

CALIGRA MANAGEMENT, LLC
1201 ELKFORD LANE
JUSTIN, TX 76247
817-726-3015 (phone)
888-501-0299 (fax)

Notice of Independent Review Decision

August 29, 2012

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

L4-L5-S1: laminectomy, discectomy; L5-S1: fusion with posterior instrumented spinal fusion (PISF), cages.

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

Board Certified Orthopedic Surgeon

REVIEW OUTCOME:

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

Upheld (Agree)

Medical documentation **does not support** the medical necessity of the health care services in dispute.

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:

- Utilization reviews (07/27/12, 08/09/12)
- Office visits (06/07/11 – 05/29/12)
- Diagnostic (09/01/11, 10/03/11)
- Utilization reviews (07/27/12, 08/09/12)
- Office visits (12/01/10 – 05/15/12)
- Therapy (12/16/10 – 01/21/11)
- Diagnostic (09/01/11, 10/03/11)
- Reviews (09/26/11, 11/11/11, 06/26/12)
- Utilization reviews (07/27/12, 08/09/11)

PATIENT CLINICAL HISTORY [SUMMARY]:

The patient is a male who was unloading a truck. While lifting material weighing about 60-70 pounds, he hurt his lower back.

2010: In December, evaluated the patient for back pain that was not getting better. He complained of pain in the low back, neck and thoracic region. Review of systems (ROS) was positive for fatigue, weight change, chills, numbness in his hands and arms, joint swelling and muscle aches. Examination showed numbness in hands with side bending of the lumbar spine, tenderness across the

entire low back and numbness and tenderness over the low thoracic or cervical spine. assessed lumbar strain. He prescribed Flexeril, ibuprofen, Lortab and recommended physical therapy (PT) and follow-up with primary care physician for non-work related issues.

On follow-up, discontinued Flexeril, Ibuprofen and Lortab and changed medications to Skelaxin, Ultram and Cataflam.

In December 2010 and January 2011, the patient attended several sessions of PT consisting of therapeutic exercises and manual therapy.

2011: From January through March, the patient was under the care of for the ongoing back pain. noted that the patient was slowly improving. The patient had lumbosacral paraspinal guarding and some tightness of the piriformis and pain getting up from forward flexion. He had pain in his buttocks and tenderness at the sciatic notch. noted that the patient had worsening of the pain complaints and was depressed. He was maintained on Skelaxin, Ultram and Cataflam. prescribed steroids, recommended home exercise program (HEP) after completing physical therapy (PT), pain management, losing weight and increasing workouts and stretches.

In June, evaluated the patient for pain on the lower back which radiated down to thighs and dorsum of feet. The patient had difficulty getting in and out of chairs and had difficulty sleeping due to pain. He also reported feeling depressed. Examination showed that movements of torso aroused pain on lower thoracic and lumbar spine which radiated to thighs clear to the dorsum of feet. There was tenderness of paraspinal musculature and digital percussion evoked pain from T10 to L5. Examination of the extremities showed pain from T1 to L5 on right and left leg straight leg elevation over thighs. There was right knee tenderness with limited range of motion. There was decreased sensation to pinprick and light touch at L5-S1 dermatome on the right and there was pain with all lumbar motion. assessed lumbar strain with pain radiating to thighs clear to dorsum of feet. He prescribed Fioricet, Soma, Xanax and Lyrica, recommended 12 sessions of PT and transcutaneous electrical nerve stimulation (TENS) unit and ordered magnetic resonance imaging (MRI).

noted that the patient's back pain had worsened with no relief from home exercises. The patient was unable to work. The patient complained of a constant burning feeling in his lower back with numbness and tingling down his both legs. diagnosed displacement of lumbar IVD, myospasm, neuralgia and lumbar spine strain/sprain. He recommended PT including therapeutic exercises.

