Cohere Medicare Advantage Policy - Spinal Decompression (Laminectomy, Laminotomy, Foraminotomy, and Discectomy)

Clinical Policy for Medical Necessity Review

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Important Notices

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Other Notices:

Policy Information:

Specialty Area: Musculoskeletal Care
Policy Name: Cohere Medicare Advantage Policy - Spinal Decompression (Laminectomy, Laminotomy, Foraminotomy, and Discectomy)
Type: [**X**] Adult (18+ yo) | [**X**] Pediatric (0-17 yo)

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Medical Necessity Criteria

Service: Spinal Decompression (Laminectomy, Laminotomy, Foraminotomy, and Discectomy)

Related CMS Documents

Please refer to the CMS Medicare Coverage Database for the most current applicable CMS National Coverage.[1]

- National Coverage Determination (NCD). Percutaneous Image-Guided Lumbar Decompression for Lumbar Spinal Stenosis (150.13)

Description

Spinal decompression is used to treat conditions such as lumbar spinal stenosis, disc herniation with radiculopathy, cervical radiculopathy, or spondylolisthesis and may be accomplished through a number of procedures. Laminectomy involves surgical removal of a spinous process, lamina, portions of the facet joint (facetectomy), and ligamentum flavum to increase the spinal canal diameter and reduce stenosis.[2] It is considered the "gold standard" surgical treatment for spinal stenosis.[3] Surgery provides more rapid relief than non-surgical treatment options in patients with low back pain, although these changes become less significant two years after treatment.[4] Laminotomy (hemilaminectomy) involves the removal of a facet joint or partial lamina to allow decompression of the nerve root or dural sac.[2] A laminotomy is frequently performed with a lumbar discectomy for disc herniations.[2] A discectomy is performed to remove all or part of a herniated or damaged intervertebral disc.[5] Foraminotomy involves direct compression of a nerve root by enlarging the neural foramen via removal of the lamina, facet joint, and ligamentum flavum.[2] Laminoplasty is performed to access and decompress the cervical spinal canal and is often used to treat spinal stenosis.[6] The procedure may be performed on the lumbar spine.[6]

Percutaneous image-guided lumbar decompression (PILD) is a posterior decompression of the lumbar spine performed under indirect image guidance without any direct visualization of the surgical area.[1] This procedure

is proposed as a treatment for symptomatic lumbar spinal stenosis unresponsive to conservative therapy. PILD is not covered by Medicare outside of research studies.[1] These studies must comply with all applicable federal regulations concerning the protection of human subjects, be registered on ClinicalTrials.gov, and have a written protocol addressing Medicare requirements for CED coverage, including the release of outcomes.[1]

Medical Necessity Criteria

Indications

Spinal decompression is considered appropriate if **ANY** of the following is **TRUE**:

- The procedure is an anterior or posterior cervical or upper thoracic decompression, and **ANY** of the following is **TRUE**:
  - The patient has cervical or upper thoracic myelopathy, and **ALL** of the following:
    - Advanced imaging (MRI or CT myelogram) reveals spinal cord compressive pathology (e.g., myelomalacia of cord signal change consistent with the presentation)[7]; **AND**
    - **ANY** of the following[8–11]:
      - Procedure needed for treatment of cervical or upper thoracic spine injury with myelopathy (e.g., trauma); **OR**
      - Progressive neurological deficit; **OR**
      - **ANY** of the following myelopathy symptoms:
        - Gait disturbance or abnormality; **OR**
        - Lower or upper extremity weakness; **OR**
        - Paresthesias or numbness in the upper extremities; **OR**
        - Loss of dexterity/coordination; **OR**
        - Bowel or bladder dysfunction; **OR**
      - **ANY** of the following myelopathy physical examination findings:
        - Lhermitte's sign: an electric shock-like sensation down the spine or into the upper extremities with forward flexion of the cervical spine; **OR**
        - Hoffman's sign; **OR**
        - Upper or lower motor neuron findings in the upper extremities (e.g., weakness, atrophy); **OR**

