

<b>Case Number:</b>	CM15-0130679		
<b>Date Assigned:</b>	07/17/2015	<b>Date of Injury:</b>	10/31/2014
<b>Decision Date:</b>	09/15/2015	<b>UR Denial Date:</b>	06/17/2015
<b>Priority:</b>	Standard	<b>Application Received:</b>	07/07/2015

### 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: Georgia

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:

The injured worker (IW) is a 41 year old male who sustained an industrial injury on 10/31/2014. He reported twisting his knee with immediate onset of pain and a popping sensation. The injured worker was diagnosed as having sprain of right knee, and contusion of right knee. Treatment to date has included medication and physical therapy. A MRI on 01/23/2014 found a complex tear of the meniscus, and a small joint effusion and synovitis and low-grade marrow edema suggesting contusion. Currently, the injured worker complains of pain in the right knee. He has an antalgic gait on the right side with limited squatting to 50%. Subjectively the right knee had moderate swelling and effusion with tenderness at the posteriolateral aspect of the knee. The range of motion was limited in flexion. There was no laxity in the collateral or cruciate ligament, however there was positive grinding and hyperextension test of the right knee elicited pain in the lateral aspect of the right knee. Arthroscopic surgery of the right knee is planned for 04/03/2015. Requests for authorization were made for the following: 1. Post-operative therapeutic exercises 3 times a week for a total of 12 sessions for the right knee. 2. Post-operative hydroculator 3 times a week for a total of 12 sessions for the right knee. 3. Post-operative e-stimulation 3 times a week for a total of 12 sessions for the right knee. 4. Right hinged knee brace. 5. Post-operative therapeutic exercises twice weekly for a total of 6 sessions for the right knee.

### IMR ISSUES, DECISIONS AND RATIONALES

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

**Post-operative hydrocollator 3 times a week for a total of 12 sessions for the right knee:**  
Upheld

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 13 Knee Complaints, Postsurgical Treatment Guidelines. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Knee and Leg Chapter, Physical medicine treatment.

**MAXIMUS guideline:** Decision based on MTUS Chronic Pain Treatment Guidelines Hydrocollator/Cryotherapy Page(s): 119.

**Decision rationale:** Post-operative hydrocollator 3 times a week for a total of 12 session for right knee is not medically necessary. The MTUS guidelines state that is hydrollocollator/cryotherapy is "not recommended as an isolated intervention. There is no quality evidence of effectiveness except in conjunction with recommended treatments, including return to work, exercise and medications, and limited evidence of improvement on those recommended treatments alone. The randomized trials that have evaluated the effectiveness of this treatment have included studies for back pain, jaw pain, soft tissue shoulder pain, cervical neck pain and post-operative knee pain. The findings from these trials were either negative or non-interpretable for recommendation due to poor study design and/or methodologic issues." As it relates to this case, electrical stimulation was recommended prior to attempted physical therapy for knee pain. There is a lack of documentation of failed therapy or sub-therapeutic exercise therapy requiring adjunctive electrical stimulation. Per MTUS, hydrocollator therapy is not medically necessary.

**Post-operative e-stimulation 3 times a week for a total of 12 sessions for the right knee:**  
Upheld

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 13 Knee Complaints, Chronic Pain Treatment Guidelines Electrical stimulators, Postsurgical Treatment Guidelines. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Knee and Leg Chapter, Physical medicine treatment.

**MAXIMUS guideline:** Decision based on MTUS Chronic Pain Treatment Guidelines Electrical Stimulation Page(s): 119.

**Decision rationale:** Post-operative e-stimulation 3 times a week for a total of 12 sessions for the right knee is not medically necessary. The MTUS guidelines state that is electrical stimulation is "not recommended as an isolated intervention. There is no quality evidence of effectiveness except in conjunction with recommended treatments, including return to work, exercise and medications, and limited evidence of improvement on those recommended treatments alone. The randomized trials that have evaluated the effectiveness of this treatment have included studies for back pain, jaw pain, soft tissue shoulder pain, cervical neck pain and post-operative knee pain. The findings from these trials were either negative or non-interpretable for recommendation due to poor study design and/or methodologic issues." As it relates to this case, electrical stimulation was recommended prior to attempted physical therapy for knee pain. There is a lack of documentation of failed therapy or sub-therapeutic exercise therapy requiring adjunctive electrical stimulation. Per MTUS, electrical stimulation is not medically necessary.

