MEDICAL POLICY – 7.01.551
Lumbar Spine Decompression Surgery: Discectomy, Foraminotomy, Laminotomy, Laminectomy

BCBSA Ref. Policies: 7.01.145 & 7.01.146

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), widening 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

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Medical Necessity</th>
</tr>
</thead>
</table>
| Lumbar discectomy (diskectomy), foraminotomy, laminotomy | Lumbar discectomy (diskectomy), foraminotomy, or laminotomy surgery may be considered medically necessary for the rapid (48 hours or less) progression of neurologic impairment (eg, cauda equina syndrome, foot drop, extremity weakness, saddle anesthesia, sudden onset of bladder or bowel dysfunction). If there is not rapid progression of neurologic impairment, lumbar discectomy (diskectomy), foraminotomy, or laminotomy may be considered medically necessary when ALL of the following criteria are met:  
• All other sources of low back pain have been ruled out  
   AND  
• 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 (eg, selective nerve root injections)  
   AND  
• 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)  
   AND  
• Neurological deficits (eg, reflex change in the legs, dermatomal sensory loss, motor weakness) or alternative signs of lumbar root irritation (eg, positive leg raising test) are present on |
<table>
<thead>
<tr>
<th>Procedure</th>
<th>Medical Necessity</th>
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<tbody>
<tr>
<td></td>
<td>physical examination</td>
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<tr>
<td><strong>AND</strong></td>
<td>The member has actively tried and failed at least 6 weeks of conservative medical management such as:</td>
</tr>
<tr>
<td></td>
<td>• Activity modification</td>
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<td></td>
<td>• Oral analgesics and/or anti-inflammatory medications</td>
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<td></td>
<td>• Physical therapy</td>
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<td>• Chiropractic manipulation</td>
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<tr>
<td></td>
<td>• Epidural steroid injections</td>
</tr>
<tr>
<td><strong>Lumbar laminectomy</strong></td>
<td><strong>Lumbar laminectomy may be considered medically necessary for the rapid (48 hours or less) progression of neurologic impairment (eg, cauda equina syndrome, foot drop, extremity weakness, saddle anesthesia, sudden onset of bowel or bladder dysfunction).</strong></td>
</tr>
<tr>
<td></td>
<td><strong>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:</strong></td>
</tr>
<tr>
<td></td>
<td>• All other sources of low back pain have been ruled out</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td>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</td>
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<tr>
<td><strong>AND</strong></td>
<td>A lumbar spine MRI or lumbar spine CT scan with myelogram within the past 12 months shows lumbar spine stenosis that corresponds to the clinical findings on physical examination</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td>The member has actively tried and failed at least 12 weeks of conservative medical management such as:</td>
</tr>
<tr>
<td></td>
<td>• Activity modification</td>
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<tr>
<td></td>
<td>• Oral analgesics and/or anti-inflammatory medications</td>
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<tr>
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<td>• Chiropractic manipulation</td>
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<td></td>
<td>• Epidural steroid injections</td>
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</tbody>
</table>
Lumbar laminectomy may also be considered medically necessary for ANY of the following:

- Dorsal rhizotomy for spasticity in cerebral palsy
- Lumbar spondylolisthesis confirmed by a lumbar MRI study
- Metastatic neoplasm of the spine, non-cancerous spinal tumor, 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
- 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

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 in this policy.

The provider’s choice of interventional surgery depends on the specific member’s symptoms and imaging findings.

See the Documentation section below.

See Related Policies for other spinal procedure not addressed in this policy.

