



**CLAIMS EVAL**

*Utilization Review and  
Peer Review Services*

## Notice of Independent Review Decision-WC

**DATE OF REVIEW: 1-19-10**

**IRO CASE #:**

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

L4-L5 lumbar transforaminal fusion 22612, 22630, 22840, 22851, 20937 2 days LOS

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

American Board of Orthopaedic Surgery-Board Certified

**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.

**INFORMATION PROVIDED TO THE IRO FOR REVIEW**

- 4-2-08 MRI of the lumbar spine.
- 11-20-08 MD. performed a Designated Doctor Evaluation.
- 12-5-08 EMG/NCS performed by MD.
- 2-9-09 lumbar discogram and post CT scan.
- 3-24-09 Flexion/extension views of the lumbar spine.

- 4-22-09, MD., performed a Peer Review.
- 4-22-09 presurgical evaluation.
- 6-1-09 MD. performed an addendum Peer Review.
- 7-18-09 Pre surgical psychological evaluation addendum report.
- 8-4-09 MD. office visit.
- 8-18--09 MD., performed Utilization Review.
- 11-20-09 MD. office visit.
- 12-17-09 MD. performed a Utilization Review.

**PATIENT CLINICAL HISTORY [SUMMARY]:**

MRI of the lumbar spine dated 4-2-08 showed disc pathology at L4-L5 and L5-S1 levels. At L4-L5, a 1-2 mm disc protrusion presses on the anterior thecal sac with no neural foraminal narrowing. At L5-S1, there is a 1-2 mm disc protrusion approaches but does not compress the S1 nerve root and the thecal sac.

On 11-20-08, MD. performed a Designated Doctor Evaluation. The evaluator certified the claimant had reached MMI with 0% impairment rating.

On 12-5-08, the claimant underwent an EMG/NCS performed by MD., which was normal.

On 2-9-09, the claimant underwent a lumbar discogram, which showed normal discogram at L5-S1 and abnormal discogram at the L4-L5 level.

Post CT discogram dated 2-9-09 shows grade 1 tear of the annulus at both L4-L5 and L5-S1.

On 3-24-09 Flexion/extension views of the lumbar spine was normal.

On 4-22-09, MD., performed a Peer Review. It was his opinion that the claimant had reasonable amount of treatment, testing and medications for the xx/xx/xx injury. The claimant has multiple subjective complaints that on MRI scan do not show a surgical lesion. The evaluator reported that the psychological evaluation appeared to be reasonable, as well as flexion and extension views. The evaluator reported that further treatment would depend on the results of psychological test and flexion/extension views.

4-22--09 Presurgical evaluation notes the claimant underwent psychological testing. It was noted the claimant had moderate levels of distress involving depression, reduced energy, concentration and social interaction and desire for sexual intimacy. Due to the above, the evaluator felt the claimant was not a good candidate for the proposed surgery and recommended individual counseling prior to proceeding with surgery.

A Peer Review Addendum provided by Dr. dated 6-1-09 notes the claimant underwent psychological evaluation and was not cleared for surgery. The claimant continues to have subjective complaints, but no objective testing including flexion/extension views and MRI,

which did not show instability or disc problems requiring a lumbar fusion. The evaluator recommended an independent medical evaluation.

7-18-09 Pre surgical psychological evaluation addendum notes the claimant was seen for evaluation for fusion surgery. The interpretation of the evaluation revealed that the claimant was experiencing distress that indicated he was not a good candidate for the proposed procedure at that time. The claimant had four psychotherapy sessions and learned strategies to reduce his distress and related that at the fourth session his level of distress was mild. The evaluator notes that based on the results of the counseling sessions, the claimant appears to be a good candidate for the proposed surgery at this time.

