

MEDICAL POLICY – 7.01.551

Lumbar Spine Decompression Surgery: Discectomy, Foraminotomy, Laminotomy, Laminectomy in Adults

BCBSA Ref. Policies: 7.01.145 & 7.01.146

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RELATED MEDICAL POLICIES:

- 7.01.18 Automated Percutaneous and Percutaneous Endoscopic Discectomy
- 7.01.72 Percutaneous Intradiscal Electrothermal Annuloplasty, Radiofrequency Annuloplasty, Biacuplasty, and Intraosseous Basivertebral Nerve Ablation
- 7.01.87 Artificial Intervertebral Disc: Lumbar Spine
- 7.01.107 Interspinous and Interlaminar Stabilization/Distraction Devices (Spacers)
- 7.01.126 Image-Guided Minimally Invasive Decompression for Spinal Stenosis
- 7.01.130 Axial Lumbosacral Interbody Fusion
- 7.01.542 Lumbar Spinal Fusion
- 7.01.560 Cervical Spine Surgeries: Discectomy, Laminectomy, and Fusion in Adults
- 8.03.09 Vertebral Axial Decompression
- 8.03.501 Chiropractic Services

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Introduction

The spine is a complex combination of tissues, bones, and nerves. The small bones of the back (vertebrae) surround and protect the spinal cord. Disease or injury can affect these bones and tissues, causing them to shift or bulge. This can put pressure on the spinal cord or nerves and cause symptoms like pain, numbness, weakness, or tingling. Physical therapy, chiropractic adjustments, or steroid injections often relieve these symptoms. Surgery may be needed if these treatments don't work. Decompression surgery is a general term meaning the removal of bone and/or tissue that is pressing on the nerves or spinal cord. These surgeries include removing all or part of a disc that's pressing on a nerve (discectomy), enlarging the passageway where nerves branch out from the spinal cord (foraminotomy), or removing all or part of the vertebra known as the lamina (laminotomy or laminectomy). This policy describes when decompression surgery on the lower back may be medically necessary and covered by the health plan.

Note: The Introduction section is for your general knowledge and is not to be taken as policy coverage criteria. The rest of the policy uses specific words and concepts familiar to medical professionals. It is intended for providers. A provider can be a person, such as a doctor, nurse, psychologist, or dentist. A provider also can be a place where medical care is given, like a hospital, clinic, or lab. This policy informs them about when a service may be covered.

Policy Coverage Criteria

We will review for medical necessity these elective surgical procedures.

This includes single and multi-level lumbar spine decompression surgeries performed with/without single level lumbar fusion.

We also will review the site of service for medical necessity. Site of service is defined as the location where the surgical procedure is performed, such as an off campus-outpatient hospital or medical center, an on campus-outpatient hospital or medical center, an ambulatory surgical center, or an inpatient hospital or medical center.

Site of Service for Elective Surgical Procedures	Medical Necessity
Medically necessary sites of service: <ul style="list-style-type: none">• Off campus-outpatient hospital/medical center• On campus-outpatient hospital/medical center• Ambulatory Surgical Center	Certain elective surgical procedures will be covered in the most appropriate, safe, and cost-effective site. These are the preferred medically necessary sites of service for certain elective surgical procedures.
Inpatient hospital/medical center	Certain elective surgical procedures will be covered in the most appropriate, safe, and cost-effective site. This site is considered medically necessary only when the individual has a clinical condition which puts him or her at increased risk for complications including any of the following (this list may not be all inclusive): <ul style="list-style-type: none">• Anesthesia Risk



Site of Service for Elective Surgical Procedures	Medical Necessity
	<ul style="list-style-type: none"> ○ American Society of Anesthesiologists (ASA) classification III or higher (see definition) ○ Personal history of complication of anesthesia ○ Documentation of alcohol dependence or history of cocaine use ○ Prolonged surgery (Greater than 3 hours) ● Cardiovascular Risk <ul style="list-style-type: none"> ○ Uncompensated chronic heart failure (New York Heart Association [NYHA] class III or IV) ○ Recent history of myocardial infarction (MI) (Less than 3 months) ○ Poorly controlled, resistant hypertension* ○ Recent history of cerebrovascular accident (Less than 3 months) ○ Increased risk for cardiac ischemia (drug eluting stent placed less than 1 year or angioplasty less than 90 days) ○ Symptomatic cardiac arrhythmia despite medication ○ Significant valvular heart disease ● Liver Risk <ul style="list-style-type: none"> ○ Advance liver disease (Model for End-Stage Liver Disease Score greater than 8)** ● Pulmonary Risk <ul style="list-style-type: none"> ○ Chronic obstructive pulmonary disease (COPD) (FEV1 Less than 50%) ○ Poorly controlled asthma (FEV1 less than 80% despite treatment) ○ Moderate to severe obstructive sleep apnea (OSA)*** ● Renal Risk <ul style="list-style-type: none"> ○ End stage renal disease (on dialysis) ● Other <ul style="list-style-type: none"> ○ Morbid obesity (body mass index greater or equal to 50 kg/m²) ○ Pregnancy



Site of Service for Elective Surgical Procedures	Medical Necessity
	<ul style="list-style-type: none"> ○ Bleeding disorder (requiring replacement factor, blood products, or special infusion product [DDAVP**** does not meet this criterion]) ○ Anticipated need for transfusion(s) <p>Note:</p> <ul style="list-style-type: none"> *3 or more drugs to control blood pressure ** https://reference.medscape.com/calculator/meld-score-end-stage-liver-disease *** Moderate-AHI greater or equal to 15 and less than or equal to 30, Severe-AHI greater or equal to 30 ****DDAVP-Deamino-Delta-D-Arginine Vasopressin (Desmopressin)
Inpatient hospital/medical center	<p>This site of service is considered NOT medically necessary for certain elective surgical procedures when the site of service criteria listed above are not met.</p>

Note: This policy only applies to individuals aged 19 and older.

Procedure	Medical Necessity
Lumbar discectomy (diskectomy), foraminotomy, laminotomy	<p>Lumbar discectomy (diskectomy)*, foraminotomy, or laminotomy surgery may be considered medically necessary for the rapid (48 hours or less) progression of neurologic impairment (e.g., cauda equina syndrome, foot drop, extremity weakness, saddle anesthesia, sudden onset of bladder or bowel dysfunction).</p> <p>If there is not rapid progression of neurologic impairment, lumbar discectomy (diskectomy)*, foraminotomy, or laminotomy for the treatment of lumbar disc herniation may be considered medically necessary when ALL the following criteria are met:</p> <ul style="list-style-type: none"> • All other sources of low back pain have been ruled out AND



Procedure	Medical Necessity
	<ul style="list-style-type: none"> • A lumbar spine magnetic resonance image (MRI) or lumbar spine computerized tomography (CT) scan with myelogram done within the past 12 months shows nerve root compression that corresponds to symptoms and physical examination findings or there is definitive neurological localization by other means (e.g., selective nerve root injections) <p>AND</p> <ul style="list-style-type: none"> • Persistent, debilitating pain radiating from the low back down to the lower extremity is present on a daily basis and limits activities of daily living (ADLs) <p>AND</p> <ul style="list-style-type: none"> • Neurological deficits (e.g., reflex change in the legs, dermatomal sensory loss, motor weakness) or alternative signs of lumbar root irritation (e.g., positive leg raising test) are present on physical examination <p>AND</p> <ul style="list-style-type: none"> • Symptoms have been unresponsive to at least 6 weeks of conservative nonsurgical care, including ALL of the following: <ul style="list-style-type: none"> ○ Use of prescription strength analgesics for several weeks at a dose sufficient to induce a therapeutic response <ul style="list-style-type: none"> ▪ Analgesics should include anti-inflammatory medications with or without adjunctive medications such as nerve-membrane stabilizers or muscle relaxants (if not contraindicated) ○ Physical therapy ○ Evaluation and appropriate management of associated cognitive, behavioral or addiction issues when present <p>Note: *See Related Information for further description of lumbar discectomy</p>
Lumbar laminectomy	<p>Lumbar laminectomy may be considered medically necessary for the rapid (48 hours or less) progression of neurologic impairment (e.g., cauda equina syndrome, foot drop, extremity weakness, saddle anesthesia, sudden onset of bowel or bladder dysfunction).</p>



