

<b>Case Number:</b>	CM14-0123253		
<b>Date Assigned:</b>	08/08/2014	<b>Date of Injury:</b>	08/19/2004
<b>Decision Date:</b>	09/24/2014	<b>UR Denial Date:</b>	07/02/2014
<b>Priority:</b>	Standard	<b>Application Received:</b>	08/05/2014

### 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 Neurology 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 injured worker (IW) is a 57-year-old right-hand dominant female who reports an injury on 8/19/2004. The mechanism of injury is unspecified in the documents provided however, it is noted that the IW states suffering an injury to her spine and shoulders in a work-related vehicular accident. Two medical documents were provided for this Independent Medical Review (IMR): a Primary Treating Physician's Progress Report (PR) dated 4/17/2014 and an Agreed Medical Evaluation dated 5/19/2014. The AME states that the IW reports having been treated with medications, physical therapy, acupuncture, and trigger point injections. A cervical spine MRI dated 2/1/2013 notes degenerative central stenosis at levels C3 - 7 and neural foramina narrowing resulting in impingements of exiting nerve roots at each of these same levels, C3 - 7. Facet and uncovertebral arthrosis was also noted at multiple levels. The IW is status post-cervical spine fusion (performed 3/21/2013) and reports symptoms as "better overall" with regard to her neck and upper extremity complaints but notes that there is residual tingling bilaterally in the upper extremities. The 4/17/2014 PR notes muscle strength bilaterally in the upper extremities as 5/5 for all corresponding major cervical nerve distributions but is absent to report results of any sensory or reflex testing, or specific tests for peripheral nerve impingements. The physical exam reported in the AME indicates decreased ranges of motion in the cervical spine in all planes tested and notes bilaterally diminished range of motion in the shoulders. Circumferential measurement of upper extremity does not indicate atrophy. Bilaterally, it is apparent that there is some minimal loss of motor strength in the shoulders (recorded as "4+" where grading is noted as "from 0 - 5") but forearm motor strength may only be inferred as "normal" as these results are recorded as "5+" in the muscle groups tested. Upper extremity deep tendon reflexes are recorded as "4+" (where grading is specified as "from 0 - 4") in the right Triceps, Biceps, and Brachioradialis, and as "3+" in the corresponding tendons in the left. The

notes provided are particularly absent to report these findings as abnormal for hyper-reflexivity. The report also records and notes bilateral grip strength loss. Findings from an upper extremity sensory exam are absent from both reports. A lumbar MRI dated 2/1/2013 indicates degenerative central stenosis at levels L2 - 4. Narrowing of neural foramina and lateral recesses are noted to cause effacement of exiting and transiting nerve roots at L2-3 and L3-4 and encroachment of exiting and transiting roots at L4-5 and L5-S1. Moderate and mild discogenic spondylosis is noted at levels L2 through L4 and L4-5, respectively. There is moderate facet arthrosis at levels L2 - S1 and degenerative grade 1 anterolisthesis at L2 and L3. The PR of 4/17/2014 reports only that a straight-leg raise (SLR) test was positive bi-laterally at 40-degrees. The AME of 5/19/2014 reports decreased range of motion of the lumbosacral spine in all planes tested and notes SLR tests as positive for the right lower extremity only. The AME further reports motor strength as "5+" (where grading is specified as "from 0 - 5") bilaterally in all muscle groups tested, and like the upper extremity exam, reports reflexes as "4+" (where grading is specified as "from 0 - 4") bilaterally for the Patella and Achilles. The notes provided are absent to report these findings as abnormal for hyper-reflexivity. The sensory component of the lower extremity exam is reported as negative. The treating physician of 4/17/2014 requested authorization for bilateral upper extremity electromyography (EMG)/nerve conduction velocity (NCV) studies and bilateral lower extremity EMG/NCV studies. These requests were non-certified in a utilization review dated 7/2/2014.

### **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. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Treatment in Workers Compensation, online edition, Neck and Upper Back Chapter.

**MAXIMUS guideline:** Decision based on MTUS ACOEM Chapter 8 Neck and Upper Back Complaints Page(s): 165 - 173.

**Decision rationale:** The ACOEM Guidelines for Neck and Upper Back Complaints (Ch. 8) cites that special studies. In this case, electromyography (EMG) studies and Nerve conduction velocity (NCV) studies, may be required to determine the presence of cervical root compromise with specificity to the level of compromise where pain or paresthesia symptoms are accompanied by signs of sensory deficit, muscle weakness or atrophy, and reflex loss (p. 168). The upper extremity neurological and physical examinations recorded in the AME and the PR lack evidence to substantiate the medical necessity for an EMG or concomitant NCV studies on this basis. For example, neither report includes findings from an upper extremity sensory examination from which objectively assessed sensory deficits specific to the IW's generalized complaints (reported only as residual arm tingling and hand pain) could corroborate other findings specific to root level impairment (for example, see Table 8-2, p. 169; Table 8-3, p. 170). There are no clinical findings for motor weakness other than the AME's summary for bilateral shoulder weakness and quizzical report of "4+" on an exam that indicates within its own convention an upper-limit of "5." There are no reports of atrophy. Deep tendon reflex findings

were absent in the PR report, and the AME report. The findings from the PR and AME examinations are insufficient to substantiate the presence of sensory deficit, muscle weakness or atrophy, and reflex loss which necessitate EMG or NCV studies. Lastly, the IW is status post cervical spine fusion, and evidence that EMG and NCV results shall aid alter the course of treatment of the IW's upper extremity complaints has not been substantiated. The common scale for tendon reflex assessment standardizes reporting where reflexes are graded from 0 - 4 and findings of 1+ to 2+ may be considered within normal range responses. In this case, there is no corresponding commentary indicating that the measured "4+" is a particularly striking abnormal observation. In other words, what would be considered "hyper-reflexive" in any other neurological screening is here found "unremarkable". That this seems to be the understanding can be corroborated by the similar fashion in which the deep tendon reflexes are reported in the lower extremity exam. As such, the request is not medically necessary.