### Coding

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPT</td>
<td></td>
</tr>
<tr>
<td>62287</td>
<td>Decompression procedure, percutaneous, of nucleus pulposus of intervertebral disc, any method, single or multiple levels, lumbar (e.g., manual or automated percutaneous discectomy, percutaneous laser discectomy)</td>
</tr>
<tr>
<td>62380</td>
<td>Endoscopic decompression of spinal cord, nerve root(s), including laminotomy, partial</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
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<td>--------</td>
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</tr>
<tr>
<td>63005</td>
<td>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</td>
</tr>
<tr>
<td>63012</td>
<td>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)</td>
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<tr>
<td>63017</td>
<td>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</td>
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<tr>
<td>63030</td>
<td>Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc; 1 interspace, lumbar</td>
</tr>
<tr>
<td>63035</td>
<td>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)</td>
</tr>
<tr>
<td>63042</td>
<td>Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, reexploration, single interspace; lumbar</td>
</tr>
<tr>
<td>63044</td>
<td>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)</td>
</tr>
<tr>
<td>63047</td>
<td>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</td>
</tr>
<tr>
<td>63048</td>
<td>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)</td>
</tr>
<tr>
<td>63056</td>
<td>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)</td>
</tr>
<tr>
<td>63057</td>
<td>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)</td>
</tr>
<tr>
<td>63185</td>
<td>Laminectomy with rhizotomy; 1 or 2 segments</td>
</tr>
<tr>
<td>63190</td>
<td>Laminectomy with rhizotomy; more than 2 segments</td>
</tr>
<tr>
<td>63191</td>
<td>Laminectomy with section of spinal accessory nerve</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
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<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>63267</td>
<td>Laminectomy for excision or evacuation of intraspinal lesion other than neoplasm, extradural; lumbar</td>
</tr>
<tr>
<td>63272</td>
<td>Laminectomy for excision of intraspinal lesion other than neoplasm, intradural; lumbar</td>
</tr>
</tbody>
</table>

**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

#### Definition of Terms

**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 to 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 is seen that 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 patients with cerebral palsy.

**Foraminotomy (foraminectomy):** 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 a 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.

**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.

Documentation

Documentation in the medical record must clearly support the medical necessity of the surgery and include the following information:

Medical History

- 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:
  - Activity modification for at least 6 weeks
  - Oral analgesics and/or anti-inflammatory medications
  - Physical therapy
  - Chiropractic manipulation
  - Epidural steroid injections

Physical Examination

Clinical findings including the patient’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 patient’s diagnostic workup.

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 patients may experience radiating pain in addition to decreased range of motion and low back discomfort. For the majority of patients, 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 patients 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 a 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, lumbar laminectomy.

Background

**Lumbar Discectomy (Diskectomy)**

Lumbar disc prolapse, protrusion, or extrusion accounts for less than 5% of all low back problems, but are the most common causes of nerve root pain and surgical interventions. The primary motivation for any form of surgery for disc prolapse is to relieve nerve root irritation or compression due to herniated disc material.\(^4\) In order to visualize the disc, vertebrae and surrounding tissue, the surgery may be done as an open procedure or microscopically (see Related Policies). Decompression surgery is a common treatment for lumbar disc herniation (LDH), though it may be used in the cervical and thoracic spine areas.

The comparative evidence on lumbar discectomy versus conservative care consists of a small number of RCTs and nonrandomized comparative studies. The RCT evidence is limited by a lack of high-quality trials. In most trials, there is a high percentage of patients in the conservative group who cross over to receive surgery. This high degree of contamination leads to reduced power to detect a difference when an ITT analysis is used. Analysis by treatment received is also flawed because of the potential noncomparability of groups resulting from the high crossover.

Despite the methodologic limitations of the evidence, the RCTs are consistent in demonstrating a probable benefit for surgery in more rapid resolution of pain and disability. For the ITT analyses, there are small differences in favor of surgery that, which sometimes reach statistical significance and other times do not. In contrast, on analysis by treatment received and in the nonrandomized comparative studies, there are larger differences in favor of surgery that exceed the threshold for clinical significance. At time points of 1 year or longer, outcomes from surgery and conservative care appear to be equivalent.
**Lumbar Laminotomy**

