

<b>Case Number:</b>	CM13-0049089		
<b>Date Assigned:</b>	12/27/2013	<b>Date of Injury:</b>	07/18/2011
<b>Decision Date:</b>	02/24/2014	<b>UR Denial Date:</b>	10/15/2013
<b>Priority:</b>	Standard	<b>Application Received:</b>	11/07/2013

### HOW THE IMR FINAL DETERMINATION WAS MADE

MAXIMUS Federal Services sent the complete case file to a physician reviewer. He/she has no affiliation with the employer, employee, providers or the claims administrator. The physician reviewer is Board Certified in Emergency Medicine and is licensed to practice in New York and Tennessee. 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 physician 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 patient is a 50-year-old male who sustained an injury to this neck on July 8, 2011 when he hit his head on a steel beam. The patient underwent spinal fusion on July 18, 2012. The patient continues to experience pain in his neck with radiation into his left arm with numbness, weakness, and tingling. Physical examination reveals decreased sensation to C4, C5, and C6 dermatomes. Motor strength was 4/5 on the left compared with 5/5 on the left. MRI of the cervical spine showed spinal arthrodesis at C3-4 and C4-5, and disc disease at C5-6 and C6-7. Diagnosis was post-laminectomy syndrome. Treatment included physical therapy, steroid injections, and medications. Request for authorization for trial with an H-wave device was submitted on June 25, 2013. Request for authorization for purchase of home H-wave device was submitted on September 23, 2013.

### IMR ISSUES, DECISIONS AND RATIONALES

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

**Purchase of home H-Wave device:** Upheld

**Claims Administrator guideline:** Decision based on MTUS Chronic Pain Treatment Guidelines.

**MAXIMUS guideline:** Decision based on MTUS Chronic Pain Treatment Guidelines Pain Interventions and Guidelines Page(s): 117-118.

**Decision rationale:** H-wave stimulation (HWT) is not recommended as an isolated intervention, but a one-month home-based trial of H- Wave stimulation may be considered as a noninvasive conservative option for diabetic neuropathic pain, or chronic soft tissue inflammation if used as an adjunct to a program of evidence-based functional restoration, and only following failure of initially recommended conservative care, including recommended physical therapy (i.e., exercise) and medications, plus transcutaneous electrical nerve stimulation (TENS). There is no evidence that H-Wave is more effective as an initial treatment when compared to TENS for analgesic effects. A randomized controlled trial comparing analgesic effects of H- wave therapy and TENS on pain threshold found that there were no differences between the different modalities or HWT frequencies. The one-month HWT trial may be appropriate to permit the physician and provider licensed to provide physical therapy to study the effects and benefits, and it should be documented (as an adjunct to ongoing treatment modalities within a functional restoration approach) as to how often the unit was used, as well as outcomes in terms of pain relief and function. Trial periods of more than one month should be justified by documentation submitted for review. While H-Wave and other similar type devices can be useful for pain management, they are most successfully used as a tool in combination with functional improvement. In this case, the patient was continuing to experience pain and chronic tissue inflammation. There was no documentation of functional improvement.