**Nerve conduction velocity (NCV) bilateral upper extremities:** Upheld

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 8 Neck and Upper Back Complaints. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Treatment in Workers Compensation, online edition, Neck and Upper Back Chapter.

**MAXIMUS guideline:** Decision based on MTUS ACOEM Chapter 8 Neck and Upper Back Complaints Page(s): 165 - 173.

**Decision rationale:** The ACOEM Guidelines for Neck and Upper Back Complaints (Ch. 8) cites that special studies. In this case, electromyography (EMG) studies and Nerve conduction velocity (NCV) studies, may be required to determine the presence of cervical root compromise with specificity to the level of compromise where pain or paresthesia symptoms are accompanied by signs of sensory deficit, muscle weakness or atrophy, and reflex loss (p. 168). The upper extremity neurological and physical examinations recorded in the AME and the PR lack evidence to substantiate the medical necessity for an EMG or concomitant NCV studies on this basis. For example, neither report includes findings from an upper extremity sensory examination from which objectively assessed sensory deficits specific to the IW's generalized complaints (reported only as residual arm tingling and hand pain) could corroborate other findings specific to root level impairment (for example, see Table 8-2, p. 169; Table 8-3, p. 170). There are no clinical findings for motor weakness other than the AME's summary for bilateral shoulder weakness and quizzical report of "4+" on an exam that indicates within its own convention an upper-limit of "5." There are no reports of atrophy. Deep tendon reflex findings were absent in the PR report, and the AME report. The findings from the PR and AME examinations are insufficient to substantiate the presence of sensory deficit, muscle weakness or atrophy, and reflex loss which necessitate EMG or NCV studies. Lastly, the IW is status post cervical spine fusion, and evidence that EMG and NCV results shall aid alter the course of treatment of the IW's upper extremity complaints has not been substantiated. The common scale for tendon reflex assessment standardizes reporting where reflexes are graded from 0 - 4 and findings of 1+ to 2+ may be considered within normal range responses. In this case, there is no corresponding commentary indicating that the measured "4+" is a particularly striking abnormal observation. In other words, what would be considered "hyper-reflexive" in any other neurological screening is here found "unremarkable". That this seems to be the understanding

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**Electromyography (EMG) bilateral lower extremities:** Overturned

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 12 Low Back Complaints. Decision based on Non-MTUS Citation Official Disability Guidelines, Low Back-Lumbar & Thoracic.

**MAXIMUS guideline:** Decision based on MTUS ACOEM Chapter 12 Low Back Complaints Page(s): 303-304.

**Decision rationale:** The ACOEM Guidelines for managing Low Back Complaints (Ch. 12, Special Studies and Diagnostic and Treatment Considerations, pp. 303-304) indicates that electromyography (EMG) studies may be useful to identify subtle, focal neurologic impairments in patients with lumbar spine symptoms persisting beyond four weeks. The neurological findings reported within the PR and the AME are unclear to provide physiological evidence for lumbar spine nerve impairment at any specific level. While the PR notes a positive straight-leg raise exam in the right lower extremity, the AME reports positive exam in both lower extremities. All sensory, motor strength, measurements for atrophy and reflex testing are reported as normal in the AME, with the noted exception that the examiner seems to report reflexes in an unconventional manner. (Medical Research Council standardizes reporting where reflexes are graded from 0 - 4 and findings of 1+ to 2+ may be considered within normal range responses. In this case, there is no corresponding commentary indicating that the measured "4+" is a particularly striking abnormal observation. In other words, what would be considered "hyper-reflexive" in any other neurological screening is here found as apparently "unremarkable". That this seems to be the understanding can be corroborated by the similar fashion in which the deep tendon reflexes are reported in the upper extremity exam. While the MRI dated 2/1/2013, reveals some central stenosis due to discogenic disease at levels L2 - L4 and exiting and transiting nerve root effacement and encroachment at multiple levels, the physical examination is absent for any specific myotomal and dermatomal findings or reports of significant lower extremity symptomology, which clinically correspond to the imaging findings. Because a positive straight-leg raise test indicates a clinically relevant indication of stenosis or nerve root dysfunction but lacks specificity, and because imaging studies may identify disc disease for which painful symptomology is not correlated, additional physiological evidence of nerve dysfunction is necessary. As the treatment plan includes the possibility of future lumbar spine surgery, it is medically necessary to obtain unequivocal objective findings for the IW's specific nerve compromise. Therefore, the request is medically necessary.

**Nerve conduction velocity (NCV) bilateral lower extremities:** Overturned

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 12 Low Back Complaints. Decision based on Non-MTUS Citation Official Disability Guidelines, Low Back-Lumbar & Thoracic.

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