A 2008 quasi-randomized study from Asia compared laminoforaminotomy with laminectomy (n=152). Inclusion criteria for participants was 1) neurogenic claudication as defined by leg pain that limited standing, ambulation, or both; 2) a history of exercise intolerance; 3) magnetic resonance imaging (MRI), myelogram, or computed tomography (CT) showing compressive central stenosis (central sagittal diameter less than 10 mm) with or without lateral recess stenosis (lateral recess diameter less than 3 mm); and 4) failure of conservative therapy after an adequate trial (not defined). Exclusion criteria for selecting participants was 1) previous surgery at the same level; 2) isthmic spondylolisthesis; 3) congenital spinal stenosis less than 8 mm caused by short pedicles; 4) dynamic instability; 5) cauda equina syndrome; 6) worker’s compensation claim or other litigation; 7) dying of other disease or otherwise lost to follow-up. An average of 40 months after surgery, the Oswestry Disability Index (ODI) and Visual Analog Scale (VAS) for back and leg pain were low (eg, less than 1 on VAS) for both groups, and significantly lower for laminotomy. The proportion of patients with good to excellent results (absent or occasional mild back and leg pain and the ability to ambulate more than 1 mile or 20 minutes) was 89% for patients treated with laminotomy and 63% for patients treated with laminectomy. Seven percent of patients treated with laminectomy had poor results at the final interview (range: 27–58 months), compared with none in the laminotomy group. The study limitations are the lack of blinding and the unknown number of patients lost to follow-up.

**Lumbar Spinal Stenosis**

There is some evidence from RCTs on the efficacy of laminectomy versus nonsurgical treatment for lumbar spinal stenosis, but the RCTs have methodologic limitations. One RCT was small, with follow-up limited to 2 years, and the second RCT had a very high rate of crossover that may have subverted the randomization process. Both of the RCTs reported that improvements in pain and functional status were greater with surgery compared with nonsurgical treatment over the 2 to 4 year time frame. Results of nonrandomized comparative studies corroborate the findings of the RCTs, reporting greater improvement with surgical treatment. The benefit of surgery may diminish over time, with 1 long-term cohort study reporting that the initial benefit of surgery was no longer present at the 8- to 10-year time frame.
Summary of Evidence

The decision to perform lumbar decompression surgery involves a holistic review of the patient. Symptoms including the presence of neurological deficits, pain acuity and duration, physical examination and MRI findings, along with the impact on activities of daily living are factors that influence the decision making discussion. Patients who fail to achieve symptom or functional improvement after actively participating in a 6-12 week conservative (non-surgical) treatment program may be candidates for a decompression surgery. The surgeon’s choice of interventional procedure(s) depends on the specific member’s symptoms and imaging findings.

Clinical Trials

Ongoing and Unpublished Clinical Trials

A currently unpublished trial that might influence this review is listed in Table 1.

Table 1. Summary of Key Trials

<table>
<thead>
<tr>
<th>NCT No.</th>
<th>Trial Name</th>
<th>Planned Enrollment</th>
<th>Completion Date</th>
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<tr>
<td><strong>Ongoing</strong></td>
<td></td>
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<tr>
<td>NCT01335646</td>
<td>Surgery Versus Standardized Non-operative Care for the Treatment of Lumbar Disc Herniations: A Canadian Trial</td>
<td>140</td>
<td>March 2017</td>
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<tr>
<td>NCT02477176</td>
<td>A Prospective Multicenter Study Investigating Reherniation Risk Factors and Associated Costs in Primary Lumbar Disc Herniation Patients</td>
<td>100</td>
<td>July 2017</td>
</tr>
</tbody>
</table>

NCT: National clinical trial.

