Medical Policies

Print

Policy Number:	S-5001		
Policy Name:	Interferential Current Stimulation		
Policy Type:	Medical	**Policy Subtype:**	Surgery
Effective Date:	11-03-2025	**Last Review Date:**	09-04-2025

Description

Interferential current stimulation (IFS) is a type of electrical stimulation used to reduce pain. The technique has been proposed to decrease pain and increase function in individuals with osteoarthritis and to treat other conditions such as constipation, irritable bowel syndrome, dyspepsia, and spasticity.

Policy Application

All claims submitted under this policy's section will be processed according to the policy effective date and associated revision effective dates in effect on the date of processing, regardless of service date; **and/or**

All claims submitted under this policy's section will be processed according to the policy effective date and associated revision effective dates in effect on the date of service.

Policy

Coverage is subject to the specific terms of the member's benefit plan.

Interferential current stimulation is considered **investigational**.

Procedure Codes

97014	97032	G0283	S8130	S8131

Summary of Evidence

For individuals who have musculoskeletal conditions who receive interferential current stimulation (IFS), the evidence includes randomized controlled trials (RCTs) and meta-analyses. Relevant outcomes are symptoms, functional outcomes, quality of life, medication use, and treatment-related morbidity. Placebo-controlled randomized trial(s) have found that IFS when used to treat musculoskeletal pain and impaired function(s), does not significantly improve outcomes. Meta-analyses for IFS in musculoskeletal conditions have generally found IFS to be no more effective than other therapies. One network meta-analysis did find improvement with IFS compared with control, but the analysis is limited by indirect comparisons. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have gastrointestinal disorders who receive IFS, the evidence includes RCTs. Relevant outcomes are symptoms, functional outcomes, quality of life, medication use, and treatment-related morbidity. Interferential current stimulation has been tested for a variety of gastrointestinal conditions, with a small number of trials completed for each condition. The results of the trials are mixed, with some reporting benefit and others not. This body of evidence is inconclusive on whether IFS is an efficacious treatment for gastrointestinal conditions. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have poststroke spasticity who receive IFS, the evidence includes RCTs. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. The RCTs had small sample sizes and very short follow-up (immediately posttreatment to 5 weeks). The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Professional Statements and Societal Positions Guidelines

Not Applicable

Diagnosis Codes

Not Applicable

References

1. Hussein HM, Alshammari RS, Al-Barak SS, et al. A Systematic Review and Meta-analysis Investigating the Pain-Relieving Effect of Interferential Current on Musculoskeletal Pain. Am J Phys Med Rehabil. Jul 01 2022; 101(7): 624-633. PMID 34469914
2. Zeng C, Li H, Yang T, et al. Electrical stimulation for pain relief in knee osteoarthritis: systematic review and network meta-analysis. Osteoarthritis Cartilage. Feb 2015; 23(2): 189-202. PMID 25497083
3. National Institute for Health and Care Excellence (NICE). Low back pain and sciatica in over 16s: assessment and management [NG59]. 2016; https://www.nice.org.uk/guidance/ng59. Accessed April 15, 2025.
4. Fuentes JP, Armijo Olivo S, Magee DJ, et al. Effectiveness of interferential current therapy in the management of musculoskeletal pain: a systematic review and meta-analysis. Phys Ther. Sep 2010; 90(9): 1219-38. PMID 20651012
5. Kadı MR, Hepgüler S, Atamaz FC, et al. Is interferential current effective in the management of pain, range of motion, and edema following total knee arthroplasty surgery? A randomized double-blind controlled trial. Clin Rehabil. Jun 2019; 33(6): 1027-1034. PMID 30764635
6. Alqualo-Costa R, Rampazo ÉP, Thome GR, et al. Interferential current and photobiomodulation in knee osteoarthritis: A randomized, placebo-controlled, double-blind clinical trial. Clin Rehabil. Oct 2021; 35(10):

