Medical Review Institute of America, Inc.
America's External Review Network

DATE OF REVIEW: April 5, 2010

IRO Case #:

Description of the services in dispute:
Inpatient lumbar spine surgery, Examination under anesthesia, lumbar laminectomy, discectomy, arthrodesis with cages, posterior instrumentation at L4-5.

A description of the qualifications for each physician or other health care provider who reviewed the decision

The physician who provided this review is board certified by the American Board of Orthopaedic Surgery. This reviewer is a fellow of the American College of Surgeons. This reviewer is a member of the American Medical Association and the American Academy of Orthopedic Surgery. This reviewer has been in active practice since 1975.

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

Upheld.

The requested inpatient lumbar spine surgery, examination under anesthesia, lumbar laminectomy, discectomy, arthrodesis with cages, and posterior instrumentation at L4-5 are not medically necessary or appropriate.

Information provided to the IRO for review
Company request for IRO, 5pgs.
Request form for review by Independent Review Organization, 3/15/10, 3pgs.
xxxxx, Review, 3/5/10, 10 pgs.
Records From Provider:
Surgery codes, 1 pg.
Chronic Pain Management, Pre-surgical Screening, 2/25/10, 9pgs.
Dr., Office Visit, 2/9/10, 2 pgs.
Dr., Office Visit, 2/8/10, 1 pg.
Electro-Diagnostic Interpretation, 1/15/10, 3pgs.
Diagnostics, Electrodiagnostic Results, 1/15/10, 7pgs.
Diagnostic, MRI Lumbar Spine, 1/5/10, 1pg.
xxxxxxx, Consultation, 5/16/09, 2 pgs.

Records from URA:

Hospital, Consultation, 2 pgs.

Hospital, History and Physical, 3/2/10, 3 pgs.

Hospital, Consultation, 3/2/10, 3pgs.

Hospital, Physicans Orders, 3/4/10-3/5/10, 2 pgs.

Hospital, IPC Hospitalist Progress Note, 3/4/10, 2pgs.

Hospital, IPC Hospitalist Progress Note, 3/3/10, 1 pg.

Hospital, Progress Note, 3/2/10-3/3/10, 3pgs.

Hospital, Abdomen AP (KUB), 3/5/10, 1 pg.

Hospital, Abdomen AP (KUB), 3/4/10, 1 pg.

Hospital, Myelogram Spine Lumbosacral, 3/2/10, 2pg.

Hospital, CT Lumbar spine w/ Contrast, 3/2/10, 2pgs.

Hospital, MRI Lumbar Spine w/o Contrast, 3/1/10, 2pgs.

Hospital, Lab Results, 3/5/10, 1 pg.

Hospital, Lab Results, 3/4/10, 1 pg.

Hospital, Lab Results, 3/3/10, 2 pgs.

Hospital, Lab Results, 3/1/10, 1 pg.

Hospital, Face Sheet, 3/3/10 1 pg.

Additional Records Sent on 3/29/10:

Accident Benefit Clinics, SOAP Notes, 1/22/10, 1 pg.

Accident Benefit Clinics, SOAP Notes, 1/20/10, 1 pg.

Accident Benefit Clinics, SOAP Notes, 1/18/10, 1 pg.

Accident Benefit Clinics, SOAP Notes, 1/13/10, 1 pg.

Accident Benefit Clinics, SOAP Notes, 1/11/10, 1 pg.

Accident Benefit Clinics, SOAP Notes, 1/8/10, 1 pg.

Accident Benefit Clinics, SOAP Notes, 1/6/10, 1 pg.

Accident Benefit Clinics, SOAP Notes, 1/4/10, 1 pg.

Accident Benefit Clinics, SOAP Notes, 12/14/09, 1 pg.

Accident Benefit Clinics, SOAP Notes, 12/11/09, 1 pg.

Accident Benefit Clinics, Initial Medical Report, 12/9/09, 3 pgs.

Accident Benefit Clinics, SOAP Notes, 12/9/09, 1 pg.

Accident Benefit Clinics, SOAP Notes, 2/10/10, 1 pg.

Accident Benefit Clinics, SOAP Notes, 2/4/10, 1 pg.

Accident Benefit Clinics, SOAP Notes, 2/10/10, 1 pg.

Accident Benefit Clinics, Evaluation, 2/4/10, 2 pgs.

Accident Benefit Clinics, SOAP Notes 1/25/10, 1 pg.

