

**C-IRO, Inc.**  
**An Independent Review Organization**  
7301 Ranch Rd. 620 N, Suite 155-199  
Austin, TX 78726

**DATE OF REVIEW:** FEBRUARY 10, 2009

**IRO CASE #:**

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

Lumbar decompression and fusion at L4-S1 with two day length of stay

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

MD, Board Certified Orthopedic Surgeon

**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.

The reviewer finds that medical necessity does not exist for Lumbar decompression and fusion at L4-S1 with two day length of stay

**INFORMATION PROVIDED TO THE IRO FOR REVIEW**

Adverse Determination Letters, 12/17/08, 12/23/08  
ODG Guidelines and Treatment Guidelines  
Work Status Reports, 11/28/07, 06/20/08  
Note, Dr. 03/07/08  
Labs, 05/19/08, 08/28/08  
CMT and range of motion testing, 06/19/08, 07/28/08, 08/28/08, 09/25/08  
Report of Medical Evaluation, 06/20/08  
Notes from, 12/17/08, 12/23/08  
Office notes, Dr., 11/28/07, 12/08/07, 12/27/07, 01/03/08, 01/21/08, 02/04/08, 02/25/08, 03/17/08, 03/31/08, 04/17/08, 05/06/08, 05/14/08, 06/05/08, 06/26/08, 07/31/08, 09/03/08, 10/02/08, 10/23/08, 12/11/08, 01/08/09  
MRI lumbar spine, 12/08/07  
MRI lumbar spine, 02/08/08

Evaluation, Dr., 03/06/08  
Physical therapy notes, 05/07/08, 05/09/08  
Office notes, Dr., 05/19/08, 06/19/08, 07/28/08, 08/28/08, 09/25/08  
DDE, Dr., 06/20/08  
EMG/NCV, 07/09/08  
Lumbar discogram and CT, 11/10/08  
Office note, Dr., 11/19/08  
Review, 12/17/08, 12/23/08  
Request, 01/22/09

### **PATIENT CLINICAL HISTORY [SUMMARY]:**

The claimant is a xx year-old male who developed back pain on xx/xx/xx while putting pressure to move or install a big pipe. Dr. saw the claimant on 11/28/07 for pain radiating from the lumbar area to the right leg and groin, sometimes with tingling. His history was significant for a similar problem 8-9 years prior which completely resolved with conservative treatment, diabetes and hypertension. Straight leg raise was fairly well controlled through an arc of 85 degrees. There was tenderness to palpation of the right sacroiliac and right paralumbar area, equivocal reflexes and fairly good right lower extremity strength. Lumbar spine x-rays showed normal compliment of vertebrae. The disc spaces appeared well preserved. There was no evidence of spondylolysis or spondylolisthesis. He had mild straightening of the lordosis which was possibly projectional. Anterior osteophytes were noted in some of the vertebrae which was consistent with his age. An acute lumbar sprain and right leg radiculopathy were diagnosed. An MRI, paravertebral block, therapy and off work were recommended.

A lumbar MRI on 12/08/07 showed disk bulging with some facet and ligamentous hypertrophy slightly narrowing the neural foramen at L3-4; L4-5: disk bulging with slight disk protrusion on the right and some facet and ligamentous hypertrophy moderately narrowing the right neural foramen and slightly narrowed the left neural foramen. At L5-S1 there was disk bulging with a slight right lateral disk protrusion moderately narrowed the right neural foramen. Dr. re-evaluated the claimant on 12/10/07 for low back and right lower extremity symptomatology with complaints of this legs feeling heavy after ambulation. He had no relief with paravertebral blocks. The examination noted an antalgic gait, difficulty straightening up, straight leg raise tolerated to about 70 degrees on the right, tenderness of the right paravertebral musculature extending all the way to the SI joint, difficulty with heel/toe raise and subjective paresthesias both legs after ambulation. Radiculopathy of the lower extremity due to a disc herniation and foraminal stenosis at L4-5 and L5-S1 was diagnosed. A laminectomy decompression and segmental fusion from L4-S1 was recommended. At the 01/03/08 followup visit the claimant reported being unable to do any bending or stooping due to pain and complained of numbness and tingling and pain radiating to the bottom of the right foot and right lower extremity pain and some cross over occasionally. On examination there was localized tenderness of the lumbar spine and right SI joint. Straight leg raise was tolerated to 75 degrees on the right with complaints of pain, this was further aggravated with dorsiflexion of the right foot. On the left he tolerated straight leg raise to 80 degrees. Reflexes seemed active at the knee but right knee reflexes were questionably decreased. There was decreased sensation in the L4-5 distribution. EMG/NCV studies and psychiatric testing were recommended.

