

<b>Case Number:</b>	CM15-0209515		
<b>Date Assigned:</b>	10/28/2015	<b>Date of Injury:</b>	06/25/2012
<b>Decision Date:</b>	12/09/2015	<b>UR Denial Date:</b>	10/15/2015
<b>Priority:</b>	Standard	<b>Application Received:</b>	10/23/2015

### 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: Ohio, West Virginia

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

### 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 49 year old female, who sustained an industrial injury on June 25, 2012. The injured worker was diagnosed as having impingement syndrome of left shoulder and rotator cuff tendinitis of left shoulder. Treatment to date has included diagnostic studies, injection, physical therapy without relief and medication without relief. On October 15, 2014, an MRI showed tendonitis of the rotator cuff, especially anteriorly and subscapularis tendon. This was confirmed on ultrasound with her injection on February 4, 2015. On February 4, 2015, an ultrasound guided injection was noted to help for a couple of days and then the pain returned. On August 5, 2015, the injured worker complained of left shoulder discomfort that was noted to be worse since her last visit. The pain was rated as a 7 progressing to an 8-9 on a 1-10 pain scale. Activities such as reaching, pulling, pushing and lifting were noted to cause an increase in pain. Physical examination of the left shoulder revealed tenderness over the greater tuberosity. Hawkin's and impingements tests were positive. Range of motion revealed 145 degrees of forward flexion, 140 degrees of abduction and 60degrees of internal and external rotation. The treatment plan included surgical treatment for the left shoulder with diagnostic arthroscopy debridement or repair of the rotator cuff, subacromial decompression, surgical assistant, postoperative pain medication, postoperative physical therapy, shoulder brace and a cold compression unit. On October 15, 2015, utilization review denied a request for seven-day rental of cold compression unit for the left shoulder.

## IMR ISSUES, DECISIONS AND RATIONALES

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

### **7 day rental of cold compression unit, left shoulder: Upheld**

**Claims Administrator guideline:** The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines, Shoulder.

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) shoulder, Compression Therapy.

**Decision rationale:** MTUS is silent concerning compression therapy. ODG States "Not generally recommended in the shoulder. Deep venous thrombosis and pulmonary embolism events are common complications following lower-extremity orthopedic surgery, but they are rare following upper-extremity surgery, especially shoulder arthroscopy. It is still recommended to perform a thorough preoperative workup to uncover possible risk factors for deep venous thrombosis/ pulmonary embolism despite the rare occurrence of developing a pulmonary embolism following shoulder surgery. Mechanical or chemical prophylaxis should be administered for patients with identified coagulopathic risk factors. (Edgar, 2012) Although variability exists in the reported incidence of VTE, surgeons should still be aware of the potential for this serious complication after shoulder arthroplasty." MTUS is silent concerning DVT prophylaxis. ODG states "Recommend identifying subjects who are at a high risk of developing venous thrombosis and providing prophylactic measures such as consideration for anticoagulation therapy. Minor injuries in the leg are associated with greater risk of venous thrombosis. The relative risk for venous thrombosis is 3-fold greater following minor injury, especially if injury occurs in the 4 weeks prior to thrombosis, is located in the leg, and involves multiple injuries or rupture of muscle or ligament. Risk for venous thrombosis is higher in those with leg injury combined with family history of venous thrombosis (12-fold risk), Factor V Leiden mutation (50-fold risk), or Factor II 20210A mutation (9-fold risk). (van Stralen, 2008) A venous thrombosis is a blood clot that forms within a vein. Deep venous thromboses (DVTs) form in the deep veins of the legs, and if a piece of a blood clot formed in a vein breaks off it can be transported to the right side of the heart, and from there into the lungs, and is called an embolism, and this process called a venothromboembolism (VTE). Risk factors for venous thrombosis include immobility, surgery, and prothrombotic genetic variant. Neither AAOS nor ACCP recommend routine screening for DVT or PE in asymptomatic patients postoperatively. Warfarin is an acceptable therapy in all patient groups, but recommendations regarding other medications differ. ACCP recommends a LMWH or fondaparinux. AAOS, in contrast to ACCP, stratifies patients into four categories based on VTE risk and risk of major bleeding. Recommendations regarding mechanical prophylaxis differ slightly. According to AAOS, unless contraindicated, mechanical compression should be utilized for both total hip and knee arthroplasty for all patients in the recovery room and during the hospital stay. For patients undergoing THR or TKR, ACCP recommends the optimal use of mechanical thromboprophylaxis with the VFP (venous foot pump) or IPC (intermittent pneumatic compression) for patients with a high risk of bleeding. When the high bleeding risk decreases, ACCP recommends that pharmacologic thromboprophylaxis be substituted for or added to the mechanical thromboprophylaxis. (AAOS/ACCP, 2010) The latest AHRQ Comparative

Effectiveness Review of venous thromboembolism in orthopedic surgery concluded that there are inadequate data to make very many recommendations. They did suggest, for patients who have undergone major orthopedic surgery such as hip or knee replacement, extending post-surgery use of medications, from the standard 7-10 days to 28 days or longer, to prevent blood clots may be beneficial. While there is not enough evidence to determine which type of anti-clotting medication is best, within the heparin class of medications, low molecular-weight heparin was found to be superior to unfractionated heparin. (Sobieraj, 2012) Extended anticoagulation with apixaban or dabigatran reduces recurrent VTE and mortality without increasing major bleeding." While DVT prophylaxis is appropriate for surgical patients, cold compression is not generally recommended in the shoulder. The treating physician has not provided documentation as to why compression therapy is needed in addition to anticoagulation therapy in this case. As such, the request for a 7-day rental of cold compression unit, left shoulder is deemed not medically necessary.