**Post-operative therapeutic exercises twice weekly for a total of 6 sessions for the right knee:**  
Upheld

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 13 Knee Complaints, Postsurgical Treatment Guidelines. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Knee and Leg Chapter, Physical medicine treatment.

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) Lower Extremity Complaints: Physical therapy.

**Decision rationale:** Post-operative therapeutic exercises twice weekly for a total of 6 sessions for the right knee is not medically necessary. A request for 12 sessions three times per week was previously made. An evaluation and fading of therapy following the allowed number of sessions is recommended. The Official Disability Guidelines states that physical therapy for knee recommended. Positive limited evidence. As with any treatment, if there is no improvement after 2-3 weeks the protocol may be modified or re-evaluated. See also specific modalities. (Philadelphia, 2001) Acute muscle strains often benefit from daily treatment over a short period, whereas chronic injuries are usually addressed less frequently over an extended period. It is important for the physical therapy provider to document the patient's progress so that the physician can modify the care plan, if needed. The physical therapy prescription should include diagnosis; type, frequency, and duration of the prescribed therapy; preferred protocols or treatments; therapeutic goals; and safety precautions (eg, joint range-of-motion and weight-bearing limitations, and concurrent illnesses). (Rand, 2007) Controversy exists about the effectiveness of physical therapy after arthroscopic partial meniscectomy. (Goodwin, 2003) A randomized controlled trial of the effectiveness of water-based exercise concluded that group-based exercise in water over 1 year can produce significant reduction in pain and improvement in physical function in adults with lower limb arthritis, and may be a useful adjunct in the management of hip and/or knee arthritis. (Cochrane, 2005) Functional exercises after hospital discharge for total knee arthroplasty result in a small to moderate short-term, but not long-term, benefit. In the short term, physical therapy interventions with exercises based on functional activities may be more effective after total knee arthroplasty than traditional exercise programs, which concentrate on isometric muscle exercises and exercises to increase range of motion in the joint. (Lowe, 2007) Supervised therapeutic exercise improves outcomes in patients who have osteoarthritis or claudication of the knee. Compared with home exercise, supervised therapeutic exercise has been shown to improve walking speed and distance. (Rand, 2007) A physical therapy consultation focusing on appropriate exercises may benefit patients with OA, although this recommendation is largely based on expert opinion. The physical therapy visit may also include advice regarding assistive devices for ambulation. (Zhang, 2008) Accelerated perioperative care and rehabilitation intervention after hip and knee arthroplasty (including intense physical therapy and exercise) reduced mean hospital length of stay (LOS) from 8.8 days before implementation to 4.3 days after implementation. (Larsen, 2008) In patients with ACL injury willing to moderate activity level to avoid re-injury, initial treatment without ACL reconstruction should be considered. All ACL-injured patients need to begin knee-specialized physical therapy early (within a week) after the ACL injury to learn more about the injury, to lower the activity level while performing neuromuscular training to restore the functional stability, and as far as possible avoid further giving-way or re-injuries in the same or the other knee, irrespectively if ACL is reconstructed or not. (Neuman, 2008) Limited gains for most patients with knee OA. (Bennell, 2005) More likely benefit for combined manual physical therapy and supervised exercise for OA. (Deyle, 2000) Many patients do not require PT after partial meniscectomy. (Morrissey, 2006) There are short-term gains for PT after TKR. (Minns

