Medical Assessments, Inc.

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IRO CASE #: XXX

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

Lumbar decompression and fusion L1, L2, L3 decompression L2-L5, decompression and fusion L5-S1

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

The Reviewer is a Board Certified Orthopedic Surgeon with over 15 years of experience. XX is fellowship trained in adult spine surgery.

REVIEW OUTCOME:

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

Upheld (Agree)

Provide a description of the review outcome that clearly states whether medical necessity exists for <u>each</u> of the health care services in dispute.

PATIENT CLINICAL HISTORY [SUMMARY]:

The claimant is a XX who was injured on XX when XX. The claimant was diagnosed with low back pain.

XX: MRI lumbar spine interpreted by XX, MD. Broad based disc bulge at L4-L5 with superimposed left paracentral disc extrusion abutting and posteriorly displacing the descending left L5 nerve root in the left lateral recess. There was a right foraminal disc extrusion with ligament flavum hypertrophy and facet arthropathy resulting in moderate to severe right neural foraminal narrowing. At L5-S1 there was a broad based disc bulge superimposed and a central and right paracentral disc extrusion. The extrusion was seen abutting and mildly displacing the descending right S1 nerve root in the right lateral recess. There was mild to moderate spinal canal stenosis and moderate bilateral neural foraminal narrowing at that level. At L1-L2, there was a broad based disc bulge resulting in mild to moderate to severe spinal canal stenosis.

XX: Evaluation by XX, DO. Claimant reported lower back pain rated at 8/10. The pain was association with numbness and tingling in the entire RLE. Examination of the lumbar spine showed restricted and painful ROM 1+ patellar and Achilles reflexes on the right and hyposcsthesia in the shin-calf region over the posterior, medial and lateral aspects, over the foot on the dorsal aspect of the lateral side. The SLR was positive on the right. The diagnoses were low back pain, lumbar radiculopathy, lumbar spinal stenosis and other intervertebral disc displacement of the lumber region.

XX: Evaluation by XX. PT Evaluation. Claimant continued to have back pain, limited ROM and radiculopathy.

XX Evaluation by XX. Right L5 and S1 TFESI. Postoperative diagnosis was herniated L4-L5 and L5-S1.

XX: Evaluation by XX. Reported XX radicular symptoms had improved with the injection. However, XX continued to experience some lower back pain, stiffness and limited ROM. Examination showed reduced lumbosacral ROM, sacral and lumbar tenderness and decreased sensation in the L5 and S1 distributions.

XX: Evaluation by XX. Examination showed decreased and painful ROM, midline tenderness bilaterally and tenderness on the paraspinous muscle. The diagnosis were lower back pain, lumbar radiculopathy, other intervertebral disc displacement of lumbar and lumbosacral regions and sprain of ligaments of the lumbar spine. HEP, PT and light duty were continued.

XX: Evaluation by XX. Reported relief with the injection for about two weeks. However, the pain had returned recently. The pain was interfering with sleep, walking, and changing positions and driving.

XX: Evaluation by XX. Reported relief with the injection for about two weeks. However, the pain had returned recently. The pain was interfering with sleep, walking, and changing positions and driving.

XX: Evaluation by XX. Reported numbness and had resolved after first injection. PT also helped to improve XX pain but XX continued to experience pain the lumbar region in the midline and on the right side.

XX: Evaluation by XX. Continued lower back pain radiation to RLE at knee level. XX had completed all approved PT session and was doing HEP. XX second ESI was denied.

XX: Evaluation by XX. No change in symptoms. XX had DDE and was referred to a spine surgeon. Light duty and XX were continued.

XX: Evaluation by XX. Reported severe pain in lumbar region radiating to right leg. A HEP was continued and current mediations and TFESI were recommended.

