

<b>Case Number:</b>	CM14-0089606		
<b>Date Assigned:</b>	07/23/2014	<b>Date of Injury:</b>	04/13/2009
<b>Decision Date:</b>	09/26/2014	<b>UR Denial Date:</b>	05/23/2014
<b>Priority:</b>	Standard	<b>Application Received:</b>	06/13/2014

### 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 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 patient is a 42-year-old female who has submitted a claim for carpal tunnel syndrome associated with an industrial injury date of April 13, 2009. Medical records from 2013 through 2014 were reviewed, which showed that the patient complained of hand pain that had been ongoing for 4-5 years. The patient reported numbness and pain specifically on her left hand. On examination of the upper extremities, shoulders were found to be non-tender with no impingement symptoms and full ROM. The elbows were non-tender and with full ROM. The wrists showed healed surgical scars. Left hand had signs of atrophy and weakness. Tinel's and Phalen's allegedly more pronounced on the left than on the right. Electrodiagnostic studies dated March 4, 2011 revealed severe left CTS; normal left ulnar study and left upper extremity denervation changes. Treatment to date has included 2 carpal tunnel syndrome surgeries on the patient's left hand and surgery on her right hand. Medications included Cymbalta and ibuprofen. Utilization review from May 23, 2014 denied the request for Electromyography (EMG) Bilateral Upper Extremities and Nerve Conduction Test (NCT) Bilateral Upper Extremities because the submitted documentation did not outline progressive neurological deficits or new peripheral neuropathy symptoms in the upper extremities to support the proposed electrodiagnostic study.

### IMR ISSUES, DECISIONS AND RATIONALES

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

**Electromyography (EMG) Bilateral Upper Extremities:** Upheld

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 8 Neck and Upper Back Complaints Page(s): 178. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG)-Treatment & Workman's Compensation (TWC): Neck and Upper Back Procedure Summary (EMG/NCV).

**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:** California 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 records provided do not mention that there is a need to perform EMG. Furthermore, electrodiagnostic studies had already been conducted on the left upper extremity in 2011 and the provided medical records do not outline progressive neurologic dysfunction to warrant repeat testing. Finally, the recent progress notes do not present significant symptoms and findings consistent with radiculopathy on the right hand. Therefore, the request for Electromyography (EMG) Bilateral Upper Extremities is not medically necessary.

**Nerve Conduction Test (NCT) Bilateral Upper Extremities: Upheld**

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 8 Neck and Upper Back Complaints Page(s): 178. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG)-Treatment & Workman's Compensation (TWC): Neck and Upper Back Procedure Summary (EMG/NCV).

**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 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:** California 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 records provided do not mention whether there is intent to perform further surgeries. Furthermore, electrodiagnostic studies had already been conducted on the left upper extremity in 2011 and the provided medical records do not outline progressive or new peripheral neuropathy symptoms. There is no apparent reason for repeat testing. Finally, the recent progress notes do not present significant symptoms and findings consistent with neuropathy on the right hand. Therefore, the request for Nerve Conduction Test (NCT) Bilateral Upper Extremities is not medically necessary.