Procedure	Medical Necessity
	<p>If there is not rapid progression of neurologic impairment, lumbar laminectomy for spinal stenosis may be considered medically necessary when ALL of the following criteria are met:</p> <ul style="list-style-type: none"> • All other sources of low back pain have been ruled out <p>AND</p> <ul style="list-style-type: none"> • Persistent, progressive, debilitating symptoms of neurogenic claudication (numbness, tingling, muscle weakness with or without back pain) are present on a daily basis that limits activities of daily living <p>AND</p> <ul style="list-style-type: none"> • A lumbar spine MRI or lumbar spine CT scan with myelogram within the past 12 months shows findings of spinal cord or nerve root compression (lumbar spinal stenosis with or without spondylolisthesis) that corresponds to the clinical findings on physical examination <p>AND</p> <ul style="list-style-type: none"> • Symptoms have been unresponsive to at least 6 weeks of conservative nonsurgical care, including ALL of the following: <ul style="list-style-type: none"> ○ Use of prescription strength analgesics for several weeks at a dose sufficient to induce a therapeutic response <ul style="list-style-type: none"> ▪ Analgesics should include anti-inflammatory medications with or without adjunctive medications such as nerve-membrane stabilizers or muscle relaxants (if not contraindicated) ○ Physical therapy ○ Evaluation and appropriate management of associated cognitive, behavioral or addiction issues when present <p>Lumbar laminectomy may also be considered medically necessary for ANY of the following:</p> <ul style="list-style-type: none"> • Dorsal rhizotomy for spasticity in cerebral palsy • Lumbar spondylolisthesis confirmed by a lumbar MRI study • Metastatic neoplasm of the spine, non-cancerous spinal tumor, or cysts that cause nerve root or spinal cord compression with corresponding neurological deficit, confirmed by a lumbar MRI study • Spinal infection confirmed by a lumbar MRI study



Procedure	Medical Necessity
	<ul style="list-style-type: none"> • Spinal injury confirmed by a lumbar MRI study (e.g., epidural hematoma or foreign body) • Spinal trauma confirmed by a lumbar MRI study (e.g., spinal fracture, displaced fragment from a spinal fracture, vertebral dislocation together with instability, locked facets)
Lumbar spine decompression surgery	<p>Lumbar spine decompression surgery is considered not medically necessary when no clinical indication is documented and there are no confirmatory physical and radiologic findings that meet the relevant criteria listed above in this policy.</p> <p>The provider's choice of interventional surgery depends on the specific member's symptoms and imaging findings.</p> <p>Note: *See Related Policies for other spinal procedures not addressed in this policy.</p>

Procedure	Investigational
Annular closure device following lumbar discectomy	<p>The use of an annular closure device (ACD) to repair an annular defect following a lumbar discectomy is considered investigational (e.g., Barricaid)</p>

Documentation Requirements
<p>Documentation in the medical record must clearly support the medical necessity of the surgery and include the following information:</p>
<ul style="list-style-type: none"> • Medical History <ul style="list-style-type: none"> ◦ Co-morbid physical and psychological health conditions ◦ History of back surgery, including minimally invasive back procedures ◦ Prior trial, failure, or contraindication to conservative medical/non-operative interventions that may include but are not limited to the following: <ul style="list-style-type: none"> ▪ Activity modification for at least 6 weeks ▪ Oral analgesics and/or anti-inflammatory medications ▪ Physical therapy ▪ Chiropractic manipulation ▪ Epidural steroid injections • Physical Examination



Documentation Requirements

- Clinical findings, including the individual's stated symptoms and duration
- Diagnostic Test
 - Radiologist's report of a magnetic resonance image (MRI) or computerized tomography (CT) scan with myelogram of the lumbar spine within the past 12 months showing a lumbar spine abnormality. Report of the selective nerve root injection results, if applicable, to the individual's diagnostic workup.

Coding

Code	Description
CPT	
22899	Unlisted procedure, spine (when used for repair of annular defect with implantation of bone anchored annular closure device, following lumbar discectomy)
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
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
63030	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc; 1 interspace, lumbar
63032	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and excision of herniated intervertebral disc; with repair of annular defect by implantation of bone-anchored annular closure device, including all imaging guidance, 1 interspace, lumbar (list separately in addition to code for primary procedure) (new code effective 01/01/26)
63035	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc; each additional interspace, cervical or lumbar (List separately in addition to code for primary procedure)



Code	Description
63042	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, reexploration, single interspace; lumbar
63044	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, reexploration, single interspace; each additional lumbar interspace (List separately in addition to code for primary procedure)
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 (List separately in addition to code for primary procedure)
63056	Transpedicular approach with decompression of spinal cord, equina and/or nerve root(s) (e.g., herniated intervertebral disc), single segment; lumbar (including transfacet, or lateral extraforaminal approach) (e.g., far lateral herniated intervertebral disc)
63057	Transpedicular approach with decompression of spinal cord, equina and/or nerve root(s) (e.g., herniated intervertebral disc), single segment; each additional segment, thoracic or lumbar (List separately in addition to code for primary procedure)
63185	Laminectomy with rhizotomy; 1 or 2 segments
63190	Laminectomy with rhizotomy; more than 2 segments
63191	Laminectomy with section of spinal accessory nerve
63267	Laminectomy for excision or evacuation of intraspinal lesion other than neoplasm, extradural; lumbar
63272	Laminectomy for excision of intraspinal lesion other than neoplasm, intradural; lumbar

HCPCS

C9757	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and excision of herniated intervertebral disc, and repair of annular defect with implantation of bone anchored annular closure device, including annular defect measurement, alignment and sizing assessment, and image guidance; 1 interspace, lumbar
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Note: CPT codes, descriptions and materials are copyrighted by the American Medical Association (AMA). HCPCS codes, descriptions and materials are copyrighted by Centers for Medicare Services (CMS).



Related Information

Lumbar Discectomy

Lumbar discectomy refers to standard open discectomy or minimally invasive microdiscectomy. Microdiscectomy will be defined for the purpose of this policy as having the following features: (1) uses a small surgical incision (as opposed to an endoscopic "port"), (2) uses a specially designed microscope to achieve direct visualization of the vertebral column (as opposed to indirect visualization with an endoscope or other type of camera), and (3) removes disc and other surgical products by direct visualization through the surgical incision. Microdiscectomy may be done with adjunctive devices, such as tubular retractors to improve visualization, or endoscopy to localize the correct areas to operate. However, removal of the disc itself must be done under direct visualization to be considered microdiscectomy. Annular closure devices are proposed to reduce the risk of reherniation in individuals with large annular defects following discectomy.

Radiculopathy

Radiculopathy presents with a characteristic set of signs and symptoms based on history and physical exam.

History:

- Pain that radiates down the back of the leg to below the knee
- Numbness and tingling in a dermatomal distribution
- Muscular weakness in a pattern associated with spinal nerve root compression.

Physical exam:

- Positive straight leg raise test
- Loss of deep tendon reflexes corresponding to affected nerve root level



- Loss of sensation in a dermatomal pattern.

