

<b>Case Number:</b>	CM13-0013466		
<b>Date Assigned:</b>	11/08/2013	<b>Date of Injury:</b>	09/15/2012
<b>Decision Date:</b>	04/03/2014	<b>UR Denial Date:</b>	08/02/2013
<b>Priority:</b>	Standard	<b>Application Received:</b>	08/19/2013

### 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 Orthopedic Surgery, 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 male who was injured on 09/15/2012 while he was leaning forward to install an umbrella at a restaurant. He suddenly experienced excruciating pain in the mid back radiating into the lower back and right lower extremity, as well as shooting pain into his neck and right upper extremity. The treatment history included conservative care including medications such as Norco, physical therapy, chiropractic treatments, bracing, and epidural injections. MRI (magnetic resonance imaging) of the lumbar spine on 10/30/2012 showing evidence of a disc protrusion at the lower thoracic are T11-12 extending inferiorly. Minimal disc desiccation is noted also at L3-4 and L4-5 and mild degenerative change at L5-S1, otherwise intact. Significant facet degeneration is also noted at several levels. MRI of the lumbar spine dated 05/23/2013 demonstrates the presence of disc degeneration at L4-5. No significant canal stenosis is noted. There is mild facet arthropathy. A very small disc bulge is noted at L4-5, non-compressive. There is also cystic change noted in the right facet joint and the L5-S1, best appreciated on the axial views slides 26 and 27 axial T2. MRI of the thoracic spine from 05/23/2013 reveals minimal disc bulge is noted at T11-12. X-rays of the lumbar spine on 05/23/2013 demonstrates narrowing at the L4-5 level with degenerative changes. Discogram on 07/17/2013 demonstrated normal L3-4, L4-5 discs. L5-S1 reproduced concordant pain at 8/10 typical pain. Also, it was very severely painful as well. An EMG (electromyogram)/nerve conduction study performed by [REDACTED], Physical Medicine and Rehab, demonstrates moderate acute L5-S1 radiculopathy and left S1 radiculopathy. Clinic note dated 06/03/2013 by [REDACTED] documented the patient to have complaints of low back pain, right leg pain, numbness and weakness, right upper extremity pain, numbness and weakness and mid back pain. Objective findings on exam included: alert and oriented, afebrile. Lumbar Spine Exam: gait was normal, lumbar lordosis was noted, pain to palpation over the lumbar spine L4-5, L5-S1, and

palpable paraspinal muscle spasms. Range of motion was limited secondary to pain; flexion: 60% of normal; extension: 40% of normal; side to side bending: 60% of normal. Motor Strength: right extensor hallucis longus 4/5. Iliopsoas is 5/5 on right side. Sensory Sensation: is decreased in the right leg in the L5-S1 distribution. Deep Tendon Reflexes were brisk in the lower extremities, bilateral knee and 3+ bilateral Achilles reflexes. This is a change in the neurological status. Due to concern about upper motor neuron and the thoracic area needs to be checked. Hoffman test in the upper extremity was normal and no hyperflex in the upper extremities. Therefore, the thoracic spine needs to be checked at this point. Straight leg raise was positive on the right side. Extension at 60 degrees causes pain radiating into the right ankle. Babinski was absent. Clonus was absent. Sacroiliac: joints non-tender. Faber was Negative bilaterally. Hips: non-tender, full range of motion. Pulses: 2+ equal bilaterally. Clinic note dated 07/25/2013 for a spine follow up progress report documented the patient to have worsening low back pain, worsening leg pain despite extensive and conservative care for the past ten months including physical therapy, medications, modification of activities and epidural injections as well as mid back pain and lower and upper extremity pain, numbness and weakness. Physical exam revealed: alert and oriented, afebrile. Lumbar spine exam: gait: normal, lumbar lordosis noted, pain to palpation over the lumbar spine L4-5, L5-S, and palpable paraspinal muscle spasms. Range of Motion: Limited secondary to pain; flexion: 60% of normal; extension: 40% of normal; side to side bending: 60% of normal, left and right. Motor Strength: right extensor hallucis longus 4/5. Iliopsoas is 5/5 on right side. Se

### **IMR ISSUES, DECISIONS AND RATIONALES**

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

#### **L5-S1 ANTERIOR AND POSTERIOR FUSION: Overturned**

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 12 Low Back Complaints, Chapter 14 Ankle and Foot Complaints Page(s): 387-310. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Low Back - Lumbar and Thoracic (Acute and Chronic), Fusion (spinal).

