

**AccuReview**  
An Independent Review Organization  
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Notice of Independent Review Decision

**DATE OF REVIEW:** MARCH 14, 2011

**IRO CASE #:**

**DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE**

Hardware removal L4-S1 and decompression and stabilization of L3-4 segments; LSO brace; bone growth stimulator, corset, walker with wheels; 3-5 days inpatient stay

**A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION**

This physician is a Board Certified Orthopedic Surgeon with 10 years of experience.

**REVIEW OUTCOME**

Upon independent review the reviewer finds that the previous adverse determination/adverse determinations should be:

- Upheld (Agree)
- Overturned (Disagree)
- Partially Overturned (Agree in part/Disagree in part)

Provide a description of the review outcome that clearly states whether or not medical necessity exists for each of the health care services in dispute.

**INFORMATION PROVIDED TO THE IRO FOR REVIEW**

On April 16, 20XX, M.D., a neurologist, evaluated the claimant. He has had intermittent symptoms with low back pain and leg paraesthesias and leg pains

bilaterally which have worsened over the past several months. A recent block injection has helped the leg but not the low back pain. DTR's are 1+ in the upper extremities, 1 ½+ in the right knee, 2+ left knee, trace right ankle and absent left ankle. Coordination, station and gait show and antalgic gait favoring the left leg. Impression: 1. Work related injury with subsequent two level decompression and stabilization x2 (9/1993 and 3/1997). 2. Residual radiculopathy involving L3 through S1 motor nerve roots. 3. Lower sacral involvement with clinical improvement in bowel and bladder incontinence). 4. Worsening bilateral L4 involvement with actual improvement in the L5 and S1 distributions.

On May 26, 20XX, a CT of the Lumbar Spine was performed. Impression: 1. Postoperative changes with bilateral laminectomy and anterior and posterior fusion L4 to S1. 2. Mild disc bulge at L1-L2 without compromise of the spinal canal or neural foramina. 3. Mild disc bulge at L2-L3 leading to mild to moderate stenosis of the spinal canal. 4. Disc bulge at L3-L4 causing mild stenosis of the spinal canal as interpreted by M.D.

On March 12, 20XX, an MRI of the lumbar spine was performed. Impression: 1. Status post anterior fusion and posterior instrumentation of L4 to S1. The L4-5 fusion is solid. The L5-S1 anterior fusion may be incompletely united or recent. CT if clinically appropriate to evaluation if the fusion is solid. 2. Evidence for pedicle screw removal at L5 pedicles. 3. Moderate arachnoiditis lower lumbar spine. 4. Postoperative changes in the laminectomy defect at L5 as interpreted by M.D.

On May 7, 20XX, an EMG of the lower extremities was performed by M.D. Impression: Possibility of recurrent radiculopathy mainly involving the L5-S1 roots. Clinical correlation as well as correlation with other diagnostic workup is recommended.

On February 3, 20XX, M.D., an orthopedic surgeon, evaluated the claimant. He states he has numbness and tingling in his anterior, lateral, and posterior portion and with upper thigh. He is unable to ambulate well. He has a positive straight leg raise on the right leg. He has dysesthesias over the posterior, lateral, and anterior portion of the upper thigh. An ESI was recommended. Current Medications: Skelaxin, Lyrica 100mg, and Darvocet. X-Rays dated February 3, 20XX: Radiographic studies done of the lumbosacral spine consisting of AP and lateral with flexion-extension reveals the transpedicular fixation device at L4-5 to be in good position without evidence of fracture. The lateral fusion mass is somewhat irregular; however, the anterior fusion mass now appears consolidated. Diagnoses: 1. Status postop L4-5 and L5-S1 decompression and stabilization with transpedicular fixation, September 1, 19XX. 2. Status postop hemilaminectomy with decompression at L4-5 and L5-S1, March 31, 19XX. 3. Osteoporosis. 4. Radiculopathy L5-S1 EMG May 7, 20XX. 5. Status postop facet blocks L3-4, L4-5, and L5-S1 dated April 9, 20XX. 6. HNP L1-2 contained CT May 26, 20XX. 7. HNP L3-4 contained with central and foraminal stenosis,

CT dated May 26, 20XX. 8. Stenosis at L2-3 and L3-4 central CT dated May 26, 20XX. 9. Stenosis foraminal L3-4 CT dated May 26, 20XX. 10. Status postop bilateral L2-L3 and L3-4 facet (medial nerve) block.

On March 10, 20XX, a CT of the Lumbar spine was performed. Impression: 1. Postsurgical changes status post fusion L4 through S1. 2. Scarring in the region of laminectomy defects and around the thecal sac at these levels. 3. Disc protrusions at L3-L4 and L2-L3 without spinal stenosis or neural foraminal narrowing as interpreted by M.D.

