

<b>Case Number:</b>	CM15-0108609		
<b>Date Assigned:</b>	06/12/2015	<b>Date of Injury:</b>	03/05/2008
<b>Decision Date:</b>	07/14/2015	<b>UR Denial Date:</b>	06/03/2015
<b>Priority:</b>	Standard	<b>Application Received:</b>	06/04/2015

### 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: Montana

Certification(s)/Specialty: Preventive Medicine, Occupational Medicine

### 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 57 year old female who sustained an industrial injury on 3/5/08. The mechanism of injury is unclear. She currently complains of achiness in the low back with residual left sided L5 numbness. On physical exam of the low back there were palpable taut muscle bands, tenderness over the trochanteric region bilaterally slightly greater on the left, positive straight leg raise causing dysesthesias along the lateral aspect of the left and into the left foot. Medications are Norco, tizanidine. Per note dated 5/19/15 she developed chest tightness at night and shortness of breath so the Norco was stopped and the symptoms subsided. Without the Norco her discomfort has increased. Medications have improved her ability to function and improved her sleep quality. She is able to exercise more easily, perform activities of daily living, stand and walk for longer periods of time. Her pain level has decreased from 7/10 to 2/10. Urine drug screen (3/13/15) was consistent with prescribed medications as she does not take Norco until later in the day. Diagnoses include lumbar disc syndrome; chronic myofascial pain. Treatments to date include medications; back brace; home exercise program; H-wave unit. In the progress note dated 4/21/15 and 5/19/15 the treating provider's plan of care includes a request for H-wave electro pads-2 sets. H-wave reduces her pain significantly and the current pads have worn out.

### IMR ISSUES, DECISIONS AND RATIONALES

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

## **H-Wave pads 2 sets for the bilateral low back area: Overturned**

**Claims Administrator guideline:** Decision based on MTUS Chronic Pain Treatment Guidelines H-wave stimulation (HWT). Decision based on Non-MTUS Citation ODG, Low Back, H-wave stimulation (devices).

**MAXIMUS guideline:** Decision based on MTUS Chronic Pain Treatment Guidelines Transcutaneous electrotherapy, H-Wave stimulation Page(s): 117-118. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), H-Wave stimulation.

**Decision rationale:** The MTUS notes that 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 (Julka, 1998) (Kumar, 1997) (Kumar, 1998), 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). 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 an upper or lower extremity or the spine that was unresponsive to conventional therapy, including physical therapy, medications, and TENS. (Blum, 2006) (Blum 2, 2006) 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. (McDowell 2, 1999) [Note: This may be a different device than the H-Wave approved for use in the US.] Regarding tissue repair, another study suggests that low-frequency HWT may produce direct localized effects on cutaneous blood flow, a finding relevant for clinicians working in the field of tissue repair. (McDowell, 1999) 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. Rental would be preferred over purchase during this trial. 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. H-wave stimulation is a form of electrical stimulation that differs from other forms of electrical stimulation, such as transcutaneous electrical nerve stimulation (TENS), in terms of its waveform. While physiatrists, chiropractors, or podiatrists may perform H-wave stimulation, H-wave devices are also available for home use. H-wave stimulation is sometimes used for the treatment of pain related to a variety of etiologies, muscle sprains, temporomandibular joint dysfunctions or reflex sympathetic dystrophy. In fact, H-wave is used more often for muscle spasm and acute pain as opposed to neuropathy or radicular pain, since there is 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. H-wave stimulation has also been used to accelerate healing of wounds, such as diabetic ulcers. The ODG guidelines note that H-Wave stimulation 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 neuropathic pain, if used as an adjunct to a program of evidence-based functional restoration. In this case the treatment records on 12/9/14, 1/13/15 and 2/17/15 do not address the use of H-Wave stimulation as part of the treatment plan. There is no documentation of frequency and duration of use, and no documentation of specific functional improvement related to H-Wave stimulation. The treatment note of 4/21/15 does state that the use of the H-Wave unit does result in significant pain reduction and requests H-Wave pads 2 sets for the bilateral low back area. It is assumed that the unit has been used for well beyond the 1 month trial period. It is part of a treatment plan that includes pain medication, muscle relaxer and a home exercise program. It does appear that the injured worker does receive significant benefit from the H-Wave unit as an adjunct to the other treatments. It is recommended that, in the future, the treating physician provide improved documentation for ongoing use however, the request for H-Wave pads 2 sets for the bilateral low back area is medically necessary.