Practice Guidelines and Position Statements

American Pain Society (APS)

In 2009 the APS published evidence based clinical practice guidelines for Interventional Therapies, Surgery and Interdisciplinary Rehabilitation for Low Back Pain. Developed by a
multidisciplinary panel of experts based on a systematic review of the literature, the recommendations are:

- **Recommendation 1:** In patients with chronic nonradicular low back pain, provocative discography is not recommended as a procedure for diagnosing discogenic low back pain (strong recommendation, moderate-quality evidence). There is insufficient evidence to evaluate validity or utility of diagnostic selective nerve root block, intra-articular facet joint block, medial branch block, or sacroiliac joint block as diagnostic procedures for low back pain with or without radiculopathy.

- **Recommendation 2:** In patients with nonradicular low back pain who do not respond to usual, noninterdisciplinary interventions, it is recommended that clinicians consider intensive interdisciplinary rehabilitation with a cognitive/behavioral emphasis (strong recommendation, high-quality evidence). Chronic back pain is a complex condition that involves biologic, psychological, and environmental factors. For patients with persistent and disabling back pain despite recommended noninterdisciplinary therapies, clinicians should counsel patients about interdisciplinary rehabilitation (defined as an integrated intervention with rehabilitation plus a psychological and/or social/occupational component) as a treatment option.

- **Recommendation 3:** In patients with persistent nonradicular low back pain, facet joint corticosteroid injection, prolotherapy, and intradiscal corticosteroid injection are not recommended (strong recommendation, moderate-quality evidence). There is insufficient evidence to adequately evaluate benefits of local injections, botulinum toxin injection, epidural steroid injection, intradiscal electrothermal therapy (IDET), therapeutic medial branch block, radiofrequency denervation, sacroiliac joint steroid injection, or intrathecal therapy with opioids or other medications for nonradicular low back pain.

- **Recommendation 4:** In patients with nonradicular low back pain, common degenerative spinal changes, and persistent and disabling symptoms, it is recommended that clinicians discuss risks and benefits of surgery as an option (weak recommendation, moderate-quality evidence). It is recommended that shared decision-making regarding surgery for nonspecific low back pain include a specific discussion about intensive interdisciplinary rehabilitation as a similarly effective option, the small to moderate average benefit from surgery versus noninterdisciplinary nonsurgical therapy, and the fact that the majority of such patients who undergo surgery do not experience an optimal outcome (defined as minimum or no pain, discontinuation of or occasional pain medication use, and return of high-level function).

- **Recommendation 5:** In patients with nonradicular low back pain, common degenerative spinal changes, and persistent and disabling symptoms, there is insufficient evidence to
adequately evaluate long-term benefits and harms of vertebral disc replacement (insufficient evidence).

- **Recommendation 6:** In patients with persistent radiculopathy due to herniated lumbar disc, it is recommended that clinicians discuss risks and benefits of epidural steroid injection as an option (weak recommendation, moderate-quality evidence). It is recommended that shared decision-making regarding epidural steroid injection include a specific discussion about inconsistent evidence showing moderate short-term benefits, and lack of long-term benefits. There is insufficient evidence to adequately evaluate benefits and harms of epidural steroid injection for spinal stenosis.

- **Recommendation 7:** In patients with persistent and disabling radiculopathy due to herniated lumbar disc or persistent and disabling leg pain due to spinal stenosis, it is recommended that clinicians discuss risks and benefits of surgery as an option (strong recommendation, high-quality evidence). It is recommended that shared decision-making regarding surgery include a specific discussion about moderate average benefits, which appear to decrease over time in patients who undergo surgery.

- **Recommendation 8:** In patients with persistent and disabling radicular pain following surgery for herniated disc and no evidence of a persistently compressed nerve root, it is recommended that clinicians discuss risks and benefits of spinal cord stimulation as an option (weak recommendation, moderate-quality evidence). It is recommended that shared decision-making regarding spinal cord stimulation include a discussion about the high rate of complications following spinal cord stimulator placement.