On September 1, 20XX, the claimant was re-evaluated by, M.D. He stated 3 weeks ago he had a spontaneous onset of severe low back pain radiating in the left leg. There is marked loss of motion secondary to pains, spasm and guarding. Surgical recommendations were made consisting of transpedicular fixation device and decompression and stabilization of L3-L4 with anterior column and lateral arthrodesis and transpedicular fixation. Current Medications: Lidoderm patch. Skelaxin. Lyrica. Darvocet. 1. Status postop L4-5 and L5-S1 decompression and stabilization with transpedicular fixation, September 1, 19XX. 2. Status postop hemilaminectomy with decompression at L4-5 and L5-S1, March 31, 19XX. 3. Osteoporosis. 4. Radiculopathy L5-S1 EMG May 7, 20XX. 5. Status postop facet blocks L3-4, L4-5, and L5-S1 dated April 9, 20XX. 6. HNP L1-2 contained CT May 26, 20XX. 7. HNP L3-4 contained with central and foraminal stenosis, CT dated May 26, 20XX. 8. Stenosis at L2-3 and L3-4 central CT dated May 26, 20XX. 9. Stenosis foraminal L3-4 CT dated May 26, 20XX. 10. Status postop bilateral L2-L3 and L3-4 facet (medial nerve) block. 11. Nonunion at L5-S1, MRI dated March 10, 20XX. 12. Moderate to severe segmental spondylitis, per CT dated March 10, 20XX. 13. Impingement syndrome per x-rays dated 2/3/XX.

On January 7, 20XX, the claimant was re-evaluated by M.D. His symptoms have increased due to the weather changes. Pain is continuous. DTR's are bilaterally equal and depressed at Achilles and patella. X-rays showed the coral, which was used for lateral fusion is still not consolidated. Also there is impingement syndrome of the upper portion of the transpedicular plating system. Current Medications: Lidoderm patch. Skelaxin. Lyrica. Darvocet.

On July 2, 20XX, the claimant was re-evaluated by M.D. He continues to have low back pain with associated numbness and tingling in the lower extremities. There is weakness to the left lower extremity as compared to the right. A CT scan was recommended. Current Medications: Skelaxin, Lyrica, Darvocet.

On September 7, 20XX, a CT of the Lumbar spine was performed. Impression: 1. Unchanged disc protrusion at L3-L4. 2. Completed fusion L4 through S1 without spinal stenosis or neural foraminal narrowing. 3. Small abdominal aortic aneurysm. This could be followed CT or ultrasound as clinically indicated as interpreted by M.D.

On October 5, 20XX, the claimant was re-evaluated by M.D. His symptoms have remained unchanged. Surgical intervention was recommended.

On January 5, 20XX, the claimant was re-evaluated by M.D. He continues to have back pain with associated numbness and tingling in the lower extremities. His surgery was denied. Current Medications: Skelaxin, Lyricia, Darvocet. Recommendations: Due to the chronicity and longstanding symptoms and complaints, objective and subjective findings, and imaging studies, I strongly recommend having a surgical intervention consisting of hardware removal from L4 to S1 as well as decompression and stabilization of L3-4 segments. Instruction to continue taking present medication. The Darvocet is out of the market. We are going to prescribe Ultracet one p.o. q.8h. p.r.n for pain as well as the Skelaxin 800 mg one p.o. b.i.d and Lyrica 100 mg one p.o.t.i.d Instruction to continue doing back to school program of exercise and strengthening exercise over the lumbar spine. Instruction to cut down the cigarette smoking and alcohol and beer consumption and to be enrolled on an aquatic therapy on a regular basis at home if it is possible.

On January 31, 20XX, M.D., a neurosurgeon, performed a utilization review on the claimant. Rational for Denial: It was mentioned that the claimant had conservative treatment including facet injections and medications; however the claimant's clinical presentation is confounded by SI joint dysfunction. There is no indication in the records that validates exhaustion of prior conservative care. Therefore, it is not certified.

On February 8, 20XX, M.D., an orthopedic surgeon, performed a utilization review on the claimant. Rational for Denial: Examination appears to be significant for SI joint dysfunction. There is no comprehensive history of conservative treatment completed since surgical intervention and specifically addressing the L3-4 level. Therefore, it is not certified.

### **PATIENT CLINICAL HISTORY:**

On XX/XX/XXXX this XX year old male sustained an injury to the lumbar spine when bending at work for a long period of time. He was noted to have spondylosis with a grade I spondylolisthesis of L5 on S1 in addition to an abnormal disc at L4-5 level. He failed conservative therapy and subsequently underwent surgery with a PLIF of L405 and L5-S1 in September 19XX and because of recurrent of symptoms underwent hemilaminectomy with decompression at the same levels in March 19XX.

**ANALYSIS AND EXPLANATION OF THE DECISION INCLUDE CLINICAL BASIS, FINDINGS AND CONCLUSIONS USED TO SUPPORT THE DECISION.**

Patient is currently not indicated for L4-S1 hardware removal and fusion/decompression of L3-4.

Based on ODG criteria for preoperative surgical indications for a fusion:

**1. The back pain generator has not been fully defined.**

- a. The treating physician assumes that the existing hardware is the source of the claimant's back pain. The hardware should be injected with local anesthetic prior to surgery to confirm painful hardware.
- b. There is discussion of sacroiliac (SI) joint dysfunction. SI joint pathology could be the source of the claimant's back pain. An SI joint cortisone injection should be undertaken prior to surgery to identify this joint as a possible generator of back pain.