On 8-4-09, the claimant was evaluated by MD. The evaluator reported the claimant was seen for management of his low back pain. He recently underwent a psychological evaluation and has been cleared from the psychological standpoint, which is one of the prerequisite for processing transforaminal lumbar interbody fusion. The patient had four sessions of psychological evaluation before getting cleared, since he was initially in the previous report dated 4-28-09 not a good candidate for proposed surgery. The patient states that he is progressively getting worse over the period of time in terms of low back pain and documents pain level of intensity 7/10 to 8/10 on VA scale with 0 being no pain and 10 being maximum pain. The patient denies any radiation to lower extremity. His pain is primarily in the lumbar spine with constant throbbing and stabbing sensation, aggravated on sudden movements of the lumbar spine, especially bending at the waist. He is currently on ibuprofen and Tylenol on p.r.n. basis. The patient had injection performed by Dr. followed by a diskogram. This diskogram was performed by Dr. at level L4-L5 and L5-S1, which was concordant for pain 10:10 at L4-L5 and normal diskogram at L5 and S1. On exam, the claimant has tenderness on palpation in paraspinal region at L4, L5, and S1, sacroiliac joints and notches are nontender to palpation. Thoracolumbar range of motion is compromised on flexion to lower one-third of the tibia, extension of 20 degrees, and lateral bending maneuvers of 25 degrees, left and right. The patient is able to perform heel-toe walk and squat and arise, however, with pain without any assistive devices. Deep tendon reflexes are 2/4 at bilateral L4 and S1. No loss of sensation to light touch and pinprick. Motor strength is grossly intact without any muscle loss or atrophy. Clonus is absent. Toes are downgoing. Capillary refill is brisk without any vascular deficit. Straight leg raise is negative. The evaluator reported the claimant had a series of lumbar epidural steroid injection which any significant pain relief. The claimant had a discogram on 2-2-09 which showed positive concordant pain 10/10 at the L4-L5 with negative findings at L5-S1. The evaluator reported that per ODG, the patient is a candidate for surgical intervention in the form of transforaminal lumbar interbody fusion if he had more than six months of injury and failure to respond to conservative care that is repeat session of physical therapy, injection to the lumbar spine, and has positive findings either in the form of instability on x-rays or positive CT myelogram or positive concordant pain on diskogram. The evaluator reported that the claimant met all of the above criteria's for surgery.

8-18--09 MD., performed Utilization Review. The evaluator reported the claimant has no instability on flexion and extension radiographs and the discogram showed only grade 1 annular tears not a full thickness tear. Moreover, the MRI showed the discs to be well hydrated. The quality of rehab program was not available to be determined. The evaluator reported that ODG does not support the use of discography to identify the pain generator nor does it support the use of fusion surgery of the lumbar spine for discogenic pain. The evaluator reported that there was reference as to the claimant having suicidal ideation as well. Therefore, the evaluator reported that the proposed interbody fusion at L4-L5 was not validated as medically necessary.

On 11-20-09, the claimant was evaluated by MD. The evaluator reported the claimant presents with a chief complaint of low back pain. He states he was injured on the job on 12/21/07. He states that he was loading a rail cart and was going to step up onto a ladder that was not working properly. He slipped and fell flat on his back on top of a hand-held radio that was attached to his belt. He was having increased pain at night in his low back and 2 weeks later his pain became more severe. He is constantly having low back pain. If he does not take his medications during the day, his pain is very severe, His pain is worse at night. He is experiencing some right buttock pain. He denies any numbness or paresthesias in his lower extremities. He states his symptoms have been worsening. He does have difficulty with sitting for periods longer than 40 minutes. He does have difficulty standing and walking, He has difficulty sleeping at night due to pain. He denies any bowel or bladder dysfunction. Mr. has not worked since his accident. He works at a chemical plant. He has gone to a chiropractor, which did not give him any relief of his pain. He has been using an electrical stimulator, which does give him some relief. He has had at least two epidural steroid injections, which only give him 2 days of relief. He has been taking Norco 10/325, Flexeril, and Meloxicam. He has not had any surgery to his spine. He has an Oswestry disability score of 58%. At this time, his visual analog scale is an 8 to 9 out of 10, on average pain ranges from 6 to 10 out of 10, at its best 3 out of 10, and at its worst 10 out of 10. On exam, the claimant ambulates with an antalgic gait. He is able to heel and toe walk, although with discomfort. There is moderate lumbar paraspinal tenderness in the L4-L5 region. Lumbar flexion and extension is limited. He has restriction in lateral rotation as well. Long tract signs are negative with a bilateral downgoing Babinski and negative clonus. Deep tendon reflexes are 2+ and symmetric in the patellar and Achilles tendon. He has 5 over 5 strength bilaterally in the iliopsoas, quadriceps, hamstrings, tibialis anterior, extensor hallucis longus, gastrosoleus. Straight leg raise exam elicits severe back pain bilaterally. Sensation to light touch is intact and symmetric. Distal pulses are palpable. The evaluator reported that the claimant has undergone extensive non-operative treatment for over 2 years. His treatment has included activity modification, anti-inflammatories, physical therapy, and multiple epidural steroid injections. None of these have given him any significant relief. He remains unable to work at this time. He has had extensive workup for his condition. He does have a strong concordant discogram at L4-L5. Because of his failure of nonoperative management, operative treatment at L4-L5 was indicated

