

AccuReview

An Independent Review Organization

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Notice of Independent Review Decision

[Date notice sent to all parties]: August 1, 2012

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

Lumbar Laminectomy and Discectomy L4-5, Decompression and Fusion L5-S1, 1 day inpatient stay

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

This physician is Board Certified in Neurological Surgery with over 40 years of experience.

REVIEW OUTCOME:

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

Upheld (Agree)

Provide a description of the review outcome that clearly states whether medical necessity exists for each of the health care services in dispute.

INFORMATION PROVIDED TO THE IRO FOR REVIEW:

- 01-04-12: Extremity Evaluation Worksheet from 1st Choice Treatment Clinic
- 01-12-12: Initial Report at 1st Choice Treatment Clinic dictated by MD
- 01-23-12: MRI lumbar spine without IV contrast at Imaging dictated by MD
- 01-27-12: NCV/EMG dictated by MD
- 02-20-12: Office Note dictated by MD
- 03-20-12: Progress note dictated by MD
- 04-03-12: Progress note dictated by MD
- 05-02-12: CT Lumbar Myelogram w/contrast at Diagnostic Outpatient Imaging dictated by MD
- 05-14-12: Progress note dictated by MD
- 06-11-12: UR performed by DO
- 06-14-12: Request for surgery dictated by MD
- 07-13-12: UR performed by MD

PATIENT CLINICAL HISTORY [SUMMARY]:The claimant is a male who suffered a lumbar spine injury as well as an umbilical hernia on xx/xx/xx, while

working. His injury occurred while he was changing the tire out on a truck which was flat when he injured his back and an abdominal protrusion. The claimant stated that as he took the wheel off, it fell onto its side on the ground. The claimant attempted to lift the tire and experienced a sharp pulling pain in the lumbar region immediately experiencing intense pain and stiffness.

01-04-12: Extremity Evaluation. Orthopedic Tests: Lumbar Spine: Straight leg raise: L (-); Kemp's Test: L (-); Braggard's Test: L/R (-); Valsalva maneuver: L/R (-); Pinprick Fabre: L/R (-). Notes: X-Ray's LB.

01-12-12: Initial report dictated by MD. Physical examination: The claimant presented with complaints of lumbar pain and dysfunction; throbbing, ripping, burning sensation of the lumbar spine. His condition is aggravated with bending, stooping, carrying, lifting, pushing, pulling, arising from a sitting position, range of motion and vigorous activity. Testing Analysis: The claimant exhibits decrease range of motion and flexibility of the lumbar spine in all planes. Muscle weakness was noted of the lower extremities while performing Hip Flexion during manual muscle testing. Plan/Treatment: We will initiate a physical therapy regimen to help alleviate the claimant's symptoms and improve his condition: 1. Electrical muscle stimulation with heat or ice to decrease muscle spasms and to reduce pain. 2. Soft tissue and passive joint mobilization to break fibrous adhesions and to increase range of motion and flexibility. 3. Ultrasound to reduce muscle spasms, to reduce adhesions, and to reduce pain. 4. Range of motion, stretching, and strengthening exercises to restore range of motion, flexibility, strength and restore function.

01-23-12: MRI lumbar spine without IV contrast dictated by MD. Impression: 1. L5-S1 disc herniation. 2. L5-S1 right endplate bone marrow edema. 3. L5-S1 mild right neural foraminal narrowing.

01-27-12: NCV/EMG dictated by MD. Patient Complaints: Lumbar pain with intermittent tingling, numbness and pain in the legs. Impression: The electrodiagnostic study reveals evidence of acute S1 radiculopathy on the right and left. Recommendation: Continue current management of symptoms. Suggest epidural steroid injections at L5-S1 level bilaterally. Suggest surgical evaluation.

