

<b>Case Number:</b>	CM14-0050580		
<b>Date Assigned:</b>	07/07/2014	<b>Date of Injury:</b>	10/16/2013
<b>Decision Date:</b>	08/01/2014	<b>UR Denial Date:</b>	03/21/2014
<b>Priority:</b>	Standard	<b>Application Received:</b>	04/18/2014

### 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 Physical Medicine and Rehabilitation, and is licensed to practice in Illinois. 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 injured worker is a 56-year-old with a date of injury of 10/16/13. The injury occurred pushing tables and cards, and going up and down the stairs. Diagnoses were noted to include left shoulder impingement with tendonitis and tendinosis. Previous treatments were noted to include physical therapy, medication, and a TENS trial. The provider reported the MRI of the left shoulder performed on 12/30/13 had evidence of mild supraspinatus and infraspinatus tendinosis with high-grade rotator cuff tear, mild acromioclavicular joint osteoarthritis, and type III acromion morphology, which can predispose to external impingement syndromes. The progress note dated 2/10/14 reported the injured worker complained of left shoulder pain and dysfunction. The injured worker reported left shoulder pain radiated into the left elbow without numbness or tingling, and was rated between 3-7/10 in severity. The injured worker reported subjective weakness to the left shoulder, specifically with shoulder-level activities and/or above shoulder-level activities. The physical examination revealed a negative Spurling's test. The neurological examination of the upper extremities revealed intact sensation in all dermatomes to the bilateral upper extremities. The motor strength examination was noted to be 4/5 to deltoid and biceps function on the left side. The deep tendon reflex examination revealed as normal and equal bilaterally. The physical examination of the left shoulder revealed diffuse tenderness to palpation, restricted range of motion with a positive Speed's and impingement test. The progress note dated 3/10/14 revealed the injured worker complained of pain, impaired range of motion, and impaired activities of daily living. The provider indicated the injured worker had failed conservative therapy, along with a failed home TENS trial and medications.

## IMR ISSUES, DECISIONS AND RATIONALES

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

**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 Page(s): 117-118.

**Decision rationale:** The California Chronic Pain Medical Treatment Guidelines do not recommend H-Wave stimulation 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 and medications, plus transcutaneous electrical nerve stimulation. In a recent retrospective study suggesting effectiveness of the H-wave device, the patient selection criteria included a physician documented diagnosis of chronic soft tissue injury or neuropathic pain in the upper or lower extremity or the spine that was unresponsive to conventional therapy, including physical therapy, medications, and TENS. There is no evidence that H-wave is more effective as an initial treatment when compared to TENS for analgesic effects. A randomized control trial comparing analgesic effects of the H-wave therapy and TENS on a pain threshold found that there were no differences between the different modalities or H-wave frequencies. The one-month HWT trial may be appropriate to permit the physician and provider to license to provide physical therapy to study the effects and benefits, and it should be documented (as an adjunct to ongoing treatment modalities with functional restoration approach), as to how often the unit was used, as well as outcomes in terms of pain relief and function. 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 fact, H-wave is used more often for muscle spasm and acute pain as opposed to neuropathy or radicular pain, since there is no anecdotal evidence that H-wave stimulation helps to relax the muscles, but there are no published studies to support this use, so it is not recommended at this time. There is a lack of documentation regarding the utilization of the H-wave device as an adjunct to ongoing treatment modalities with a functional restoration approach, such as with physical therapy, as per the guidelines. As such, the request is not medically necessary.