        - Upper or lower motor neuron findings in the lower extremities (e.g., hypertonicity, hyperreflexia, multiple beats or sustained clonus, positive Babinski); **OR**
        - Decreased sensation, proprioception, or vibratory sense; **OR**
        - Loss of sphincter tone; **OR**
- The patient has cervical or upper thoracic radiculopathy, and **ALL** of the following[12]:
    - Advanced imaging (magnetic resonance imaging [MRI] or computed tomography [CT] myelogram) reveals diagnostic findings of the spinal cord or nerve root compressive pathology consistent with clinical symptoms[13]; **AND**
    - **ANY** of the following:
        - **ANY** of the following cervical spine symptoms:
            - Neck pain; **OR**
            - Radicular arm pain, motor, or sensory changes; **OR**
            - Scapular or periscapular pain; **OR**
        - **ANY** of the following thoracic spine symptoms:
            - Thoracic pain; **OR**
            - Scapular, periscapular, or chest wall pain; **OR**
            - Radicular chest pain; **OR**
        - **ANY** of the following cervical or upper thoracic radiculopathy positive specialty tests:
            - Spurling's test or maneuver or compression test (reproduction of symptoms with neck extension, lateral flexion, and downward compression or loading); **OR**
            - Shoulder abduction test (symptoms relieved with shoulder abduction); **AND**
    - **ANY** of the following:
        - Failure of conservative management for greater than 6 weeks, including **AT LEAST TWO** of the following:
            - Anti-inflammatory medications, non-opioid analgesics, or prescription medications (e.g., oral steroids, neuropathic pain medications) if not contraindicated; **AND**
            - Physical therapy, including a physician-directed home exercise program; **AND**
            - **ANY** of the following:
                - Corticosteroid injection if medically appropriate; **OR**

        - Documentation that corticosteroid injection is contraindicated; **OR**
    - The patient's severe pain or disability is significantly affecting their quality of life and limiting their daily life (e.g., working ability, forced bed rest, ability to provide self-care); **OR**
- The procedure is lower thoracic or lumbar decompression* and **ANY** of the following:
    - The patient has signs or symptoms of neurogenic claudication or radiculopathy, and **ALL** of the following[2,14]:
        - Advanced imaging (MRI or CT myelogram) reveals neurogenic claudication or radiculopathy consistent with the condition and clinical symptoms[15]; **AND**
        - **ANY** of the following conditions:
            - Lower thoracic or lumbar stenosis; **OR**
            - Degenerative/isthmic spondylolisthesis; **OR**
            - Synovial facet cyst; **AND**
        - **ANY** of the following symptoms:
            - Lower extremity pain, weakness, fatigue, paresthesias, and sensory changes; **OR**
            - Gluteal and low back pain; **OR**
            - Bilateral or unilateral symptoms; **OR**
            - Symptoms present only with activity; **OR**
            - Exacerbating factors include standing, walking, and other upright exercises; **OR**
            - Pain relief in a sitting or supine position or with forward flexion at the waist; **OR**
            - Lower extremity pain that is made worse by walking; **AND**
        - **ANY** of the following:
            - Failure of conservative management for greater than 6 weeks, including **AT LEAST TWO** of the following:
                - Anti-inflammatory medications, non-opioid analgesics, or prescription medications (e.g., oral steroids, neuropathic pain medications) if not contraindicated; **AND**
                - Physical therapy, including a physician-directed home exercise program; **AND**
                - **ANY** of the following:
                    - Corticosteroid injection if medically appropriate; **OR**

        - Documentation that corticosteroid injection is contraindicated; **OR**
    - The patient's severe pain or disability is significantly affecting their quality of life and limiting their daily life (e.g., working ability, forced bed rest, ability to provide self-care); **OR**
- The patient has signs or symptoms of cauda equina syndrome and **ALL** of the following[2]:
    - Advanced imaging (MRI or CT myelogram) reveals acute cauda equina syndrome consistent with clinical symptoms[15]; **AND**
    - **ANY** of the following symptoms of cauda equina syndrome:
        - Bowel, bladder, and erectile dysfunction; **OR**
        - Diffuse motor weakness; **OR**
        - Saddle-distribution anesthesia; **OR**
        - New onset of lower extremity neurologic deficits not explained by a more proximal lesion; **OR**
- The patient requires treatment for **ANY** of the following in the lower thoracic or lumbar region[2]:
    - Tumor; **OR**
    - Fracture; **OR**
    - Infection; **OR**
    - Epidural/subdural hematoma; **OR**
- The procedure is an anterior or posterior lower thoracic or lumbar discectomy, and **ANY** of the following**:**
    - The patient has lower thoracic or lumbar radiculopathy with lumbar disc herniation, and **ALL** of the following are **TRUE**[5,16]:
        - Advanced imaging (MRI or CT myelogram) reveals disc herniation consistent with clinical findings; **AND**
        - **ANY** of the following lower thoracic or lumbar radiculopathy symptoms:
            - Unremitting lower extremity pain, paresthesia, weakness, or numbness in a myotomal or dermatome distribution; **OR**
            - Increased pain with coughing, sneezing or straining; **OR**
            - Low back pain; **AND**
        - **ANY** of the following physical examination findings:
            - Sensory disturbance (i.e., loss of sensation or decreased sensory response) or weakness in a dermatomal/myotomal distribution; **OR**
            - Absent or decreased lower extremity reflexes; **OR**

