Case Number:	CM14-0202659		
Date Assigned:	12/15/2014	**Date of Injury:**	12/09/2013
Decision Date:	01/30/2015	**UR Denial Date:**	11/24/2014
Priority:	Standard	**Application Received:**	12/03/2014

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 Internal 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 had his injury on 12/5/13 .On 5/6/14 he was seen by an orthopedist who noted that an EMG/NCS study of the neck and upper extremities showed mild right carpal tunnel syndrome and right chronic C7 radiculopathy. His diagnoses were cervical radiculopathy and right carpal tunnel syndrome at the wrist. On 6/6/14 another note from the same MD noted that an MRI of the c spine showed C5-6 mild annular disk bulge. On 11/4/14 the patient was seen by his PCP who noted that a QME had recommended an EMG/NCS of the c spine and bilateral upper extremities. Pain in the neck and shoulders were noted on history and physical revealed tenderness of the cervical area and pain with ROM. The MD diagnosed cervical radiculopathy. The MD requested these studies based on the QME report. However, no mention was made of the previous reports or any change in condition which prompted this request. The UR denied this request on 11/24/14.

IMR ISSUES, DECISIONS AND RATIONALES

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

Electromyography (EMG) of the right upper extremity: Upheld

Claims Administrator guideline: Decision based on MTUS ACOEM Chapter 8 Neck and Upper Back Complaints Page(s): 178,Chronic Pain Treatment Guidelines.

MAXIMUS guideline: Decision based on MTUS ACOEM Chapter 10 Elbow Disorders (Revised 2007), Chapter 11 Forearm, Wrist, and Hand Complaints, Chapter 12 Low Back

Complaints Page(s): 19; 34; 261; 303 and 304. Decision based on Non-MTUS Citation Other Medical Treatment Guideline or Medical Evidence: Up to date topic 5145 version 8.0.

Decision rationale: Electromyography or EMG is the study of electrical activity of muscle fibers individually and collectively. It is recorded by surface or needle electrodes, which measure electrical potential difference between 2 sites. It is noninvasive and well tolerated and complications are rare. It is best utilized as an extension of the clinical evaluation. While typical neuropathic and myelopathic patterns of EMG abnormalities are recognized, no single abnormality is pathognomic of a single disease entity, although exceptions do occur. The MTUS states that EMG may be helpful in identifying subtle, focal neurological dysfunction in patients with lumbar pain more than 3 to 4 weeks. It also states that it is useful in diagnosing disc protrusion and 1+ in the diagnosis of cauda equina, spinal stenosis, or post laminectomy syndrome. The MTUS also states that NCS or EMG may be appropriate in helping to differentiate between carpal tunnel syndrome and other conditions such as cervical radiculopathy. Also, EMG should be considered if cervical radiculopathy is suspected as a cause of lateral arm pain on the basis of physical exam and symptoms have been present for at least 6 weeks, denervation atrophy is likely, and conservative treatment has not been effective. Appropriate electrodiagnostic studies may help differentiate between carpal tunnel syndrome and other conditions such as cervical radiculopathy. These may include NCS or in more difficult cases, EMG may be helpful. In the above patient this test had already been done and no mention was made of any change in condition which would have needed the test to be repeated. Therefore, this request is not medically necessary.

Nerve Conduction Study (NCS) fo the right upper extremity QTY#1: Upheld

Claims Administrator guideline: Decision based on MTUS ACOEM Chapter 8 Neck and Upper Back Complaints Page(s): 178,Chronic Pain Treatment Guidelines.

MAXIMUS guideline: Decision based on MTUS ACOEM Chapter 10 Elbow Disorders (Revised 2007) Page(s): 19. Decision based on Non-MTUS Citation Other Medical Treatment Guideline or Medical Evidence: Up to date topic 5142 and topic 6.0.

