

<b>Case Number:</b>	CM14-0164979		
<b>Date Assigned:</b>	10/10/2014	<b>Date of Injury:</b>	02/23/2014
<b>Decision Date:</b>	11/13/2014	<b>UR Denial Date:</b>	09/25/2014
<b>Priority:</b>	Standard	<b>Application Received:</b>	10/07/2014

### 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 Family Medicine and is licensed to practice in Colorado. 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:

Claimant is a 49 year old male with date of injury 2/23/2014, continues care with the treating physicians. Patient suffered a right shoulder dislocation when he fell onto the shoulder while skiing. Post-reduction films showed a bony Bankart lesion and minimally displaced fracture. Patient continued to have right arm pain and numbness, and brachial plexus injury was suspected. He initiated Physical Therapy for passive range of motion improvement and made little progress. Pain continued to limit his range of motion and use of the right arm, and he continued to have numbness / pain through the right arm and into the hand despite continued physical therapy and medication management. He was evaluated in Physical Medicine, and MRI of the right shoulder was performed which revealed Hill Sachs Deformity, Bony Bankart lesion, Labral tears, and incidentally noted C5-C6 spurring with neuroforaminal narrowing. Physical Medicine Physician performed EMG and NCV 4/21/2014 which showed evidence of right subacute brachial plexopathy with ongoing denervation potentials resulting in neuropraxia which could take 3months - 1 year to resolve. No radiculopathy or neuropathy noted on EMG / NCV. Patient was then seen by Orthopedic Surgeon who diagnosed early onset arthrofibrosis in the right shoulder and provided right shoulder joint injection with Kenalog and Lidocaine which did not improve range of motion in the shoulder. Patient then underwent right shoulder manipulation under anesthesia, but continued to have pain into right arm. Because patient continued to have pain and numbness and weakness in right arm / hand with no significant improvement despite multiple interventions, he was referred to an Orthopedic Hand Specialist for evaluation. The treating physician then requested repeat EMG/NCV 7/21/2014 to determine if patient had any nerve regeneration which would direct his future therapies.

### IMR ISSUES, DECISIONS AND RATIONALES

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

**NCV of right upper extremity:** Overturned

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 9 Shoulder Complaints. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Shoulder, Electrodiagnostic Testing for TOS (Thoracic Outlet Syndrome)

**MAXIMUS guideline:** Decision based on MTUS ACOEM Chapter 10 Elbow Disorders (Revised 2007), Chapter 9 Shoulder Complaints Page(s): 213, 807-808, 847-848.

**Decision rationale:** The Chronic Pain Treatment Guidelines do not address the use of Electromyography (EMG)/ Nerve conduction velocity studies (NCV) studies as diagnostics, so the American College of Occupational and Environmental Medicine (ACOEM) Guidelines were consulted. Electrodiagnostic studies, comprised of EMG and NCV, are recommended when Computerized tomography (CT) or magnetic resonance imaging (MRI) is non-diagnostic and /or patient continues to have symptoms, suggestive of neurological compromise, that do not respond to treatment. If suspected radicular pain fails to resolve or reaches a plateau after 4-6 weeks, which would allow time to develop new abnormalities on testing, then NCV, with needle EMG component if radiculopathy suspected, would be indicated. NCV would also be indicated if another condition, in addition to or instead of radiculopathy is suspected based on history and/or physical. EMG and/or NCV may also be recommended in situations in which rotator cuff weakness is evident on exam, but no rotator cuff injury is present on imaging. Some clinicians would wait to test patients with NCV/EMG until after patient failed a steroid injection as a diagnostic and therapeutic trial. Per the records supplied, patient did have some change in exam between 4/21/2014 visit with Physical Medicine and 7/21/2014 visit with Orthopedic Hand Specialist: Most recent exam showed atrophy just above the supraspinatus level, and at the deltoid level and at the thenar eminence, on the right. Also, some decreased sensation is documented in the lateral antecubital cutaneous distribution and decreased strength is noted in forearm and flexors of the index finger and thumb on right hand. Patient also, during most recent exam, exhibited rotator cuff weakness when he was unable to abduct the right arm. (Previous MRI did not show rotator cuff tear.) Given some change in exam but persistent symptoms of pain and numbness in the arm and weakness in rotator cuff, the EMG/NCV would be recommended to evaluate for persistent versus new findings. The request for NCV of the right upper extremity is therefore considered medically necessary.

**EMG of right upper extremity:** Overturned

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 9 Shoulder Complaints. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Shoulder, Electrodiagnostic Testing for TOS (Thoracic Outlet Syndrome)

**MAXIMUS guideline:** Decision based on MTUS ACOEM Chapter 9 Shoulder Complaints, Chapter 10 Elbow Disorders (Revised 2007) Page(s): 213, 807-808, 847-848.

**Decision rationale:** The Chronic Pain Treatment Guidelines do not address the use of Electromyography (EMG)/ Nerve conduction velocity studies (NCV) studies as diagnostics, so the American College of Occupational and Environmental (ACOEM) Guidelines were consulted. As EMG and NCV are recommended in combination, the rationale for EMG is the same as that for NCV. Electrodiagnostic studies, comprised of EMG and NCV, are recommended when CT or MRI is non-diagnostic and /or patient continues to have symptoms, suggestive of neurological compromise, that do not respond to treatment. If suspected radicular pain fails to resolve or reaches a plateau after 4-6 weeks, which would allow time to develop new abnormalities on testing, then NCV, with needle EMG component if radiculopathy suspected, would be indicated. NCV would also be indicated if another condition, in addition to or instead of radiculopathy is suspected based on history and/or physical. EMG and/or NCV may also be recommended in situations in which rotator cuff weakness is evident on exam, but no rotator cuff injury is present on imaging. Some clinicians would wait to test patients with NCV/EMG until after patient failed a steroid injection as a diagnostic and therapeutic trial. Per the records supplied, patient did have some change in exam between 4/21/2014 visit with Physical Medicine and 7/21/2014 visit with Orthopedic Hand Specialist: Most recent exam showed atrophy just above the supraspinatus level, and at the deltoid level and at the thenar eminence. Also, some decreased sensation is documented in the lateral antecubital cutaneous distribution and decreased strength is noted in forearm and flexors of the index finger and thumb on right hand. Patient also, during most recent exam, exhibited rotator cuff weakness when he was unable to abduct the right arm. (Previous MRI did not show rotator cuff tear.) Given some change in exam but persistent symptoms of pain and numbness in the arm and weakness in rotator cuff, the EMG/NCV would be recommended to evaluate for persistent versus new findings. The request for EMG of the right upper extremity is therefore considered medically necessary.