Conservative Nonsurgical Therapy Should Include the Following:

- Use of prescription-strength analgesics for several weeks at a dose sufficient to induce a therapeutic response
 - Analgesics should include anti-inflammatory medications with or without adjunctive medications, such as nerve membrane stabilizers or muscle relaxants, AND
- Participation in at least 6 weeks of physical therapy (including active exercise) or documentation of why the individual could not tolerate physical therapy, AND
- Evaluation and appropriate management of associated cognitive, behavioral, or addiction issues AND
- Documentation of individual compliance with the preceding criteria

Medical History

- Assessment of comorbid physical and psychological health conditions (e.g., morbid obesity, current smoking, diabetes, renal disease, osteoporosis, severe physical deconditioning)
- History of back surgery, including minimally invasive back procedures
- Prior trial, failure, or contraindication to conservative medical/nonoperative interventions that may include but are not limited to the following:
 - Activity modification for at least 6 weeks
 - Oral analgesics and/or anti-inflammatory medications
 - Physical therapy
 - Chiropractic manipulation
 - Epidural steroid injections



Persistent Debilitating Pain Is Defined As:

- Significant level of pain on a daily basis, defined on a visual analog scale score as greater than 4; AND
- Pain on a daily basis that has a documented impact on activities of daily living despite optimal conservative nonsurgical therapy, as outlined above, and appropriate for the individual.

Diagnostic Testing

- Radiologically confirmed lumbar spine abnormality based on a magnetic resonance image or computerized tomography scan with myelogram of the lumbar spine within the past 6 months
- Report of the selective nerve root injection results, if applicable to the individual's diagnostic workup

Definition of Terms

American Society of Anesthesiologists (ASA) Score:

ASA 1 A normal healthy patient.

ASA 2 A patient with mild systemic disease.

ASA 3 A patient with severe systemic disease.

ASA 4 A patient with severe systemic disease that is a constant threat to life.

ASA 5 A moribund patient who is not expected to survive

Cauda equina: The nerve roots resembling a horse's tail that hang from the tip of the spinal cord where it ends in the lower back. These nerve roots dangle in the spinal canal before exiting through the vertebral foramen and go out to the lower part of the body. (Cauda equina is Latin for horse's tail).

Cauda equina syndrome: Cauda Equina Syndrome (CES) is a serious condition caused by compression of the cauda equina nerves of the lower spine; it is considered a surgical emergency. CES may be caused by a herniated disk, infection, cancer, trauma, or spinal stenosis. A rapid progression of neurologic symptoms are exhibited which may include but are not limited to severe sharp/stabbing debilitating low back pain that starts in the buttocks and travels



down one or both legs. It is often accompanied by severe muscle weakness, inability to start/stop urine flow, inability to start/stop bowel movement, loss of sensation below the waist and absence of lower extremity reflexes.

Disc (intervertebral): Round flat "cushions" between each vertebra of the spine.

Discectomy (diskectomy): The removal of herniated disc material/disc fragments that are compressing a nerve root or the spinal cord. A discectomy may be done to treat a ruptured disc. (Percutaneous discectomy is addressed in a separate policy; see [Related Policies](#)).

Dorsal rhizotomy: The cutting of selected nerves in the lower spine to reduce leg spasticity in individuals with cerebral palsy.

Foraminotomy (foraminctomy): The removal of bone and tissue to enlarge the opening (foramen) where a spinal nerve root exits the spinal canal.

Hemilaminectomy: The removal of only one side (left or right) of the posterior arch (lamina) of a vertebra.

Lamina: Bony arch of the vertebra that helps to cover and protect the spinal cord running through the spinal canal. Each spinal vertebra has two laminae (left and right).

Laminectomy: The removal of the whole posterior arch (lamina) of a vertebra.

Laminotomy: The removal of a small portion of the lamina of a vertebra.

Lumbar spinal stenosis: Abnormal narrowing of the spinal canal which puts pressure on the spinal cord and the nerve roots leaving the spinal cord. Spinal stenosis may cause pain, numbness or weakness in the legs, feet, or buttocks.

Lumbar spondylolisthesis: A condition where one of the vertebrae slips out of place by moving forward or backward on an adjacent vertebra. Usually occurs in the lumbar spine. Isthmic spondylolisthesis is the most common form of spondylolisthesis due to a defect or fracture of the bone that connects the upper and lower facet joints (the pars interarticularis). The disorder may be congenital when the bone fails to form properly or acquired, due to a stress fracture and slippage of part of the spinal column. (Some athletes, such as gymnasts, football players, and weightlifters may suffer from this disorder).

Myelopathy: Refers to any neurologic deficit related to the spinal cord. It could be caused by trauma, inflammation, vascular issues, arthritis in the spine, or other causes.

Neurogenic claudication (or pseudoclaudication): Symptoms of pain, paresthesia (numbness, tingling, burning sensation) in the back, buttocks and lower limbs and possible muscle tension,



limping or leg weakness that worsens with standing/walking and is relieved by rest, sitting, or leaning forward – usually associated with lumbar spinal stenosis.

New York Heart Association (NYHA) Classification:

Class I No symptoms and no limitation in ordinary physical activity, e.g., shortness of breath when walking, climbing stairs etc.

Class II Mild symptoms (mild shortness of breath and/or angina) and slight limitation during ordinary activity.

Class III Marked limitation in activity due to symptoms, even during less-than-ordinary activity, e.g., walking short distances (20–100 m). Comfortable only at rest.

Class IV Severe limitations. Experiences symptoms even while at rest. Mostly bedbound patients

Paresthesia: Abnormal sensations of the skin including burning, prickling, pricking, tickling, or tingling, and are often described as “pins and needles.”

Radicular pain: Pain that radiates down a compressed or irritated nerve root that connects to the spinal cord, also known as radiculitis. A common form is sciatica.

Radiculopathy: A progressive neurologic deficit caused by compression or irritation of a nerve root as it leaves the spinal column. The compression may be caused by disc material or boney changes like spurs. Symptoms may include pain radiating from the spine, a motor deficit, reflex changes, or EMG changes.

Saddle anesthesia: A loss of feeling in the buttocks, perineum and inner thighs frequently related to cauda equina syndrome.

Spinal cord/nerve roots: The spinal cord runs down through the spinal canal in the vertebral column. The spinal cord gives off pairs of nerve roots that extend from the cord, pass through spaces in between the vertebrae, and go out to the body.

Vertebrae: The individual bones of the spinal column that consist of the cervical, thoracic, and lumbar regions. The vertebrae in the spinal column surround and protect the spinal cord.

Place of Service (Professional Claims Codes):

Off-Campus-Outpatient Hospital A portion of an off-campus hospital provider-based department which provides diagnostic, therapeutic (both surgical and nonsurgical), and rehabilitation services to sick or injured persons who do not require hospitalization or institutionalization. (Code 19)

Inpatient Hospital A facility, other than psychiatric, which primarily provides diagnostic,



therapeutic (both surgical and nonsurgical), and rehabilitation services by, or under, the supervision of physicians to patients admitted for a variety of medical conditions. (Code 21)

On Campus-Outpatient Hospital A portion of a hospital's main campus which provides diagnostic, therapeutic (both surgical and nonsurgical), and rehabilitation services to sick or injured persons who do not require hospitalization or institutionalization. (Code 22)

Ambulatory Surgical Center A freestanding facility, other than a physician's office, where surgical and diagnostic services are provided on an ambulatory basis. (Code 24)

Evidence Review

Description

Back pain, with and without radicular symptoms, is one of the most common medical reasons that members seek medical care and may affect 8 out of 10 people during their lifetime. Most back pain will improve over 2 months with minimal intervention. The pain can vary from mild to disabling. Back pain is considered to be chronic if it lasts more than three months. Age-related disc degeneration, facet joint arthrosis and segmental instability are leading causes of chronic back pain.

The most common symptoms of spinal disorders are regional pain and range of motion limitations. A small subset of individuals may experience radiating pain in addition to decreased range of motion and low back discomfort. For the majority of individuals, pain characteristics depend on activity levels. For example, the pain intensity changes with increased physical activity, certain movements or postures and decreases with rest. However, night-time back pain may be present in the absence of serious specific spinal disorders. The precise location and originating point of back pain is often difficult for individuals to describe.