12-17-09 MD., performed a Utilization Review. The evaluator reported that the request for lumbar interbody fusion at L4-L5 was not recommended as medically necessary. The evaluator reported that the claimant was determined to have reached MMI by a Designated Doctor with 0% impairment as of 11-20-08. The EMG/NCS on 12-5-08 was normal. The evaluator reported that there was no current physical exam for review. Although the claimant has a positive discogram, current evidence guidelines do not support the use of discogram results as an indication for lumbar surgery. The claimant participated in individual psychotherapy and no current evaluation for surgical intervention.

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

Following review of the records provided, I would recommend against the proposed surgical fusion at L4/L5.

Medical documentation shows the claimant has predominately low back pain. There are no objective abnormal neurological findings demonstrated. EMG testing is found to be within normal limits. MRI testing has demonstrated minimal disk protrusion consistent with aging, but not an acute injury. Flexion/extension x-rays have not revealed evidence of instability.

Diskography was performed which was concordant at L4/L5. It has been noted that there is a good disk height with no loss of hydration at L4/L5. Preoperative psychological testing has been performed which reveals depression and other psychosocial features. After four visits of psychotherapy, claimant has been declared a good surgical candidate. It is not medically credible that a simple four visits of psychotherapy would resolve all the depression and psychosocial features. Dr. has written in the medical literature about the increased rates of positive diskography in the presence of psychosocial features. Furthermore, Dr. has also written about poor surgical outcomes for fusions based purely on diskography

The ODG guidelines have also recommended against lumbar fusions due to poor outcomes.

Based on this, the medical necessity and appropriateness of the proposed surgical fusion at L4/L5 is not established.

**ODG-TWC, last update 12-30-09 Occupational Disorders of the Low Back – Lumbar 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. [For spinal instability criteria, see AMA Guides (Andersson, 2000)] For complete references, see separate document with all studies focusing on Fusion (spinal). 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. (Gibson-Cochrane, 2000) (Savolainen, 1998) (Wetzel, 2001) (Molinari, 2001) (Bigos, 1999) (Washington, 1995) (DeBarard-Spine, 2001) (Fritzell-Spine, 2001) (Fritzell-Spine, 2002) (Deyo-NEJM, 2004) (Gibson-Cochrane/Spine, 2005) (Soegaard, 2005) (Glassman, 2006) (Atlas, 2006) According to the recently released AANS/NASS Guidelines, lumbar fusion is recommended as a treatment for carefully selected patients with disabling low back pain due to one- or two-level degenerative disc disease after failure of an appropriate period of conservative care. This recommendation was based on one study that contained numerous flaws, including a lack of standardization of conservative care in the control group. At the time of the 2-year follow up it appeared that pain had significantly increased in the surgical group from year 1 to 2. Follow-up post study is still pending publication. In addition, there remains no direction regarding how to define the “carefully selected patient.” (Resnick, 2005) (Fritzell, 2004) 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. (Airaksinen, 2006) For chronic LBP, exercise and cognitive intervention may be equivalent to lumbar fusion without the potentially high surgical complication rates. (Ivar Brox-Spine, 2003) (Keller-Spine, 2004) (Fairbank-BMJ, 2005) (Brox, 2006) In acute spinal cord injury (SCI), if the spine is unstable following injury, surgical fusion and bracing may be

