



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

DATE OF REVIEW: July 25, 2008

IRO Case #:

**Description of the services in dispute:**

Anterior lumbar interbody fusion at L5-S1

**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 Neurological Surgery. This reviewer is a member of the American Association of Neurological Surgeons and the Congress of Neurological Surgeons. The reviewer has completed training in both pediatric and adult neurosurgical care. This reviewer has been in active practice since 2001.

**Review Outcome**

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

Upheld

Anterior lumbar interbody fusion at L5-S1 is not medically necessary and is not supported by ODG.

**Information provided to the IRO for review**

Records from the State:

Confirmation of receipt of a request for a IRO

Letter from , LVN dated 06/05/2008

Letter from , LVN dated 06/25/2008

Records received from Carrier:

Report of medical evaluation dated 03/26/2007

Progress note dated 05/11/2007

compensation- follow up dated 06/28/2007 and 01/30/2008

Progress note dated 12/17/2007, 02/22/2008, 03/28/2008, and 06/30/2008

MRI of Lumbar spine dated 12/19/2007

Notice of Independent review decision dated 03/05/2008

IRO reviewer report dated 03/05/2008

ODG-TWC, Low Back Pain

List of provider information

Records received from Provider:

Rehabilitation services form dated 09/03/2003

Patient medical history forms

Impairment rating dated 05/12/2004

Designated doctor examination dated 07/13/2004

MRI of lumbar spine dated 11/11/2005

MRI of thoracic spine dated 11/11/2005

Established patient visit dated 12/09/2005

Progress note dated 10/18/2006 (handwritten date), 12/13/2006, 01/23/2007, 04/20/2007, 12/27/2007, 01/14/2008, 03/18/2008, 03/21/2008, and 05/27/2008

Cervical spine MRI dated 11/18/2006

History and physical dated 01/04/2007

Electrodiagnostic study results dated 01/22/2007

compensation- follow up dated 02/01/2007 and 03/15/2007

Letter from , MD dated 03/26/2007

Reevaluation dated 11/27/2007

Preauthorization request dated 12/17/2007, 01/03/2008, and 02/14/2008

History and physical dated 01/08/2008

Radiology report dated 01/08/2008

Mental health evaluation dated 02/06/2008

Letters from , PA-C and , MD dated 02/12/2008 and 06/19/2008

Rehabilitation services form dated 09/08/??

### **Patient clinical history [summary]**

The patient is a xx year old female who is reported to have sustained multiple injuries as a result of a work place injury occurring on xx/xx/xx. On the date of injury the patient was sent to an offsite classroom and took the children to the cafeteria. She was in line to go back to class when a child ran out and she ran after him. She caught him, held him with her right arm and restrained with both arms causing cervical, thoracic and lumbar pain. Records indicate that the patient initially came under the care of Dr. who performed x-rays, prescribed medications and diagnosed cervical, thoracic and lumbar sprains. The patient subsequently underwent EMG/NCV study due to complaints of right lower extremity radicular symptoms. She received chiropractic treatment from , D.C. She continued to follow up with Dr. and reported a lot of pain and spasms in her low back.

The patient transferred her care to Dr. on 10/27/05. Dr. ordered additional tests which included an MRI of the lumbar spine performed on 11/11/05. This study reports a 4 mm right paracentral disc protrusion with annular tear at L5-S1 that narrows the right lateral recess approaching but not displacing the right S1 nerve root. There is moderate right and mild to moderate left neural foraminal narrowing due to disc bulge and facet disease. The patient was treated conservatively with oral medications, epidural steroid injections and psychiatric evaluation. A repeat MRI of the cervical spine was performed on 11/18/06. This study reports mild narrowing and signal loss at

C5-6 and C6-7 and a 1-1.5 mm central posterior bulge that mildly indents the dura but leaves ample 10 mm AP dural diameters without cord impingement. The neural foramina remain ample. There are anterior spurring and bulging present from C4-5 to C6-7. At C3-4 there is a 1-1.5 mm right posterolateral bulge without significant foraminal or central canal stenosis. The other visualized levels are unremarkable. The facet joints are unremarkable. The spinal cord is of normal contour and signal. MRI of the lumbar spine was performed on this same date. The L5-S1 disc shows moderate signal loss without narrowing and has a 4 mm central herniation with a visible annular tear. This herniation abuts the ample dural sac and the S1 root sheaths without deforming or displacing. The higher discs are unremarkable. The vertebra otherwise are normal in signal as well as contour and alignment. The facet joints are unremarkable. The spinal canal and neural foramina are ample.

The patient was later referred for EMG/NCV study on 01/22/07. This study reports a left S1 radiculopathy. The patient subsequently completed 2 epidural steroid injections and is reported to have improved significantly because of this. When seen in follow up on 01/23/07 palpation was negligible for pain. Deep tendon reflexes are 2+ and symmetric. Emotionally she is reported to have a blunted affect and is at times tearful.