**MAXIMUS guideline:** Decision based on MTUS ACOEM Chapter 12 Low Back Complaints Page(s): 307-310. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Low Back - Lumbar and Thoracic (Acute and Chronic), Fusion (spinal).

**Decision rationale:** As per CA MTUS guidelines, patients with increased spinal instability (not work-related) after surgical decompression at the level of degenerative spondylolisthesis may be candidates for fusion. As per Official Disability Guidelines (ODG), the procedure is "not recommended for patients who have less than six months of failed recommended conservative care unless there is objectively demonstrated severe structural instability and/or acute or progressive neurologic dysfunction, but recommended as an option for spinal fracture, dislocation, spondylolisthesis or frank neurogenic compromise. Further ODG indications for spinal fusion may include: (1) Neural Arch Defect - Spondylolytic spondylolisthesis, congenital neural arch hypoplasia. (2) Segmental instability (objectively demonstrable) - Excessive motion, as in degenerative spondylolisthesis, surgically induced segmental instability and mechanical intervertebral collapse of the motion segment and advanced degenerative changes after surgical

discectomy, with relative angular motion greater than 20 degrees." In this case, this patient has worsening of lower back pain despite trial of conservative care. No actual results of the imaging studies available for review; however, as per the note dated 09/09/2013 by [REDACTED], it was noted that Flexion/extension radiographs of lumbar spine at Concentra demonstrated spondylolisthesis at L5-S1 with borderline motion instability. Pain generator was identified by discogram dated 07/17/2013 which was positive at L5-S1. This patient also has objective neurologic deficits on physical exam. Thus, the medical necessity has been established and the request for anterior and posterior fusion at L5-S1 is certified.

**T11-12 ANTERIOR FUSION THROUGH THORACOTOMY AND POSTERIOR STABILIZATION: Upheld**

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 12 Low Back Complaints Page(s): 307-310. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Low Back - Lumbar and Thoracic (Acute and Chronic), Fusion (spinal).

**MAXIMUS guideline:** Decision based on MTUS ACOEM Chapter 12 Low Back Complaints Page(s): 307-310. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Low Back - Lumbar and Thoracic (Acute and Chronic), Fusion (spinal).

**Decision rationale:** As per CA MTUS guidelines, patients with increased spinal instability (not work-related) after surgical decompression at the level of degenerative spondylolisthesis may be candidates for fusion. As per Official Disability Guidelines (ODG), the procedure is "not recommended for patients who have less than six months of failed recommended conservative care unless there is objectively demonstrated severe structural instability and/or acute or progressive neurologic dysfunction, but recommended as an option for spinal fracture, dislocation, spondylolisthesis or frank neurogenic compromise. Further ODG indications for spinal fusion may include: (1) Neural Arch Defect - Spondylolytic spondylolisthesis, congenital neural arch hypoplasia. (2) Segmental Instability (objectively demonstrable) - Excessive motion, as in degenerative spondylolisthesis, surgically induced segmental instability and mechanical intervertebral collapse of the motion segment and advanced degenerative changes after surgical discectomy, with relative angular motion greater than 20 degrees." In this case, the patient has mid and lower thoracic spine pain, but there is no corroborating objective findings on physical exam and clinical studies. No acute imaging studies available for review but as per the note dated 09/09/2013 by [REDACTED], lumbar MRI (magnetic resonance imaging) dated 10/30/2012 showed disc extrusion at T11-12 extending inferiorly and thoracic MRI dated 05/23/2013 showed minimal disc bulge at T11-12. Pain generator is not identified at this level. There is no documentation of spondylolisthesis and thus medical necessity has not been established. Thus, the request for T11-12 anterior fusion through thoracotomy and posterior stabilization is non-certified.

**PRE-OP CLEARANCE: Overturned**

**Claims Administrator guideline:** The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation <http://www.guidelines.gov/content/asp?id=24226&search=pre-op+clearance>.

**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 - Lumbar & Thoracic (Acute and Chronic), Preoperative Echocardiogram, Preoperative lab testing, Preoperative testing, general, and Other Medical Treatment Guideline or Medical Evidence: American Society of Anesthesiologists

**Decision rationale:** As per the above referenced guidelines, the pre-op clearance is medically necessary. This patient meets the criteria for lumbar spine fusion; therefore the request for pre-op clearance is medically necessary and appropriate.

#### **VACULAR AND THORACIC SURGEON FOR STAGE 1: Overturned**

**Claims Administrator guideline:** The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Blue Cross and Blue Shield: <http://www.bcbsnc.com>.