necessary. (Bagnall-Cochrane, 2004) (Siebenga, 2006) A study on improving quality through identifying inappropriate care found that use of guideline-based Utilization Review (UR) protocols resulted in a denial rate for lumbar fusion 59 times as high as denial rates using non-guideline based UR. (Wickizer, 2004) The profit motive and market medicine have had a significant impact on clinical practice and research in the field of spine surgery. (Weiner-Spine, 2004) (Shah-Spine, 2005) (Abelson, 2006) Data on geographic variations in medical procedure rates suggest that there is significant variability in spine fusion rates, which may be interpreted to suggest a poor professional consensus on the appropriate indications for performing spinal fusion. (Deyo-Spine, 2005) (Weinstein, 2006) Outcomes from complicated surgical fusion techniques (with internal fixation) may be no better than the traditional posterolateral fusion. (van Tulder, 2006) (Maghout-Juratli, 2006) Despite the new technologies, reoperation rates after lumbar fusion have become higher. (Martin, 2007) According to the recent Medicare Coverage Advisory Committee Technology Assessment, the evidence for lumbar spinal fusion does not conclusively demonstrate short-term or long-term benefits compared with nonsurgical treatment for elderly patients. (CMS, 2006) When lumbar fusion surgery is performed, either with lateral fusion alone or with interbody fusion, unlike cervical fusion, there is no absolute contraindication to patients returning even to contact sports after complete recovery from surgery. Like patients with a thoracic injury, those with a lumbar injury should be pain free, have no disabling neurological deficit, and exhibit evidence of bone fusion on x-ray films before returning. (Burnett, 2006) A recent randomized controlled trial comparing decompression with decompression and instrumented fusion in patients with foraminal stenosis and single-level degenerative disease found that patients universally improved with surgery, and this improvement was maintained at 5 years. However, no obvious additional benefit was noted by combining decompression with an instrumented fusion. (Hallett, 2007) Discography may be supported if the decision has already been made to do a spinal fusion, and a negative discogram could rule out the need for fusion on that disc (but a positive discogram in itself would not justify fusion). Discography may help distinguish asymptomatic discs among morphologically abnormal discs in patients without psychosocial issues. Precise prospective categorization of discographic diagnoses may predict outcomes from treatment, surgical or otherwise. (Derby, 2005) (Derby2, 2005) (Derby, 1999) New research shows that healthcare expenditures for back and neck problems have increased substantially over time, but with little improvement in healthcare outcomes such as functional disability and work limitations. Rates of imaging, injections, opiate use, and spinal surgery have increased substantially over the past decade, but it is unclear what impact, if any, this has had on health outcomes. (Martin, 2008) The efficacy of surgery for nonspecific back pain is uncertain. There may be some patients for whom surgery, fusion specifically, might be helpful, but it is important for doctors to discuss the fact that surgery doesn't tend to lead to huge improvements on average, about a 10- to 20-point improvement in function on a 100-point scale, and a significant proportion of patients still need to take pain medication and don't return to full function. (Chou, 2008) This study showed that fusion for chronic lower back pain was the least successful common orthopaedic surgery. The study compared the gains in quality of life achieved by total hip replacement, total knee replacement, surgery for spinal stenosis, disc excision for lumbar disc herniation, and arthrodesis for chronic low back pain. For chronic lower back pain, improvements were statistically significant but clinically negligible. Although pain was reduced and function improved slightly, outcomes remained in the moderately affected range, quality of life was not improved and rendered worse, on average. While surgery for spinal stenosis and for disc herniation compare well with archetypical orthopaedic operations, the outcomes of surgery for chronic lower back pain do not even approach those of other orthopaedic procedures, and the data show that patients with back pain are rendered worse off by surgery. (Hansson, 2008) Recent studies document a 220% increase in lumbar spinal fusion surgery rates, without demonstrated improvements in patient outcomes or disability rates. (Deyo, 2009) In a

