

<b>Case Number:</b>	CM15-0048864		
<b>Date Assigned:</b>	03/20/2015	<b>Date of Injury:</b>	01/05/2011
<b>Decision Date:</b>	05/01/2015	<b>UR Denial Date:</b>	02/27/2015
<b>Priority:</b>	Standard	<b>Application Received:</b>	03/16/2015

### 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: New Jersey, Michigan, California  
 Certification(s)/Specialty: Neurology, Neuromuscular 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 48 year old male, who sustained an industrial injury on January 5, 2011. He has reported right shoulder pain and right wrist pain. Diagnoses have included adhesive capsulitis of the right shoulder and carpal tunnel syndrome. Treatment to date has included medications, physical therapy, acupuncture, injections, surgery, exercise, and imaging studies. A progress note dated February 5, 2015 indicates a chief complaint of increased right arm pain, trouble sleeping, and increased pins and needles sensation to the right arm. The treating physician documented a plan of care that included continuous passive motion machine, medications, distal radial ulnar joint brace with ulnar styloid accommodation, counterforce brace for the right elbow, and physical therapy.

### IMR ISSUES, DECISIONS AND RATIONALES

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

**Continuous Passive Motion machine:** Upheld

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 10 Elbow Disorders (Revised 2007). Decision based on Non-MTUS Citation Official Disability Guidelines, Shoulder, Elbow and Hand/Wrist.

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Continuous passive motion (CPM) <http://www.odg-twc.com/index.html>.

**Decision rationale:** According to ODG guidelines, Continuous passive motion "Not recommended for shoulder rotator cuff problems, but recommended as an option for adhesive capsulitis, up to 4 weeks/5 days per week. See the Knee Chapter for more information on continuous passive motion devices. Rotator cuff tears: Not recommended after shoulder surgery or for nonsurgical treatment. (Raab, 1996) (BlueCross BlueShield, 2005) An AHRQ Comparative Effectiveness Review concluded that evidence on the comparative effectiveness and the harms of various operative and non-operative treatments for rotator cuff tears is limited and inconclusive. With regard to adding continuous passive motion to postoperative physical therapy, 11 trials yielded moderate evidence for no difference in function or pain, and one study found no difference in range of motion or strength. (Seida, 2010) Adhesive capsulitis: According to this RCT, CPM treatment for adhesive capsulitis provides better response in pain reduction than conventional physical therapy. The CPM group received CPM treatments for 1 h once a day for 20 days during a period of 4 weeks. The PT group had a daily physical therapy treatment including active stretching and pendulum exercises for 1 h once a day for 20 days during a period of 4 weeks. All patients in both groups were also instructed in a standardized home exercise program consisting of passive range of motion and pendulum exercises to be performed every day. In both groups, statistically significant improvements were detected in all outcome measures compared with baseline. Pain reduction, however, evaluated with respect to pain at rest, at movement and at night was better in CPM group. In addition the CPM group showed better shoulder pain index scores than the PT group. (Dundar, 2009) Because adhesive capsulitis involves fibrotic changes to the capsuloligamentous structures, continuous passive motion or dynamic splinting are thought to help elongate collagen fibers." (Page, 2010) There is no documentation that the patient underwent recent physical therapy. In addition there is no clear documentation of the status of the shoulder range of motion. Therefore, the Continuous Passive Motion machine is not medically necessary.

**Distal Radio-Ulna Joint brace with ulnar styloid accommodation:** Upheld

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 10 Elbow Disorders (Revised 2007). Decision based on Non-MTUS Citation Official Disability Guidelines, Shoulder, Elbow and Hand/Wrist.

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Splinting. <http://www.odg-twc.com/index.html>.

**Decision rationale:** According to MTUS guidelines, splinting is "recommend splinting of wrist in neutral position at night & day prn, as an option in conservative treatment. Use of daytime wrist splints has positive, but limited evidence. Splinting after surgery has negative evidence. When treating with a splint, there is scientific evidence to support the efficacy of neutral wrist splints in CTS, and it may include full-time splint wear instructions as needed, versus night-only. Carpal tunnel syndrome may be treated initially with a splint and medications before injection is considered, except in the case of severe CTS (thenar muscle atrophy and constant paresthesias in

