

# Wren Systems

An Independent Review Organization  
71 Court Street  
Belfast, ME 04915  
Phone: (512) 553-0533  
Fax: (207) 470-1064  
Email: manager@wrensystems.com

## NOTICE OF INDEPENDENT REVIEW DECISION

**DATE OF REVIEW:**

Jul/24/2009

**IRO CASE #:**

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

Lumbar laminectomy with fusion and instrumentation L1 thru L3 with 1 inpatient night stay.  
(63047)

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

M.D., Board Certified Orthopedic Surgeon

**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)

**INFORMATION PROVIDED TO THE IRO FOR REVIEW**

ODG Guidelines and Treatment Guidelines

Adverse Determination Letters, 6/15/09, 6/24/09

ESI, 10/10/95

Office notes, Dr. 11/14/96, 12/12/96, 12/12/96, 08/11/97, 10/16/97, 04/02/08, 06/23/03,

09/08/03, 05/04/06, 11/08/07, 07/14/08, 10/13/08, 01/15/09, 04/16/08

OR report, 11/29/96, 02/05/08, 06/23/08, 04/16/09, 06/04/09

X-ray lumbar spine, 08/11/97

CT myelogram, 10/01/97, 01/09/02, 11/27/07, 05/29/09

CT, 03/05/03

X-rays, 03/05/03, 01/15/09

Myelogram, 04/11/03

Denial, , 06/15/09, 06/24/09

Dr., 09/28/95, 09/23/96, 03/06/97, 05/08/97, 09/18/97, 10/30/97, 11/24/97, 12/15/97,

06/01/98, 06/19/98, 11/05/98, 12/14/98, 08/06/98, 01/18/99, 05/20/99, 06/17/99, 09/02/99,

10/04/99, 11/11/99, 11/29/99, 12/23/99, 01/31/00, 05/01/00, 05/09/01, 07/10/00, 12/21/00.

04/12/01, 08/09/01, 12/13/01, 01/25/02, 06/06/02, 08/05/02, 10/28/02, 02/03/03, 04/12/03

OR, 05/28/99, 03/23/03, 04/17/03, 10/13/03, 11/13/03, 04/12/04, 06/25/05, 06/25/04,

07/14/05, 11/29/07, 02/26/08, 08/11/08, 11/13/08, 03/05/08, 05/08/08,

Discharge Summary, 05/29/99, 10/03/01, 02/09/08

CT, 12/14/99

X-ray, 10/28/02, 02/26/08

OR Report, 05/07/04, 06/28/05

Dr. 09/08/04

Dr., 03/19/08, 05/21/08, 07/21/08, 09/10/08, 12/23/08, 02/16/09, 04/08/09, 06/02/09

Physical Therapy, 07/18/08, 08/11/08

Request, 04/23/09

#### **PATIENT CLINICAL HISTORY SUMMARY**

The claimant is a xx year old female injured on xx/xx/xx. On 11/29/96 the claimant had bilateral L3-4, L4-5 and L5-S1 decompression with lateral facet fusion and bilateral pedicle screws at L4-5 and S1.

Records showed that the claimant had initial good results with resolution of her leg pain. X-rays on 12/12/96 showed the hardware was in good position.

The claimant was seen on 08/11/97 by Dr. for an exacerbation of back and left leg pain. The examination noted decreased flexibility and pain down the left leg. X-rays showed no abnormality and no abnormal motion. Dr. recommended work hardening and Neurontin. The 08/11/97 x-rays of the lumbar spine showed no abnormal motion although she was unable to completely flex or extend. The 10/01/97 CT myelogram noted the laminectomy L4 through S1 with cross linked pedicle screws. L3-4 was normal. There was evidence of the L4-5 prior surgery and but the level was other wise normal. There was L5-S1 abnormal soft tissue into the extra foraminal portion of the left foramen felt to be possible scar versus herniation. The claimant treated with medication and therapy the remainder of 1997 for her back and left leg pain.

The 04/02/98 note from Dr. noted the claimant had ongoing back and left leg pain. An EMG showed chronic left S1 radiculopathy with minor L5 involvement. No further surgical procedures were recommended as he felt they would be of no benefit. A spinal cord stimulator was trialed and made her worse. She was treated with Depakote and Morphine for her back and leg pain.

In 1999 the claimant had insertion of a pain pump with good results. She developed new right leg pain but a CT did not show stenosis or nerve root compression. An epidural steroid injection was given.

In 2000 the claimant had back and bilateral leg pain and reflex sympathetic dystrophy was considered. She was treated with medication and her pump. There was no loosening of hardware on x-rays 07/10/00 and no abnormal motion. In 2001, Methadone was added to the treatment recommendations. The claimant was able to return to sedentary work. The pain pump was changed to Dilaudid. She reported some numbness of her hands but there was no concern for radiculopathy.