Decision rationale: Nerve conduction studies, or NCS studies, are noninvasive and done employing surface electrodes .The major risk involves possible electrical injury from leakage of current .It is invaluable in defining peripheral nervous system function dysfunction and disease; both focally and generally as in entrapment neuropathies and as in polyneuropathies. They are useful in addressing the degree of axonal damage versus demyelination. Because they evaluate myelinated fibers, conduction studies are often normal in polyneuropathies with predominant small fiber involvement. Nerve conduction velocity, NCV, and EMG or electromyography should be done at the same time in most test situations. This is particularly important in patients with suspected radiculopathy, plexopathy, myopathy, motor neuropathy, or motor neuron disease. Proper testing to localize nerve entrapment at the elbow involves nerve conduction study that includes stimulation above and below the elbow. This so called "inching technique" of study involves the measurement of velocities both above and below the joint and is utilized to infer the precise location of the entrapment. While this technique is logical, it has not yet been verified by

controlled studies. In the above patient these test had already been done and there is no documentation as to why these tests need to be repeated. The request is not medically necessary.

Electromyography (EMG) of the left upper extremity QTY#1: Upheld

Claims Administrator guideline: Decision based on MTUS ACOEM Chapter 8 Neck and Upper Back Complaints Page(s): 178,Chronic Pain Treatment Guidelines.

MAXIMUS guideline: Decision based on MTUS ACOEM Chapter 10 Elbow Disorders (Revised 2007), Chapter 11 Forearm, Wrist, and Hand Complaints, Chapter 12 Low Back Complaints Page(s): 19; 34; 261; 303 and 304. Decision based on Non-MTUS Citation Other Medical Treatment Guideline or Medical Evidence: Up to date topic 5145 and version 8.0

Decision rationale: Electromyography or EMG is the study of electrical activity of muscle fibers individually and collectively. It is recorded by surface or needle electrodes, which measure electrical potential difference between 2 sites. It is noninvasive and well tolerated and complications are rare. It is best utilized as an extension of the clinical evaluation. While typical neuropathic and myelopathic patterns of EMG abnormalities are recognized, no single abnormality is pathognomic of a single disease entity, although exceptions do occur. The MTUS states that EMG may be helpful in identifying subtle, focal neurological dysfunction in patients with lumbar pain more than 3 to 4 weeks. It also states that it is useful in diagnosing disc protrusion and 1+ in the diagnosis of cauda equina, spinal stenosis, or post laminectomy syndrome. The MTUS also states that NCS or EMG may be appropriate in helping to differentiate between carpal tunnel syndrome and other conditions such as cervical radiculopathy. Also, EMG should be considered if cervical radiculopathy is suspected as a cause of lateral arm pain on the basis of physical exam and symptoms have been present for at least 6 weeks, denervation atrophy is likely, and conservative treatment has not been effective. Appropriate electrodiagnostic studies may help differentiate between carpal tunnel syndrome and other conditions such as cervical radiculopathy. These may include NCS or in more difficult cases, EMG may be helpful. In the above patient, the tests have already been done and there was no mention of why they would need to be repeated. Therefore, the request is not medically necessary.

Nerve Conduction Study (NCS) of the left upper extremity QTY#1: Upheld

Claims Administrator guideline: Decision based on MTUS ACOEM Chapter 8 Neck and Upper Back Complaints Page(s): 178,Chronic Pain Treatment Guidelines.

MAXIMUS guideline: Decision based on MTUS ACOEM Chapter 10 Elbow Disorders (Revised 2007) Page(s): 19. Decision based on Non-MTUS Citation Other Medical Treatment Guideline or Medical Evidence: Up to date topic 5145 and version 8.0.

Decision rationale: Nerve conduction studies, or NCS studies, are noninvasive and done employing surface electrodes .The major risk involves possible electrical injury from leakage of current .It is invaluable in defining peripheral nervous system function dysfunction and disease; both focally and generally as in entrapment neuropathies and as in polyneuropathies. They are

useful in addressing the degree of axonal damage versus demyelination. Because they evaluate myelinated fibers, conduction studies are often normal in polyneuropathies with predominant small fiber involvement. Nerve conduction velocity, NCV, and EMG or electromyography should be done at the same time in most test situations. This is particularly important in patients with suspected radiculopathy, plexopathy, myopathy, motor neuropathy, or motor neuron disease. Proper testing to localize nerve entrapment at the elbow involves nerve conduction study that includes stimulation above and below the elbow. This so called "inching technique" of study involves the measurement of velocities both above and below the joint and is utilized to infer the precise location of the entrapment. While this technique is logical, it has not yet been verified by controlled studies. In the above patient, the tests have already been done and there is no mention as to why a repeat of the tests needed to be done. Therefore, this request is not medically necessary.

