652 | 08/01/2025 |
| 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 mainly 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 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 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 (pain) lasting more than 3 months, considered beyond normal healing time.
- **Conservative Therapy** – A multimodality plan of care for treating pain non-surgically, 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.

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

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

CareSource Evidence of Coverage

Medical Necessity Determinations

G. Review/Revision History

| | DATE | ACTION |
|-----------------------|------------|--|
| Date Issued | 06/05/2024 | New policy. Approved at Committee |
| Date Revised | 05/07/2025 | Annual review, references updated. Approved at Committee |
| Date Effective | 08/01/2025 | |
| Date Archived | | |

H. References

1. Abd-Elseyed 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-Elseyed 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 the Treatment of Superior Cluneal Neuralgia. Hayes; 2024. Accessed April 10, 2024. www.evidence.hayesinc.com
6. Evolving Evidence Review: IB-Stim (NeurAxis) for Treatment of Pain Associated with Irritable Bowel Syndrome in Adolescents. Hayes; 2022. Reviewed July 17, 2024. Accessed April 10, 2025. www.evidence.hayesinc.com
7. Evolving Evidence Review: SPRINT PNS System (SPR Therapeutics) for Chronic Pain. Hayes; 2021. Updated February 27, 2025. Accessed April 10, 2025. 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.

8. Hatheway J, Hersel A, Song J, et al. Clinical study of a micro-implantable pulse generator for the treatment of peripheral neuropathic pain: 3-month and 6-month results from the COMFORT-randomised controlled trial. *Reg Anesth Pain Med.* 2024;0:1-7. doi:10.1136/rapm-2023-105264
9. Health Technology Assessment: Percutaneous Peripheral Nerve Stimulation for Treatment of Chronic Pain. Hayes; 2022. Reviewed May 8, 2024. Accessed April 10, 2025. www.evidence.hayesinc.com
10. Health Technology Assessment: Peripheral Nerve Field Stimulation for Treatment of Chronic Low Back Pain. Hayes; 2021. Reviewed April 17, 2024. Accessed April 10, 2025. www.evidence.hayesinc.com
11. 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
12. Huntoon MA, Slavin KV, Hagedorn JM, et al. A retrospective review of real-world outcomes following 60-day peripheral nerve stimulation for the treatment of chronic pain. *Pain Physician.* 2023;26(3):273-281. Accessed April 10, 2025. www.painphysicianjournal.com
13. 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
14. 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
15. Luna D, Hettie G, Pirrotta L, et al. Real-world long-term outcomes of peripheral nerve stimulation: a prospective observational study. *Pain Manag.* 2025;15(1):37-44. doi:10.1080/17581869.2025.2451605
16. McCullough M, Kenney D, Curtin C, et al. Peripheral nerve stimulation for saphenous neuralgia. *Reg Anesth Pain Med.* 2024;49(6):455-460. doi:10.1136/rapm-2023-104538
17. 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.0000000000002237
18. 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
19. Vangeison CT, Bintrim DJ, Saha AK, et al. The role of peripheral nerve stimulation in refractory non-operative chronic knee osteoarthritis. *Pain Manag.* 2023;13(4):213-218. doi:10.2217/pmt-2023-0025
20. West T, Hussain N, Bhatia A, et al. Pain intensity and opioid consumption after temporary and permanent peripheral nerve stimulation: a 2-year multicenter analysis. *Reg Anesth Pain Med.* 2024. doi:10.1136/rapm-2024-105704
21. 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 April 10, 2025. www.painphysicianjournal.com

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