There are many potential causes for low back pain. Several conditions may cause pinched or compressed nerves in the low back area putting pressure on the spinal cord that may cause tingling, muscle weakness and sudden loss or impairment of bowel and bladder function. Intervertebral disc herniation, spinal stenosis, and degenerative spondylolisthesis with stenosis are the most common conditions that have low back pain and leg symptoms and may require surgery to relieve the compression according to the findings in the Spine Patient Outcomes Research Trial (SPORT).

Normally, the spinal cord is protected by the back bones (vertebrae) that form the spine, but certain injuries to and disorders of the spine may cause cord compression, affecting its normal



function. The spinal cord may be compressed by bone, the collection of blood outside a blood vessel (hematomas), pus (abscesses), tumors (both noncancerous and cancerous), or a herniated/ruptured or malformed disc. These injuries and disorders may also compress the spinal nerve roots that pass through the spaces between the back bones or the bundle of nerves that extend downward from the spinal cord (cauda equina). The spinal cord may be compressed suddenly, causing symptoms in minutes or over a few hours or days, or slowly, causing symptoms that worsen over many weeks or months.

Lumbar spine decompression is a broad definition of surgical procedures performed on the bones in the lower (lumbar) spine to relieve the pinched or compressed spinal cord and/or nerve(s). The goal is to "decompress" the spinal cord and/or nerve root(s) that are causing disabling pain and/or weakness due to damage to the spinal cord (myelopathy).

During lumbar decompression surgery, the surgeon removes portions of the intervertebral disc and/or adjacent bone and tissue in the lower spine to give the nerve root more space. Surgical procedures for spinal decompression include lumbar discectomy, foraminotomy, laminotomy, and lumbar laminectomy.

Background

Lumbar Discectomy (Diskectomy)

Discectomy is a surgical procedure in which one or more intervertebral discs are removed. Extrusion of an intervertebral disc beyond the intervertebral space can compress the spinal nerves and result in pain, numbness, and weakness. Discectomy is intended to treat symptoms by relieving pressure on the affected nerve root(s). Discectomy can be performed by a variety of surgical approaches, with either open surgery or minimally invasive techniques. Annular closure devices are proposed to be used to reduce the risk of recurrence of disc herniation in individuals with large annular defects following discectomy.

Disc Herniation

Extrusion of an intervertebral disc beyond the intervertebral space can compress the spinal nerves and result in symptoms of pain, numbness, and weakness.

The natural history of untreated disc herniations is not well-characterized, but most herniations will decrease in size over time due to shrinking and/or regression of the disc.¹ Clinical symptoms



will also tend to improve over time in conjunction with shrinkage or regression of the herniation. Annular closure devices can be used following discectomy to reduce future herniation.

Treatment

Because most disc herniations improve over time, initial care is conservative, consisting of analgesics and a prescribed activity program tailored to individual considerations. Other potential nonsurgical interventions include opioid analgesics and chiropractic manipulation. Epidural steroid injections can also be used as a second-line intervention and are associated with short-term relief of symptoms.²

However, some disc herniations will not improve over time with conservative care. A small proportion of individuals will have rapidly progressive signs and symptoms, thus putting them at risk for irreversible neurologic deficits. These individuals are considered to be surgical emergencies, and expedient surgery is intended to prevent further neurologic deterioration and allow for nerve recovery.

Other individuals will not progress but will have the persistence of symptoms that require further intervention. It is estimated that up to 30% of individuals with sciatica will continue to have pain for more than 1 year.³ For these individuals, there is a high degree of morbidity and functional disability associated with chronic back pain, and there is a tendency for recurrent pain despite treatment. Therefore, treatments that have more uniform efficacy for individuals with a herniated disc and chronic back pain are needed. In particular, decreased chronic pain and decreased disability are the goals of treatment of chronic low back pain due to a herniated disc.

Surgical Treatment

Discectomy is a surgical procedure in which one or more intervertebral discs are removed. The primary indication for discectomy is herniation (extrusion) of an intervertebral disc. Discectomy is intended to treat symptoms by relieving pressure on the affected nerve(s).

Lumbar Discectomy

Lumbar discectomy can be performed by a variety of surgical approaches. Open discectomy is the traditional approach. In open discectomy, a 2- to 3-centimeter (cm) incision is made over the area to be repaired. The spinal muscles are dissected, and a portion of the lamina may be



removed to allow access to the vertebral space. The extruded disc is removed either entirely or partially using direct visualization. Osteophytes that are protruding into the vertebral space can also be removed if deemed necessary.

The main alternative to open discectomy is microdiscectomy, which has gained popularity. Microdiscectomy is a minimally invasive procedure that involves a smaller incision, visualization of the disc through a special camera, and removal of disc fragments using special instruments. Because less resection can be performed in a microdiscectomy, it is usually reserved for smaller herniations, in which a smaller amount of tissue needs to be removed. A few controlled trials comparing open discectomy with microdiscectomy have been published and reported that neither procedure is clearly superior to the other, but that microdiscectomy is associated with more rapid recovery.^{4,5} Systematic reviews and meta-analyses have also concluded that the evidence does not support the superiority of one procedure over another.^{6,7,8}

In individuals with large annular defects following lumbar discectomy, annular closure devices have been proposed to reduce the risk of recurrence and reoperation.¹⁵ Although many devices and techniques have been investigated, a bone-anchored implant is the only device currently approved by the United States (US) Food and Drug Administration (FDA).

Adverse Events

Complications of discectomy generally include bleeding, infections, and inadvertent nerve injuries. Dural puncture occurs in a small percentage of individuals, leading to leakage of cerebrospinal fluid that can be accompanied by headaches and/or neck stiffness. In a small percentage of cases, worsening of neurologic symptoms can occur post-surgery.

Other Surgical Alternatives

Other variations on discectomy include the following. These procedures do not have high-quality comparative trials versus standard discectomy, and will therefore not be considered as true alternatives to discectomy for this policy:

- Laser discectomy
- Radiofrequency coblation (nucleoplasty)
- Automated percutaneous discectomy
- Automated endoscopic discectomy



- Intradiscal electrothermal annuloplasty
- Intradiscal radiofrequency therapy
- Vertebral axial decompression
- Chemonucleolysis.

Annular Defect Repair with Annular Closure Device Following Lumbar Discectomy

Annular closure is a surgical procedure that involves the fluoroscopic guided implantation of a bone anchored annular closure device (ACD) at the site of an annular defect following a lumbar discectomy. This surgery is performed to try to prevent reherniation and reoperation. The Barricaid annular closure device is currently the only FDA approved ACD. The Barricaid is "U" shaped with a titanium component on one side that is secured to an adjacent healthy vertebral body and a flexible polymer mesh occlusion component on the other side that is used to fill the annular defect (the damaged annulus fibrosus) to prevent future expulsion or migration of disc material. The ACD is generally used to close annular defects ≥ 6 mm. This surgical procedure is to be performed only at a single level between L4 and S1.

Lumbar Laminectomy

Lumbar laminectomy is a surgical procedure in which a portion of the vertebra (the lamina) is removed to decompress the spinal cord. Removal of the lamina creates greater space for the spinal cord and the nerve roots, thus relieving compression on these structures. Lumbar laminectomy is typically performed to alleviate compression due to lumbar spinal stenosis or a space-occupying lesion.

Associated Disorders

The most common diagnosis treated with laminectomy is spinal stenosis. In spinal stenosis, the spinal canal (vertebral foramen) is narrowed, thus compressing the spinal cord. Narrowing of the spinal canal may be congenital or degenerative in origin. Other conditions that cause pressure on the spine and spinal nerve roots include those where a mass lesion is present (e.g., tumor, abscess, other localized infection).



