

MEDICAL POLICY

MEDICAL POLICY DETAILS	
Medical Policy Title	Lumbar Decompression
Policy Number	7.01.97
Category	Technology Assessment
Original Effective Date	06/21/18
Committee Approval Date	12/20/18, 07/18/19, 01/16/20, 02/18/21, 02/17/22, 02/16/23
Current Effective Date	02/16/23
Archived Date	N/A
Archive Review Date	N/A
Product Disclaimer	<ul style="list-style-type: none"> • If a product excludes coverage for a service, it is not covered, and medical policy criteria do not apply. • If a commercial product (including an Essential Plan or Child Health Plus product), medical policy criteria apply to the benefit. • If a Medicaid product covers a specific service, and there are no New York State Medicaid guidelines (eMedNY) criteria, medical policy criteria apply to the benefit. • If a Medicare product (including Medicare HMO-Dual Special Needs Program(DSNP) product) covers a specific service, and there is no national or local Medicare coverage decision for the service, medical policy criteria apply to the benefit. • If a Medicare HMO-Dual Special Needs Program (DSNP) product DOES NOT cover a specific service, please refer to the Medicaid Product coverage line.

POLICY STATEMENT

- I. Based upon our criteria and assessment of the peer-reviewed literature, an initial primary lumbar decompression has been medically proven to be effective and, therefore, is considered **medically appropriate** for spinal stenosis/spondylolisthesis, when **ALL** the following are met:
- The patient has subjective symptoms, including at least **TWO** of the following:
 - Significant level of pain on a daily basis, defined as either of the following:
 - Visual Analog Scale (VAS)/Numeric Rating Scale (NRS) greater than or equal to 7; or
 - Severe, disabling, crippling, or incapacitating pain;
 - Persistent, radiating pain into the buttock(s) and/or lower extremity(ies) on a daily basis that has a documented, negative impact on activities of daily living despite optimal conservative treatment as described below; and/or
 - Pain, cramping, weakness, or tingling in the lower back, buttock(s), and leg(s) brought about by walking or positions that cause thecal sac or nerve root compression (e.g., standing, extension).
 - The procedure is performed for **EITHER** of the following:
 - Neurogenic claudication secondary to central/lateral recess/foraminal stenosis, when **BOTH** of the following criteria are met:
 - Subjective symptoms include **EITHER** of the following:
 - Symptoms worsen with standing and/or walking; or
 - Symptoms are alleviated with sitting and/or forward flexion; and
 - Objective physical findings are consistent with MRI/CT; OR
 - Spondylolisthesis with neurogenic claudication symptoms or radicular pain from lateral recess or foraminal stenosis associated with listhesis, as demonstrated on plain x-rays and/or magnetic resonance imaging (MRI)/computed tomography (CT).
 - The patient has not experienced clinically meaningful improvement with at least **TWO** of the following, unless contraindicated:

Medical Policy: LUMBAR DECOMPRESSION

Policy Number: 7.01.97

Page: 2 of 6

1. Prescription strength analgesics, steroids, and/or NSAIDS for six weeks; and/or
 2. Provider-directed exercise program prescribed by a physical therapist, chiropractic provider, osteopathic or allopathic physician for six weeks; and/or
 3. Epidural steroid injection(s)/selective nerve root block(s).
- D. An MRI/CT identifies nerve root impingement and/or thecal sac impingement caused by stenosis/lithesis that correlates with patient symptoms or physical findings.
- E. All other sources of pain have been excluded.
- F. The patient has no unmanaged, significant behavioral health disorders (e.g., major depressive disorder, chronic pain syndrome, secondary gain, opioid use or alcohol use disorders).
- II. Based upon our criteria and assessment of the peer-reviewed literature, a repeat lumbar decompression has been medically proven to be effective and, therefore, is considered **medically appropriate** when **ALL** of the criteria noted in Policy Statement I above, plus **ALL** of the following, are met:
- A. Post-operative MRI /CT confirms radiographic evidence of neural structure compression (e.g., nerve root(s) compression);
 - B. More than 12 weeks have elapsed since last decompression surgery; and
 - C. Patient experienced initial relief of symptoms following previous decompression procedure at same level(s), unless post-operative imaging demonstrates persistent, significant neurologic compression at the surgical level.
- III. Based upon our criteria and assessment of the peer-reviewed literature, the following procedures have not been medically proven to be effective and, therefore, are considered **investigational**:
- A. Percutaneous lumbar discectomy;
 - B. Percutaneous laser discectomy;
 - C. Laser-assisted/percutaneous laser disc decompression; and
 - D. Percutaneous nucleotomy.