Lowe, 2007) Physical therapy and patient education may be underused as treatments for knee pain, compared to the routine prescription of palliative medication. (Mitchell, 2008) While foot orthoses are superior to flat inserts for patellofemoral pain, they are similar to physical therapy and do not improve outcomes when added to physical therapy in the short-term management of patellofemoral pain. (Collins, 2008) This study sought to clarify which type of postoperative rehabilitation program patients should undergo after ACL reconstruction surgery, comparing a neuromuscular exercise rehabilitation program with a more traditional strength-training regimen, and it showed comparable long-term primary and secondary outcomes between the 2 groups at 12 and 24 months. On the basis of the study, the authors recommend a combined approach of strength exercises with neuromuscular training in postoperative ACL rehabilitation programs. (Risberg, 2009) This RCT concluded that, after primary total knee arthroplasty, an outpatient physical therapy group achieved a greater range of knee motion than those without, but this was not statistically significant. (Mockford, 2008) See also specific physical therapy modalities by name, as well as exercise. Active Treatment versus Passive Modalities: See the Low Back Chapter for more information. The use of active treatment modalities instead of passive treatments is associated with substantially better clinical outcomes. The most commonly used active treatment modality is Therapeutic exercises (97110), but other active therapies may be recommended as well, including Neuromuscular reeducation (97112), Manual therapy (97140), and Therapeutic activities/exercises (97530). ODG Physical Medicine Guidelines: Allow for fading of treatment frequency (from up to 3 visits per week to 1 or less), plus active self-directed home PT. Also see other general guidelines that apply to all conditions under Physical Therapy in the ODG Preface. Dislocation of knee; Tear of medial/lateral cartilage/meniscus of knee; Dislocation of patella: Medical treatment: 9 visits over 8 weeks.

**Post-operative hydrocollator twice weekly for a total of 6 sessions for the right knee: Upheld**

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 13 Knee Complaints, Postsurgical Treatment Guidelines. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Knee and Leg Chapter, Physical medicine treatment.

**MAXIMUS guideline:** Decision based on MTUS Chronic Pain Treatment Guidelines Hydrocollator/Cryotherapy Page(s): 119.

**Decision rationale:** Post-operative hydrocollator twice weekly for a total of 6 session for right knee is not medically necessary. The MTUS guidelines state that is hydrollocollator/cryotherapy is "not recommended as an isolated intervention. There is no quality evidence of effectiveness except in conjunction with recommended treatments, including return to work, exercise and medications, and limited evidence of improvement on those recommended treatments alone. The randomized trials that have evaluated the effectiveness of this treatment have included studies for back pain, jaw pain, soft tissue shoulder pain, cervical neck pain and post-operative knee pain. The findings from these trials were either negative or non-interpretable for recommendation due to poor study design and/or methodologic issues." As it relates to this case, electrical stimulation was recommended prior to attempted physical therapy for knee pain. There is a lack of documentation of failed therapy or sub-therapeutic exercise therapy requiring adjunctive electrical stimulation. Per MTUS, hydrocollator therapy is not medically necessary.

**Post-operative e-stimulation twice weekly for a total of 6 sessions for the right knee: Upheld**

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 13 Knee Complaints, Chronic Pain Treatment Guidelines Electrical stimulators, Postsurgical Treatment Guidelines. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Knee and Leg Chapter, Physical medicine treatment.

**MAXIMUS guideline:** Decision based on MTUS Chronic Pain Treatment Guidelines Electrical Stimulation Page(s): 119.

**Decision rationale:** Post-operative e-stimulation twice weekly for a total of 6 sessions for the right knee is not medically necessary. The MTUS guidelines state that is electrical stimulation is "not recommended as an isolated intervention. There is no quality evidence of effectiveness except in conjunction with recommended treatments, including return to work, exercise and medications, and limited evidence of improvement on those recommended treatments alone. The randomized trials that have evaluated the effectiveness of this treatment have included studies for back pain, jaw pain, soft tissue shoulder pain, cervical neck pain and post-operative knee pain. The findings from these trials were either negative or non-interpretable for recommendation due to poor study design and/or methodologic issues." As it relates to this case, electrical stimulation was recommended prior to attempted physical therapy for knee pain. There is a lack of documentation of failed therapy or sub-therapeutic exercise therapy requiring adjunctive electrical stimulation. Per MTUS, electrical stimulation is not medically necessary.