Surgical Techniques

Laminectomy is an inpatient procedure performed under general anesthesia. An incision is made in the back over the affected region, and the back muscles are dissected to expose the spinal cord. The lamina is then removed from the vertebral body, along with any inflamed or thickened ligaments that may be contributing to compression. Following resection, the muscles are reapproximated and the soft tissues sutured back into place. The extent of laminectomy varies, but most commonly extends two levels above and below the site of maximal cord compression.¹

There are numerous variations on the basic laminectomy procedure. It can be performed by minimally invasive techniques, which minimizes the extent of resection. Laminoplasty is a more limited procedure in which the lamina is cut but not removed, thus allowing expansion of the spinal cord. Foraminotomy and/or foramenectomy, which involve partial or complete removal of the facet joints, may be combined with laminectomy when the spinal nerve roots are compressed at the foramen. Spinal fusion is combined with laminectomy when instability of the spine is present preoperatively, or if the procedure is sufficiently extensive to expect postoperative spinal instability.

Surgical Variations

Hemilaminotomy and laminotomy, sometimes called laminoforaminotomy, are less invasive than a laminectomy. These procedures focus on the interlaminar space, where most of the pathologic changes are concentrated, minimizing resection of the stabilizing posterior spine. A laminotomy typically removes the inferior aspect of the cranial lamina, the superior aspect of the subjacent lamina, the ligamentum flavum, and the medial aspect of the facet joint. Unlike laminectomy, laminotomy does not disrupt the facet joints, supra- and interspinous ligaments, a major portion of the lamina, or the muscular attachments. Muscular dissection and retraction are required to achieve adequate surgical visualization.

Microendoscopic decompressive laminotomy is similar to laminotomy but uses endoscopic visualization. The position of the tubular working channel is confirmed by fluoroscopic guidance, and serial dilators (METRx lumbar endoscopic system, Medtronic) are used to dilate the musculature and expand the fascia. For microendoscopic decompressive laminotomy, an endoscopic curette, rongeur, and drill are used for the laminotomy, facetectomy, and foraminotomy. The working channel may be repositioned from a single incision for multilevel and bilateral dissections.



Adverse Events

Complications of laminectomy can include spinal cord and nerve root injuries, which occur at rates from 0% to 10%.²² Worsening myelopathy and/or radiculopathy can occur in a small percentage of individuals independent of surgical injuries. Worsening of symptoms is usually temporary, but in some cases it has been permanent. Infection and bleeding can occur; hematomas following surgery often require reoperation if they are close to critical structures. Leakage of spinal fluid may occur and occasionally be persistent requiring treatment. Instability of the spine can result from extensive laminectomy involving multiple levels. This is usually an indication for spinal fusion as an adjunct to laminectomy, but if fusion is not performed, the instability may lead to progressive symptoms and additional surgery. Specific complication rates depend on the indication and location treated, surgical approach, and extent of surgery.

Summary of Evidence

Lumbar Discectomy (Diskectomy)

For individuals who have lumbar herniated disc(s) and symptoms of radiculopathy rapidly progressing or refractory to conservative care who receive lumbar discectomy, the evidence includes randomized controlled trials (RCTs) and systematic reviews. Relevant outcomes are symptoms, functional outcomes, health status measures, quality of life, and treatment-related mortality and morbidity. In individuals with lumbar radiculopathy with disc herniation who receive discectomy, there is sufficient evidence to support the use of discectomy in individuals who have not responded to "usual care" for 6 weeks. The evidence is limited by a lack of high-quality trials. In most trials, a high percentage of individuals in the conservative care group crossed over to surgery. This high degree of crossover reduced the power to detect differences when assessed by intention-to-treat analysis. Analysis by treatment received was also flawed because of the potential noncomparability of groups resulting from the high crossover rate. Despite the methodologic limitations, the evidence has consistently demonstrated a probable short-term benefit for surgery and a more rapid resolution of pain and disability. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have a lumbar herniated disc and undergo discectomy, use of a bone-anchored annular closure device has been evaluated as a means to reduce reherniation and reoperation in a systematic review and RCTs. Relevant outcomes are symptoms, functional outcomes, health status measures, quality of life, and treatment-related mortality and morbidity. Although a key RCT found beneficial effects in terms of reoperation and reherniation, the



evidence is limited by a lack of blinding. In individuals with lumbar radiculopathy with disc herniation who receive discectomy and an annular closure device, the evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Lumbar Laminectomy

For individuals who have lumbar spinal stenosis and spinal cord or nerve root compression who receive lumbar laminectomy, the evidence includes RCTs and a systematic review of RCTs. Relevant outcomes are symptoms, functional outcomes, health status measures, quality of life, and treatment-related mortality and morbidity. In individuals with spinal stenosis, there is sufficient evidence that laminectomy is more effective than nonoperative "usual care" in individuals with spinal stenosis who do not improve after eight weeks of conservative treatment. The superiority of laminectomy is sustained through eight years of follow-up. This conclusion applies best to individuals who do not want to undergo intensive, organized conservative treatment, or who do not have access to such a program. For individuals who want to delay surgery and participate in an organized program of physical therapy and exercise, early surgery with the combination of conservative initial treatment and delayed surgery in selected individuals have similar outcomes at two years. From a policy perspective, this means that immediate laminectomy and intensive conservative care are both viable options. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have space-occupying lesion(s) of the spinal canal or nerve root compression who receive lumbar laminectomy, the evidence includes case series. Relevant outcomes are symptoms, functional outcomes, health status measures, quality of life, and treatment-related mortality and morbidity. Most case series are small and retrospective. They have reported that most individuals with myelopathy experience improvements in symptoms or abatement of symptom progression after laminectomy. However, this uncontrolled evidence does not provide a basis to determine the efficacy of the procedure compared with alternatives. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

The current standard of care, clinical input obtained in 2015, clinical practice guidelines, and the absence of alternative treatments all support the use of laminectomy for space-occupying lesions of the spinal canal. As a result, laminectomy may be considered medically necessary for individuals with space-occupying lesions of the spinal cord.



Ongoing and Unpublished Clinical Trials

Some currently ongoing and unpublished trials that might influence this review are listed in **Table 1**.

Table 1. Summary of Key Trials

NCT No.	Trial Name	Planned Enrollment	Completion Date
Ongoing			
NCT02477176	A Prospective Multicenter Study Investigating Re-herniation Risk Factors and Associated Costs in Primary Lumbar Disc Herniation Patients	100	Mar 2025

NCT: National clinical trial.

Clinical Input from Physician Specialty Societies and Academic Medical Centers

While the various physician specialty societies and academic medical centers may collaborate with and make recommendations during this process, through the provision of appropriate reviewers, input received does not represent an endorsement or position statement by the physician specialty societies or academic medical centers, unless otherwise noted.

In response to requests, input was received from two specialty societies and four academic medical centers when this policy was in development in 2015. Input informed criteria for medical necessity for the indications of mass lesions.

Practice Guidelines and Position Statements

The purpose of the following information is to provide reference material. Inclusion does not imply endorsement or alignment with the policy conclusions.

Guidelines or position statements will be considered for inclusion if they were issued by, or jointly by, a US professional society, an international society with US representation, or National Institute for Health and Care Excellence (NICE). Priority will be given to guidelines that are



informed by a systematic review, include strength of evidence ratings, and include a description of management of conflict of interest.

North American Spine Society

In 2014, the North American Spine Society (NASS) published evidence-based clinical guidelines on the diagnosis and treatment of lumbar disc herniation with radiculopathy.¹ **Table 2** summarizes the recommendations specific to open discectomy or microdiscectomy.

Table 2. Recommendations for Treating Lumbar Disc Herniation with Radiculopathy

Recommendations	GOR ^a
Endoscopic percutaneous discectomy is suggested for carefully selected patients to reduce early postoperative disability and reduce opioid use compared with open discectomy.	B
There is insufficient evidence to make a recommendation for or against the use of automated percutaneous discectomy compared with open discectomy.	I
Discectomy is suggested to provide more effective symptom relief than medical/interventional care for patients whose symptoms warrant surgical care. In patients with less severe symptoms, both surgery and medical/interventional care appear to be effective in short and long-term relief.	B
Use of an operative microscope is suggested to obtain comparable outcomes to open discectomy for patients whose symptoms warrant surgery.	B
There is insufficient evidence to make a recommendation for or against the use of tubular discectomy compared with open discectomy.	I

GOR: grade of recommendation.