- Reduced spinal mobility; **OR**
- **ANY** of the following positive specialty tests:
  - Straight leg raise; **OR**
  - Crossed Lasègue's (or crossed straight leg raise); **OR**
  - Femoral nerve stretch; **OR**
  - Slump; **AND**

■ Failure of conservative management for greater than 6 weeks, including **AT LEAST TWO** of the following:
- Anti-inflammatory medications, non-opioid analgesics, or prescription medications (e.g., oral steroids, neuropathic pain medications) if not contraindicated; **AND**
- Physical therapy, including a physician-directed home exercise program; **AND**
- **ANY** of the following:
  - Corticosteroid injection if medically appropriate; **OR**
  - Documentation that corticosteroid injection is contraindicated; **OR**

○ The patient has signs or symptoms of cauda equina syndrome with lumbar disc herniation and **ALL** of the following[5]:

■ Advanced imaging (MRI or CT myelogram) reveals disc herniation that causes moderate to severe lower thoracic or lumbar stenosis consistent with clinical symptoms[15]; **AND**

■ **ANY** of the following symptoms of cauda equina syndrome:
- Bowel, bladder, and erectile dysfunction; **OR**
- Diffuse motor weakness; **OR**
- Saddle-distribution anesthesia; **OR**
- New onset of lower extremity neurologic deficits not explained by a more proximal lesion; **OR**

○ The patient has an infection involving the disc space, and **ANY** of the following[5]:

■ An open disc biopsy and culture is needed when an organism has not been identified by less invasive means (e.g., blood cultures, percutaneous needle biopsy); **OR**

■ A disc space/spinal canal debridement is needed if **ANY** of the following is present:
- No clinical response to antibiotics; **OR**
- Epidural abscess with neurological deficits; **OR**

- Signs of systemic sepsis that are associated with disc space infection.

*NOTE: Effective for services performed on or after January 9, 2014, percutaneous image-guided lumbar decompression (PILD) will be covered by Medicare through Coverage with Evidence Development (CED) for beneficiaries with lumbar spinal stenosis (LSS) who are enrolled in an approved clinical study that meets the following criteria.

Percutaneous image-guided lumbar decompression is considered appropriate if **ALL** of the following are **TRUE**[1]:
- The patient has lumbar spinal stenosis; **AND**
- The patient is enrolled in a Centers for Medicare and Medicaid Services (CMS)-approved Coverage with Evidence Development (CED) study.

Non-Indications

Spinal decompression without fusion is not considered appropriate if **ANY** of the following are **TRUE**:
- The procedure is posterior laminectomy without fusion, and the patient has kyphosis or is at-risk for postoperative kyphosis[12]; **OR**
- The patient has isolated, nonspecific low back pain without any accompanying symptoms[2]; **OR**
- Use of annular closure devices.[17,18]

Definitions

Per CED study criteria, lumbar spinal stenosis with neurogenic claudication is defined as moderate to severe central stenosis accompanied by pain, tingling, or cramping in the lower back and one or both legs, hips, and/or buttocks.[1]

Level of Care Criteria

Inpatient or Outpatient

Procedure Codes (CPT/HCPCS)