From June through November, the patient was seen by an unknown physician for the ongoing moderate-to-severe discomfort in the area of his lower back, numbness in the right and left foot. The patient was diagnosed with displacement of the lumbar IVD, muscles spasm, neuralgia, lumbar spine sprain/strain and depression. The patient was treated with moist heat and interferential current. Several recommendations were made including electromyography/nerve

conduction velocity (EMG/NCV) of the lumbar dermatomes, pain management consultation and chronic pain management program (CPMP).

In July, prescribed Soma, Xanax, Lyrica, tramadol and ibuprofen and recommended 12 sessions of PT and ordered MRI of the lumbar spine.

In August, the patient was evaluated by for back pain radiating to his right leg. Flexion-extension views of the lumbar spine showed L5-S1 with a functional spinal unit collapse from 12 mm of normal to 5 mm for a total collapse of 7 mm additionally on standing lateral film and a retrolisthesis of 7 mm extension of L5 on S1. There was also evidence of posterior column deficit with facet subluxation, foraminal stenosis and lateral recess stenosis. Examination of the back and lower extremities showed positively spring test, interiliac crest line, positive extensor lag, positive sciatic notch tenderness on the right, positive flip test on the right, positive Lasegue's on the right, contralateral positive straight leg raise (SLR) on the left with pain from the back and right lower extremity, positive Bragard's on the right, absent posterior tibial tendon jerks bilaterally, hypoactive ankle jerk on the right, paresthesia in the L5 and S1 nerve root distribution on the right and weakness of gastroc-soleus on the right. diagnosed clinical instability with functional spinal unit collapse and primarily right-sided S1 and L5 radiculopathy with failure of conservative treatment. He recommended open-sided MRI scan of the lumbar spine.

Per IRO report dated August 11, 2011, the request for PT was denied.

On follow-up, refilled Soma, Xanax, Lyrica, tramadol and ibuprofen and recommended MRI of the lumbar spine and follow-up with after MRI was performed.

In September, MRI of the lumbar spine showed the following findings: (1) At L2-L3, a 2 mm AP dimension posterior annular disc bulge and small bilateral facet joint effusion. (2) At L3-L4, a 2 mm AP dimension posterior annular disc bulge and small bilateral facet. (3) At L4-L5, there were mild loss of vertical disc height with normal sagittal plane alignment and 5 mm AP dimension broad-based disc herniation with mild compression of both L5 nerve roots in the lateral recess and abutment of both L4 nerve roots in the neural foramen without compression. (4) At L5-S1, mild loss of vertical disc height with normal sagittal plane alignment, 5 mm AP dimension slightly inferiorly extruded broad-based disc herniation and abutment of both S1 nerve roots in the lateral recess.

reviewed the x-rays and MRI findings, refilled the medications and referred the patient for a psychological evaluation, lower extremities EMG/NCV and follow-up for consultation with opined that the patient was a candidate for L4-L5 and L5-S1 decompression, and instrumented arthrodesis in relationship to his herniated nucleus pulposus (HNP) at L4-L5 and L5-S1 and instability at L5-S1 only.

In October, performed EMG/NCV study of the lower extremities that revealed subtle reinnervation potentials right L5-S1 innervated muscles consistent with

chronic polyradiculopathy. recommended pain management, PT, MRI and considering surgical intervention.

noted that the patient was seen by who reported that the patient was severely depressed. prescribed Wellbutrin, recommended six sessions of individual psychotherapy and referred the patient for pain management.

evaluated the patient for complaints consistent with an acute injury to the lumbar spine and inability to perform some of his regular activities for prolonged periods of time without an increase in pain. It was noted that the patient was unable to work due to his significant decrease in positional tolerance. The patient was scheduled to undergo his first lumbar ESI.

evaluated the patient for ongoing pain complaints. He noted that the patient had definite L4-L5 disc herniation with impingement syndrome at L5 level with radicular pain in the bilateral lower extremities, SLR was positive on the left. assessed L4-L5 disc herniation and extruded disc at L5-S1. He recommended proceeding with L4-L5 injection.