^a Grade B: fair evidence (level II or III studies with consistent findings); grade I: insufficient evidence.

In 2011, the NASS issued evidence-based guidelines on the diagnosis and treatment of degenerative lumbar spinal stenosis.⁴⁰ The guidelines stated that patients with mild symptoms of lumbar spinal stenosis are not considered surgical candidates; however, decompressive surgery was suggested to improve outcomes in patients with moderate-to-severe symptoms of lumbar spinal stenosis (grade B recommendation). The Society also indicated that current evidence was insufficient to recommend for or against the placement of interspinous process spacing devices to treat spinal stenosis. A 2013 update of this guideline from the Degenerative Lumbar Spinal Stenosis Work Group of the NASS notes the same recommendation.¹



International Society for the Advancement of Spine Surgery

In 2019, the International Society for the Advancement of Spine Surgery (ISASS) published a policy on the surgical treatment of lumbar disc herniation with radiculopathy.⁸ This policy contained a review of available clinical evidence and concluded that discectomy (open, microtubular, or endoscopic) is a medically necessary procedure for the treatment of patients who do not respond to nonsurgical care or have severe and deteriorating symptoms. Per the policy, documentation requirements include confirmation of radiculopathy based on history/physical examination AND either the presence of disabling leg or back pain refractory to six weeks of conservative care or progressive neurologic deficit AND level appropriate documentation of nerve root compression on imaging and/or nerve conduction velocity/electromyogram.

The ISASS also included specific recommendations for bone-anchored annular closure devices as follows:

- "Patient is indicated for a primary discectomy due to a posterior or posterolateral herniation,"
- Discectomy will be performed at a single level that includes L4-L5 or L5-S1,
- The annular defect is large (between 4 and 6 mm tall and between 6 and 10 mm wide) after completion of the discectomy procedure."

National Institute for Health and Care Excellence

In 2014, NICE in their interventional procedure guidance (IPG506)⁴¹ recommended that the current evidence on the safety and efficacy of insertion of an annular disc implant at lumbar discectomy is limited in quantity and quality. They recommend that the procedure only be performed with special arrangements for clinical governance, consent, and audit or research.

Medicare National Coverage

There is no national coverage determination.



Regulatory Status

Discectomy and laminectomy are surgical procedures and, as such, are not subject to regulation by the US FDA. Some of the instrumentation used during laminectomy may be subject to FDA approval.

In 2019, the FDA granted premarket approval for the Barricaid implantable annular closure device (ACD) (Intrinsic Therapeutics, Inc.) (P160050). It is "indicated for reducing the incidence of reherniation and reoperation in skeletally mature patients with radiculopathy attributed to a posterior or posterolateral herniation..." It is used to treat a large annular defect between 4-6 mm tall and between 6-10 mm wide following a primary discectomy procedure (excision of herniated intervertebral disc) at a single level between L4 and S1.

FDA Product code: QES.

References

1. Kreiner DS, Hwang SW, Easa JE, et al. An evidence-based clinical guideline for the diagnosis and treatment of lumbar disc herniation with radiculopathy. *Spine J.* Jan 2014; 14(1): 180-91. PMID 24239490
2. American Academy of Neurology (AAN). Use of epidural steroid injections to treat lumbosacral radicular pain. 2007 (retired February 2025); <https://www.aan.com/Guidelines/home/GuidelineDetail/255>. Accessed July 16, 2025.
3. Jacobs WC, van Tulder M, Arts M, et al. Surgery versus conservative management of sciatica due to a lumbar herniated disc: a systematic review. *Eur Spine J.* Apr 2011; 20(4): 513-22. PMID 20949289
4. Henriksen L, Schmidt K, Eskesen V, et al. A controlled study of microsurgical versus standard lumbar discectomy. *Br J Neurosurg.* Jun 1996; 10(3): 289-93. PMID 8799541
5. Katayama Y, Matsuyama Y, Yoshihara H, et al. Comparison of surgical outcomes between macro discectomy and micro discectomy for lumbar disc herniation: a prospective randomized study with surgery performed by the same spine surgeon. *J Spinal Disord Tech.* Jul 2006; 19(5): 344-7. PMID 16826006
6. Mu X, Wei J, Li P. What were the advantages of microendoscopic discectomy for lumbar disc herniation comparing with open discectomy: a meta-analysis?. *Int J Clin Exp Med.* 2015; 8(10): 17498-506. PMID 26770340
7. Arts MP, Kuršumović A, Miller LE, et al. Comparison of treatments for lumbar disc herniation: Systematic review with network meta-analysis. *Medicine (Baltimore).* Feb 2019; 98(7): e14410. PMID 30762743
8. Lorio M, Kim C, Araghi A, et al. International Society for the Advancement of Spine Surgery Policy 2019-Surgical Treatment of Lumbar Disc Herniation with Radiculopathy. *Int J Spine Surg.* Feb 2020; 14(1): 1-17. PMID 32128297
9. Katz NP, Paillard FC, Ekman E. Determining the clinical importance of treatment benefits for interventions for painful orthopedic conditions. *J Orthop Surg Res.* Feb 03 2015; 10: 24. PMID 25645576
10. Parker SL, Mendenhall SK, Shau DN, et al. Minimum clinically important difference in pain, disability, and quality of life after neural decompression and fusion for same-level recurrent lumbar stenosis: understanding clinical versus statistical significance. *J Neurosurg Spine.* May 2012; 16(5): 471-8. PMID 22324801



