

<b>Case Number:</b>	CM14-0185061		
<b>Date Assigned:</b>	11/12/2014	<b>Date of Injury:</b>	06/26/2012
<b>Decision Date:</b>	01/07/2015	<b>UR Denial Date:</b>	10/28/2014
<b>Priority:</b>	Standard	<b>Application Received:</b>	11/06/2014

### HOW THE IMR FINAL DETERMINATION WAS MADE

MAXIMUS Federal Services sent the complete case file to an expert reviewer. He/she has no affiliation with the employer, employee, providers or the claims administrator. The expert reviewer is Board Certified in Internal Medicine and is licensed to practice in Virginia. He/she has been in active clinical practice for more than five years and is currently working at least 24 hours a week in active practice. The expert reviewer was selected based on his/her clinical experience, education, background, and expertise in the same or similar specialties that evaluate and/or treat the medical condition and disputed items/services. He/she is familiar with governing laws and regulations, including the strength of evidence hierarchy that applies to Independent Medical Review determinations.

### CLINICAL CASE SUMMARY

The expert reviewer developed the following clinical case summary based on a review of the case file, including all medical records:

This case involves a 38 year old male patient who sustained an injury on June 26 2012 when he developed issues with lower back pain. He was diagnosed with thoracic lumbar neuritis and radiculopathy, and lumbosacral spondylosis. On 11/12/ 2013, the patient had a MRI of the lumbar spine which showed L5-S1 facet hypertrophy with mild proximal left neural foraminal narrowing with was not significantly changed. On 12/18/2013, he underwent a EMG/NCS of the bilateral lower extremities which showed chronic L5-S1 radiculopathy on the right without evidence of left side radiculopathy or lumbar plexopathy. He was prescribed multiple medications: Percocet, Zanaflex, Ambien and sennokot. He was also prescribed a polarcare-style unit to provide coolness to the lumbar spine in the post-operative care setting. The patient underwent surgical decompression of the L5-S1 and L4-5.

### IMR ISSUES, DECISIONS AND RATIONALES

The Final Determination was based on decisions for the disputed items/services set forth below:

**Zynax Nexwave and supplies:** Upheld

**Claims Administrator guideline:** Decision based on MTUS Chronic Pain Treatment Guidelines Interferential Current Stimulation Page(s): 118-120.

**MAXIMUS guideline:** Decision based on MTUS Chronic Pain Treatment Guidelines Page(s): 118-120.

**Decision rationale:** This device is a portable muscle stimulator. Per MTUS, Interferential Current Stimulation (ICS): Not recommended as an isolated intervention. There is no quality evidence of effectiveness except in conjunction with recommended treatments, including return to work, exercise and medications, and limited evidence of improvement on those recommended treatments alone. The randomized trials that have evaluated the effectiveness of this treatment have included studies for back pain, jaw pain, soft tissue shoulder pain, cervical neck pain and post-operative knee pain. The findings from these trials were either negative or non-interpretable for recommendation due to poor study design and/or methodologic issues. In addition, although proposed for treatment in general for soft tissue injury or for enhancing wound or fracture healing, there is insufficient literature to support Interferential current stimulation for treatment of these conditions. There are no standardized protocols for the use of interferential therapy; and the therapy may vary according to the frequency of stimulation, the pulse duration, treatment time, and electrode-placement technique. Two recent randomized double-blind controlled trials suggested that ICS and horizontal therapy (HT) were effective in alleviating pain and disability in patients with chronic low back pain compared to placebo at 14 weeks, but not at 2 weeks. The placebo effect was remarkable at the beginning of the treatment but it tended to vanish within a couple of weeks. The studies suggested that their main limitation was the heterogeneity of the low back pain subjects, with the interventions performing much better for back pain due to previous multiple vertebral osteoporotic fractures, and further studies are necessary to determine effectiveness in low back pain from other causes. A recent industry-sponsored study in the Knee Chapter concluded that interferential current therapy plus patterned muscle stimulation (using the RS-4i Stimulator) has the potential to be a more effective treatment modality than conventional low-current TENS for osteoarthritis of the knee. This recent RCT found that either electro-acupuncture or interferential electrotherapy, in combination with shoulder exercises, is equally effective in treating frozen shoulder patients. It should be noted that this study only showed the combined treatment effects with exercise as compared to no treatment, so the entire positive effect could have been due to the use of exercise alone. While not recommended as an isolated intervention, patient selection criteria if Interferential stimulation is to be used anyway is as follows: Possibly appropriate for the following conditions if it has documented and proven to be effective as directed or applied by the physician or a provider licensed to provide physical medicine: Pain is ineffectively controlled due to diminished effectiveness of medications; or Pain is ineffectively controlled with medications due to side effects; or History of substance abuse; or Significant pain from postoperative conditions limits the ability to perform exercise programs/physical therapy treatment; or Unresponsive to conservative measures (e.g., repositioning, heat/ice, etc.). If those criteria are met, then a one-month trial may be appropriate to permit the physician and physical medicine provider to study the effects and benefits. There should be evidence of increased functional improvement, less reported pain and evidence of medication reduction. A "jacket" should not be certified until after the one-month trial and only with documentation that the individual cannot apply the stimulation pads alone or with the help of another available person. Per guidelines, this intervention would not be medically indicated. As such, this request is not medically necessary.