XX: Medical notes by XX, MD. Left par disc herniation that compresses the traversing nerve root and left foraminal herniation at L4/L5; Foraminal herniation at L2/3. Pain reported 10/10. X-ray of the lumbar spine showed degenerative disc disease at every level and worse at L1-L2 narrowed at 7mm. There was grade 1retrolisthesis at L2-L3.

XX: MRI lumbar spine interpreted by XX, MD. Showed probable thoracolumbar scheuermans disease with multilevel disc and facet degenerative changes, findings consist with the juvenile discongenis disease with no spondylolisthesis. Kyphosis centered at L1-L2 remained unchanged. L5-S1 modis I discognic narrow edema and potential for discogentic mechanical/axial skeletal pain generator was increased.

XX: Medical notes by XX, MD. Disc bulging and facet arthrosis at the L1 through S1 levels. Foraminal narrowing was seen at the L5-S1 level. Pain was rated 7-8/10.

XX: EMG/NCV by XX MD. Chronic lumbar poly radiculopathy affecting L2-L4 and L5-S1.

XX: Psychodiagnostic assessment by XX, MD. It was determined that the claimant was appropriate candidate for the surgical procedure.

XX: UR performed by XX, MD. Rationale for denial: The claimant is a XX who was injured on XX while XX. Treatment included PT, Oral medication and epidural steroid injections. Recent PE findings were not submitted for review. Request for L1-L3 and L5-S1 decompression and fusion with L2-L5 decompression is not certified. Texas Department of Insurance | www.tdi.texas.gov XX: Designated doctor Examination by XX D. C. The claimant had complaints of pain to the low back that radiated to the bilateral lower extremities. XX rated XX pain as a 8-10/10. Upon PE, it was noted XX had tenderness to palpation to the lumbar spine with spasm. ROM was restricted. Deep tendon reflexes were absent to the patellar and Achilles. Sensation was diminished and weakness was noted along the L3-S1 dermatomal distributions. The treatment plan stated the patients objective findings on examination correlate with symptoms and MRI findings specifically to left L5 and right S1 nerve roots.

XX: UR performed by XX, MD. Rationale for denial: Clarification is needed regarding the dermatomal distributions of symptoms given the discrepancy of the requested number of levels versus the findings described in the clinical notes. Consequently, the request is not supported. AS such the requested the L1-L3 and L5-S1 decompression and fusion with L2-L5 decompression remained non-certified.

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

The request for PSF L1-2, L2-3, and L5-S1 with decompression L2-S1 is denied.

The patient injured XX lower back in XX, while XXXX. XX currently has lower back with numbness and tingling in the right lower extremity. XX had improvement in XX symptoms with a right L5 and S1 epidural steroid injection. XX has completed the following diagnostic testing:

1. MRI lumbar spine (XX): moderate-severe spinal canal stenosis L1-2; mild-moderate canal stenosis noted at all other levels

2. MRI lumbar spine (XX): retrolisthesis of 2-3 mm identified at T12-L1, L1-2, L2-3, L3-4, L4-5; disc dessication L1-2 through L5-S1, with severe loss of disc height at L5-S1; flattening of bilateral L5 and S1 nerve roots noted; kyphosis L1-2

3. EMG/NC (XX): poly radiculopathy L2-4, L5-S1

4. Psychodiagnostic assessment: XX concluded that XX was an appropriate candidate for a spinal fusion.

The Official Disability Guidelines (ODG) supports spinal fusion in patients with spondylolisthesis who have instability, radiculopathy, and/or spinal stenosis. Spinal instability is defined as greater than 4.5 mm of intersegmental translational movement. Spinal fusion is not recommended for degenerative disc disease in workers' compensation patients.

This patient has spondylolisthesis identified on MRI. The XX MRI identified listhesis at every level from T12-L1 through L4-5. XX has radiculopathy on examination, which is confirmed on electrodiagnostics.

Skipping levels in the lumbar fusion may place these non-instrumented levels at risk for adjacent segment degeneration. The retrolisthesis at T12-L1 and the kyphosis at L1-2 may require extension of the instrumented fusion into the thoracic spine.