CPT/HCPCS Code	Code Description
22899	Unlisted procedure, spine
62380	Endoscopic decompression of spinal cord, nerve root(s), including laminotomy, partial facetectomy, foraminotomy, discectomy and/or excision of herniated intervertebral disc, 1 interspace, lumbar
63001	Laminectomy with exploration and/or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (eg, spinal stenosis), 1 or 2 vertebral segments; cervical
63003	Laminectomy with exploration and/or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (eg, spinal stenosis), 1 or 2 vertebral segments; thoracic
63005	Laminectomy with exploration and/or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (eg, spinal stenosis), 1 or 2 vertebral segments; lumbar, except for spondylolisthesis
63011	Laminectomy with exploration and/or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (eg, spinal stenosis), 1 or 2 vertebral segments; sacral
63012	Laminectomy with removal of abnormal facets and/or pars inter-articularis with decompression of cauda equina and nerve roots for spondylolisthesis, lumbar (Gill type procedure)
63015	Laminectomy with exploration and/or

	decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (eg, spinal stenosis), more than 2 vertebral segments; cervical
63016	Laminectomy with exploration and/or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (eg, spinal stenosis), more than 2 vertebral segments; thoracic
63017	Laminectomy with exploration and/or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (eg, spinal stenosis), more than 2 vertebral segments; lumbar
63020	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc; 1 interspace, cervical
63030	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc; 1 interspace, lumbar
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)
63040	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, reexploration, single interspace; cervical
63042	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, reexploration, single

	interspace; lumbar
63043	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, reexploration, single interspace; each additional cervical interspace (List separately in addition to code for primary procedure)
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)
63045	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [eg, spinal or lateral recess stenosis]), single vertebral segment; cervical
63046	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [eg, spinal or lateral recess stenosis]), single vertebral segment; thoracic
63047	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [eg, 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], [eg, spinal or lateral recess stenosis]), single vertebral segment; each additional vertebral segment, cervical, thoracic, or lumbar (List separately in addition to code for primary procedure)

63050	Laminoplasty, cervical, with decompression of the spinal cord, 2 or more vertebral segments;
63051	Laminoplasty, cervical, with decompression of the spinal cord, 2 or more vertebral segments; with reconstruction of the posterior bony elements (including the application of bridging bone graft and non-segmental fixation devices [eg, wire, suture, mini-plates], when performed)
63052	Laminectomy, facetectomy, or foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s] [eg, spinal or lateral recess stenosis]), during posterior interbody arthrodesis, lumbar; single vertebral segment (List separately in addition to code for primary procedure)
63053	Laminectomy, facetectomy, or foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s] [eg, spinal or lateral recess stenosis]), during posterior interbody arthrodesis, lumbar; each additional vertebral segment (List separately in addition to code for primary procedure)
63055	Transpedicular approach with decompression of spinal cord, equina and/or nerve root(s) (e.g., herniated intervertebral disc), single segment; thoracic
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)

63064	Costovertebral approach with decompression of spinal cord or nerve root(s) (e.g., herniated intervertebral disc), thoracic; single segment
63066	Costovertebral approach with decompression of spinal cord or nerve root(s) (e.g., herniated intervertebral disc), thoracic; each additional segment (List separately in addition to code for primary procedure)
63075	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; cervical, single interspace
63076	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; cervical, each additional interspace (List separately in addition to code for primary procedure)
63077	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; thoracic, single interspace
63078	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; thoracic, each additional interspace (List separately in addition to code for primary procedure)
63170	Laminectomy with myelotomy (eg, Bischof or DREZ type), cervical, thoracic, or thoracolumbar
63172	Laminectomy with drainage of intramedullary cyst/syrinx; to subarachnoid space
63173	Laminectomy with drainage of intramedullary cyst/syrinx; to peritoneal or pleural space
63185	Laminectomy with rhizotomy; 1 or 2 segments
63190	Laminectomy with rhizotomy; more than 2 segments
63191	Laminectomy with section of spinal accessory nerve