Accident Benefit Clinics, SOAP Notes 12/22/09, 1 pg.

xxxxx Emergency Nursing Record, 11/23/09, 49gs. Memorial

xxxxx, Physician Order Sheet, 11/23/09, 1 pg. Memorial xxxxx,

Lab Report, 11/23/09, 2 pgs.

xxxxx Radiology Report, 11/23/09, 1 pg.

xxxxxx, CT Cervical Pine, 11/23/09, 1pg.

xxxxx, CT abdomen, 11/23/09, 1 pg.
xxxxx, CT Head, 11/23/10, 1 pg.
xxxxx, CT Lumbar spine, 11/23/09, 1 pg. Dr.,
Evaluation Report, 12/14/09, 3pgs.
Dr., Clinical Note, 1/4/10, 5pgs.
Dr., Evaluation Report, 12/14/09, 3pgs.
Dr., Follow-up Note, 1/10/10 , 2 pgs.
Diagnostics, Electrodiagnostic Results, 1/15/10, 7 pgs.
Therapy & Diagnostic, Clinical Note, 1/18/10, 6 pgs.
xxxx, Procedure Note, 2/11/10, 1 pg. Hospital,
Neurology Consultation, 4 pgs.
Hospital, Progress Note, 3/10/10, 5 pgs.
Hospital, Patient Care Inquiry, 8 pgs.
Hospital, MRI Brain, 3/9/10, 2 pgs.

Patient clinical history [summary]

The patient is a male who was involved in a motor vehicle accident while on the job on xx/xx/xx. The patient swerved to avoid a deer and hit a cement culvert which caused his truck to flip over. The patient then reported experiencing low back and right lower extremity radiculopathy.

- On 12/16/09, Dr. evaluated the patient and noted right lower extremity radiculopathy; rule out nucleus pulposus and right knee pain. Dr. prescribed Lyrica, Mobic and Vicodin.
- On 1/5/10, an MRI of the lumbar spine reported posterior central disc protrusion at L4-5 and transitionally narrow disc at L5-S1 with posterior central disc bulge.
- On 1/15/10, an EMG/NCV reported evidence of chronic right S1 lumbar radiculopathy, clinical report of bilateral back pain, and clinical report of extremity pain on the right.
- On 2/9/10, Dr. noted the diagnosis to be a lumbar herniated nucleus pulposus with clinical instability and right radiculopathy with failed conservative treatment (physical therapy and electrical stimulation) with Dr.. Dr. recommended decompression discectomy at L4-L5.
- On 2/25/10, the patient was evaluated at Chronic Pain Management in a pre-surgical assessment.
- On 3/1/10, an MRI of the lumbar spine revealed minimal lower lumbar spondylosis without significant central or foraminal stenosis. At the L4-5 level, there is a minimal broad-based posterior disc bulge and findings consistent with a small posterior annular tear.
- On 3/2/10, CT of the lumbar spine showed no significant spondylosis, no evidence of central foraminal stenosis and changes seen involving the lower thoracic vertebrae suggest mild changes of Scheuermann's disease.
- On 3/2/10, a myelogram of the lumbosacral spine was reported to show no evidence of nerve root edema or focal nerve root compression. Transitional L5 level of the transverse processes articulating with the sacrum. There are degenerative changes at the right transverse process sacrum articulation. The patient had been taking Mobic, Lyrica, Norco and Flexeril.

- On 3/2/10, the patient was admitted to xxxxxxx and examined by Dr. for sciatica pain, incontinence of bowel, and right lower extremity pain, differential diagnoses, disk herniation and cauda equina syndrome. Dr. noted severe constipation with fecal impaction, most likely related to inactivity as well as increased amount of narcotics. Dr. was placed on a clear liquid diet and given Relitater and Golytely (and premedicated with Zofran, Reglan and Phenergan) to clean out the colon, then placed on a high fiber diet, MiraLax and Amitiza.
- On 3/4/10, an AP of the abdomen showed NG tube in the stomach. A later view on the same day showed propagation of oral contrast, bowel abnormality is as noted with mild distention of the bowel. On 3/5/10, a view of the abdomen showed no evidence of bowel obstruction.
- On 3/5/10, Dr. performed a peer review in which it was noted that the request for lumbar laminectomy, discectomy, arthrodesis with cages and posterior instrumentation at L4-5 under anesthesia with two days of stay is not medically necessary.

Analysis and explanation of the decision include clinical basis, findings and conclusions used to support the decision.

The requested inpatient lumbar spine surgery, examination under anesthesia, lumbar laminectomy, discectomy, arthrodesis with cages, and posterior instrumentation at L4-5 are not medically necessary or appropriate. According to Official Disability Guidelines (ODG), fusion 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. The patient has not had at least six months of failed conservative therapy.

