

## Medical Coverage Policy | Interferential Current Stimulation



**EFFECTIVE DATE:** 03 | 03 | 2015

**POLICY LAST UPDATED:** 07 | 06 | 2022

### OVERVIEW

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.

### MEDICAL CRITERIA

Not applicable.

### PRIOR AUTHORIZATION

Prior authorization review is not required.

### POLICY STATEMENT

#### Medicare Advantage Plans

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 Medicare Advantage Plans policies. Therefore, Medicare Advantage Plans policies may differ from Commercial products. In some instances, benefits for Medicare Advantage Plans 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 that has been investigated as a technique to reduce pain, improve function and range of motion, and treat gastrointestinal disorders. This stimulation uses paired electrodes of 2 independent circuits carrying high-frequency and medium-frequency alternating currents. The superficial electrodes are aligned on the skin around the affected area. It is believed that IFS permeates the tissues more effectively, and with less unwanted stimulation of cutaneous nerves, and is more comfortable than transcutaneous electrical nerve stimulation. There are no standardized protocols for the use of IFS; IFS may vary by the frequency of stimulation, the pulse duration, treatment time, and electrode-placement technique.

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). Interferential current stimulation may be included in multimodal electrotherapy devices such as transcutaneous electrical nerve stimulation and functional electrostimulation.

### **Medicare Advantage Plans**

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**

#### **Medicare Advantage Plans**

The following code(s) are considered medically necessary:

**S8130** Interferential current stimulator, 2 channel

**S8131** Interferential current stimulator, 4 channel

#### **Commercial**

The following code(s) are not medically necessary:

**S8130** Interferential current stimulator, 2 channel

**S8131** Interferential current stimulator, 4 channel

### **RELATED POLICIES**

Not applicable.

### **PUBLISHED**

Provider Update, September 2022

Provider Update, August 2021

Provider Update, August 2020

Provider Update, October 2019

Provider Update, September 2018

### **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.* Aug 31 2021. 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 22, 2022.
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. Kadi MR, Hepgulcer 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 EP, 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. 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
8. 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
9. 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
10. 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
11. 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
12. 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): 961-8. PMID 20136803
13. 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
14. 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
15. 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](https://www.dir.ca.gov/dwc/MTUS/ACOEM_Guidelines/Shoulder-Disorders-Guideline.pdf). Accessed April 22, 2022.
16. 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
17. American College of Occupational and Environmental Medicine (ACOEM). Knee 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; 2011:1-503.
18. 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

19. 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

**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.