Electromyography of the Neck QTY #1: Upheld

Claims Administrator guideline: Decision based on MTUS ACOEM Chapter 8 Neck and Upper Back Complaints Page(s): 178,Chronic Pain Treatment Guidelines.

MAXIMUS guideline: Decision based on MTUS ACOEM Chapter 10 Elbow Disorders (Revised 2007), Chapter 11 Forearm, Wrist, and Hand Complaints, Chapter 12 Low Back Complaints Page(s): 19; 34; 261; 303 and 304. Decision based on Non-MTUS Citation Other Medical Treatment Guideline or Medical Evidence: Up to date topic 5145 and version 8.0.

Decision rationale: Electromyography or EMG is the study of electrical activity of muscle fibers individually and collectively. It is recorded by surface or needle electrodes, which measure electrical potential difference between 2 sites. It is noninvasive and well tolerated and complications are rare. It is best utilized as an extension of the clinical evaluation. While typical neuropathic and myelopathic patterns of EMG abnormalities are recognized, no single abnormality is pathognomic of a single disease entity, although exceptions do occur. The MTUS states that EMG may be helpful in identifying subtle, focal neurological dysfunction in patients with lumbar pain more than 3 to 4 weeks. It also states that it is useful in diagnosing disc protrusion and 1 in the diagnosis of cauda equina, spinal stenosis, or post laminectomy syndrome. The MTUS also states that NCS or EMG may be appropriate in helping to differentiate between carpal tunnel syndrome and other conditions such as cervical radiculopathy. Also, EMG should be considered if cervical radiculopathy is suspected as a cause of lateral arm pain on the basis of physical exam and symptoms have been present for at least 6 weeks, denervation atrophy is likely, and conservative treatment has not been effective. Appropriate electrodiagnostic studies may help differentiate between carpal tunnel syndrome and other conditions such as cervical radiculopathy. These may include NCS or in more difficult cases, EMG may be helpful. The tests have already been done and there is no documentation as to why the tests need to be repeated. Therefore, the request is not medically necessary.

Nerve Conduction Study (NCS) of the neck QTY#1: Upheld

Claims Administrator guideline: Decision based on MTUS ACOEM Chapter 8 Neck and Upper Back Complaints Page(s): 178,Chronic Pain Treatment Guidelines.

MAXIMUS guideline: Decision based on MTUS ACOEM Chapter 10 Elbow Disorders (Revised 2007) Page(s): 19. Decision based on Non-MTUS Citation Other Medical Treatment Guideline or Medical Evidence: Up to date topic 5142 and version 6.0.

Decision rationale: Nerve conduction studies, or NCS studies, are noninvasive and done employing surface electrodes .The major risk involves possible electrical injury from leakage of current .It is invaluable in defining peripheral nervous system function dysfunction and disease; both focally and generally as in entrapment neuropathies and as in polyneuropathies. They are useful in addressing the degree of axonal damage versus demyelination. Because they evaluate myelinated fibers, conduction studies are often normal in polyneuropathies with predominant small fiber involvement. Nerve conduction velocity, NCV, and EMG or electromyography should be done at the same time in most test situations. This is particularly important in patients with suspected radiculopathy, plexopathy, myopathy, motor neuropathy, or motor neuron disease. Proper testing to localize nerve entrapment at the elbow involves nerve conduction study that includes stimulation above and below the elbow. This so called "inching technique" of study involves the measurement of velocities both above and below the joint and is utilized to infer the precise location of the entrapment. While this technique is logical, it has not yet been verified by controlled studies. This test has already been done and there is no documentation as to why they need to be repeated. Therefore, the request is not medically necessary.