63197	Laminectomy with cordotomy, with section of both spinothalamic tracts, 1 stage, thoracic
63200	Laminectomy, with release of tethered spinal cord, lumbar
63250	Laminectomy for excision or occlusion of arteriovenous malformation of spinal cord; cervical
63251	Laminectomy for excision or occlusion of arteriovenous malformation of spinal cord; thoracic
63252	Laminectomy for excision or occlusion of arteriovenous malformation of spinal cord; thoracolumbar
63265	Laminectomy for excision or evacuation of intraspinal lesion other than neoplasm, extradural; cervical
63266	Laminectomy for excision or evacuation of intraspinal lesion other than neoplasm, extradural; thoracic
63267	Laminectomy for excision or evacuation of intraspinal lesion other than neoplasm, extradural; lumbar
63268	Laminectomy for excision or evacuation of intraspinal lesion other than neoplasm, extradural; sacral
63270	Laminectomy for excision of intraspinal lesion other than neoplasm, intradural; cervical
63271	Laminectomy for excision of intraspinal lesion other than neoplasm, intradural; thoracic
63272	Laminectomy for excision of intraspinal lesion other than neoplasm, intradural; lumbar
63273	Laminectomy for excision of intraspinal lesion other than neoplasm, intradural; sacral
63275	Laminectomy for biopsy/excision of intraspinal neoplasm; extradural, cervical

63276	Laminectomy for biopsy/excision of intraspinal neoplasm; extradural, thoracic
63277	Laminectomy for biopsy/excision of intraspinal neoplasm; extradural, lumbar
63278	Laminectomy for biopsy/excision of intraspinal neoplasm; extradural, sacral
63280	Laminectomy for biopsy/excision of intraspinal neoplasm; intradural, extramedullary, cervical
63281	Laminectomy for biopsy/excision of intraspinal neoplasm; intradural, extramedullary, thoracic
63282	Laminectomy for biopsy/excision of intraspinal neoplasm; intradural, extramedullary, lumbar
63283	Laminectomy for biopsy/excision of intraspinal neoplasm; intradural, sacral
63285	Laminectomy for biopsy/excision of intraspinal neoplasm; intradural, intramedullary, cervical
63286	Laminectomy for biopsy/excision of intraspinal neoplasm; intradural, intramedullary, thoracic
63287	Laminectomy for biopsy/excision of intraspinal neoplasm; intradural, intramedullary, thoracolumbar
63290	Laminectomy for biopsy/excision of intraspinal neoplasm; combined extradural-intradural lesion, any level
63295	Osteoplastic reconstruction of dorsal spinal elements, following primary intraspinal procedure (List separately in addition to code for primary procedure)
0274T	Percutaneous laminotomy/laminectomy (interlaminar approach) for decompression of neural elements, (with or without ligamentous resection, discectomy, facetectomy and/or foraminotomy), any method, under indirect image

	guidance (eg, fluoroscopic, CT), single or multiple levels, unilateral or bilateral; cervical or thoracic
0275T	Percutaneous laminotomy/laminectomy (interlaminar approach) for decompression of neural elements, (with or without ligamentous resection, discectomy, facetectomy and/or foraminotomy), any method, under indirect image guidance (eg, fluoroscopic, CT), single or multiple levels, unilateral or bilateral; lumbar
C2614	Probe, percutaneous lumbar discectomy
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
S2350	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; lumbar, single interspace
S2351	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; lumbar, each additional interspace (list separately in addition to code for primary procedure)

Disclaimer: S Codes are non-covered per CMS guidelines due to their experimental or investigational nature.

Evaluation of Clinical Harms and Benefits

Clinical determinations for Medicare Advantage beneficiaries are made in accordance with 42 CFR 422.101 guidance outlining CMS's required approach to decision hierarchy in the setting of NCDs/LCDs identified as being "not fully established". When clinical coverage criteria are "not fully established" Medicare Advantage organizations are instructed to create publicly accessible clinical coverage criteria based on widely-accepted clinical guidelines and/or scientific studies backed by a robust clinical evidence base. Clinical coverage criteria provided by Cohere Health in this manner include coverage rationale and risk/benefit analysis.