Refer to Corporate Medical Policy #7.01.16 Automated Percutaneous Discectomy and Image-Guided, Minimally Invasive Decompression

Refer to Corporate Medical Policy #7.01.62 Intervertebral Disc Decompression: Laser (Laser Discectomy) and Radiofrequency Coblation (Disc Nucleoplasty) Techniques

Refer to Corporate Medical Policy #7.01.75 Interspinous and Interlaminar Stabilization/Distractor Implants (Spacers).

Refer to Corporate Medical Policy #7.01.83 Minimally Invasive/Minimal Access Techniques for Lumbar Interbody Fusion.

Refer to Corporate Medical Policy #7.01.90 Lumbar Fusion for Adults.

Refer to Corporate Medical Policy #11.01.03 Experimental or Investigational Services.

POLICY GUIDELINES

- I. Acceptable imaging modalities are CT scan, MRI, and myelogram. Imaging must be performed and read by an independent radiologist. If discrepancies should arise in the interpretation of the imaging, interpretations by the radiologist will supersede. Discography or magnetic resonance (MR) spectroscopy results will not be used as a determining factor of medical necessity for any requested procedures. Use is not endorsed.
- II. Clinically meaningful improvement is defined as global assessment showing at least 50% improvement.
- III. **URGENT/EMERGENT CONDITIONS:** All patients being evaluated for spine surgery should be screened for indications of a medical condition that requires urgent/emergent treatment. The presence of such indications/conditions warrants definitive surgical treatment. Confirmatory advanced imaging studies, such as a CT scan or MRI, are required. Provider-directed, non-surgical management (Statement I.C.) and absence of unmanaged significant behavioral health disorders (Statement I.F.) are NOT required. Urgent/emergent conditions for lumbar decompression include ANY of the following:
 - A. acute/unstable traumatic spinal fractures or dislocations, with or without neural compression;

Medical Policy: LUMBAR DECOMPRESSION

Policy Number: 7.01.97

Page: 3 of 6

- B. cauda equina syndrome (CES);
- C. epidural hematoma;
- D. documentation of progressive neurological deficit on two separate physical examinations;
- E. infection (e.g., discitis, epidural abscess, osteomyelitis);
- F. primary or metastatic neoplastic disease causing pathologic fracture, cord compression or instability;
- G. severe or rapidly progressive symptoms of motor loss, bowel incontinence or bladder incontinence/retention due to a neuro-compressive pathology; or
- H. documentation of severe debilitating pain and/or dysfunction to the point of being incapacitated.

DESCRIPTION

Narrowing/stenosis or spondylolisthesis that creates a narrowing of the spinal canal can cause chronic pain, numbness, and muscle weakness in an individual's arms or legs. Spinal decompression can be performed anywhere along the spine from the neck (cervical) to the lower back (lumbar). The procedure is performed through a surgical incision in the back (posterior). The lamina is the bone that forms the backside of the spinal canal and makes a roof over the spinal cord. Removing the lamina and other soft tissues gives more room for the nerves, relieves pressure, and allows for removal of bone spurs. Depending on the extent of stenosis, one vertebra (single-level) or more (multi-level) may be involved. There are several types of decompression surgery:

- I. Laminectomy is the removal of the entire bony lamina, a portion of the enlarged facet joints, and the thickened ligaments overlying the spinal cord and nerves.
- II. Laminotomy is the removal of a small portion of the lamina and ligaments, usually on one side. Laminotomy leaves the natural support of the lamina in place, decreasing the chance of post-operative spinal instability. In some cases, an endoscope may be used, allowing for a smaller, less-invasive incision.
- III. Foraminotomy is the removal of bone around the neural foramen, the space between vertebrae where the nerve root exits the spinal canal. This method is used when disc degeneration has caused the height of the foramen to collapse, resulting in a pinched nerve. It can be performed with a laminectomy or laminotomy.

RATIONALE

The Spine Patient Outcomes Research Trial (SPORT) was funded by the National Institutes of Health (NIH) to study the outcomes from surgical and non-surgical management of three conditions: intervertebral disc herniation, degenerative spondylolisthesis, and lumbar spinal stenosis. Both surgical and non-surgical care of intervertebral disc herniation resulted in significant improvement in symptoms of low back and leg pain. However, the treatment effect of surgery for intervertebral disc herniation was less than that seen in individuals with degenerative spondylolisthesis and lumbar spinal stenosis. The preliminary four-year outcomes data demonstrated more significant degrees of improvement in pain levels and function with surgical versus non-surgical treatment in the chronic conditions of lumbar spinal stenosis and lumbar spinal stenosis with spondylolisthesis (Asghar, 2012; Weinstein, 2006a; Weinstein, 2006b; Weinstein, 2007; Weinstein, 2009).