*American Academy/Association of Orthopaedic Surgeons (AAOS)*

**AAOS Lumbar Spinal Stenosis**

The educational section of the AAOS website states that nonsurgical treatment should focus on relieving pain and restoring function and may include PT, traction, anti-inflammatory medications, steroid injections, acupuncture and chiropractic manipulation. The society further states as part of their education that:

> Over the long term, 15% of patients will improve with nonsurgical modalities, and 70% will continue to experience neurogenic claudication. Therefore, most patients with LSS will, in time, require surgical intervention for a more definitive treatment. Surgery for lumbar spinal stenosis is generally reserved for patients who have poor quality of life due to pain and weakness. Patients may complain of inability to walk
for an extended length of time without sitting. This is often the reason that patients consider surgery.

There are two main surgical options to treat lumbar spinal stenosis: laminectomy and spinal fusion. Both options can result in excellent pain relief. The advantages and disadvantages of both should be discussed.

**North American Spine Society (NASS)**

**NASS Clinical Guidelines – Lumbar Herniated Disc with Radiculopathy**

The North American Spine Society issued 2012 evidence-based clinical guidelines on the diagnosis and treatment of lumbar disc herniation with radiculopathy. The guidelines state that discectomy is suggested to provide more effective symptom relief than medical/interventional care for patients with lumbar disc herniation with radiculopathy whose symptoms warrant surgical intervention. In patients with less severe symptoms, surgery of medical/interventional care appears to be effective for both short- and long-term relief (grade B recommendation). There is also a grade C recommendation stating that endoscopic percutaneous discectomy may be considered for the treatment of lumbar disc herniation with radiculopathy.

**NASS Clinical Guidelines – Degenerative Spinal Stenosis**

The society states the following treatment recommendations:

**Grade of Recommendation: I**

There is insufficient evidence to make a recommendation for or against the use of physical therapy or exercise as stand-alone treatments for degenerative lumbar spinal stenosis. In the absence of reliable evidence, it is the work group’s opinion that a limited course of active physical therapy is an option for patients with lumbar spinal stenosis.
**Grade of Recommendation: B**

Interlaminar epidural steroid injections are suggested to provide short term (two weeks to six months) symptom relief in patients with neurogenic claudication or radiculopathy. There is, however, conflicting evidence concerning long-term (21.5-24 months) efficacy.

**Grade of Recommendation: C**

A multiple injection regimen of radiographically-guided transforaminal epidural steroid injection or caudal injections is suggested to produce medium-term (3-36 months) relief of pain in patients with radiculopathy or neurogenic intermittent claudication (NIC) from lumbar spinal stenosis.

**Grade of Recommendation: B**

Decompressive surgery is suggested to improve outcomes in patients with moderate to severe symptoms of lumbar spinal stenosis.

**Grade of Recommendation: C**

Medical/interventional treatment may be considered for patients with moderate symptoms of lumbar spinal stenosis.

**NASS Clinical Guidelines – Lumbar spondylolisthesis**

The society states the following treatment recommendations:

**Work Group Consensus Statement**

“Medical/interventional treatment for degenerative lumbar spondylolisthesis, when the radicular symptoms of stenosis predominate, most logically should be similar to treatment for symptomatic degenerative lumbar spinal stenosis.”
Grade of Recommendation: I

Direct surgical decompression is recommended for treatment of patients with symptomatic spinal stenosis associated with low grade degenerative lumbar spondylolisthesis whose symptoms have been recalcitrant to a trial of medical/interventional treatment.

Grade of Recommendation: I

Indirect surgical decompression is recommended for treatment of patients with symptomatic spinal stenosis associated with low grade degenerative lumbar spondylolisthesis whose symptoms have been recalcitrant to a trial of medical/interventional treatment.

Grade of Recommendation: B

Surgical decompression with fusion is recommended for the treatment of patients with symptomatic spinal stenosis and degenerative lumbar spondylolisthesis to improve clinical outcomes compared with decompression alone.

Grade of Recommendation: B

The addition of instrumentation is recommended to improve fusion rates in patients with symptomatic spinal stenosis and degenerative lumbar spondylolisthesis.