Dr. re-evaluated the claimant on 01/21/08 reporting worse pain which now radiated to both lower extremities. Straight leg raise was tolerated rather poorly at 70 degrees on the right with aggravation of pain on dorsiflexion of the foot. Straight leg raise was

positive on the left at 80 degrees. There was decreased sensation in the L4-5 distribution on the right and some weakness of dorsiflexion. At the 02/04/08 followup the examination also showed a slightly decreased right ankle reflex. A lumbar MRI on 02/08/08 demonstrated L4-5: diffuse disk bulging, ligamentum flavum hypertrophy, facet hypertrophy, moderate central spinal canal stenosis, moderate to severe left neural foraminal narrowing and mild to moderate right neural foraminal narrowing. There was mild L3-4 spinal stenosis and mild L2-3 diffuse disk bulging.

Dr. saw the claimant again on 02/25/08 at which time there was low back pain radiating to both lower extremities, greater on the right. The gait was normal, there was tenderness in the mid lumbar area to palpation, straight leg raise positive especially on the right at 70 degrees, strength was fairly well preserved, decreased sensation to pin in the anterolateral aspect of the right leg and calf and subjective weakness in the right leg. The claimant was referred to and seen by Dr., pain management on 03/06/08. The examination noted lumbosacral interspinal and right paraspinal tenderness L4-5 and L5-S1 facet joints and sciatic notch, painful motion with extension and right lateral bending, positive low back pain with heel/toe walk, low back pain with sitting straight leg raise on the right and bilateral positive supine straight leg raise. Back pain was positive at 45 degrees. Prone hip extension and Fabere-Patrick tests were positive on the right for low back pain. Discogenic low back pain with L4-5 and L5-S1 posterior disc herniation and impingement of neuroforamina, with right lower extremity radicular symptoms at L5-S1 dermatomal distribution pronounced over S1, low back pain with facet arthropathy L4-5 and L5-S1 were diagnosed. A right L5 and S1 transforaminal epidural steroid injections were recommended.

Dr. saw the claimant on 04/17/08 noting that 3-4 days prior he was unable to stand due to severe pain. He had doubled up on his medications. On 04/17/08 he had low back pain radiating to the right lower extremity with weakness and a heavy feeling. Lumbar motion was restricted due to spasm, straight leg raise was positive on the right at 75 degrees, reflexes equivocal, and he had subjective decreased sensation. At the 05/06/08 followup visit he complained of severe pain and discomfort over the right paralumbar area radiating towards the right hip region. There was discomfort over the right sacroiliac and posterior hip area, soft tissue swelling over the posterior aspect of the hip possibly representing the swollen nerve root, equivocal reflexes and a positive straight leg raise at 75 degrees on the right. A paravertebral block was given from L4-S1. This proved short term relief. Dr. re-evaluated the claimant on 05/14/08 for continued pain over the right hip with numbness and tingling radiating into the right lower extremity. Straight leg raise was much better tolerated on the left through 85 degrees. He complained of subjective weakness of the right leg, but none was demonstrated on strength testing. He had a slight antalgic gait when the examination was finished. Dr. felt that the claimant was credible. The epidural steroid injections were denied. On 05/19/08 he had low back pain more pronounced to the right with radiation to the posterior aspect of the right leg down to the toes. Therapy and a TENS unit had helped. The examination noted persistent right lumbosacral paraspinal tenderness L4-5 and L5-S1 over sciatic notch, painful thoracolumbar motion upon extension and right lateral bending, positive straight leg raise on the right at L5-S1 dermatomal distribution and decreased sensation of the right leg at L5-S1. The epidural steroid injections were appealed.