According to the American Pain Society (APS), decompressive laminectomy may be an acceptable option for individuals experiencing disabling and persistent leg pain due to spinal stenosis, either with or without degenerative spondylolisthesis. The APS reports that decompressive laminectomy is associated with moderate benefits, compared to non-surgical therapy, through one to two years, though the effects of the procedure appear to diminish with long-term follow-up. Although individuals, on average, do not worsen without surgery, improvements are less than those observed in individuals with radiculopathy due to herniated lumbar disc. The APS guidelines indicate that there is insufficient evidence to determine whether laminectomy with fusion is more effective than laminectomy without fusion. The authors recommended that shared decision-making regarding surgery include a specific discussion about moderate/average benefits, which appear to decrease over time, in affected individuals who undergo surgery (Chou, 2009).

CODES

- *Eligibility for reimbursement is based upon the benefits set forth in the member's subscriber contract.*

Medical Policy: LUMBAR DECOMPRESSION**Policy Number: 7.01.97****Page: 4 of 6**

- *CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY.*
- *Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than policy updates.*
- *Code Key: Experimental/Investigational = (E/I), Not medically necessary/ appropriate = (NMN).*

CPT Codes

Code	Description
63005	Laminectomy with exploration and/or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (e.g., spinal stenosis), 1 or 2 vertebral segments; lumbar, except for spondylolisthesis
63011	Laminectomy with exploration and/or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (eg, spinal stenosis), 1 or 2 vertebral segments; sacral
63012	Laminectomy with removal of abnormal facets and/or pars inter-articularis with decompression of cauda equina and nerve roots for spondylolisthesis, lumbar (Gill type procedure)
63017	Laminectomy with exploration and/or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (e.g., spinal stenosis), more than 2 vertebral segments; lumbar
63047	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [e.g., spinal or lateral recess stenosis]), single vertebral segment; lumbar
63048	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [e.g., spinal or lateral recess stenosis]), single vertebral segment; each additional segment, cervical, thoracic, or lumbar
63052	Laminectomy, facetectomy, or foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s] [eg, spinal or lateral recess stenosis]), during posterior interbody arthrodesis, lumbar; single vertebral segment (List separately in addition to code for primary procedure) (<i>effective 01/01/2022</i>)
63053	Laminectomy, facetectomy, or foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s] [eg, spinal or lateral recess stenosis]), during posterior interbody arthrodesis, lumbar; each additional vertebral segment (List separately in addition to code for primary procedure) (<i>effective 01/01/2022</i>)

Copyright © 2023 American Medical Association, Chicago, IL

HCPCS Codes

Code	Description
No codes	

ICD10 Codes

Code	Description
C72.0	Malignant neoplasm of spinal cord

Medical Policy: LUMBAR DECOMPRESSION

Policy Number: 7.01.97

Page: 5 of 6

Code	Description
C79.40	Secondary malignant neoplasm of unspecified part of nervous system
G06.1	Intraspinal abscess and granuloma
M43.15-M43.17	Spondylolisthesis, thoracolumbar, lumbar or lumbosacral region (code range)
M48.05-M48.07	Spinal stenosis, thoracolumbar, lumbar or lumbosacral region (code range)

REFERENCES

- *Andreisek G, et al. Uncertainties in the diagnosis of lumbar spinal stenosis. Radiology 2011;261(3):681-4.
- Austevoll IM, et al. Decompression with or without fusion in degenerative lumbar spondylolisthesis. N Engl J Med 2021 Aug; 385(6): 526-38.
- *Backstrom KM, et al. Lumbar spinal stenosis-diagnosis and management of the aging spine. Manual Therapy 2011;16(4):308-17.
- *Brox JI, et al. Four-year follow-up of surgical versus non-surgical therapy for chronic low back pain. Annals of the Rheumatic Diseases 2010;69(9):1643-8.
- *Choi D, et al. Review of metastatic spine tumour classification and indications for surgery: the consensus statement of the Global Spine Tumour Study Group. European Spine Journal 2010;19(2):215-22.
- *Chou R, et al. Diagnosis and treatment of low back pain: a joint clinical practice guideline from the American College of Physicians and the American Pain Society. Annals of Internal Medicine 2007;147(7):478-91.
- *Chou R, et al. Medications for acute and chronic low back pain: a review of the evidence for an American Pain Society/ American College of Physicians clinical practice guideline. Annals of Internal Medicine 2007;147(7):505-14.
- *Chou R, et al. Interventional therapies, surgery, and interdisciplinary rehabilitation for low back pain: an evidence-based clinical practice guideline from the American Pain Society. Spine 2009;34(10):1066-77.
- *Conn A, et al. Systematic review of caudal epidural injections in the management of chronic low back pain. Pain Physician 2009;12(1):109-35.
- Costa F, et al. Decompressive surgery for lumbar spinal stenosis: WFNS spine committee recommendations. World Neurosurg X 2020 Mar 10;7:100076.
- *Darouiche RO. Spinal epidural abscess. New England Journal of Medicine 2006;355(19):2012-20.
- *Deyo RA, et al. Trends, major medical complications, and charges associated with surgery for lumbar spinal stenosis in older adults. Journal of the American Medical Association 2010;303(13):1259-65.
- *Eliyas JK, et al. Surgery for degenerative lumbar spine disease. Disease-a-Month 2011;57(10):592-606.
- *Fu KM, et al. Morbidity and mortality in the surgical treatment of 10,329 adults with degenerative lumbar stenosis. Journal of Neurosurgery: Spine 2010;12(5):443-6.
- Jung JM, et al. The long-term reoperation rate following surgery for lumbar stenosis: a nationwide sample cohort study with a 10-year follow-up. Spine (Phila Pa 1976) 2020 Sep 15;45(18):1277-1284.
- *Kalichman L, Hunter DJ. Diagnosis and conservative management of degenerative lumbar spondylolisthesis. European Spine Journal 2008;17(3):327-35.
- *Kanayama M, et al. Effective prevention of surgical site infection using a Centers for Disease Control and Prevention guideline-based antimicrobial prophylaxis in lumbar spine surgery. Journal of Neurosurgery: Spine 2007;6(4):327-9.
- Karlson, Thomas, et al. Decompression alone or decompression with fusion for lumbar spinal stenosis: a randomized clinical trial with two-year MRI follow-up. Bone Joint J. 2022 Dec;104-B(12):1343-1351.

