

<b>Case Number:</b>	CM14-0129026		
<b>Date Assigned:</b>	08/18/2014	<b>Date of Injury:</b>	03/12/2007
<b>Decision Date:</b>	10/14/2014	<b>UR Denial Date:</b>	07/15/2014
<b>Priority:</b>	Standard	<b>Application Received:</b>	08/13/2014

### 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 Anesthesiology, has a subspecialty in Pain Management and is licensed to practice in Tennessee. 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 patient is a 55-year-old female who has submitted a claim for right shoulder impingement associated with an industrial injury date of March 12, 2007. Medical records from 2014 were reviewed, which showed that the patient complained of Examination of the shoulder revealed range of motion in flexion of 30 degree and abduction of 30 degrees. Hawkin's and Neer's signs are markedly positive for impingement. There was exquisite tenderness over the bursa and anterior deltoid. Patient was described to be neurovascularly intact. Treatment to date has included physical therapy, TENS unit and H-wave. Utilization review from July 15, 2014 denied the request for EMG of the right upper extremity to rule out carpal tunnel syndrome and NCV of the the right upper extremity to rule out carpal tunnel syndrome because progress notes do not reflect any neurologic exam abnormalities.

### IMR ISSUES, DECISIONS AND RATIONALES

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

**EMG of the right upper extremity to rule out carpal tunnel syndrome:** Upheld

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

**MAXIMUS guideline:** Decision based on MTUS ACOEM Chapter 11 Forearm, Wrist, and Hand Complaints Page(s): 261-262. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) Carpal tunnel, Electromyography.

**Decision rationale:** CA MTUS ACOEM Guidelines state that appropriate electrodiagnostic studies may help differentiate between carpal tunnel syndrome and other conditions, such as cervical radiculopathy. According to the ODG, an EMG is recommended only in cases where diagnosis is difficult with nerve conduction studies (NCS). In more difficult cases, needle electromyography (EMG) may be helpful as part of electrodiagnostic studies which include nerve conduction studies (NCS). There are situations in which both electromyography and nerve conduction studies need to be accomplished, such as when defining whether neuropathy is of demyelinating or axonal type. Seldom is it required that both studies be accomplished in straightforward condition of median and ulnar neuropathies or peroneal nerve compression neuropathies. In this case, the request is for EMG to rule out carpal tunnel syndrome. However, there are no signs and symptoms supporting radiculopathy to warrant EMG. The physical examination showed that the patient is neurovascularly intact. Therefore, the request for EMG of the right upper extremity to rule out carpal tunnel syndrome is not medically necessary.

**NCV of the the right upper extremity to rule out carpal tunnel syndrome:** Upheld

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

**MAXIMUS guideline:** Decision based on MTUS ACOEM Chapter 11 Forearm, Wrist, and Hand Complaints Page(s): 261-262. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) Carpal tunnel, Electromyography. X Other Medical Treatment Guideline or Medical Evidence: Nerve Conduction Studies in Polyneuropathy: Practical Physiology and Patterns of Abnormality, Acta Neurol Belg 2006 Jun; 106 (2): 73-81

**Decision rationale:** CA MTUS ACOEM Guidelines state that appropriate electrodiagnostic studies may help differentiate between carpal tunnel syndrome and other conditions, such as cervical radiculopathy. According to the ODG, nerve conduction studies are recommended in patients with clinical signs of CTS who may be candidates for surgery. Appropriate electrodiagnostic studies (EDS) include nerve conduction studies (NCS). Carpal tunnel syndrome must be proved by positive findings on clinical examination and should be supported by nerve conduction tests before surgery is undertaken. A published study entitled, "Nerve Conduction Studies in Polyneuropathy", cited that NCS is an essential part of the work-up of peripheral neuropathies. Many neuropathic syndromes can be suspected on clinical grounds, but optimal use of nerve conduction study techniques allows diagnostic classification and is therefore crucial to understanding and separation of neuropathies. In this case, the request for NCV is to rule out carpal tunnel syndrome. However, there are no signs and symptoms supporting the diagnosis of carpal tunnel syndrome. The progress notes do not indicate presence of numbness and tingling on the hands. The physical examination showed that the patient is neurovascularly intact. There is no basis to suspect carpal tunnel syndrome in this case. Therefore, the request for NCV of the right upper extremity to rule out carpal tunnel syndrome is not medically necessary.