The patient subsequently came under the care of Dr. . She is reported to have a constant pain level of 4/10 that increases to 8/10. She is reported to have undergone treatment which included epidural steroid injections; however, relief was reported to be short term. MRI dated 12/19/07 is discussed. On examination the patient has a negative straight leg raise bilaterally, 5/5 motor strength in the lower extremities and the remaining examination was neurovascularly intact. The patient was subsequently referred for lumbar discography which was performed on 01/08/08. This study reports a negative control disc at L4-5 with concordant pain at L5-S1 that radiates to the extremities bilaterally left greater than right. The patient is reported to have a pathologic response. There is evidence of a left parasagittal to left lateral grade 5 radial tear extending to approximately 4 mm soft tissue disc protrusion.

The patient was referred for mental health evaluation on 02/06/08. The patient reports 5/10 pain with a daily use of pain medication and pain coping techniques. She reports bilateral pain radiating down her legs. She is reported to have obvious difficulty with ambulating. Her Beck Depression Inventory is reported to be 6. Her BAI is reported to be 10. She is assessed with anxiety in the mild range and depressive symptomatology in the minimal range. The interviewer reports no contraindications that could impact with the patient's ability to comply with surgical protocols.

The record includes an IRO decision dated 03/05/08. This decision upheld previous utilization review outcomes. The reviewing physician reports that the patient has had more than 3 years of conservative care. He notes the records documented continued pain complaints not only in the back but in the neck and mid back as recent as one year ago in January of 2007. It is noted that electromyograms at that time suggested that the claimant suffered from radiculopathy although these studies did not completely explain her complaints of pain in the neck and shoulders. In

03/2007 she was complaining of paresthesias into her hands with pain radiating into her elbows, feet, legs and into her neck. Her examination revealed a multitude of findings including weakness in a variety of muscle groups that would not be consistent with her electromyograms. She continues to complain of pain and was recommended to undergo lumbar surgery based on concordant discography in 01/2008. The reviewer notes no evidence of a progressive neurologic deficit or spinal instability and upholds the previous utilization review determinations.

Records indicate that the request was resubmitted and was considered by Dr. on 06/05/08. Dr. notes the history of treatment and indicates that an L5-S1 fusion does not appear medically necessary at this time based on the information provided. He reports that although the claimant has apparent discogenic pain by discogram with MRI and CT pathology as well as an S1 radiculopathy by electrodiagnostic studies, the fusion is requested for discogenic pain. There is no evidence of instability and ODG guidelines suggest a psychosocial screen to evaluate the confounding issues before pursuing fusion.

The case was subsequently reviewed by Dr. on 06/25/08. Dr. non-certifies the request and in his opinion he reports recent high quality studies on discography have significantly questioned use of discography results as a preoperative indication for either IDET or spinal fusion. He reports records do not reflect segmental instability to support the need for fusion in this claimant.

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

Items in dispute: Anterior lumbar interbody fusion L5-S1

Anterior lumbar interbody fusion at L5-S1 is not medically necessary. The available medical records indicate that the patient has had a 3 year history of conservative treatment which has included oral medications, physical therapy, chiropractic treatment and epidural steroid injections. The patient has diffuse complaints involving the cervical, thoracic and lumbar spines. Imaging studies indicate that the patient has a degenerated disc at L5-S1 with a grade 5 annular tear that abuts the thecal sac and encroaches into the neural foramina. The patient has undergone lumbar discography which was reported to be concordant at L5-S1 with a negative control at L4-5. Records indicate that the patient has undergone psychological evaluation and she is reported to have no contraindications to operative intervention. Noting this the patient has diffuse symptoms which cannot be clearly related to her imaging studies and electrodiagnostic studies. The patient has undergone extensive conservative care. At one point it is reported that her low back condition was resolving after epidural steroid injections with subsequent increased pain reported later in the course of her care. The submitted clinical records do not include any flexion or extension radiographs of the lumbar spine to establish instability at the L5-S1 level. The patient's lower extremity radicular symptoms correlate with the reported disc protrusion at L5-S1 and a lesser procedure has a greater probability of providing this patient with relief of her lower extremity symptoms. The Official Disability Guidelines do not support the performance of fusion in the absence of instability. Based upon this information the requested procedure would not be considered medically necessary.

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

1. The Official Disability Guidelines, 11th edition, The Work Loss Data Institute.
2. The American College of Occupational and Environmental Medicine Guidelines; Chapter 12.
3. Deyo RA, Nachemson A, Mirza SK, Spinal–fusion surgery – the case for restraint, N Engl J Med. 2004 Feb 12;350(7): 722–6
4. Gibson JN, Waddell G. Surgery for degenerative lumbar spondylosis: updated Cochrane Review. Spine. 2005 Oct 15;30(20): 2312–20.
5. Atlas SJ, Delitto A. Spinal Stenosis: Surgical versus Nonsurgical Treatment. Clin Orthop Relat Res. 2006 Feb;443: 198–207.
6. Resnick DK, Choudhri TF, Dailey AT, Groff MW, Khoo L, Matz PG, Mummaneni P, Watters WC 3rd, Wang J, Walters BC, Hadley MN; American Association of Neurological Surgeons/Congress of Neurological Surgeons. Guidelines for the performance of fusion procedures for degenerative disease of the lumbar spine. Part 7: intractable low–back pain without stenosis or spondylolisthesis. J Neurosurg Spine. 2005 Jun;2(6): 670–2.

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