the median innervated digits). Outcomes from carpal tunnel surgery justify prompt referral for surgery in moderate to severe cases. Nevertheless, surgery should not be performed until the diagnosis of CTS is made by history, physical examination and possible electrodiagnostic studies. Symptomatic relief from a cortisone/anesthetic injection will facilitate the diagnosis, however the benefit from these injections although good is short-lived. Two prospective randomized studies show that there is no beneficial effect from postoperative splinting after carpal tunnel release when compared to a bulky dressing alone. In fact, splinting the wrist beyond 48 hours following CTS release may be largely detrimental, especially compared to a home physical therapy program. (Banta, 1994) (Bury, 1995) (Courts, 1995) (Finsen, 1999) (Walker, 2000) (Gerritsen-JAMA, 2002) (Goodyear-Smith, 2004) (Muller, 2004) (Sevim, 2004) (Werner, 2005) (Premoselli, 2006) (Ucan, 2006) A hand brace significantly improves symptoms after four weeks. There is limited evidence that a nocturnal hand brace improves symptoms, hand function and overall patient-reported change in the short-term (up to four weeks of use). There is limited evidence that night-only wrist splint use is equally effective as full-time wrist splint use in improving short-term symptoms and hand function. There is limited evidence that neutral wrist splinting results in superior short-term overall and nocturnal symptom relief (at two weeks) when compared with wrist splinting in extension. Furthermore, limited evidence suggests that short-term daytime symptom relief is similar for both splint groups. (O'Conner-Cochrane, 2003) It is concluded that steroid injections and wrist splinting may be effective for relief of CTS symptoms but have a long-term effect in only 10 percent of patients. Symptom duration of less than 3 months and absence of sensory impairment at presentation are predictive of a lasting response to conservative treatment. Selected patients (i.e., with no thenar wasting or obvious underlying cause) presenting with mild to moderate carpal tunnel syndrome may receive either a single steroid injection or wear a wrist splint for 3 weeks. This will allow identification of the 10 percent of patients who respond well to conservative therapy and do not need surgery. (Graham, 2004) Statistical evaluation identified five factors, which were important in predicting lack of response to wrist splints: (1) age over 50 years, (2) duration over ten months, (3) constant paraesthesiae, (4) stenosing flexor tenosynovitis, and (5) a Phalen's test positive in less than 30 seconds. When none of these factors was present, 66% of patients were cured by medical therapy, 40% of patients with one factor, 17% with two factors, and 7% with three factors, and no patient with four or five factors present was cured by medical management. (Kaplan, 1990) Data suggest that splinting is most effective if applied within three months of symptom onset. (Kruger, 1991) This systematic review found that the usefulness of splinting as initial treatment for improving CTS symptoms is still supported by recent literature, but these effects are temporary. (Bernardino, 2011)." There is no documentation that the patient wrist condition requires keeping the wrist in a neutral position and the need for a wrist brace is unclear. Therefore, the request for Distal Radio-Ulna Joint brace with ulnar styloid accommodation is not medically necessary.

**Counterforce brace for right elbow:** Upheld

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 10 Elbow Disorders (Revised 2007). Decision based on Non-MTUS Citation Official Disability Guidelines, Shoulder, Elbow and Hand/Wrist.

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Splinting (padding). <http://www.odg-twc.com/index.html>.

**Decision rationale:** According to ODG guidelines, Splinting (padding), "recommended for cubital tunnel syndrome (ulnar nerve entrapment), including a splint or foam elbow pad worn at night (to limit movement and reduce irritation), and/or an elbow pad (to protect against chronic irritation from hard surfaces). (Apfel, 2006) (Hong, 1996) Under study for epicondylitis. No definitive conclusions can be drawn concerning effectiveness of standard braces or splints for lateral epicondylitis. (Borkholder, 2004) (Derebery, 2005) (Van De Streek, 2004) (Jensen, 2001) (Struijs, 2001) (Jansen, 1997) If used, bracing or splinting is recommended only as short-term initial treatment for lateral epicondylitis in combination with physical therapy. (Struijs, 2004) (Struijs, 2006) Some positive results have been seen with the development of a new dynamic extensor brace but more trials need to be conducted. Initial results show significant pain reduction, improved functionality of the arm, and improvement in pain-free grip strength. The beneficial effects of the dynamic extensor brace observed after 12 weeks were significantly different from the treatment group that received no brace. The beneficial effects were sustained for another 12 weeks. (Faes, 2006) (Faes2, 2006) Static progressive splinting can help gain additional motion when standard exercises seem stagnant or inadequate, particularly after the original injury. Operative treatment of stiffness was avoided in most patients. (Doornberg, 2006) These results differ from studies testing standard bracing which showed little to no effect on pain. (Wuori, 1998) (AHRQ, 2002) (Gabel, 1999) See also Static progressive stretch therapy and Tennis elbow band." There is no clear documentation for elbow splinting such as cubital tunnel syndrome or lateral epicondylitis combined to physical therapy. Therefore, the request for Counterforce brace for right elbow is not medically necessary.