On November 11, 2011, performed a peer review and rendered the following opinions: (1) The patient had degenerative changes at L4-L5 and L5-S1 with no acute structural damage on lumbar MRI. (2) There was no objective evidence of lumbar radiculopathy on EMG or physical exam findings and the work event dated October 7, 2010 did not result in acceleration or aggravation of the pre-existing disease of the life findings at L4-L5 and L5-S1. (3) Complete recovery could be expected within six weeks of the onset. (4) The ongoing treatment was not reasonable per ODG criteria as related to the October 7, 2010 work event. TENS unit, MRI lumbar spine and medications including Fioricet, Soma, Xanax and Lyrica were not reasonable per ODG criteria. (5) The patient required weaning off of Soma, Xanax and Lyrica at a rate of 25% per week for four weeks. Anxiety and depression per ODG would not have been produced by the work incident. (6) Chiropractic therapy that had been ordered was not reasonable per ODG criteria and should not be continued for more than one-year status post work event.

In November and December, the patient attended several sessions of cognitive and behavioral therapy under the care of. refilled hydrocodone, Soma, tramadol and Xanax.

On December 5, 2011, performed the lumbar transforaminal ESI with 70% improvement. However, the pain returned. recommended second ESI and continuing medications.

2012: In a functional capacity evaluation (FCE), the patient demonstrated the ability to perform at medium physical demand level (PDL) versus heavy PDL required by his job. recommended return to work program-work hardening.

In March, noted that the patient had ongoing low back pain radiating down right thigh to the dorsum of the feet. He also noted that in December the patient had

seizures and had to go to the ER. It was reported that the tramadol that the patient was taking had caused seizures. prescribed Thera-Gesic cream, hydrocodone and Xanax.

In April and May, the patient was seen by who had recommended BHA for surgical intervention as recommended by.

In May, prescribed hydrocodone and Thera-Gesic analgesic cream for the ongoing complaints of the patient. He also recommended obtaining second opinion orthopedic consultation.

In May, opined that the patient had completed individual counseling sessions and was well prepared to undergo surgery.

In June, noted the patient had pain in lower back radiating down the right thigh to the dorsum of the feet. Referral for orthopedic consultation had been denied. Examination movement of torso aroused pain on the lumbar spine which radiated to the thighs clear to the dorsum of the feet, tenderness of the paraspinal musculature, pain from T1 to L5 on straight leg elevation, decreased sensation to pinprick and light touch at the L5-S1 dermatome on the right and pain with all lumbar motions. prescribed hydrocodone and recommended follow-up with for lumbar surgery. also recommended proceeding with the surgical intervention by.

On June 26, 2012, performed a designated doctor evaluation (DDE) and assessed maximum medical improvement (MMI) as of December 1, 2010, with 0% whole person impairment (WPI) rating.

Per utilization review dated July 27, 2012, the request for lumbar laminectomy (hemilaminectomy)/discectomy at L5-S1, additional level, microsurgery, application of spine prosthetic device, spinal bone autograft, insertion of spine fixation device, treatment of spine fracture, arthrodesis with cage, posterior instrumentation at L5-S1 and inpatient two days stays was denied with the following rationale: *“A very thorough and complete review of all the records is offered by November 11, 2011, and even an over read of the MRI. He notes the radiologic test does NOT show and extruded disc nor herniated disc at any level. The most recent Designated Doctor Evaluation by on June 26, 2012, demonstrates a completely normal physical exam and no evidence of radiculopathy. The impairment rating assigned is 0%. This patient is only 24 years of age. He demonstrates inconsistent straight leg raises when examined and no real motor sensory or reflex changes that would be consistent with either his electrodiagnostic or MRI reports. The only physician noting instability is. He needs these studies over read by an independent party especially the in-office x-rays in which finds with instability.”*

On June 27, 2012, made an appeal for the L4-L5-S1: laminectomy, discectomy, L5-S1 arthrodesis with cages and posterior instrumentation.