A 01/09/02 CT myelogram showed an L2-3 slight lateral disc bulge. There was an L3-4 disc bulge with effacement of the ventral dural sac and mild encroachment of the lateral recesses. At L4-5 were bilateral laminectomies and pedicle screws. She had L5-S1 post surgical changes and moderate arthritic changes of the facets. The 2002 records indicated she had right leg pain but had no neurological changes and she continued to use the pain pump

A 03/05/03 CT showed mild spinal stenosis at L3-4 due to a disc bulge and hypertrophic changes and there was probable bilateral foraminal stenosis. There were hypertrophic changes at L4-5 and L5-S1 with bilateral foraminal narrowing. The 03/05/03 x-rays with flexion and extension showed that the hardware was well positioned. There was marked narrowing at L4-5 and L5-S1 with mild L3-4 narrowing. The 04/11/03 myelogram documented a small L3-4 extradural defect with minimal impingement on the thecal sac and post operative changes at L4-5 and L5-S1. An EMG was noted to show the mild chronic S1 radiculopathy. She had no change in her examination findings. In 2004 and 2005 she treated with chronic pain management for her low back. She had no radicular leg pain. Use of the pain pump continued. On 05/04/06, Dr. noted the claimant had had edema and

infection in her lower legs as well as increased back pain and pain in her hips and legs. She used a cane and had some weakness in the lower extremities.

An 11/08/07 note from Dr. documented that the claimant had not been seen for 2 years. She was still using a pain pump. Lumbar spine x-rays showed "severe problems" at L3-4 with marked sclerosis of the end plates with obliteration of the disc space and distraction of the posterior elements. There was a solid L4 fusion. On examination there was a severely antalgic gait. She had weakness with plantar flexion and dorsiflexion and weakness of the bilateral quadriceps. An 11/27/07 CT myelogram showed wasting of the contrast column at L3-4 due to disc space collapse.

On 02/05/08, the claimant had an L3-4 decompression, discectomy, L3-4 anterior interbody fusion and L3-5 posterior fusion and pedicle screws. A 07/14/08 note by Dr. indicated the claimant had compression deformities on x-ray. She continued to report thoracolumbar spin after surgery but her leg pain resolved. By 01/09, the L3-4 fusion was reported to be solid.

On 04/16/08, Dr. saw the claimant for back and left leg pain to the foot. The examination documented a severe antalgic gait. There was weakness with dorsiflexion and plantar flexion and positive straight leg raise on the left. The 06/23/08 note indicated the claimant had progressive kyphosis and back pain but no hip or leg pain. No physical examination was documented. The claimant had some therapy in 07/08 to 09/08 and she continued use of the pain pump.

The 01/15/09 x-rays with flexion and extension showed extensive postoperative changes with screws and rods L3-4 and L5-S1. There was no abnormal motion with flexion and extension. Vertebral body heights were maintained. On 04/16/09, Dr. documented that the left radicular pain was worse. On examination, there was weakness on plantar flexion and dorsiflexion on the left. She had decreased sensation in the left leg and positive on straight leg raise on the left. The 05/29/09 CT myelogram showed L1-2 broad based bulging with mild encroachment on the dural sac and foramina; thickening of the ligamentum flavum caused mild spinal canal stenosis. There were L2-3 Schmorl's nodes with an 80 percent compression deformity of the L2 vertebral body; mild broad based bulging, ligamentum flavum hypertrophy caused moderate spinal stenosis and mild bilateral foraminal stenosis. There were L3-4 postoperative changes with bilateral posterior fusion; bilateral pedicle screws and posterior compression plates and inter disc spacers at L4. There was L4-5 with mild to moderate disc space narrowing and degenerative changes of the facets. L5-S1 posterior decompression and fusion was seen with hardware at L5 and S1 with posterior body fusion.

#### **ANALYSIS AND EXPLANATION OF THE DECISION INCLUDING CLINICAL BASIS, FINDINGS AND CONCLUSIONS USED TO SUPPORT THE DECISION**

The most recent imaging does reveal some mild stenosis at L1-2 centrally with moderate central and mild foraminal stenosis at L2-3. None of these areas would indicate severe stenosis. The weakness reported does not correspond to the levels in question. The records do not clearly outline any recent conservative care. The spine pathology in this case is certainly not limited to two levels given multiple prior procedures and fusions below. There is no documentation of a psychosocial screening. There is no documentation of smoking history or counseling regarding the same. Given these factors, this claimant would not meet the ODG guidelines for fusion. The reviewer finds that medical necessity does not exist for Lumbar laminectomy with fusion and instrumentation L1 thru L3 with 1 inpatient night stay. (63047).

Official Disability Guidelines 2009 Low Back-Fusion

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-AMERICA 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)