Grade of Recommendation: B

The addition of instrumentation is not recommended to improve clinical outcomes for the treatment of patients with symptomatic spinal stenosis and degenerative lumbar spondylolisthesis.

Grade of Recommendation: I

Reduction with fusion and internal fixation of patients with low grade degenerative lumbar spondylolisthesis is not recommended to improve clinical outcomes.
Grade of Recommendation: C

Decompression and fusion is recommended as a means to provide satisfactory long-term (4 years +) results for the treatment of patients with symptomatic spinal stenosis and degenerative lumbar spondylolisthesis.

Note: NASS grades of recommendation for summaries or reviews of studies:

A = Good evidence (Level I studies with consistent findings) for or against recommending intervention.

B = Fair evidence (Level II or III studies with consistent findings) for or against recommending intervention.

C = Poor quality evidence (Level IV or V studies) for or against recommending intervention.

I = Insufficient or conflicting evidence not allowing a recommendation for or against intervention.

Medicare National Coverage

There is no national coverage determination (NCD). In the absence of an NCD, coverage decisions are left to the discretion of local Medicare carriers.

References


Appendix

Figure 1. Lumbosacral dermatome innervations

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

| L1,2,3,4 | L4 – inner (medial) side of the great toe |
| L4,5, S1 | 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) |

Fig. 1
<table>
<thead>
<tr>
<th>Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/13/14</td>
<td>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.</td>
</tr>
<tr>
<td>01/14/14</td>
<td>Replace policy. Policy criteria revised for lumbar disectomy 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.</td>
</tr>
<tr>
<td>02/10/14</td>
<td>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.</td>
</tr>
<tr>
<td>02/27/14</td>
<td>Updated Related Policies. Add 8.03.501.</td>
</tr>
<tr>
<td>04/04/14</td>
<td>Minor rewording of not medically necessary policy statement for clarity, intent is unchanged.</td>
</tr>
<tr>
<td>05/02/14</td>
<td>Update Related Policies. Add 7.01.537 and 8.03.503.</td>
</tr>
<tr>
<td>05/20/14</td>
<td>Update Related Policies. Remove 7.01.116 as it was deleted, and replace with 7.01.555.</td>
</tr>
<tr>
<td>06/26/14</td>
<td>Update Related Policies. Add 7.01.18.</td>
</tr>
<tr>
<td>09/11/14</td>
<td>Update Related Policies. Add 8.03.502.</td>
</tr>
<tr>
<td>09/25/14</td>
<td>Update Related Policies. Add 7.01.93.</td>
</tr>
<tr>
<td>12/22/14</td>
<td>Interim Update. Updated Related Policies added 8.03.09. Reference 7 removed from the additional resources and websites section; others renumbered. Policy statement unchanged.</td>
</tr>
<tr>
<td>01/06/15</td>
<td>Update Related Policies. Add 8.01.40.</td>
</tr>
<tr>
<td>09/24/15</td>
<td>Coding update; ICD-9 diagnosis and procedure codes removed. These were for informational purposes only.</td>
</tr>
<tr>
<td>10/13/15</td>
<td>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.</td>
</tr>
<tr>
<td>11/10/15</td>
<td>Interim Review. Policy guidelines update to reflect imaging timeline of 12 from 6 to be consistent with all policies within documentation requirements.</td>
</tr>
<tr>
<td>03/21/16</td>
<td>Interim Update. Removed related policy 8.01.40 as it was archived.</td>
</tr>
<tr>
<td>07/01/16</td>
<td>Annual Review, approved June 14, 2016. Policy updated with literature review; references added. Policy statements unchanged but added clarification that “rapid”</td>
</tr>
<tr>
<td>Date</td>
<td>Comments</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>11/24/16</td>
<td>Policy moved into new format; no change to policy statements.</td>
</tr>
<tr>
<td>01/01/17</td>
<td>Coding update; added new CPT 62380 effective 1/1/17.</td>
</tr>
<tr>
<td>07/01/17</td>
<td>Annual review, approved June 22, 2017. Minor language update in policy statement for clarification purposes. No major change to policy statements.</td>
</tr>
</tbody>
</table>