02-20-12: Office note dictated by MD. Physical Examination: The back and leg finding shows severe tenderness in the lumbosacral spine region at L5-S1 level with positive leg raising sign on the right side about 45 degrees with sciatic irritation. The knee and Achilles jerk are present on both sides. The Achilles jerk is plus/minus on the right side. The patient has difficulty on walking on heels and toes. When claimant bends, he complains of pain and before reaching his knees, and below the knees, the patient complains of pain in the lumbar region. Summary, Diagnosis & Recommendation: Examination shows absent right Achilles jerk with tenderness in lumbosacral spine region and positive leg raising sign on the right with sciatic irritation about 45 degrees. The claimant has

difficulty in bending and bending below the knee, he complains of pain in the lumbosacral spine region. MRI scan is positive for herniated disk at L5-S1. Diagnosis is herniated disk, posttraumatic L5-S1, right; with Radiculopathy of right lower extremity. Recommended conservative and symptomatic therapy, continue with therapy under the care of Dr.. The claimant was provided with medications Baclofen and Vicodin. Follow up in four weeks for recheck, at which time we will decide whether the claimant is a candidate for surgery or maybe spinal epidural block, or both.

03-20-12: Progress note dictated by MD. The claimant has evidence of herniated lumbar disc at L5-S1 and also L4-L5. Mainly herniated to the right side. The claimant has the main herniation at L5-S1 on the right side. The claimant will be benefitted from surgery and therefore, I strongly recommend lumbar laminectomy and discectomy at the level of L5-S1 on the right side. In spite of conservative and symptomatic therapy, there has not been much improvement of the claimant's condition, and claimant stated that he seems to be gradually getting worse. The claimant remains totally disabled for any type of gainful employment.

04-03-12: Progress note dictated by MD. The claimant's was denied request for surgery. Will order a lumbar myelography and CT scan of the lumbar to further evaluate the claimant's condition. Examination revealed the claimant has difficulty in bending, flexion, extension and mild rotation of the back producing pain. There is tenderness in the lumbosacral spine region which is aggravated by pressure and palpitation. The leg raising is positive on the right side 45 degrees. The claimant remains totally disabled for any type of gainful employment.

05-02-12: CT Lumbar Myelogram w/contrast dictated by MD. Impression: 1. Motion artifact between LS and S1. Today's study is still diagnostic. 2. Wavy nerve roots. This could represent a low-grade arachnoiditis. It is equivocal, however. 3. The rest of the lumbar spine is unremarkable.

05-14-12: Progress note dictated by MD. Examination shows difficulty in bending, positive leg raising sign on both sides, and 45 degrees on the right. The reflexes are hypoactive on the right side, Achilles jerk, particularly, is down. Noted reduction of pinprick sensation in the dermatomes supplied by L4-L5 on the right side. Recommend surgery – lumbar laminectomy and discectomy, two levels, L4-L5 and L5-S1, fusion at L5-S1. The claimant remains totally disabled for any type of gainful employment.

06-11-12: UR performed by DO. Reason for denial: There is no indication for this request. The claimant did have a positive EMG/NCV but there is no evidence of instability and therefore no fusion indicated nor a discectomy at L4-5. Therefore this request is not certified. The claimant currently complains of low back pain. Latest physician examination dated 04/03/12 revealed tenderness in the lumbosacral region with restricted range of motion. SLR is positive on the right side. This request is for laminectomy/discectomy at L4-L5 and L5-S1 and fusion at L5-S1. However, a comprehensive neurological assessment clearly

suggesting presence of Radiculopathy on suggested levels for surgery which was provided on recent medical reports submitted. It is unclear why laminectomy/discectomy is being contemplated on L4-L5 when both the MRI and EMG/NCV results did not reveal pathology on this level. Furthermore, CT myelogram dated 5/2/12 suggested low-grade arachnoiditis for which surgical intervention is currently deemed controversial. There is likewise no objective documentation on demonstrating exhaustion of conservative management such as symptoms logs and VAS scores associated with medication use as well as progress notes from previously completed PT and Chiropractic treatments, previous guidelines criteria. Evidence of trial and failure of other therapeutic modalities was also not provided. With all of the active factors considered, the medical necessity of this request is not fully established at this time. The request is not certified.

06-14-12: Request for surgery dictated by MD. "It is my opinion that the patient still needs surgery and laminectomy and discectomy at L4-L5, decompression and fusion of L5-S1 because of spondylosis and also former displacement of sacrum and displacement of L5. This is exaggerated when the patient stands."

