

<b>Case Number:</b>	CM14-0154326		
<b>Date Assigned:</b>	09/23/2014	<b>Date of Injury:</b>	05/11/2010
<b>Decision Date:</b>	11/03/2014	<b>UR Denial Date:</b>	08/26/2014
<b>Priority:</b>	Standard	<b>Application Received:</b>	09/22/2014

### 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 Physical Medicine & Rehabilitation, 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:

This is a 58 year old male with a 5/11/2010 date of injury. The exact mechanism of the original injury was not clearly described. A progress reported dated 1/8/14 noted subjective complaints of neck, shoulder, and wrist discomfort. Objective findings included paraspinal tenderness, normal strength of lower extremities bilaterally and symmetric DTRs. The patient is s/p cervical spine discectomy and fusion from C4 through C7 with disc replacement at C3-C4 on 7/15/11. Diagnostic Impression: cervical and lumbar strain, carpal tunnel syndrome. Treatment to Date: medication management, cervical surgery. A UR decision dated 8/26/14 denied the request for nerve conduction, EMG, neuromuscular junction testing, and transcranial motor evoked potentials; DOS (date of service) 7/15/11. Guidelines do not recommend the use of intraoperative nerve conduction, EMG, neuromuscular junction testing and transcranial motor evoked potentials.

### IMR ISSUES, DECISIONS AND RATIONALES

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

**Nerve Conduction; DOS (Date of Service) 07/15/11: Upheld**

**Claims Administrator guideline:** The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG)-TWC Neck & Upper Back Procedure

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) low back chapter

**Decision rationale:** CA MTUS does not specifically address this issue. ODG states that intraoperative neurophysiological monitoring is recommended during spinal or intracranial surgeries when such procedures have a risk of significant complications that can be detected and prevented through use of neurophysiological monitoring. The following types of intraoperative monitoring may be necessary: somatosensory-evoked potentials; brainstem auditory-evoked potentials; EMG of cranial or spinal nerves; EEG; & electrocorticography (ECOG). Intraoperative EMG and nerve conduction velocity monitoring on peripheral nerves during surgery is not recommended. Intraoperative monitoring is not recommended for intraoperative visual-evoked potentials and motor-evoked potentials. Use of intraoperative SSEP (somatosensory evoked potential) or DSEP (dermatomal sensory evoked potential) monitoring is recommended as an adjunct in those circumstances during instrumented lumbar spinal fusion procedures in which the surgeon desires immediate intraoperative information regarding the potential of a neurological injury. The occurrence of a postoperative neurological deficit is highly correlated with intraoperative changes in these monitoring modalities. An abnormal SSEP or DSEP during surgery, however, often does not correlate with a postoperative neurological injury because of a high false-positive rate. However, guidelines do not recommend the use of intraoperative nerve conduction velocity monitoring on peripheral nerves. Therefore, the request for nerve conduction; DOS (date of service) 7/15/11 is not medically necessary.

**EMG (Electromyography); DOS (Date of Service) 07/15/11: Upheld**

**Claims Administrator guideline:** The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG); TWC Neck & Upper Back Procedure

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) low back chapter

**Decision rationale:** CA MTUS does not specifically address this issue. ODG states that intraoperative neurophysiological monitoring is recommended during spinal or intracranial surgeries when such procedures have a risk of significant complications that can be detected and prevented through use of neurophysiological monitoring. The following types of intraoperative monitoring may be necessary: somatosensory-evoked potentials; brainstem auditory-evoked potentials; EMG of cranial or spinal nerves; EEG; & electrocorticography (ECOG). Intraoperative EMG and nerve conduction velocity monitoring on peripheral nerves during surgery is not recommended. Intraoperative monitoring is not recommended for intraoperative visual-evoked potentials and motor-evoked potentials. Use of intraoperative SSEP (somatosensory evoked potential) or DSEP (dermatomal sensory evoked potential) monitoring is recommended as an adjunct in those circumstances during instrumented lumbar spinal fusion procedures in which the surgeon desires immediate intraoperative information regarding the potential of a neurological injury. The occurrence of a postoperative neurological deficit is highly correlated with intraoperative changes in these monitoring modalities. An abnormal SSEP or DSEP during surgery, however, often does not correlate with a postoperative neurological

injury because of a high false-positive rate. However, guidelines do not recommend the use of intraoperative EMG monitoring on peripheral nerves. Therefore, the request for EMG (electromyography); DOS (date of service) 7/15/11 is not medically necessary.

**Neuromuscular Junction Testing; DOS (Date of Service) 07/15/11: Upheld**

**Claims Administrator guideline:** The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG); TWC Neck & Upper Back Procedure

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) low back chapter

**Decision rationale:** CA MTUS does not specifically address this issue. ODG states that intraoperative neurophysiological monitoring is recommended during spinal or intracranial surgeries when such procedures have a risk of significant complications that can be detected and prevented through use of neurophysiological monitoring. The following types of intraoperative monitoring may be necessary: somatosensory-evoked potentials; brainstem auditory-evoked potentials; EMG of cranial or spinal nerves; EEG; & electrocorticography (ECOG). Intraoperative EMG and nerve conduction velocity monitoring on peripheral nerves during surgery is not recommended. Intraoperative monitoring is not recommended for intraoperative visual-evoked potentials and motor-evoked potentials. Use of intraoperative SSEP (somatosensory evoked potential) or DSEP (dermatomal sensory evoked potential) monitoring is recommended as an adjunct in those circumstances during instrumented lumbar spinal fusion procedures in which the surgeon desires immediate intraoperative information regarding the potential of a neurological injury. The occurrence of a postoperative neurological deficit is highly correlated with intraoperative changes in these monitoring modalities. An abnormal SSEP or DSEP during surgery, however, often does not correlate with a postoperative neurological injury because of a high false-positive rate. However, guidelines do not recommend the use of intraoperative neuromuscular junction testing. Therefore, the request for neuromuscular junction testing; DOS (date of service) 7/15/11 is not medically necessary.

**Transcranial Motor Evoked Potentials; DOS (Date of Service) 07/15/11: Upheld**

**Claims Administrator guideline:** The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG)-TWC Neck & Upper Back Procedure

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) low back chapter

**Decision rationale:** CA MTUS does not specifically address this issue. ODG states that intraoperative neurophysiological monitoring is recommended during spinal or intracranial surgeries when such procedures have a risk of significant complications that can be detected and prevented through use of neurophysiological monitoring. The following types of intraoperative monitoring may be necessary: somatosensory-evoked potentials; brainstem auditory-evoked

potentials; EMG of cranial or spinal nerves; EEG; & electrocorticography (ECOG). Intraoperative EMG and nerve conduction velocity monitoring on peripheral nerves during surgery is not recommended. Intraoperative monitoring is not recommended for intraoperative visual-evoked potentials and motor-evoked potentials. Use of intraoperative SSEP (somatosensory evoked potential) or DSEP (dermatomal sensory evoked potential) monitoring is recommended as an adjunct in those circumstances during instrumented lumbar spinal fusion procedures in which the surgeon desires immediate intraoperative information regarding the potential of a neurological injury. The occurrence of a postoperative neurological deficit is highly correlated with intraoperative changes in these monitoring modalities. An abnormal SSEP or DSEP during surgery, however, often does not correlate with a postoperative neurological injury because of a high false-positive rate. However, guidelines do not recommend the use of intraoperative motor evoked potentials. Therefore, the request for transcranial motor evoked potentials DOS (date of service) 7/15/11 is not medically necessary.