The potential clinical harms of using these criteria for spinal decompression without fusion may include:

- Adverse effects from delayed or denied treatment, such as inadequate management of severe spinal conditions due to inappropriate denials. For example, patients with moderate to severe cervical myelopathy may not benefit from conservative treatment, and there is little evidence that nonoperative treatment is effective in stopping progression.[9,19]

The clinical benefits of using these criteria for spinal decompression without fusion may include:

- Improved patient selection for spinal decompression procedures, resulting in better long-term outcomes. Patient selection may vary across decompression procedure types. For example, discectomy is typically indicated in younger patients presenting with acute radiculopathy from focal disc herniation, whereas laminectomy or laminotomy is more appropriate in older patients with spinal stenosis due to age-related degenerative changes.[20–23]
- Appropriate allocation of healthcare resources at the individual beneficiary and population levels.
- Maintenance of rigorous patient safety standards aligned to best available evidence. Patients with lumbar spinal stenosis who undergo percutaneous lumbar decompression (PILD) are only covered by Medicare when the procedure is provided in a clinical study under section 1862(a)(1)(E) through Coverage with Evidence Development (CED).[1]

Medical Evidence

Karlsson et al. (2024) conducted a randomized clinical trial to evaluate five-year outcomes between decompression alone and decompression with fusion for the treatment of lumbar spinal stenosis. The five-year Oswestry Disability Index scores were similar across treatments, and the EuroQol five-dimension questionnaire was higher for decompression alone than with fusion. These results indicate that adding fusion to decompression surgeries may not improve patient outcomes at five years post-surgery, consistent with the two-year findings. The authors conclude that decompression alone is the preferred method for spinal stenosis surgery.[24]

Wei et al. (2021) performed a systematic review and network meta-analysis to evaluate the nine most common interventions for lumbar spinal stenosis: laminectomy, laminotomy, minimally invasive decompression, endoscopic decompression, decompression plus fusion, decompression, split-decompression, interspinous process spacer device, and non-surgery. The surgical interventions that were found to be more effective in relieving pain than non-surgical interventions were all but split-decompression. Laminotomy was best for improving short- and long-term dysfunction, although differences were not statistically significant, and endoscopic decompression had the lowest complication rates and shortest hospitalization time.[25]

In a systematic review by Lannon et al. (2021), degenerative cervical myelopathy is described as a leading cause of spinal cord injury and spinal stenosis with increasing incidence. Early surgical referral is recommended along with conservative management to prevent progressive neurologic deterioration.[26]

Thomé et al. (2018) conducted a randomized controlled trial of 554 participants focused on annular closure in lumbar microdiscectomy for prevention of reherniation. They concluded that in patients with a high risk of herniation recurrence after lumbar microdiscectomy, annular closure with a bone-anchored implant lowered the risk of symptomatic recurrence and reoperation. They stated that additional studies to determine outcomes beyond 2 years with a bone-anchored annular closure device would be

warranted, as the results of this study are not generalizable to all patients undergoing lumbar discectomy.[18]

Karadimas et al. (2013) concluded from a combination of both a narrative and systematic review that the incidence of cervical spondylotic myelopathy will continue to increase as the population ages. Their evidence-based recommendation states that, due to common progressive neurological deterioration with cervical spondylotic myelopathy, patients should be educated regarding the potential future need for surgical intervention.[27]

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Clinical Guideline Revision History/Information

Original Date: May 31, 2024		
Review History		
Version 2	6/10/2024	422.101 Disclaimer added
Version 3	05/29/2025	Annual review. CPT Code 62287 was removed from this policy and added to a non-coverage policy: Cohere Medicare Advantage Policy - Intradiscal biacuplasty, Percutaneous Intradiscal Radiofrequency Thermocoagulation (PIRFT), or Intradiscal Electrothermal Therapy (IDET). Included indications for Percutaneous Image-Guided Lumbar Decompression (PILD) as a standalone section, as the NCD only covers this procedure in Coverage with Evidence Development (CED) studies (see Note). NASS coverage policy recommendation for Lumbar discectomy added. Ensured citations for NASS coverage policies, evidence-based clinical guidelines, and expert panel recommendations are present throughout and updated indications accordingly. Split indications for cervical or thoracic radiculopathy into two: cervical spine symptoms and thoracic spine symptoms. Updated conservative care indications; patients must have at least two.

		Added indications for spinal decompression without fusion for degenerative/isthmic spondylolisthesis or synovial facet cyst (consistent with NASS). Added indications for spinal decompression without fusion for infection, tumor, and fracture (consistent with NASS and to ensure all CPT codes are covered [biopsy, excision, etc.]). Literature review - Recommended Clinical Approach, Harms & Benefits, and Medical Evidence sections updated (including references).