

<b>Case Number:</b>	CM15-0047159		
<b>Date Assigned:</b>	03/19/2015	<b>Date of Injury:</b>	06/17/2002
<b>Decision Date:</b>	04/20/2015	<b>UR Denial Date:</b>	02/25/2015
<b>Priority:</b>	Standard	<b>Application Received:</b>	03/12/2015

### 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. 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/Service. He/she is familiar with governing laws and regulations, including the strength of evidence hierarchy that applies to Independent Medical Review determinations.

The Expert Reviewer has the following credentials:

State(s) of Licensure: North Carolina

Certification(s)/Specialty: Family Practice

### CLINICAL CASE SUMMARY

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

The injured worker is a 37-year-old male, who sustained an industrial injury on 06/17/2002. He has reported injury of the neck, low back, and shoulder. The diagnoses have included neck sprain and strain; lumbar sprain and strain; thoracic outlet syndrome. Treatment to date has included medications and surgical intervention. A progress note from the treating physician, dated 06/12/2014, documented an evaluation with the injured worker. The injured worker reported low back pain, neck pain, numbness of the right lower extremity, and tingling in the left shoulder and bilateral thumbs and index fingers. Objective testing showed chronic left C7 radiculopathy and possible left C8 radiculopathy; marked left ulnar neuropathy at the elbow and wrist; mild carpal tunnel syndrome bilaterally; and mild chronic right L3 radiculopathy. Request is being made for an interferential unit.

### IMR ISSUES, DECISIONS AND RATIONALES

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

**Interferential unit:** Upheld

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 12 Low Back Complaints Page(s): 287-328, Chronic Pain Treatment Guidelines Transcutaneous electrotherapy Page(s): 114. Decision based on Non-MTUS Citation Official Disability Guidelines: Low Back - Lumbar & Thoracic (Chronic & Acute).

**MAXIMUS guideline:** Decision based on MTUS Chronic Pain Treatment Guidelines  
interferential therapy Page(s): 118-119.

**Decision rationale:** The California medical treatment guidelines section on ICS therapy states: 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. (Van der Heijden, 1999) (Werner, 1999) (Hurley, 2001) (Hou, 2002) (Jarit, 2003) (Hurley, 2004) (CTAF, 2005) (Burch, 2008) 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. (Zambito, 2006) (Zambito, 2007) 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. (Burch, 2008) This recent RCT found that either electroacupuncture 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. (Cheing, 2008) See also Sympathetic therapy. See also TENS, chronic pain. While not recommended as an isolated intervention, Patient selection criteria if Interferential stimulation is to be used anyway: 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. The criteria as set forth above per the

California MTUS have not been met. In addition, ICS is only initially approved for a one-month trial period. Therefore, the request is not certified.