

<b>Case Number:</b>	CM14-0053783		
<b>Date Assigned:</b>	07/07/2014	<b>Date of Injury:</b>	12/21/2007
<b>Decision Date:</b>	08/19/2014	<b>UR Denial Date:</b>	04/08/2014
<b>Priority:</b>	Standard	<b>Application Received:</b>	04/22/2014

### 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. The expert reviewer is Board Certified in Occupational Medicine and is licensed to practice in California. 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/services. He/she is familiar with governing laws and regulations, including the strength of evidence hierarchy that applies to Independent Medical Review determinations.

### 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 claimant was injured on 12/21/07. A cold therapy recovery system with wrap, deep vein thrombosis (DVT) prevention system, pro-sling with abduction pillow, and non-programmable pain pump have been requested and are under review. The cold therapy recovery system was modified to 7 days use. The deep vein thrombosis prevention system was not certified. The pro-sling with abduction pillow was certified for 1 pro-sling and the pain pump was not certified. The claimant was considered very low risk for the pending shoulder arthroscopic procedure on 02/20/14. He underwent surgery for right shoulder impingement on 02/28/14. He had extensive synovectomy, glenoid chondroplasty, arthroscopic subacromial decompression, injection of the joint, placement of a pain pump, placement of a brace, and manipulation under anesthesia. On 03/06/14, he was seen in follow-up. He had significant and severe hypertrophy of the synovium that was noticed during the operation. He was thought to have a rheumatological condition. 18 sessions of physical therapy were ordered. A rheumatology consultation was also recommended.

### IMR ISSUES, DECISIONS AND RATIONALES

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

**Q-tech cold therapy recovery system with wrap for up to 21 days: Upheld**

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 9 Shoulder Complaints Page(s): 203. Decision based on Non-MTUS Citation Official Disability Guidelines, Shoulder (Acute & Chronic): Continuous-flow cryotherapy.

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

**Decision rationale:** The history and documentation do not objectively support the request for use of a Q-tech cold therapy recovery system with wrap for up to 21 days. The California Medical Treatment Utilization Schedule (MTUS) do not address the use of this type of device. The Official Disability Guidelines (ODG) state continuous-flow cryotherapy may be recommended as an option after surgery, but not for nonsurgical treatment. Postoperative use generally may be up to 7 days, including home use. In the postoperative setting, continuous-flow cryotherapy units have been proven to decrease pain, inflammation, swelling, and narcotic usage; however, the effect on more frequently treated acute injuries (e.g. muscle strains and contusions) has not been fully evaluated. Continuous-flow cryotherapy units provide regulated temperatures through use of power to circulate ice water in the cooling packs. In this case, there is no evidence of postoperative outlier status. It is not explained in the records why the claimant required use of this type of device for longer than the length of time recommended by the ODG. A modification to 7 days' rental can be supported, however. The medical necessity of a Q-tech cold therapy recovery system for more than 7 days postop has not been demonstrated.

**Q-tech DVT prevention system for up to 21 days:** 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 (Acute & Chronic): Venous thrombosis.

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Other Medical Treatment Guideline or Medical Evidence: Qaseem A, Chou R, Humphrey LL, Starkey M, Shekelle P, for the Clinical Guidelines Committee of the American College of Physicians. Venous thromboembolism prophylaxis in hospitalized patients: a clinical practice guideline from the American College of Physicians. *Ann Intern Med.* 2011 Nov 1;155(9):625-32.

**Decision rationale:** The history and documentation do not objectively support the request for Q-tech deep vein thrombosis (DVT) prevention system for up to 21 days following shoulder surgery. There is no evidence of increased risk of deep venous thrombosis and the listed guideline does not recommend the use of this type of device for hospitalized patients who would be expected to be at more limited activity than a patient who is recovering at home. Based on the totality of the information, the medical necessity of this request for a Q-tech DVT prevention system for up to 21 days postop has not been demonstrated.

**Pro-sling with abduction pillow:** Upheld

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 9 Shoulder Complaints Page(s): 205. Decision based on Non-MTUS Citation Official Disability Guidelines, Shoulder (Acute & Chronic): Postoperative Abduction Pillow Sling.

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

**Decision rationale:** The history and documentation do not objectively support the request for a Pro-sling with abduction pillow following arthroscopic surgery. The California Medical Treatment Utilization Schedule (MTUS) do not address the use of postoperative slings. The Official Disability Guidelines (ODG) state postoperative abduction pillow slings may be recommended as an option following open repair of large and massive rotator cuff tears. The sling/abduction pillow keeps the arm in a position that takes tension off the repaired tendon. Abduction pillows for large and massive tears may decrease tendon contact to the prepared sulcus but are not used for arthroscopic repairs. There is no evidence of outlier status and the claimant had arthroscopic surgery and not open repair. Therefore, the medical necessity of this request for a Pro-sling with abduction pillow has not been clearly demonstrated.

**Non-programmable pain pump:** 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 (Acute & Chronic): Postoperative pain pump.

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

**Decision rationale:** The history and documentation do not objectively support the request for a non-programmable pain pump following arthroscopic surgery on the shoulder. The Official Disability Guidelines (ODG) state postoperative pain pumps are not recommended. Three recent moderate quality RCTs did not support the use of pain pumps. Before these studies, evidence supporting the use of ambulatory pain pumps existed primarily in the form of small case series and poorly designed, randomized, controlled studies with small populations. Much of the available evidence has involved assessing efficacy following orthopedic surgery, specifically, shoulder and knee procedures. A surgeon will insert a temporary, easily removable catheter into the shoulder joint that is connected to an automatic pump filled with anesthetic solution. This pain pump was intended to help considerably with postoperative discomfort, and is removed by the patient or their family 2 or 3 days after surgery. There is insufficient evidence to conclude that direct infusion is as effective as or more effective than conventional pre- or postoperative pain control using oral, intramuscular or intravenous measures. (Barber, 2002) (Quick, 2003) (Harvey, 2004) (Cigna, 2005) (Cho, 2007) Recent studies: Three recent RCTs did not support the use of these pain pumps. This study neither supports nor refutes the use of infusion pumps. (Banerjee, 2008) This study concluded that infusion pumps did not significantly reduce pain levels. (Cicccone, 2008) This study found no difference between interscalene block versus continuous subacromial infusion of a local anesthetic with regard to efficacy, complication rate, or cost. (Webb, 2007) Adverse reactions: A small case series (10 patients) concluded that use of intra-articular pain pump catheters eluting bupivacaine with epinephrine appear highly associated with postarthroscopic glenohumeral chondrolysis (PAGCL), and therefore intra-articular pain

pump catheters should be avoided until further investigation. (Hansen, 2007) On the other hand, a retrospective study of 583 patients concluded that subacromial pain pumps used for arthroscopic shoulder procedures are safe in the short-term. (Busfield, 2008) In this case, outlier status was not documented as there was no history of failure of conventional methods of pain control and medication use. The medical necessity of a non-programmable pain pump has not been clearly demonstrated.