**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). ©2017 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.
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- Provides free aids and services to people with disabilities to communicate effectively with us, such as:
  - Qualified sign language interpreters
  - Written information in other formats (large print, audio, accessible electronic formats, other formats)
- Provides free language services to people whose primary language is not English, such as:
  - Qualified interpreters
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Civil Rights Coordinator - Complaints and Appeals
PO Box 91102, Seattle, WA 98111
Toll free 855-332-4535, Fax 425-918-5952, TTY 800-842-5357
Email AppealsDepartmentInquiries@Premera.com

You can file a grievance in person or by mail, fax, or email. If you need help filing a grievance, the Civil Rights Coordinator is available to help you.

You can also file a civil rights complaint with the U.S. Department of Health and Human Services, Office for Civil Rights, electronically through the Office for Civil Rights Complaint Portal, available at https://ocrportal.hhs.gov/ocr/portal/lobby.jsf, or by mail or phone at:
U.S. Department of Health and Human Services
200 Independence Avenue SW, Room 509F, HHH Building
Washington, D.C. 20201, 1-800-368-1019, 800-537-7697 (TDD)

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This Notice has Important Information. This notice may have important information about your application or coverage through Premera Blue Cross. There may be key dates in this notice. You may need to take action by certain deadlines to keep your health coverage or help with costs. You have the right to get this information and help in your language at no cost. Call 800-722-1471 (TTY: 800-842-5357).

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تحوي هذا الإشعار معلومات هامة. قد يحتوي هذا الإشعار معلومات有用的، يتعين عليك حفظها أو تقديمها إلى Premera Blue Cross. للإبلاغ عن تعديلات الصحة والرعاية، يمكنك الاتصال بـ 800-722-1471 (TTY: 800-842-5357).

中文 (Chinese):
本通知有重要的訊息。本通知可能有關於您透過Premera Blue Cross提交的申請或保險的重要訊息。本通知可能有重要日期。您可能需要在截止日期之前採取行動，以保留您的健康保障或費用補貼。您有權利免費以您的母語得到本訊息和幫助。請接電話 800-722-1471 (TTY: 800-842-5357)。

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Daytoy a Pakdaak ket naglao iti Napateg nga Impormasiao. Daytoy a pakdaak mabalun nga adda ket naglao iti napateg nga impormasiao macaanggep iti aplikasyowyen no coverage babaen iti Premera Blue Cross. Daytoy ket mabalun dagiti importante a pelsa iti daytoy a pakdaak. Mabalun nga adda rumbeg nga aramidemyo nga adda sangbay dagiti partikular a naituding nga adda tidaw tapno mapagtalaidyeyo ti coverage ti salun-ayyo wenyen tulong kadagiti gastos. Adda karbenganyo a mongala iti daytoy nga impormasiao ken tulong ti bukodyo a pagasasao nga awan ti bayadanyo. Tumaweg ti numero nga 800-722-1471 (TTY: 800-842-5357).

Italiano (Italian):
Premera Blue Cross. There may be certain terms and conditions for maintaining your coverage or utilizing Premera Blue Cross. For more information, please call 800-722-1471 (TTY: 800-842-5357) to speak with us.

Romanian (Romanian):

Russian (Russian):
Настоящее уведомление содержит важную информацию. Это уведомление может содержать важную информацию о вашем заявлении или страховом покрытии через Premera Blue Cross. В настоящем уведомлении могут быть указаны ключевые даты. Вам, возможно, потребуется принять меры к определенным предельным срокам для сохранения страхового покрытия или помощи с расходами. Вы имеете право на бесплатное получение этой информации и помощи на вашем языке. Звоните по телефону 800-722-1471 (TTY: 800-842-5357).

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