A description and the source of the screening criteria or other clinical basis used to make the decision:

There is limited scientific evidence about the long-term effectiveness of fusion for degenerative disc disease compared with natural history, placebo, or conservative treatment. Studies conducted in order to compare different surgical techniques have shown success for fusion in carefully selected patients. A recently published well respected international guideline, the "European Guidelines," concluded that fusion surgery for nonspecific chronic LBP cannot be recommended unless 2 years of all other recommended conservative treatments – including multidisciplinary approaches with combined programs of cognitive intervention and exercises – have failed, or such combined programs are not available, and only then in carefully selected patients with maximum 2-level degenerative disc disease. 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. Until further research is conducted there remains insufficient evidence to recommend fusion for chronic low back pain in the absence of stenosis and spondylolisthesis, and this treatment for this condition remains "under study." It appears that workers' compensation populations require particular scrutiny when being considered for fusion for chronic low back pain, as there is evidence of poorer outcomes in subgroups of patients who were receiving compensation

or involved in litigation. Despite poorer outcomes in workers' compensation patients, utilization is much higher in this population than in group health. Presurgical biopsychosocial variables predict patient outcomes from lumbar fusion, which may help improve patient selection. Workers' compensation status, smoking, depression, and litigation were the most consistent presurgical predictors of poorer patient outcomes. Other predictors of poor results were number of prior low back operations, low household income, and older age. A recent study of 725 workers' comp patients in Ohio who had lumbar fusion found only 6% were able to go back to work a year later, 27% needed another operation, and over 90% were in enough pain that they were still taking narcotics at follow-up. A recent case-control study of lumbar fusion outcomes in worker's compensation (WC) patients concluded that only 9% of patients receiving WC achieved substantial clinical benefit compared to 33% of those not receiving WC. Official Disability Guidelines (ODG), has established the following pre-operative surgical indications recommended for lumbar spinal fusion: 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 & 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.

Gibson JN, Waddell G, Grant IC, Surgery for degenerative lumbar spondylosis, Cochrane Database Syst Rev 2000;(3): CD001352

Gibson JN, Waddell G. Surgery for degenerative lumbar spondylosis: updated Cochrane Review. Spine. 2005 Oct 15;30(20): 2312-20.

Atlas SJ, Delitto A. Spinal Stenosis: Surgical versus Nonsurgical Treatment. Clin Orthop Relat Res. 2006 Feb;443: 198-207.

Airaksinen O, Brox JI, Cedraschi C, Hildebrandt J, Klaber-Moffett J, Kovacs F, Mannion AF, Reis S, Staal JB, Ursin H, Zanoli G; On behalf of the COST B13 Working Group on Guidelines for Chronic Low Back Pain. Chapter 4 European guidelines for the management of chronic nonspecific low back pain. Eur Spine J. 2006 Mar;15(Supplement 2): s192-s300.

Fritzell P, Hagg O, Wessberg P, Nordwall A; Swedish Lumbar Spine Study Group, 2001 Volvo Award Winner in Clinical Studies: Lumbar fusion versus nonsurgical treatment for chronic low back pain: a multicenter randomized controlled trial from the Swedish Lumbar Spine Study Group, Spine 2001 Dec 1;26(23): 2521-32; discussion 2532-4.

Harris I, Mulford J, Solomon M, van Gelder JM, Young J. Association between compensation status and outcome after surgery: a meta-analysis. JAMA. 2005 Apr 6;293(13): 1644-52.

Texas. Striking the Balance: An Analysis of the Cost and Quality of Medical Care in the Texas Workers' Compensation System A Report to the 77th Texas Legislature. Research and Oversight Council on Workers' Compensation and Med-FX, LLC. January 2001

NCCI. Workers Compensation vs. Group Health: A Comparison of Utilization. November 2006

Trief PM, Ploutz-Snyder R, Fredrickson BE. Emotional health predicts pain and function after fusion: a prospective multicenter study. Spine. 2006 Apr 1;31(7): 823-30.

Nguyen T, Randolph D. Functional outcomes of lumbar fusion among the Ohio workers' compensation subjects. Primary Care Forum VIII, Amsterdam, Netherlands. 2007.

Carreon L, Glassman S, Djurasovic M, Johnson J, Puno R, Campbell M, Dimar J. Clinical Outcomes in Worker's Compensation Patients: A Case-Control Study. The Spine Journal, Volume 9, issue 10 – Supplement (October, 2009), 92.