11. Katz JN. Surgery for lumbar spinal stenosis: informed patient preferences should weigh heavily. *Ann Intern Med.* Apr 07 2015; 162(7): 518-9. PMID 25844999
12. Washington State Health Care Authority. *Surgery for Lumbar Radiculopathy/ Sciatica. Final Evidence Report.* Prepared by the RTI-UNC Evidence-based Practice Center. 2018. Available at: <https://www.hca.wa.gov/about-hca/programs-and-initiatives/health-technology-assessment/surgery-lumbar-radiculopathy/sciatica>. Accessed July 16, 2025.
13. Clark R, Weber RP, Kahwati L. Surgical Management of Lumbar Radiculopathy: a Systematic Review. *J Gen Intern Med.* Mar 2020; 35(3): 855-864. PMID 31713029
14. Bailey CS, Rasoulinejad P, Taylor D, et al. Surgery versus Conservative Care for Persistent Sciatica Lasting 4 to 12 Months. *N Engl J Med.* Mar 19 2020; 382(12): 1093-1102. PMID 32187469
15. Miller LE, Allen RT, Duhon B, et al. Expert review with meta-analysis of randomized and nonrandomized controlled studies of Barricaid annular closure in patients at high risk for lumbar disc reherniation. *Expert Rev Med Devices.* May 2020; 17(5): 461-469. PMID 32237917
16. Barth M, Fontana J, Thomé C, et al. Occurrence of discal and non-discal changes after sequestrectomy alone versus sequestrectomy and implantation of an anulus closure device. *J Clin Neurosci.* Dec 2016; 34: 288-293. PMID 27742376
17. Cho PG, Shin DA, Park SH, et al. Efficacy of a Novel Annular Closure Device after Lumbar Discectomy in Korean Patients : A 24-Month Follow-Up of a Randomized Controlled Trial. *J Korean Neurosurg Soc.* Nov 2019; 62(6): 691-699. PMID 31679318
18. Thomé C, Klassen PD, Bouma GJ, et al. Annular closure in lumbar microdiscectomy for prevention of reherniation: a randomized clinical trial. *Spine J.* Dec 2018; 18(12): 2278-2287. PMID 29730458
19. Vukas D, Ledić D, Grahovac G, et al. Clinical outcomes in patients after lumbar disk surgery with annular reinforcement device: two-year follow up. *Acta Clin Croat.* Mar 2013; 52(1): 87-91. PMID 23837277
20. Kienzler JC, Klassen PD, Miller LE, et al. Three-year results from a randomized trial of lumbar discectomy with annulus fibrosus occlusion in patients at high risk for reherniation. *Acta Neurochir (Wien).* Jul 2019; 161(7): 1389-1396. PMID 31089894
21. Thomé C, Kuršumovic A, Klassen PD, et al. Effectiveness of an Annular Closure Device to Prevent Recurrent Lumbar Disc Herniation: A Secondary Analysis With 5 Years of Follow-up. *JAMA Netw Open.* Dec 01 2021; 4(12): e2136809. PMID 34882183
22. Epstein NE. Laminectomy for cervical myelopathy. *Spinal Cord.* Jun 2003; 41(6): 317-27. PMID 12746738
23. Katz NP, Paillard FC, Ekman E. Determining the clinical importance of treatment benefits for interventions for painful orthopedic conditions. *J Orthop Surg Res.* Feb 03 2015; 10: 24. PMID 25645576
24. Zaina F, Tomkins-Lane C, Carragee E, et al. Surgical versus non-surgical treatment for lumbar spinal stenosis. *Cochrane Database Syst Rev.* Jan 29 2016; 2016(1): CD010264. PMID 26824399
25. Wei FL, Zhou CP, Liu R, et al. Management for lumbar spinal stenosis: A network meta-analysis and systematic review. *Int J Surg.* Jan 2021; 85: 19-28. PMID 33253898
26. Weinstein JN, Tosteson TD, Lurie JD, et al. Surgical versus nonoperative treatment for lumbar spinal stenosis four-year results of the Spine Patient Outcomes Research Trial. *Spine (Phila Pa 1976).* Jun 15 2010; 35(14): 1329-38. PMID 20453723
27. Lurie JD, Tosteson TD, Tosteson A, et al. Long-term outcomes of lumbar spinal stenosis: eight-year results of the Spine Patient Outcomes Research Trial (SPORT). *Spine (Phila Pa 1976).* Jan 15 2015; 40(2): 63-76. PMID 25569524
28. Släts P, Malmivaara A, Heliövaara M, et al. Long-term results of surgery for lumbar spinal stenosis: a randomised controlled trial. *Eur Spine J.* Jul 2011; 20(7): 1174-81. PMID 21240530
29. Malmivaara A, Släts P, Heliövaara M, et al. Surgical or nonoperative treatment for lumbar spinal stenosis? A randomized controlled trial. *Spine (Phila Pa 1976).* Jan 01 2007; 32(1): 1-8. PMID 17202885



30. Amundsen T, Weber H, Nordal HJ, et al. Lumbar spinal stenosis: conservative or surgical management?: A prospective 10-year study. *Spine (Phila Pa 1976)*. Jun 01 2000; 25(11): 1424-35; discussion 1435-6. PMID 10828926
31. Atlas SJ, Keller RB, Wu YA, et al. Long-term outcomes of surgical and nonsurgical management of lumbar spinal stenosis: 8 to 10 year results from the maine lumbar spine study. *Spine (Phila Pa 1976)*. Apr 15 2005; 30(8): 936-43. PMID 15834339
32. Delitto A, Piva SR, Moore CG, et al. Surgery versus nonsurgical treatment of lumbar spinal stenosis: a randomized trial. *Ann Intern Med*. Apr 07 2015; 162(7): 465-73. PMID 25844995
33. Jung JM, Hyun SJ, Kim KJ, et al. A prospective study of non-surgical versus surgical treatment for lumbar spinal stenosis without instability. *J Clin Neurosci*. Oct 2020; 80: 100-107. PMID 33099329
34. Singhatanadighe W, Limthongkul W, Valone F, et al. Outcomes following Laminoplasty or Laminectomy and Fusion in Patients with Myelopathy Caused by Ossification of the Posterior Longitudinal Ligament: A Systematic Review. *Global Spine J*. Nov 2016; 6(7): 702-709. PMID 27781191
35. Zong S, Zeng G, Xiong C, et al. Treatment results in the differential surgery of intradural extramedullary schwannoma of 110 cases. *PLoS One*. 2013; 8(5): e63867. PMID 23724010
36. Tredway TL, Santiago P, Hrubes MR, et al. Minimally invasive resection of intradural-extramedullary spinal neoplasms. *Neurosurgery*. Feb 2006; 58(1 Suppl): ONS52-8; discussion ONS52-8. PMID 16479629
37. Mo K, Gupta A, Laljani R, et al. Laminectomy Versus Laminectomy with Fusion for Intradural Extramedullary Tumors: A Systematic Review and Meta-Analysis. *World Neurosurg*. Aug 2022; 164: 203-215. PMID 35487493
38. Byvaltsev V, Polkin R, Kalinin A, et al. Laminoplasty versus Laminectomy in the Treatment of Primary Spinal Cord Tumors in Adult Patients: A Systematic Review and Meta-analysis of Observational Studies. *Asian Spine J*. Jun 2023; 17(3): 595-609. PMID 36717092
39. El-Hajj VG, Singh A, Pham K, et al. Long-term outcomes following surgical treatment of spinal arachnoid cysts: a population-based consecutive cohort study. *Spine J*. Dec 2023; 23(12): 1869-1876. PMID 37604309
40. North American Spine Society. Evidence-based clinical guidelines for multidisciplinary spine care. Diagnosis and treatment of lumbar spinal stenosis. 2011. Available at: <https://www.spine.org/Portals/0/assets/downloads/ResearchClinicalCare/Guidelines/LumbarStenosis.pdf>. Accessed July 16, 2025.
41. National Institute for Health and Care Excellence (NICE. Insertion of an annular disc implant at lumbar discectomy. Interventional procedure guidance (IPG506). London, UK. NICE. Published November 27, 2014.
42. Hayes, Inc. Health Technology Assessment. Annular closure for prevention of lumbar disc reherniation. Lansdale, PA. Hayes, Inc., June 23, 2021. Accessed April 3, 2023.
43. US Food and Drug Administration (FDA). Summary of Safety and Effectiveness Data (SSED). Barricaid Annular Closure Device (ACD). (P160050). Intrinsic Therapeutics. Silver Spring, MD. FDA. February 8, 2019. Available at URL: https://www.accessdata.fda.gov/cdrh_docs/pdf16/P160050B.pdf. Accessed July 16, 2025.

Appendix



Figure 1. Lumbosacral dermatome innervations ⁴⁰

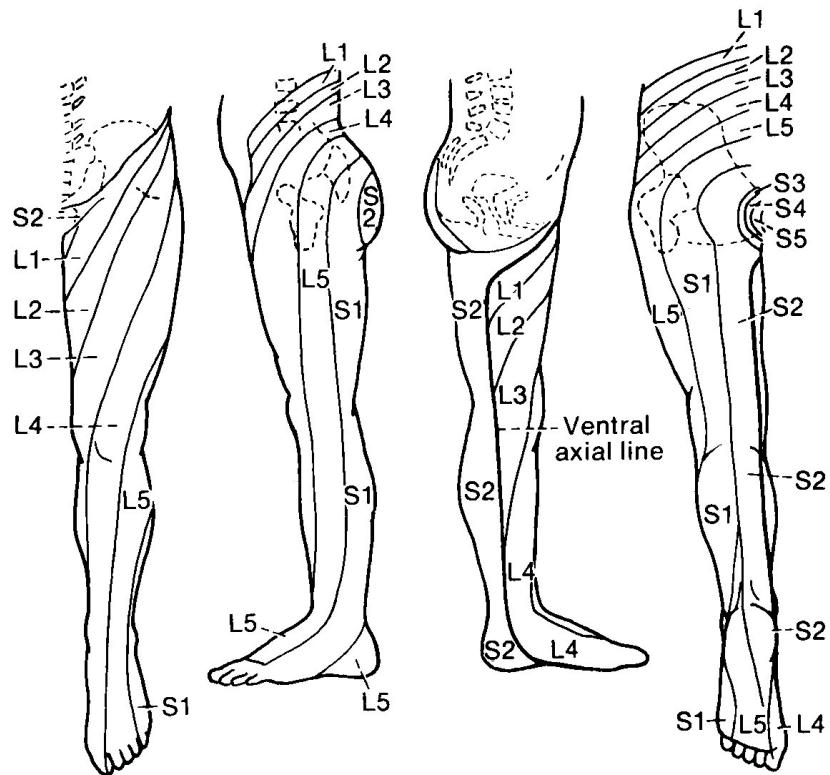


Fig. 1

Labels indicate the innervation of each lumbosacral dermatome. L=lumbar, S=sacral

