

Medical Coverage Policy | Interferential Current Stimulation



EFFECTIVE DATE: 03 | 03 | 2015

POLICY LAST UPDATED: 06 | 18 | 2020

OVERVIEW

Interferential current stimulation (IFS) is a type of electrical stimulation. It is believed that IFS permeates the tissues more effectively and thus is more comfortable than transcutaneous electrical nerve stimulation (TENS). IFS has primarily been investigated as a technique to reduce pain, but has also been proposed to increase function of patients with osteoarthritis and to treat other conditions such as dyspepsia, irritable bowel syndrome, and constipation.

MEDICAL CRITERIA

Not applicable.

PRIOR AUTHORIZATION

Prior authorization review is not required.

POLICY STATEMENT

BlueCHiP for Medicare

Interferential current stimulation is considered medically necessary.

Note: Blue Cross & Blue Shield of Rhode Island (BCBSRI) must follow Centers for Medicare and Medicaid Services (CMS) guidelines, such as national coverage determinations or local coverage determinations for all BlueCHiP for Medicare policies. Therefore, BlueCHiP for Medicare policies may differ from Commercial products. In some instances, benefits for BlueCHiP for Medicare may be greater than what is allowed by the CMS.

Commercial

Interferential current stimulation is considered not medically necessary as the evidence is insufficient to determine the effects of the technology on health outcomes.

COVERAGE

Benefits may vary between groups/contracts. Please refer to the appropriate Member Certificate, Subscriber Agreement, or Evidence of Coverage for applicable not medically necessary coverage.

BACKGROUND

Commercial

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 patients with osteoarthritis and to treat other conditions such as constipation, irritable bowel syndrome, dyspepsia, and spasticity. For individuals who have musculoskeletal conditions who receive 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; additionally, a meta-analysis of placebo-controlled trials did not find a significant benefit of IFS for decreasing pain or improving function. The evidence is insufficient to determine the effects of the technology on health outcomes.

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. IFS 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 the effects of the technology on health outcomes.

Regulatory Status

A number of IFS devices have been cleared for marketing by the U.S. Food and Drug Administration through the 510(k) process, including the Medstar™ 100 (MedNet Services) and the RS-4i® (RS Medical). IFS may be included in multimodal electrotherapy devices such as transcutaneous electrical nerve stimulation and functional electrostimulation.

BlueCHIP for Medicare

Most non-wound care electrical stimulation treatment provided in therapy should be billed as G0283 as it is often provided in a supervised manner (after skilled application by the qualified professional/auxiliary personnel) without constant, direct contact required throughout the treatment.

Code G0283 is classified as a “supervised” modality, even though it is labeled as “unattended.” A supervised modality does not require direct (one-on-one) patient contact by the provider. Most electrical stimulation conducted via the application of electrodes is considered unattended electrical stimulation. Examples of unattended electrical stimulation modalities include interferential current), TENS, cyclical muscle stimulation (Russian stimulation).

These modalities should be utilized with appropriate therapeutic procedures to facilitate continued improvement. **Note:** Coverage for this indication is limited to those patients where the nerve supply to the muscle is intact, including brain, spinal cord, and peripheral nerves, and other non-neurological reasons where disuse is causing the atrophy (e.g., post-casting or splinting of a limb, and contracture due to soft tissue scarring).

If unattended electrical stimulation is used for control of pain and swelling, there should be documented objective and/or subjective improvement in swelling and/or pain within 6 visits. If no improvement is noted, a change in treatment plan (alternative strategies) should be implemented or documentation should support the need for continued use of this modality.

Documentation must clearly support the need for electrical stimulation for more than 12 visits. Some patients can be trained in the use of a home TENS unit for pain control. Only 1-2 visits should be necessary to complete the training (which may be billed as 97032). Once training is completed, code G0283 should not be billed as a treatment modality in the clinic.

CODING

BlueCHIP for Medicare

The following codes are considered medically necessary:

S8130 Interferential current stimulator, 2 channel

S8131 Interferential current stimulator, 4 channel

E0745 Neuromuscular stimulator, electronic shock unit

G0283 Electrical stimulation (unattended), to one or more areas for indication(s) other than wound care, as part of a therapy plan of care

Commercial

The following codes are not medically necessary:

S8130 Interferential current stimulator, 2 channel

S8131 Interferential current stimulator, 4 channel

RELATED POLICIES

None

PUBLISHED

Provider Update, August 2020

Provider Update, October 2019

Provider Update, September 2018

Provider Update, June 2017

REFERENCES

1. 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
2. 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):1219-1238. PMID 20651012
3. Defrin R, Ariel E, Peretz C. Segmental noxious versus innocuous electrical stimulation for chronic pain relief and the effect of fading sensation during treatment. *Pain*. May 2005;115(1-2):152-160. PMID 15836978
4. Taylor K, Newton RA, Personius WJ, et al. Effects of interferential current stimulation for treatment of subjects with recurrent jaw pain. *Phys Ther*. Mar 1987;67(3):346-350. PMID 3493493
5. Atamaz FC, Durmaz B, Baydar M, et al. Comparison of the efficacy of transcutaneous electrical nerve stimulation, interferential currents, and shortwave diathermy in knee osteoarthritis: a double-blind, randomized, controlled, multicenter study. *Arch Phys Med Rehabil*. May 2012;93(5):748-756. PMID 22459699
6. Gundog M, Atamaz F, Kanyilmaz S, et al. Interferential current therapy in patients with knee osteoarthritis: comparison of the effectiveness of different amplitude-modulated frequencies. *Am J Phys Med Rehabil*. Feb 2012;91(2):107-113. PMID 22019968
7. Koca I, Boyaci A, Tutoglu A, et al. Assessment of the effectiveness of interferential current therapy and TENS in the management of carpal tunnel syndrome: a randomized controlled study. *Rheumatol Int*. Dec 2014;34(12):1639-1645. PMID 24728028
8. Lara-Palomo IC, Aguilar-Ferrandiz ME, Mataran-Penarrocha GA, et al. Short-term effects of interferential current electro-massage in adults with chronic non-specific low back pain: a randomized controlled trial. *Clin Rehabil*. May 2013;27(5):439-449. PMID 23035006
9. Facci LM, Nowotny JP, Tormem F, et al. Effects of transcutaneous electrical nerve stimulation (TENS) and interferential currents (IFC) in patients with nonspecific chronic low back pain: randomized clinical trial. *Sao Paulo Med J*. 2011;129(4):206-216. PMID 21971895
10. Albornoz-Cabello M, Maya-Martin J, Dominguez-Maldonado G, et al. Effect of interferential current therapy on pain perception and disability level in subjects with chronic low back pain: A randomized controlled trial. *Clin Rehabil*. Mar 14 2016. PMID 26975312
11. Dissanayaka TD, Pallegama RW, Suraweera HJ, et al. Comparison of the effectiveness of transcutaneous electrical nerve stimulation and interferential therapy on the upper trapezius in myofascial pain syndrome: a randomized controlled study. *Am J Phys Med Rehabil*. Mar 4 2016. PMID 26945216
12. 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):453-458. PMID 22065105
13. 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):1268-1272; discussion 1272. PMID 19524752
14. Coban S, Akbal E, Koklu 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

15. Koklu S, Koklu G, Ozguclu E, et al. Clinical trial: interferential electric stimulation in functional dyspepsia patients - a prospective randomized study. *Aliment Pharmacol Ther.* May 2010;31(9):961-968. PMID 20136803
16. 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):885-891. PMID 24607801
17. Chou R, Qaseem A, Snow V, et al. Diagnosis and treatment of low back pain: a joint clinical practice guideline from the American College of Physicians and the American Pain Society. *Ann Intern Med.* Oct 2 2007;147(7):478-491. PMID 17909209
18. American College of Occupational and Environmental Medicine (ACOEM). Shoulder Disorders. www.guideline.gov. Accessed May 15, 2016.
19. American College of Occupational and Environmental Medicine (ACOEM). Low Back Disorders. www.guideline.gov. Accessed May 15, 2016.
20. American College of Occupational and Environmental Medicine (ACOEM). Knee Disorders. www.guideline.gov. Accessed May 15, 2016.
21. National Government Services
<https://www.ngsmedicare.com/ngs/myportal/ngsmedicare/newngs/home-lob/pages/medical-policy-center>

[CLICK THE ENVELOPE ICON BELOW TO SUBMIT COMMENTS](#)

This medical policy is made available to you for informational purposes only. It is not a guarantee of payment or a substitute for your medical judgment in the treatment of your patients. Benefits and eligibility are determined by the member's subscriber agreement or member certificate and/or the employer agreement, and those documents will supersede the provisions of this medical policy. For information on member-specific benefits, call the provider call center. If you provide services to a member which are determined to not be medically necessary (or in some cases medically necessary services which are non-covered benefits), you may not charge the member for the services unless you have informed the member and they have agreed in writing in advance to continue with the treatment at their own expense. Please refer to your participation agreement(s) for the applicable provisions. This policy is current at the time of publication; however, medical practices, technology, and knowledge are constantly changing. BCBSRI reserves the right to review and revise this policy for any reason and at any time, with or without notice. Blue Cross & Blue Shield of Rhode Island is an independent licensee of the Blue Cross and Blue Shield Association.