Moderate to severe canal stenosis is identified at L1-2. L1-2 should be included in the decompression.

The requested procedure is not appropriate for this patient.

The request for Lumbar decompression and fusion L1, L2, L3 decompression L2-L5, decompression and fusion L5-S1 is found to be not medically necessary.

ODG Guidelines:

Patient Selection Criteria for Lumbar Spinal Fusion:

(A) <u>*Recommended*</u> as an option for the following conditions with ongoing symptoms, corroborating physical findings and imaging, and after failure of non-operative treatment (unless contraindicated, e.g., acute traumatic unstable fracture, dislocation, spinal cord injury) subject to criteria below:

(1) Spondylolisthesis (isthmic or degenerative) with at least one of these:

- (a) instability, and/or
- (b) symptomatic radiculopathy, and/or
- (c) symptomatic spinal stenosis;
- (2) Disc herniation with symptomatic radiculopathy undergoing a third decompression at the same level;
- (3) Revision of pseudoarthrosis (single revision attempt);
- (4) Unstable fracture;
- (5) Dislocation;
- (6) Acute spinal cord injury (SCI) with post-traumatic instability;
- (7) Spinal infections with resultant instability;
- (8) Scoliosis with progressive pain, cardiopulmonary or neurologic symptoms, and structural deformity;
- (9) Scheuermann's kyphosis;
- (10) Tumors.

(B) Not recommended in workers' compensation patients for the following conditions:

- (1) Degenerative disc disease (DDD);
- (2) Disc herniation;
- (3) Spinal stenosis without degenerative spondylolisthesis or instability;
- (4) Nonspecific low back pain.

(C) *Instability criteria:* Segmental Instability (objectively demonstrable) - Excessive motion, as in isthmic or 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 15 degrees L1-2 through L3-4, 20 degrees L4-5, 25 degrees L5-S1. Spinal instability criteria include lumbar inter-segmental translational movement of more than 4.5 mm. (Andersson, 2000) (Luers, 2007) (Rondinelli, 2008)

(D) After failure of two discectomies on the same disc [(A)(2) *above*], fusion may be an option at the time of the third discectomy, which should also meet the ODG criteria. (See <u>ODG Indications for SurgeryTM -- Discectomy</u>.)

(E) Revision Surgery for failed previous fusion at the same disc level [(A)(3) above] if there are ongoing symptoms and functional limitations that have not responded to non-operative care; there is imaging confirmation of pseudoarthrosis and/or hardware breakage/malposition; and significant functional gains are reasonably expected. 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. Workers compensation and opioid use may be associated with failure to achieve minimum clinically important difference after revision for pseudoarthrosis (Djurasovic, 2011) There is low probability of significant clinical improvement from a second revision at the same fusion level(s), and therefore multiple revision surgeries at the same level(s) are not supported.

(F) <u>Pre-operative clinical surgical indications</u> for spinal fusion should include all of the following:

(1) All physical medicine and manual therapy interventions are completed with documentation of reasonable patient participation with rehabilitation efforts including skilled therapy visits, and performance of home exercise program during and after formal therapy. Physical medicine and manual therapy interventions should include cognitive behavioral advice (e.g., ordinary activities are not harmful to the back, patients should remain active, etc.);

(2) X-rays demonstrating spinal instability and/or myelogram, CT-myelogram, or MRI demonstrating nerve root impingement correlated with symptoms and exam findings;

(3) Spine fusion to be performed at one or two levels;

(4) <u>Psychosocial screen</u> with confounding issues addressed; the evaluating mental health professional should document the presence and/or absence of identified psychological barriers that are known to preclude post-operative recovery;

(5) 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; (XX) (XX)

(6) There should be documentation that the surgeon has discussed potential alternatives, benefits and risks of fusion with the patient;

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

- 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)