Medical Policy: LUMBAR DECOMPRESSION

Policy Number: 7.01.97

Page: 6 of 6

*Klein G, et al. Nonoperative treatment of spondylolysis and grade I spondylolisthesis in children and young adults: a meta-analysis of observational studies. Journal of Pediatric Orthopedics 2009;29(2):146-56.

*Kreiner DS, et al. Diagnosis and treatment of degenerative lumbar spinal stenosis. Evidence-based clinical guidelines for multidisciplinary spine care. North American Spine Society. 2011.

[<https://www.spine.org/Portals/0/assets/downloads/ResearchClinicalCare/Guidelines/LumbarStenosis.pdf>] accessed 12/28/22.

*Lurie JD, et al. Long-term outcomes of lumbar spinal stenosis: eight-year results of the spine patient outcomes research trial (SPORT). Spine (Phila Pa 1976) 2015;40(2): 63-76.

Manzur MK, et al. Indirect Lumbar decompression combined with or without additional direct posterior decompression: A systematic review. Global Spine Journal 2021: 1-10.

North American Spine Society (NASS). Evidence-based clinical guidelines for multidisciplinary spine care: diagnosis & treatment of low back pain. 2020 Aug.

[<https://www.spine.org/Portals/0/assets/downloads/ResearchClinicalCare/Guidelines/LowBackPain.pdf>] accessed 12/28/22.

*Pearson A, et al. Who should have surgery for spinal stenosis?: treatment effect predictors in SPORT. Spine (Phil Pa 1976) 2012;37(21): 1791-1802.

*Sansur CA, et al. Morbidity and mortality in the surgical treatment of 10,242 adults with spondylolisthesis. Journal of Neurosurgery: Spine 2010;13(5):589-93.

*Thome C, et al. Outcome after less-invasive decompression of lumbar spinal stenosis: a randomized comparison of unilateral laminotomy, bilateral laminotomy, and laminectomy. Journal of Neurosurgery: Spine 2005;3(2):129-41.

*Tran de QH, Duong S, Finlayson RJ. Lumbar spinal stenosis: a brief review of the nonsurgical management. Canadian Journal of Anaesthesia 2010;57(7):694-703.

*Watters WC, et al. An evidence-based clinical guideline for the diagnosis and treatment of degenerative lumbar spondylolisthesis. Spine Journal 2009;9(7):609-14.

Wei FL, et al. Management for lumbar spinal stenosis: a network meta-analysis and systematic review. Int J Surg 2020 Nov 27;85:19-28.

*Weinstein JN, et al. Surgical compared with nonoperative treatment for lumbar degenerative spondylolisthesis. four-year results in the Spine Patient Outcomes Research Trial (SPORT) randomized and observational cohorts. Journal of Bone and Joint Surgery American Volume 2009;91(6):1295-304.

*Weinstein JN, et al. Surgical versus nonsurgical therapy for lumbar spinal stenosis. N Engl J Med 2008 Feb 21;358(8):794-810.

*Key Article

KEY WORDS

Lumbar foraminotomy, Lumbar decompression, Lumbar laminectomy, Spinal stenosis, Spondylolisthesis

CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS

Based upon review, lumbar decompression is not addressed in a National or Local Medicare coverage determination or policy