**2. The leg pain generator has not been fully defined.**

- a. The treating physician feels that the disk protrusion and stenosis L3-4 is a source of leg pain. In the records I reviewed, there was no mention of a lumbar epidural injection at L3-4 to confirm this level as a source of leg pain. A more recent EMG should also demonstrate pathology at L3-4 before this level is approached surgically.
- b. Stenosis is documented at L2-3 (CT, May 20XX). A more recent EMG should clarify whether this level is a source of leg pain. This level may need to be included in the decompression.

**3. The claimant continues to smoke.**

The treating physician has asked the claimant to cut down on smoking, not completely stop. Smoking carries a high risk of failure of bone fusion, even with a bone stimulator and brace. Failure of bone fusion would require further revision surgery.

**4. Psychological screening is concerning for alcohol abuse.**

The claimant has been asked to cut down on alcohol and beer consumption. Alcohol abuse could lead to problems postoperatively. Alcohol abuse can also be associated with poor nutrition, affecting the claimant's ability to fight potential wound infection and heal the bone fusion properly. Additionally, excessive alcohol could affect compliance with postoperative instructions. All of these factors need to be explored prior to surgery.

Based on the above-mentioned the previous decisions are upheld.

## Per the ODG:

### **Patient Selection Criteria for Lumbar Spinal Fusion:**

For chronic low back problems, fusion should not be considered within the first 6 months of symptoms, except for fracture, dislocation or progressive neurologic loss. 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. ([Andersson, 2000](#)) ([Luers, 2007](#))] (3) Primary Mechanical Back Pain (i.e., pain aggravated by physical activity)/Functional Spinal Unit Failure/Instability, including one or two level segmental failure with progressive degenerative changes, loss of height, disc loading capability. In cases of workers' compensation, patient outcomes related to fusion may have other confounding variables that may affect overall success of the procedure, which should be considered. There is a lack of support for fusion for mechanical low back pain for subjects with failure to participate effectively in active rehab pre-op, total disability over 6 months, active psych diagnosis, and narcotic dependence. Spinal instability criteria includes lumbar inter-segmental movement of more than 4.5 mm. ([Andersson, 2000](#))] (4) Revision Surgery for failed previous operation(s) if significant functional gains are anticipated. Revision surgery for purposes of pain relief must be approached with extreme caution due to the less than 50% success rate reported in medical literature. (5) Infection, Tumor, or Deformity of the lumbosacral spine that cause intractable pain, neurological deficit and/or functional disability. (6) After failure of two discectomies on the same disc, fusion may be an option at the time of the third discectomy, which should also meet the ODG criteria. (See [ODG Indications for Surgery -- Discectomy.](#))

**Pre-Operative Surgical Indications Recommended:** Pre-operative clinical surgical indications for spinal fusion should include all of the following: (1) All pain generators are identified and treated; & (2) All physical medicine and manual therapy interventions are completed; & (3) X-rays demonstrating spinal instability and/or myelogram, CT-myelogram, or discography (see [discography criteria](#)) & MRI demonstrating disc pathology; & (4) Spine pathology limited to two levels; & (5) [Psychosocial screen](#) with confounding issues addressed. (6) For any potential fusion surgery, it is recommended that the injured worker refrain from smoking for at least six weeks prior to surgery and during the period of fusion healing. ([Colorado, 2001](#)) ([BlueCross BlueShield, 2002](#))

For average hospital LOS after criteria are met, see [Hospital length of stay](#) (LOS).

**A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:**

- ACOEM- AMERICAN COLLEGE OF OCCUPATIONAL & ENVIRONMENTAL MEDICINE UM KNOWLEDGEBASE
- AHCPR- AGENCY FOR HEALTHCARE RESEARCH & QUALITY GUIDELINES
- DWC- DIVISION OF WORKERS COMPENSATION POLICIES OR GUIDELINES
- EUROPEAN GUIDELINES FOR MANAGEMENT OF CHRONIC LOW BACK PAIN
- INTERQUAL CRITERIA
- MEDICAL JUDGEMENT, CLINICAL EXPERIENCE AND EXPERTISE IN ACCORDANCE WITH ACCEPTED MEDICAL STANDARDS
- MERCY CENTER CONSENSUS CONFERENCE GUIDELINES
- MILLIMAN CARE GUIDELINES
- ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES
- PRESSLEY REED, THE MEDICAL DISABILITY ADVISOR
- TEXAS GUIDELINES FOR CHIROPRACTIC QUALITY ASSURANCE & PRACTICE PARAMETERS
- TEXAS TACADA GUIDELINES
- TMF SCREENING CRITERIA MANUAL
- PEER REVIEWED NATIONALLY ACCEPTED MEDICAL LITERATURE (PROVIDE A DESCRIPTION)
- OTHER EVIDENCE BASED, SCIENTIFICALLY VALID, OUTCOME FOCUSED GUIDELINES (PROVIDE A DESCRIPTION)