5068 West Plano Parkway Suite 122
Plano, Texas 75093
Phone: (972) 931-5100

DATE OF REVIEW: 01/07/2009

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

Inpatient lumbar laminectomy with fusion and instrumentation L4-5

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

This case was reviewed by a Texas licensed MD, specializing in Orthopedic Surgery. The physician advisor has the following additional qualifications, if applicable:

Fellowship Trained in Sports Medicine, Fellowship Trained in Shoulder and Elbow Reconstructive Surgery

REVIEW OUTCOME:

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

☒ Upheld

Health Care Service(s) in Dispute	CPT Codes	Date of Service(s)	Outcome of Independent Review
Inpatient lumbar laminectomy with fusion and instrumentation L4-5			Upheld

INFORMATION PROVIDED TO THE IRO FOR REVIEW:

No	Document Type	Provider or Sender	Page Count	Service Start Date	Service End Date
1	Office Visit Report	MD	20	06/13/2005	11/20/2008
2	Diagnostic Test	Central	2	08/27/2004	08/27/2004
3	Op Report	Hospital	34	06/22/2005	01/23/2008
4	IRO Request	Texas Department of Insurance	11	12/18/2008	12/18/2008
5	Initial and Appeal Denial Letters		11	05/30/2008	06/19/2008

PATIENT CLINICAL HISTORY [SUMMARY]:

The patient is a currently xx year old male with a date of injury of xx/xx/xx. The reported MOI (mechanism of injury) was a fall backward onto his back and buttocks while climbing a road scraper.

His past medical history was positive for 1 pack per day cigarette smoking and social alcohol use.

His original objective study was an MRI on 8/27/04 which was interpreted as L5-S1 Grade 1 spondylolisthesis. The L4-5 level showed no pathology. He apparently had a CT as well which showed similar findings. He had been treated with extensive medications, chiropractic care, and physical therapy. Surgery which consisted of a L5-S1 decompression and fusion was performed in July, 2005. Sequential studies revealed a solid fusion. The patient continued to complain of progressive pain and was treated with medications. A CT scan performed on 1/23/08 revealed solid fusion with mild to moderate facet hypertrophy at L4-5. Because of the continued subjective complaints additional surgery was discussed and desired by the patient and his wife.

Physical examination on this patient revealed morbid obesity in a 5' 2" 200 pound male. He had absent Achilles reflexes and trace patella reflexes bilaterally from the onset of care. His straight leg raise has been "positive" in the 30-45 degree range pre and post operatively.

The request for an L4-5 decompression and fusion has been previously denied and is being appealed.

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

I would recommend upholding the initial denials. The original objective study revealed no pathology at the L4-5 level. The most recent objective study revealed mild to moderate facet hypertrophy. That pathology is consistent with his age and normal degeneration, his smoking history, and his morbid obesity. There is no correlation of that diagnosis and the original accepted injury nor the subsequent L5 -S1 fusion.

Facet hypertrophy alone is not an indication for lumbar fusion per ODG criteria. This patient's record indicates no improvement of subjective complaints from the beginning of care to the current time.

In summary, there is no correlation between his current diagnosis, pathology and request for L4-5 fusion and his original injury, objective studies, and ODG criteria.

Adjacent segment disease/degeneration (fusion)	Recommend consider risk factors below. The term “adjacent segment disease” had been defined as the development of new clinical symptoms that correspond to radiographic changes adjacent to the level of a previous spinal fusion. Development appears to be most common above posterior lumbar fusions and at the levels of the throacolumbar junction and the lumbosacral junction. It is unclear as to whether the radiographic and clinical findings are the result of the spinal fusion, a progression of naturally occurring degenerative disease, or both of these factors. Surgical treatment has shown limited success in providing pain relief or increased function. The term “adjacent segment degeneration” is used to describe radiographic changes seen at levels adjacent to the fused segment that do not necessarily correlate with clinical findings. There is a lack of clear incidence after fusion, and it is unclear whether the artificial disc will decrease the risk. (Hilibrand, 2004) (Park, 2004) A 20-year MRI and functional outcome follow-up study was performed on patients who had undergone fusion to evaluate whether or not degeneration is related to adjacent level fusion, and it concluded that the majority of degenerative changes seen occurred over multiple levels or at levels not adjacent to the fusion, suggesting that changes seen may be more likely related to constitutional factors as opposed to the increased stresses arising from the original fusion. (Wai, 2006) A recent cohort study concluded that instrumented posterolateral lumbar fusion can

	be a cause of sacroiliac joint (SIJ) degeneration. Adjacent segment degeneration following spinal fusion has attracted considerable attention, but little attention has been paid to the SIJ, which is one of the adjacent joints. In this study the incidence of SIJ degeneration in the fusion group was 75%, which was significantly higher than that of the control group, 38%. (Ha, 2008) See Fusion (spinal). Risk Factors: (1) Instrumentation, which shortens the interval to occurrence; (2) Posterior lumbar interbody fusion procedures; (3) Placement of a superior pedicle screw, due to damage of the inferior facet of the adjacent segment; (4) Sagittal alignment; (5) Pre-existent degenerative disc at the adjacent segment to the fusion; (6) Spinal stenosis as the indication for the original surgery; (7) Age, thought to be secondary to decreased ability of the spine to accommodate the biomechanical alterations; (8) Osteoporosis; (9) Female gender; (10) Fusion length; & (11) Smoking (Battie, 2002).

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 disectomy. [For excessive motion criteria, see AMA Guides, 5th Edition, page 384 (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. [For spinal instability criteria, see AMA Guides, 5th Edition, page 379 (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.

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

ODG:

Low back

TEXAS DEPARTMENT OF INSURANCE COMPLAINT PROCESS: The Texas Department of Insurance requires Independent Review Organizations to be licensed to perform Independent Review in Texas. To contact the Texas Department of Insurance regarding any complaint, you may call or write the Texas Department of Insurance. The telephone number is 1-800-578-4677 or in writing at: Texas Department of Insurance, PO Box 149104 Austin TX, 78714. In accordance with Rule 102.4(h), a copy of this Independent Review Organization (IRO) Decision was sent to the carrier, the requestor and claimant via facsimile or U.S. Postal Service from the office of the IRO on 01/07/2009.