The examinations by Dr. and Dr. on 06/05/08 and 06/19/08 were essentially unchanged. Dr. performed a designated doctor evaluation on 06/20/08 noting complaints of low back, right leg and right foot/toe pain with numbness and pins/needles and tingling. The examination noted tenderness to palpation at L4-S1, spasms at L4-S1 with palpation of

the paravertebral muscles, positive bilateral Kernig, Supine and sitting straight leg raises, and sitting root tests, decreased lumbar motion, mildly decreased sensation at the right L3-S1 with pinwheel and 4/5 ankle dorsiflexion, plantar flexion, inversion and eversion strength on the right. Moderate lumbar spinal stenosis and severe lumbar radiculitis were diagnosed. Off work was expected through 09/20/08 and Dr. recommended referral to a spine surgeon for surgical repair. The 06/26/08 examination noted a normal gait and weakness of the right leg with the inability to do an easy heel/toe raise. EMG/NCV studies on 06/26/08 showed chronic minimal right peroneal mononeuropathy.

On 07/31/08 Dr. saw the claimant for increased back pain and right leg numbness after sitting in a hospital for several hours with his father, a feeling of instability and right knee feeling of giving way. Straight leg raise on the right was positive, there was tightness in the hamstrings at 60-70 degrees, equivocal reflexes and slightly diminished right ankle reflex. Dr. re-evaluated the claimant on 09/25/08 noting examination findings of: positive tenderness with trigger points over the right LS paraspinal region L4-5 and L5-S1 sciatic notch and facet joints, positive straight leg raise on the right leg at the L5-S1 dermatomal distribution. Epidurals were not approved. He recommended referral to Dr. for back surgery. Dr. saw the claimant again on 10/02/08 for complaints of pain radiating to the right lower extremity and increased numbness and tingling in the right leg. There was tightness on straight leg raise on the right, left knee decreased reflex compared to the right and decreased lumbar motion. A discogram and CT on 11/10/08 showed L5-S1: concordant pain graded 9/10 and findings consistent with a grade 5 annular tear and diffuse disk degeneration; L3-4: concordant pain graded 8/10 with findings consistent with a grade 4 annular tear; L4-5: concordant pain graded 6/10 with findings consistent with a grade 3 annular tear; and L3-4, L4-5 and L5-S1 diffuse disk bulging. Dr. Padilla recommended a posterolateral fusion at L3-S1 and L5-S1 right transforaminal interbody fusion. Dr. saw the claimant on 12/11/08 noting a positive straight leg raise on the right, continued sluggish right ankle reflex, weakness against resistance and subjective tingling of the right lower extremity. He recommended a decompression laminectomy and fusion at L4-S1. The fusion requests were denied on reviews and the L4-S1 fusion is currently being disputed.

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

The requested L4 through S1 fusion cannot be justified based on the information reviewed. The claimant does not meet appropriate ODG criteria for fusion. There is no instability at the levels identified. Though a discogram was reportedly positive at the levels being requested for fusion, there was concordant pain at levels outside the area being requested for fusion and there was no control level. The claimant is noted through the records to have varied physical exam findings and at times has had subjective complaints that have not matched objective examination findings. Though the claimant has some degenerative changes by MRI, it is not clear how the claimant's MRI pathology corresponds specifically with physical exam findings. The most recent records indicate the claimant has weakness in hip flexion which would not be addressed by L4 through S1 fusion. It is not clear if the claimant has neurocompressive pathology to support hip flexor weakness. The claimant may have S1 pathology with a diminished right ankle reflex, but there are too many discrepancies overall between the varied studies that have been performed. It is impossible from the records being reviewed to determine the etiology of the claimant's symptoms and the correct levels to address given the apparent discrepancies. The reviewer finds that medical necessity does not exist for Lumbar decompression and fusion at L4-S1 with two day length of stay

Official Disability Guidelines Treatment in Worker's Comp 2009 Updates, (i.e. Low Back-Fusion)

Low Back – Fusion - 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, subject to the selection criteria outlined in the section below entitled, "Patient Selection Criteria for Lumbar Spinal Fusion," after 6 months of conservative care. For workers' comp populations, see also the heading, "Lumbar fusion in workers' comp patients." After screening for psychosocial variables, outcomes are improved and fusion may be recommended for degenerative disc disease with spinal segment collapse with or without neurologic compromise after 6 months of compliance with recommended conservative therapy.

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.

Milliman Care Guidelines, 12<sup>th</sup> Edition, Inpatient and Surgical Care

**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 KNOWLEDGBASE
- 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)**