07-13-12: UR performed by MD. Reason for denial: Records indicate that there was an adverse determination of a previous review, where the previous non-certification was due to lack of documentation of clinical findings suggestive of the presence of Radiculopathy on the region where surgery was requested and exhaustion of conservative treatment. In addition, per 6/14/12 medical report, the claimant continues to have severe low back pain. Physical examination revealed limited lumbar flexion, positive bilateral straight leg raising test, hypoactive reflexes on the right lower extremity, and decreased sensation at the right L4 and L5 dermatomes. L/S CT myelogram, dated 5/2/12, revealed motion artifact between L4 and L5 wavy nerve roots, could represent low-grade arachnoiditis, the rest of the spine is unremarkable. EMG/NCV, bilateral lower extremities, dated 1/27/12, revealed evidence of bilateral acute S1 radiculopathy. L/S MRI, dated 1/23/12 revealed L5-S1 disc herniation and right endplate bone marrow edema with mild right neural foraminal narrowing, the rest of the lumbar spine unremarkable. Conservative treatment has included physical therapy and chiropractic treatment. However, there is no documentation of at least 1 symptom/finding (unilateral weakness/atrophy or unilateral pain) which confirms the presence of Radiculopathy. In addition, despite documentation of mild neural foraminal narrowing at L5-S1 on MRI, there is no clear documentation of MRI findings of Moderate greater neuroforaminal narrowing at L4-L5 and L5-S1. Lastly, there is no documentation of failure of conservative treatment (activity modification plus at least 1: NSAIDs, other analgesic therapy, muscle relaxants, or equivalent condition/diagnosis for which fusion is indicated (such as instability OR a statement that decompression indicates surgically induced instability). Therefore, the medical necessity of the request has not been sustained. Based on the clinical information submitted for this review and using the evidence-based, peer-reviewed guidelines referenced ODG Chapter: Low Back - Lumbar & Thoracic, Fusion (Spinal), ODG Indications for Surgery –

Discectomy/laminectomy, this appeal request for lumbar laminectomy and discectomy at L4-L5, decompression and fusion at L5-S1, and one day inpatient stay is non-certified.

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

The previous adverse decisions have been upheld. In the medical records supplied to me there is no clinical evidence of radiculopathy, no description of muscle atrophy, nor a description of sensory deficit. The description of the myelogram reveals no evidence of nerve root compression, or significant disc herniation that would explain bilateral leg pain. The EMG is a test that is subject to subjective interpretation by the technician, to be valid there should be clinical evidence of radiculopathy. Per ODG guidelines this claimant is not a candidate for surgery or for a spinal fusion. Therefore, the request for Lumbar Laminectomy and Discectomy L4-5, Decompression and Fusion L5-S1 is denied. As the surgery is denied, the 1 day inpatient stay would also be denied.

Per ODG:

<p>Discectomy/ laminectomy</p>	<p><u>ODG Indications for Surgery™ -- Discectomy/laminectomy --</u> Required symptoms/findings; imaging studies; & conservative treatments below: I. <u>Symptoms/Findings</u> which confirm presence of radiculopathy. Objective findings on examination need to be present. Straight leg raising test, crossed straight leg raising and reflex exams should correlate with symptoms and imaging. Findings require ONE of the following: A. L3 nerve root compression, requiring ONE of the following: 1. Severe unilateral quadriceps weakness/mild atrophy 2. Mild-to-moderate unilateral quadriceps weakness 3. Unilateral hip/thigh/knee pain B. L4 nerve root compression, requiring ONE of the following: 1. Severe unilateral quadriceps/anterior tibialis weakness/mild atrophy 2. Mild-to-moderate unilateral quadriceps/anterior tibialis weakness 3. Unilateral hip/thigh/knee/medial pain C. L5 nerve root compression, requiring ONE of the following: 1. Severe unilateral foot/toe/dorsiflexor weakness/mild atrophy 2. Mild-to-moderate foot/toe/dorsiflexor weakness 3. Unilateral hip/lateral thigh/knee pain D. S1 nerve root compression, requiring ONE of the following: 1. Severe unilateral foot/toe/plantar flexor/hamstring weakness/atrophy 2. Moderate unilateral foot/toe/plantar flexor/hamstring weakness 3. Unilateral buttock/posterior thigh/calf pain (<u>EMGs</u> are optional to obtain unequivocal evidence of radiculopathy but not necessary if radiculopathy is already clinically obvious.) II. <u>Imaging Studies</u>, requiring ONE of the following, for concordance between radicular findings on radiologic evaluation and physical exam findings: A. Nerve root compression (L3, L4, L5, or S1) B. Lateral disc rupture C. Lateral recess stenosis Diagnostic imaging modalities, requiring ONE of the following: 1. <u>MR</u> imaging 2. <u>CT</u> scanning 3. <u>Myelography</u> 4. <u>CT myelography</u> & X-Ray</p>
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	<p>III. <u>Conservative Treatments</u>, requiring ALL of the following:</p> <p>A. <u>Activity modification</u> (not bed rest) after <u>patient education</u> (>= 2 months)</p> <p>B. Drug therapy, requiring at least ONE of the following:</p> <ol style="list-style-type: none"> 1. <u>NSAID</u> drug therapy 2. Other analgesic therapy 3. <u>Muscle relaxants</u> 4. <u>Epidural Steroid Injection</u> (ESI) <p>C. Support provider referral, requiring at least ONE of the following (in order of priority):</p> <ol style="list-style-type: none"> 1. <u>Physical therapy</u> (teach home exercise/stretching) 2. <u>Manual therapy</u> (chiropractor or massage therapist) 3. <u>Psychological screening</u> that could affect surgical outcome 4. <u>Back school</u> (<u>Fisher, 2004</u>) <p>For average hospital LOS after criteria are met, see <u>Hospital length of stay</u> (LOS).</p>
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Fusion (spinal)	<p>Patient Selection Criteria for Lumbar Spinal Fusion:</p> <p>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. (<u>Andersson, 2000</u>) (<u>Luers, 2007</u>) (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. (<u>Andersson, 2000</u>) (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 <u>ODG Indications for Surgery -- Discectomy.</u>)</p> <p>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 <u>discography criteria</u>) & MRI demonstrating disc pathology correlated with symptoms and exam findings; & (4) Spine pathology limited to two levels; & (5) <u>Psychosocial screen</u> 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. (<u>Colorado, 2001</u>) (<u>BlueCross BlueShield, 2002</u>)</p> <p>For average hospital LOS after criteria are met, see <u>Hospital length of stay</u> (LOS).</p>
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ODG hospital length of stay (LOS) guidelines:

Discectomy (*icd 80.51 - Excision of intervertebral disc*)

Actual data -- median 1 day; mean 2.1 days (± 0.0); discharges 109,057; charges (mean) \$26,219

Best practice target (no complications) -- 1 day

Laminectomy (*icd 03.09 - Laminectomy/laminotomy for decompression of spinal nerve root*)

Actual data -- median 2 days; mean 3.5 days (± 0.1); discharges 100,600; charges (mean) \$34,978

Best practice target (no complications) -- 1 day

Lumbar Fusion, posterior (*icd 81.08 - Lumbar and lumbosacral fusion, posterior technique*)

Actual data -- median 3 days; mean 3.9 days (± 0.1); discharges 161,761; charges (mean) \$86,900

Best practice target (no complications) -- 3 days

Lumbar Fusion, anterior (*icd 81.06 - Lumbar and lumbosacral fusion, anterior technique*)

Actual data -- median 3 days; mean 4.2 days (± 0.2); discharges 33,521; charges (mean) \$110,156

Best practice target (no complications) -- 3 days

Lumbar Fusion, lateral (*icd 81.07 - Lumbar fusion, lateral transverse process technique*)

Actual data -- median 3 days; mean 3.8 days (± 0.2); discharges 15,125; charges (mean) \$89,088

Best practice target (no complications) -- 3 days

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)