

# **Interferential Stimulation Devices (for home use)**

Date of Origin: 5/2002 Last Review Date: 09/27/2023 Effective Date: 10/01/2023

Dates Reviewed: 04/2004, 02/2005, 02/2006, 02/2007, 02/2008, 02/2009, 02/2011, 02/2012, 11/2012, 01/2014, 01/2015, 10/2016, 09/2017, 09/2018, 09/2019, 09/2020, 09/2021, 08/2022, 09/2023

**Developed By:** Medical Necessity Criteria Committee

#### I. Description

Interferential electric or current therapy is an anti-inflammatory-based treatment that utilizes alternating currents that penetrate deep into soft tissue and bone and produce a wide range of physiological effects at the cellular level. The alternating currents interfere with the transmission of pain messages at the spinal cord level. Because of the frequency, the Interferential wave meets low impedance when crossing the skin to enter underlying tissue. This is reported to provide deep tissue penetration, which stimulates parasympathetic nerve fibers for increased blood flow and edema reduction. The interferential stimulator does not create physical movement or patient discomfort because it delivers stimulation at medium frequencies which will not stimulate motor or sensory nerves, nor will it damage new tissue growth or generate heat because it delivers electrical current at a frequency of 4000Hz to 4150Hz. Interferential therapy is used intra-operatively, post-operatively, or as a conservative non-surgical form of pain management by placing 2 to 4 electrodes around the pain site on the patient.

#### II. Criteria: CWQI HCS-0040

A. Interferential Stimulation Devices are considered investigational. There is insufficient evidence from peer-reviewed literature that has shown it to be an effective treatment of pain for home use or any other indication.

## III. Information Submitted with the Prior Authorization Request:

1. Not applicable. This is considered to be an investigational treatment for home use

## IV. CPT or HCPC codes NOT covered:

Codes	Description
E1399	Durable medical equipment, miscellaneous

## V. Annual Review History

<b>Review Date</b>	Revisions	Effective Date
11/2012	Annual Review: Added table with review date, revisions, and effective	12/01/2012
	date. Literature search done and no change to	
	experimental/investigational status	
01/2014	Annual Review: No changes	01/22/2014
01/2015	Annual Review: No change	01/28/2015
10/2016	Annual Review: No change	10/26/2016
09/27/2017	Annual Review: No change; updated to new template	09/27/2017
09/26/2018	Annual Review: No change	09/26/2018
09/2019	Annual Review: No change	10/01/2019
09/2020	Annual Review: No change	10/01/2020
09/2021	Annual Review: No changes	10/01/2021
08/2022	Annual Review: No changes	09/01/2022
09/2023	Annual Review: No changes	10/01/2023

## VI. References

- California Technology Assessment Forum (CTAF). Interferential stimulation for the treatment of musculoskeletal pain. Technology Assessment. San Francisco, CA: CTAF; October 19, 2005. Accessed February 9, 2011 at: http://www.scribd.com/doc/15028105/Interferential-Stimulation-for-the-Treatment-of-Musculoskeletal-Pain
  Stimulation-for-the-Treatment-of-Musculoskeletal-Pain.
- 2. <u>Interferential Current Therapy as an Alternative Treatment</u>; supplied by Advanced Therapy Concepts.
- 3. Jarit, GJ, Mohr KJ, Waller R, Glousman RE. The effects of home interferential therapy on post-operative pain, edema, and range of motion of the knee. Clin J Sport Med. 2003;13(1):16-20.
- 4. Johnson M, Tabasam G. An Investigation into the Analgesic Effects of Interferential Currents and Transcutaneous Electrical Nerve Stimulation on Experimentally Induced Ischemic Pain in Otherwise Pain-Free Volunteers. Phys Ther. 2003; 83: 208-223.
- 5. Washington State Department of Labor and Industries, Office of the Medical Director, Technology Assessment, Dynatron STS, 4/3/02.
- 6. Physician Advisors