Per reconsideration review dated August 9, 2012, the request for L4-L5-S1: laminectomy, discectomy, L5-S1 arthrodesis with cages and posterior instrumentation was denied with the following rationale: *“Reviewed the records, including the initial level submission and basis for adverse determination. There is no new or additional documentation on appeal. Prior review made it abundantly clear that x-ray over read needed to be performed by an independent reviewer. This was not done. The June 26, 2012, Designated Doctor (DD) report per Mark Dickie M.D., assigned MMI with a 0% IR. There is no basis to alter or amend the prior adverse determination or the reference to ODG provided in that review. This claimant is 24 years old. Discussion of a spinal fusion is highly concerning. does not have a copy of the DD report. He affirmed that they did not send the films for independent over-read. This must be done prior to any further consideration of this request.”*

ANALYSIS AND EXPLANATION OF THE DECISION INCLUDE CLINICAL BASIS, FINDINGS, AND CONCLUSIONS USED TO SUPPORT THE DECISION: L4-L5, L5-S1 laminectomy, discectomy; L5-S1: fusion with posterior instrumented spinal fusion cages would not be considered medically necessary and appropriate based on the records provided in this case.

If one looks to the Official Disability Guidelines Lumbar fusion is an option for unstable spondylolisthesis. This can be due to a degenerative problem or a neural arch defect as in cases of spondylolytic spondylothesis. Radiographs should demonstrate segmental instability with intersegmental movement between extension and flexion of more than 4.5 millimeters of translation or angular motion greater than 20 degrees. The records in this case do not convincingly demonstrate instability at all. There is documentation that this claimant was diagnosed with instability by based on the radiographs interpreted in 08/11. His interpretation does not specifically document objective instability between flexion and extension as defined per the Official Disability Guidelines. He also documents significant stenosis based on the radiographs. An MRI in this case has demonstrated little in the way of stenosis or discogenic disease at all. The Official Disability Guidelines support laminectomy or discectomy when there are symptoms and findings that confirm the presence of radiculopathy with concordance of imaging studies such as an MRI. The MRI in this case demonstrates only mild lateral recess stenosis at the L4-5 and L5-S1 levels due to extruded discs at these levels. Absent convincing evidence of instability L4-5, L5-S1 laminectomy discectomy and L5-S1 fusion with posterior intermittent spinal fusion cages cannot be certified in this case.

IRO REVIEWER REPORT TEMPLATE -WC

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

ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES
Patient Selection Criteria for Lumbar Spinal Fusion:

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](#))

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. ([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. Spinal instability criteria includes 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 correlated with symptoms and exam findings; & (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](#))

For average hospital LOS after criteria are met, see [Hospital length of stay](#) (LOS).

ODG Indications for Surgery™ -- Discectomy/laminectomy --

Required symptoms/findings; imaging studies; & conservative treatments below:

I. Symptoms/Findings 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

(EMGs are optional to obtain unequivocal evidence of radiculopathy but not necessary if radiculopathy is already clinically obvious.)

II. Imaging Studies, 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. [MR](#) imaging
2. [CT](#) scanning
3. [Myelography](#)
4. [CT myelography](#) & X-Ray

III. Conservative Treatments, requiring ALL of the following:

- A. [Activity modification](#) (not bed rest) after [patient education](#) (>= 2 months)
- B. Drug therapy, requiring at least ONE of the following:
 1. [NSAID](#) drug therapy
 2. Other analgesic therapy
 3. [Muscle relaxants](#)
 4. [Epidural Steroid Injection](#) (ESI)
- C. Support provider referral, requiring at least ONE of the following (in order of priority):
 1. [Physical therapy](#) (teach home exercise/stretching)
 2. [Manual therapy](#) (chiropractor or massage therapist)
 3. [Psychological screening](#) that could affect surgical outcome
- 4. [Back school](#) ([Fisher, 2004](#))

For average hospital LOS after criteria are met, see [Hospital length of stay](#) (LOS).