L1, 2, 3, 4 – front and inner surfaces of legs	L4 – inner (medial) side of the great toe
L4, 5, S1 – foot	L5, S1, S2 – back and outer surfaces of legs, buttocks
S1 – outer (lateral) margin of foot and little toe	S2, 3, 4 – perineum (urogenital and anal areas of pelvis)

History

Date	Comments
01/13/14	New policy. Lumbar decompression surgery may be considered medically necessary when applicable criteria are met. Effective May 18, 2014 with 90-day hold for provider notification.

Date	Comments
01/14/14	Replace policy. Policy criteria revised for lumbar discectomy MRI sub-bullet to add "nerve root compression that corresponds to symptoms and physical examination findings or there is definitive neurological localization by other means (e.g., selective nerve root injections)" and the neurological deficits sub-bullet add "to include alternative signs of lumbar root irritation (e.g., positive leg raising test)". ICD-10 CM and ICD-10 PCS codes removed. Policy statements changed as noted.
02/10/14	Replace policy. Policy statement revised: deleted cauda equina syndrome (CES) as an indication since "the rapid progression of symptoms" includes CES, added lumbar spine CT myelogram to diagnostic imaging criteria, minor edits for readability. Related policies list revised. In the Policy Guidelines, added information about pre-service requests, added selective nerve root injections to the diagnostic test reports, expanded definition of CES. Reference 16 added for Figure 1, second graphic removed. Policy statements changed as noted.
02/27/14	Updated Related Policies. Add 8.03.501.
04/04/14	Minor rewording of not medically necessary policy statement for clarity, intent is unchanged.
05/02/14	Update Related Policies. Add 7.01.537 and 8.03.503.
05/20/14	Update Related Policies. Remove 7.01.116 as it was deleted, and replace with 7.01.555.
06/26/14	Update Related Policies. Add 7.01.18.
09/11/14	Update Related Policies. Add 8.03.502.
09/25/14	Update Related Policies. Add 7.01.93.
12/22/14	Interim Update. Updated Related Policies added 8.03.09. Reference 7 removed from the additional resources and websites section; others renumbered. Policy statement unchanged.
01/06/15	Update Related Policies. Add 8.01.40.
09/24/15	Coding update; ICD-9 diagnosis and procedure codes removed. These were for informational purposes only.
10/13/15	Annual update. Reference 8 added. Policy statements unchanged. Coding update: Removed CPT codes 63200, 63252, 63277, 63282, 63287 and 63290; these are not specific to the procedures addressed in this policy.
11/10/15	Interim Review. Policy guidelines update to reflect imaging timeline of 12 from 6 to be consistent with all policies within documentation requirements.
03/21/16	Interim Update. Removed related policy 8.01.40 as it was archived.
07/01/16	Annual Review, approved June 14, 2016. Policy updated with literature review; references added. Policy statements unchanged but added clarification that "rapid" progression is defined as 48 hours or less.
11/24/16	Policy moved into new format; no change to policy statements.



Date	Comments
01/01/17	Coding update; added new CPT 62380 effective 1/1/17.
07/01/17	Annual review, approved June 22, 2017. Minor language update in policy statement for clarification purposes. No major change to policy statements.
03/01/18	Note added that this policy has been revised. Added link to revised policy that will become effective June 1, 2018. Added Documentation Requirements section.
06/01/18	Minor update; removed note and link to updated policy. Surgery Site of Service criteria becomes effective.
07/01/18	Annual Review, approved June 22, 2018. Policy updated with literature review through March 2018; references 16 and 19 added. Policy statements unchanged.
02/01/19	Minor update, added 7.01.560 to related policies.
05/01/19	Minor update, clarified Site of Service requirements.
09/01/19	Annual Review, approved August 6, 2019. Policy updated with literature review through April 2019, references added, and some previous references removed. Policy title changed from "Lumbar Spine Decompression Surgery: Discectomy, Foraminotomy, Laminotomy, Laminectomy" to "Lumbar Spine Decompression Surgery: Discectomy, Foraminotomy, Laminotomy, Laminectomy in Adults". Policy statements unchanged. Removed CPT codes 62287 and 62380.
04/01/20	Delete policy, approved March 10, 2020. This policy will be deleted effective July 2, 2020, and replaced with InterQual criteria for dates of service on or after July 2, 2020.
06/10/20	Interim Review, approved June 9, 2020, effective June 10, 2020. This policy is reinstated immediately and will no longer be deleted or replaced with InterQual criteria on July 2, 2020.
09/01/20	Annual Review, approved August 4, 2020. Policy updated with literature review through April 2020; References added. Policy statements unchanged.
12/01/20	Interim Review, approved November 19, 2020. Edits made to conservative care policy statements for greater clarity and consistency.
09/01/21	Annual Review, approved August 3, 2021. Policy updated with literature review through May 3, 2021; no references added. Policy statements unchanged. Added HCPCS code C9757.
09/01/22	Annual Review, approved August 8, 2022. Policy updated with literature review through April 19, 2022; no references added. Policy statements unchanged.
04/01/23	Coding update. Removed HCPC code C9757 as this was moved to the E&I policy.
05/01/23	Interim Review, approved April 11, 2023. Added policy statement that the use of a bone anchored annular closure device (ACD) to repair an annular defect is considered investigational. References added.
09/01/23	Annual Review, approved August 21, 2023. Changed the wording from "patient" to "individual" throughout the policy for standardization. Policy updated with literature



Date	Comments
	review through May 5, 2023; references added. Minor editorial refinements to policy statements for clarity only; intent unchanged. HCPC code C9757 was added back in this policy on 05/01/2023. This change was inadvertently missed in the History section.
12/01/23	Interim Review, approved November 6, 2023. Policy updated with literature review through July 28, 2023; references added. Minor editorial refinements to policy statements; intent unchanged.
09/01/24	Annual Review, approved August 12, 2024. Policy updated with literature review through May 8, 2024; references added. Policy statements unchanged.
08/01/25	Minor update. Removed Related Policy 11.01.524 Site of Service Surgical Procedures. Place of Service Professional Claims Codes added to Related Information.
09/01/25	Annual Review, approved August 25, 2025. Policy updated with literature review through April 21, 2025; no references added. Policy statements unchanged.
01/01/26	Coding update. Added new CPT code 63032 effective January 1, 2026.

Disclaimer: This medical policy is a guide in evaluating the medical necessity of a particular service or treatment. The Company adopts policies after careful review of published peer-reviewed scientific literature, national guidelines and local standards of practice. Since medical technology is constantly changing, the Company reserves the right to review and update policies as appropriate. Member contracts differ in their benefits. Always consult the member benefit booklet or contact a member service representative to determine coverage for a specific medical service or supply. CPT codes, descriptions and materials are copyrighted by the American Medical Association (AMA). ©2026 Premera All Rights Reserved.

Scope: Medical policies are systematically developed guidelines that serve as a resource for Company staff when determining coverage for specific medical procedures, drugs or devices. Coverage for medical services is subject to the limits and conditions of the member benefit plan. Members and their providers should consult the member benefit booklet or contact a customer service representative to determine whether there are any benefit limitations applicable to this service or supply. This medical policy does not apply to Medicare Advantage.