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Milliman Care Guidelines (MCG), Inpatient and Surgical Care 17th Edition, Assistant Surgeon Guidelines.

**Decision rationale:** The CA MTUS and Official Disability Guidelines (ODG) do not have appropriateness regarding the issue in dispute and hence other evidence based guidelines consulted. As per the referenced guidelines, assistant surgeon is recommended. In this case, the lumbar spine fusion is considered medically necessary and appropriate but the thoracic spine fusion is not medically necessary and appropriate. Thus, the request for assistant surgeon for the lumbar spine surgery is certified.

#### **ASSISTANT SURGEON FOR STAGE 2: Overturned**

**Claims Administrator guideline:** The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation American Association of Orthopedics Surgeons position statement reimbursement of the first assistant at surgery in orthopedics.

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Milliman Care Guidelines (MCG), Inpatient and Surgical Care 17th Edition, Assistant Surgeon Guidelines.

**Decision rationale:** The CA MTUS and Official Disability Guidelines (ODG) do not have appropriateness regarding the issue in dispute and hence other evidence based guidelines consulted. As per the referenced guidelines, assistant surgeon is recommended. In this case, the lumbar spine fusion is considered medically necessary and appropriate but the thoracic spine fusion is not medically necessary and appropriate. Thus, the request for assistant surgeon for the lumbar spine surgery is certified.

#### **7 DAY INPATIENT STAY AT ST FRANCIS MEMORIAL HOSPITAL: 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), Low Back - Lumbar & Thoracic Spine (Acute & Chronic), Hospital length of Stay (LOS).

**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 - Lumbar & Thoracic Spine (Acute & Chronic), Hospital length of Stay (LOS).

**Decision rationale:** The CA MTUS guidelines do not specifically discuss the issue in dispute, hence the Official Disability Guidelines (ODG) have been consulted. As per Official Disability Guidelines (ODG), a median 3 days inpatient stay is allowed; however, the request for 7 days inpatient stay is not supported by the guidelines and hence the request is non-certified.

**LSO BRACE:** Upheld

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 12 Low Back Complaints Page(s): 298-301. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Low Back - Lumbar & Thoracic (Acute and Chronic), Back brace, postoperative (fusion).

**MAXIMUS guideline:** Decision based on MTUS ACOEM Chapter 12 Low Back Complaints Page(s): 301. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Low Back - Lumbar & Thoracic (Acute and Chronic), Back brace, postoperative (fusion).

**Decision rationale:** As per CA MTUS guidelines, lumbar supports have not been shown to have any lasting benefit beyond the acute phase of symptom relief. As per Official Disability Guidelines (ODG), brace is "not recommended for prevention..... There is no scientific information on the benefit of bracing for improving fusion rates or clinical outcomes following instrumented lumbar fusion for degenerative disease." The above noted guidelines do not support its use postoperatively.

**COLD THERAPY UNIT:** Upheld

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 12 Low Back Complaints Page(s): 308-310. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Chapter - Low Back - Lumbar & Thoracic (Acute and Chronic), Cold/Heat packs.

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Chapter - Low Back - Lumbar & Thoracic (Acute and Chronic), Cold/Heat packs

**Decision rationale:** The CA MTUS do not specifically discuss the issue in dispute, thus the Official Disability Guidelines (ODG) have been consulted. As per ODG, "it is recommended as an option for acute pain. At home, local applications of cold packs in first few days of acute

complaint; thereafter, applications of heat packs or cold packs..." This patient has chronic pain and guidelines do not indicate its use postoperatively. Thus, the medical necessity has not been established. The request is therefore not certified.

**BONE GROWTH STIMULATOR:** 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), Low Back - Lumbar & Thoracic (Acute and Chronic), Bone growth stimulators (BGS).

**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 - Lumbar & Thoracic (Acute and Chronic), Bone growth stimulators (BGS).

**Decision rationale:** The CA MTUS do not specifically discuss the issue in dispute, thus the Official Disability Guidelines (ODG) have been consulted. As per ODG, "either invasive or noninvasive methods of electrical bone growth stimulation may be considered medically necessary as an adjunct to spinal fusion surgery for patients with any of the following risk factors for failed fusion: (1) One or more previous failed spinal fusion(s); (2) Grade III or worse spondylolisthesis; (3) Fusion to be performed at more than one level; (4) Current smoking habit (Note: Other tobacco use such as chewing tobacco is not considered a risk factor); (5) Diabetes, Renal disease, Alcoholism; or (6) Significant osteoporosis which has been demonstrated on radiographs." In this case, none of these criteria has been supported and hence the request is non-certified