

<b>Case Number:</b>	CM15-0205118		
<b>Date Assigned:</b>	10/22/2015	<b>Date of Injury:</b>	04/02/2014
<b>Decision Date:</b>	12/10/2015	<b>UR Denial Date:</b>	09/25/2015
<b>Priority:</b>	Standard	<b>Application Received:</b>	10/19/2015

### 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: California, District of Columbia,

Maryland Certification(s)/Specialty: Anesthesiology, Pain Management

### CLINICAL CASE SUMMARY

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

This injured worker is a 53 year old male, who sustained an industrial injury on 04-02-2014. The injured worker was diagnosed as having end stage osteoarthritis right knee. On medical records dated 4-18-2015 and 05-19-2015, the subjective complaints were noted as right knee pain. Pain was rated an 8 out of 10. Objective findings were noted as tenderness right knee medial and lateral joint line. Range of motion with pain and crepitation was noted. Treatments to date included medication and physical therapy. Per documentation, the injured worker was status post right total knee replacement 07-10-2015. The Utilization Review (UR) was dated 09-25-2015. A Request for Authorization was submitted. The UR submitted for this medical review indicated that the request TENS unit, monthly rental, right knee per 04-07-2015 order was non-certified.

### IMR ISSUES, DECISIONS AND RATIONALES

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

**TENS unit, monthly rental, right knee Qty: 1: Upheld**

**Claims Administrator guideline:** Decision based on MTUS Chronic Pain Medical Treatment 2009, Section(s): Transcutaneous electrotherapy.

**MAXIMUS guideline:** Decision based on MT US Chronic Pain Medical Treatment 2009, Section(s): Transcutaneous electrotherapy.

**Decision rationale:** MT US Chronic Pain Medical Treatment Guidelines do not recommend TENS as a primary treatment modality, but support consideration of a one-month home-based TENS trial used as an adjunct to a program of evidence-based functional restoration. Furthermore, criteria for the use of TENS includes pain of at least three months duration, evidence that other appropriate pain modalities have been tried (including medication) and failed, and a documented one-month trial period stating how often the unit was used, as well as outcomes in terms of pain relief and function. Per the ODG guidelines regarding TENS for the knee: Recommended as an option for patients in a therapeutic exercise program for osteoarthritis as a treatment for pain. The addition of TENS plus exercise appears to produce improved function (greater cumulative knee extensor torque, stride length, gait velocity and range of motion) over those treated with exercise only, although the difference has not been found to be significant. (Philadelphia, 2001) (Hulme-Cochrane, 2002) (Ng, 2003) (Cheing, 2004) (BlueCross BlueShield, 2005) (Osiri, 2000) (Mont, 2006) (Garland, 2007)

Transcutaneous electrical nerve stimulation offers clinically relevant short-term pain relief for osteoarthritis of the knee, according to a report in the June 22nd issue of BMC Musculoskeletal Disorders. (Bjordal, 2007) Transcutaneous electrical nerve stimulation can help with short-term pain control among patients with hip or knee OA. (Zhang, 2008) A 6-week program of progressive strength training targeting the quadriceps femoris muscle group substantially improves strength and function following total knee arthroplasty for treatment of osteoarthritis, compared to patients who received standard of care therapy; however, addition of neuromuscular electrical stimulation (NMES) to the strength training exercise did not improve outcomes. (Peterson, 2009) There is no conclusive evidence that TENS reduces knee pain or physical disability from osteoarthritis, even with years of clinical use and a plethora of clinical trials, based on a recent Cochrane Review, because the studies had poor methodological quality, inadequate reporting, and small sample size. Treatment responses, however minimal, occurred in 29 of 100 people treated with electrostimulation and in 26 of 100 people who had sham treatments or usual care. Per the documentation submitted for review, it was noted that TENS trial was authorized 10/30/15, however there was no documentation whether trial took place or was effective. As such, the request is not medically necessary.