study of 2,378 Washington State workers' compensation claimants who underwent fusion to assess the frequency, timing, and causes of death, the 3-year cumulative mortality rate post-fusion was 1.93% and analgesic-related deaths were responsible for 21% of all deaths and 31.4% of all potential life lost. (Juratli, 2009) A study to compare the surgical experience, clinical outcomes, and effect on body weight between obese and morbidly obese patients undergoing lumbar spine fusion surgery concluded that clinical outcomes were independent of the BMI of the patient, but the incidence of postoperative complications was significant in 45% of morbidly obese and 44% of obese patients. The authors proposed that morbidly obese patients should undergo bariatric surgery before spine surgery in nonemergent situations. (Vaidya, 2009) For nonradicular low back pain with common degenerative changes, there is fair evidence that fusion is no better than intensive rehabilitation with a cognitive-behavioral emphasis for improvement in pain or function, and less than half of patients experience optimal outcomes (defined as no more than sporadic pain, slight restriction of function, and occasional analgesics) following fusion. (Chou, 2009) Posterolateral bone-grafting fusion is not necessary when a Denis type-B thoracolumbar burst fracture associated with a load-sharing score of  $\leq 6$  is treated with short-segment pedicle screw fixation. (Dai, 2009) Discography (and not merely the fusion) may actually be the cause of adjacent segment disc degeneration. This study suggested that the phenomenon of accelerated adjacent segment degeneration adjacent to fusion levels may be, in part, explained by previous disc puncture if discography was used in segments adjacent to the fusion. (Carragee, 2009) Lumbar spinal fusion surgeries use bone grafts, and are sometimes combined with metal devices, to produce a rigid connection between two or more adjacent vertebrae. The therapeutic objective of spinal fusion surgery for patients with low back problems is to prevent any movement in the intervertebral spaces between the fused vertebrae, thereby reducing pain and any neurological deficits. See also Adjacent segment disease/degeneration (fusion) & Iliac crest donor-site pain treatment.

Lumbar fusion in workers' comp patients: 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. (Fritzell-Spine, 2001) (Harris-JAMA, 2005) (Maghout-Juratli, 2006) (Atlas, 2006) Despite poorer outcomes in workers' compensation patients, utilization is much higher in this population than in group health. (Texas, 2001) (NCCI, 2006) 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. (DeBerard-Spine, 2001) (DeBerard, 2003) (Deyo, 2005) (LaCaille, 2005) (Trief-Spine, 2006) Obesity and litigation in workers' compensation cases predict high costs associated with interbody cage lumbar fusion. (LaCaille, 2007) 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. (Nguyen, 2007) 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. (Carreon, 2009)

Lumbar fusion for spondylolisthesis: Recommended as an option for spondylolisthesis. Patients with increased instability of the spine after surgical decompression at the level of degenerative spondylolisthesis are candidates for fusion. (Eckman, 2005) This study found only a 27% success from spinal fusion in patients with low back pain and a positive single-level low-pressure provocative discogram, versus a 72% success in patients having a well-accepted single-level lumbar pathology of unstable spondylolisthesis. (Carragee, 2006) Unilateral instrumentation used for the treatment of degenerative lumbar spondylolisthesis is as effective as bilateral instrumentation. (Fernandez-Fairen, 2007) Patients with degenerative spondylolisthesis and spinal stenosis who undergo standard decompressive laminectomy (with or without fusion) showed substantially greater improvement in pain and function during a period of 2 years than patients treated nonsurgically, according to the recent results from the Spine Patient Outcomes Research Trial (SPORT). (Weinstein-spondylolisthesis, 2007) (Deyo-NEJM, 2007) For degenerative lumbar spondylolisthesis, spinal fusion may lead to a better clinical outcome than decompression alone. No conclusion about the clinical benefit of instrumenting a spinal fusion can be made, but there is moderate evidence that the use of instrumentation improves the chance of achieving solid fusion. (Martin, 2007) A recent systematic review of randomized trials comparing lumbar fusion surgery to nonsurgical treatment of chronic back pain associated with lumbar disc degeneration, concluded that surgery may be more efficacious than unstructured nonsurgical care but may not be more efficacious than structured cognitive-behavior therapy. Methodological limitations of the randomized trials prevented firm conclusions. (Mirza, 2007)

Lumbar fusion for Scheuermann's kyphosis: Recommended as an option for adult patients with severe deformities (e.g. more than 70 degrees for thoracic kyphosis), neurological symptoms exist, and pain cannot be adequately resolved non-operatively (e.g. physical therapy, back exercises). Good outcomes have been found in a relatively large series of patients undergoing either combined anterior-posterior or posterior only fusion for Scheuermann's kyphosis. (Lonner, 2007)

#### 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 discectomy. [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. (See ODG Indications for Surgery -- Discectomy.)

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. (Colorado, 2001) (BlueCross BlueShield, 2002)

**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)