

<b>Case Number:</b>	CM14-0063663		
<b>Date Assigned:</b>	07/11/2014	<b>Date of Injury:</b>	06/10/2009
<b>Decision Date:</b>	09/16/2014	<b>UR Denial Date:</b>	04/16/2014
<b>Priority:</b>	Standard	<b>Application Received:</b>	05/06/2014

### 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 Orthopedic Surgery and is licensed to practice in California. 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:

The claimant is a 49-year-old male who sustained a vocational injury on June 10, 2009 following a fall off a truck while working as a driver. The most recent office note available for review is from April 9, 2014 noting that the claimant had complaints of pain and exhibited impaired activities of daily living. It was noted that the claimant had been using a home H-wave and reported a decrease in the need for oral medications. The claimant reported the ability to perform more activity and greater overall function due to the use of the H-wave device. The claimant noted approximately 60% reduction in pain and was noted to be able to "lift more". The claimant's current working diagnoses are contracture of the palmar fascia and acquired trigger finger. The claimant is noted to be status post right carpal tunnel release and right middle finger trigger release on March 31, 2013 and a contracture release on October 24, 2013. The current request is for an H-wave device.

### IMR ISSUES, DECISIONS AND RATIONALES

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

**H-Wave Device:** Upheld

**Claims Administrator guideline:** Decision based on MTUS Chronic Pain Treatment Guidelines H-wave stimulation Page(s): 117. Decision based on Non-MTUS Citation Official Disability Guidelines: Forearm, Wrist, & Hand - Electrical Stimulators (E-Stim).

**MAXIMUS guideline:** Decision based on MTUS Chronic Pain Treatment Guidelines H-wave stimulation Page(s): 117-118. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG); Forearm, Wrist and Hand chapter TENS (transcutaneous electrical neurostimulation) Not recommended. Transcutaneous electrical neurostimulation (TENS) units have no scientifically proven efficacy in the treatment of acute hand, wrist, or forearm symptoms, but are commonly used in physical therapy. (Milliman, 1998) There are conflicting effects of TENS on pain outcomes in patients with arthritis in the hand. Acupuncture-like TENS (AL-TENS) may be beneficial for reducing pain intensity and improving muscle power scores over placebo while, conversely, Conventional TENS (C-TENS) resulted in no clinical benefit on pain intensity compared with placebo. Not all patients tolerate AL-TENS, however, as it is reported to be uncomfortable, even though it may be more efficacious than C-TENS. (Brosseau-Cochrane, 2003) There may be some benefit for people suffering from hand hypersensitivity. (Cheing, 2005) One controlled trial of short-term electrical stimulation in conjunction with neurodevelopmental exercises showed slightly improved hand function in the TENS group over placebo. (Yozbatiran, 2006) In general, it would not be advisable to use these modalities beyond 2-3 weeks if signs of objective progress towards functional restoration are not demonstrated.

**Decision rationale:** California MTUS, ACOEM Guidelines have been referenced and Official Disability Guidelines have also been supplemented due to the specificity of the request with regards to the hands. Documentation presented for review suggests the claimant has previously used transcutaneous electrotherapy machine at home for a period of five years. It can be assumed that with a period of five year use of a TENS machine this machine would have provided some subjective relief or the continued use would not have been considered medically warranted and necessary. Subsequently it can be concluded that the TENS unit had not failed and now the request that a second type of transcutaneous electrotherapy in the form of H-wave is not completely understood. There is currently no literature supporting that H-wave is more effective than initial treatment when compared to TENS for analgesic effects. California MTUS/ACOEM Guidelines note that H-wave electrical stimulation can be considered medically reasonable for diabetic neuropathy. There is insufficient data to form conclusions, and evidence is lacking for other conditions. Official Disability Guidelines note that electrical stimulators in the form of transcutaneous electrotherapy are not recommended as there is no scientifically proven efficacy in the treatment of acute hand, wrist, or forearm symptoms. Currently documentation presented for review fails to establish the medical necessity of the requested durable medical equipment and based on California MTUS, ACOEM Guidelines, and Official Disability Guidelines, the request cannot be considered medically necessary.