1413-1427. PMID 33896234
7. Artuç ŞE, Uçkun AÇ, Sivas FA, et al. Comparison of the effects of transcutaneous electrical nerve stimulation and interferential current therapies in central sensitization in patients with knee osteoarthritis. Korean J Pain. Jul 01 2023; 36(3): 392-403. PMID 37394276
8. Varapirom C, Kuptniratsaikul V, Yamthed R, et al. Efficacy of interferential current therapy plus exercise compared to sham interferential current plus exercise for pain relief in patients with knee osteoarthritis: A randomised controlled trial. Clin Rehabil. Dec 2024; 38(12): 1622-1632. PMID 39257067
9. Iacona R, Ramage L, Malakounides G. Current State of Neuromodulation for Constipation and Fecal Incontinence in Children: A Systematic Review. Eur J Pediatr Surg. Dec 2019; 29(6): 495-503. PMID 30650450
10. Kajbafzadeh AM, Sharifi-Rad L, Nejat F, et al. Transcutaneous interferential electrical stimulation for management of neurogenic bowel dysfunction in children with myelomeningocele. Int J Colorectal Dis. Apr 2012; 27(4): 453-8. PMID 22065105
11. Clarke MC, Chase JW, Gibb S, et al. Improvement of quality of life in children with slow transit constipation after treatment with transcutaneous electrical stimulation. J Pediatr Surg. Jun 2009; 44(6): 1268-72; discussion 1272. PMID 19524752
12. Moore JS, Gibson PR, Burgell RE. Randomised clinical trial: transabdominal interferential electrical stimulation vs sham stimulation in women with functional constipation. Aliment Pharmacol Ther. Apr 2020; 51(8): 760-769. PMID 32128859
13. Coban Ş, Akbal E, Köklü S, et al. Clinical trial: transcutaneous interferential electrical stimulation in individuals with irritable bowel syndrome - a prospective double-blind randomized study. Digestion. 2012; 86(2): 86-93. PMID 22846190
14. Köklü S, Köklü G, Ozgüçlü E, et al. Clinical trial: interferential electric stimulation in functional dyspepsia patients - a prospective randomized study. Aliment Pharmacol Ther. May 2010; 31(9): 961-8. PMID 20136803
15. Suh HR, Han HC, Cho HY. Immediate therapeutic effect of interferential current therapy on spasticity, balance, and gait function in chronic stroke patients: a randomized control trial. Clin Rehabil. Sep 2014; 28(9): 885-91. PMID 24607801
16. Eslamian F, Farhoudi M, Jahanjoo F, et al. Electrical interferential current stimulation versus electrical acupuncture in management of hemiplegic shoulder pain and disability following ischemic stroke-a randomized clinical trial. Arch Physiother. 2020; 10: 2. PMID 31938571
17. American College of Occupational and Environmental Medicine (ACOEM). Shoulder Disorders Guideline (2016). https://www.dir.ca.gov/dwc/MTUS/ACOEM_Guidelines/Shoulder-Disorders-Guideline.pdf. Accessed April 15, 2025.
18. Hegmann KT, Travis R, Andersson GBJ, et al. Non-Invasive and Minimally Invasive Management of Low Back Disorders. J Occup Environ Med. Mar 2020; 62(3): e111-e138. PMID 31977923
19. American College of Occupational and Environmental Medicine (ACOEM). Shoulder disorders. In: Hegmann KT, ed. Occupational medicine practice guidelines. Evaluation and management of common health problems and functional recovery in workers. 3rd ed. Elk Grove Village, IL: ACOEM; 2011:1-297.
20. Chou R, Atlas SJ, Stanos SP, et al. Nonsurgical interventional therapies for low back pain: a review of the evidence for an American Pain Society clinical practice guideline. Spine (Phila Pa 1976). May 01 2009; 34(10): 1078-93. PMID 19363456
21. Qaseem A, Wilt TJ, McLean RM, et al. Noninvasive Treatments for Acute, Subacute, and Chronic Low Back Pain: A Clinical Practice Guideline From the American College of Physicians. Ann Intern Med. Apr 04 2017; 166(7): 514-530. PMID 28192789

ND Committee Review

Internal Medical Policy Committee 09-04-2025 ***Effective November 3, 2025***

- ***Adopted*** policy

Disclaimer

Current medical policy is to be used in determining a Member's contract benefits on the date that services are rendered. Contract language, including definitions and specific inclusions/exclusions, as well as state and federal law, must be considered in determining eligibility for coverage. Members must consult their applicable benefit plans or contact a Member Services representative for specific coverage information. Likewise, medical policy, which addresses the issue(s) in any specific case, should be considered before utilizing medical opinion in adjudication. Medical technology is constantly evolving, and the Company reserves the right to review and update medical policy periodically.