02-20000-48

Original Effective Date: 07/01/15

Reviewed: 03/23/23

Revised: 06/10/23

Next Review: No Longer Scheduled for Routine Review (NLR)

Subject: Thoracic and Lumbar Spine Surgery

THIS MEDICAL COVERAGE GUIDELINE IS NOT AN AUTHORIZATION, CERTIFICATION, EXPLANATION OF BENEFITS, OR A GUARANTEE OF PAYMENT, NOR DOES IT SUBSTITUTE FOR OR CONSTITUTE MEDICAL ADVICE. ALL MEDICAL DECISIONS ARE SOLELY THE RESPONSIBILITY OF THE PATIENT AND PHYSICIAN. BENEFITS ARE DETERMINED BY THE GROUP CONTRACT, MEMBER BENEFIT BOOKLET, AND/OR INDIVIDUAL SUBSCRIBER CERTIFICATE IN EFFECT AT THE TIME SERVICES WERE RENDERED. THIS MEDICAL COVERAGE GUIDELINE APPLIES TO ALL LINES OF BUSINESS UNLESS OTHERWISE NOTED IN THE PROGRAM EXCEPTIONS SECTION.

DESCRIPTION:

Lumbar 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).

Lumbar microdiscectomy uses a small surgical incision and 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 removes disc and other surgical products by direct visualization through the surgical incision.

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. Laminectomy is typically performed to alleviate compression due to spinal stenosis or a space-occupying lesion.

Lumbar spinal fusion (arthrodesis) is a surgical technique that involves fusing 2 or more lumbar vertebrae using local bone, autologous bone taken from the iliac crest, allogeneic donor bone, or bone graft substitutes. Spinal fusion can be performed as a single procedure or in conjunction with other spinal surgeries.

Lumbar total disc arthroplasty is performed as an alternative to spinal fusion in surgical candidates with degenerative disc disease leading to disabling symptoms. A diseased or degenerative disc is removed and replaced with an artificial disc designed for the lumbar spine.

POSITION STATEMENT:

Surgery for Spinal Deformity

Thoracic deformity (minimal / secondary / flexible lumbar involvement) in adults

Posterior or anterior spinal fusion with instrumentation **meets the definition of medical necessity** for the following indications:

- Progressive neurological deficit (motor deficit, bowel or bladder dysfunction) or lower extremity weakness (0-3/5 on the strength scale) or paralysis with corresponding evidence of spinal cord or nerve root compression on an MRI or CT scan images: immediate surgical evaluation is indicated, **OR**
- When **ALL** of the following criteria are met:
    - Significant pain or symptoms that impair daily activities for > 6 months, **AND**
    - Failure of symptom or pain improvement upon completion of at least 12 weeks of focused non-operative care* in the past year, **AND**
    - Imaging studies confirm spinal curvature and demonstrate at least one of the following:
        - Spinal curvature > 50 degrees (scoliosis), **OR**
        - Spinal curvature > 75 degrees (kyphosis), **OR**
        - Severe kyphosis (chin-brow vertical angle greater than 35 degrees)

Lumbar deformity (with or without secondary thoracic involvement) in adults

Posterior or anterior spinal fusion with instrumentation **meets the definition of medical necessity** for the following indications:

- Progressive neurological deficit (motor deficit, bowel or bladder dysfunction) or lower extremity weakness (0-3/5 on the strength scale) or paralysis with corresponding evidence of spinal cord or nerve root compression on an MRI or CT scan images: immediate surgical evaluation is indicated, **OR**
- When **ALL** of the following criteria are met:
    - Lumbar back pain, neurogenic claudication, and/or radicular leg pain without significant motor deficit (0-3/5) that impairs daily activities for at least 6 months, **AND**
    - Failure of symptom or pain improvement upon completion of at least 12 weeks of focused non-operative care* in the past year, **AND**
    - Imaging studies that correspond to clinical findings and show at least one of the following:
        - Sagittal or coronal imbalance of at least 5 cm measured on long plate standing x-rays of the entire spine, **OR**
        - Documented progression of 10 degrees in one year in the coronal plane on x-ray (scoliosis), **OR**
        - A fixed scoliosis of at least 40 degrees

***Non-operative care for spinal deformity surgery:**

- Documented failure of at least twelve (12) consecutive weeks in the past year of any 2 of the following physician-directed conservative treatments:
    - Analgesics, steroids, and/or NSAIDs
    - Structured program of physical therapy aimed at increasing core muscle strength
    - Structured home exercise program prescribed by a physical therapist, chiropractic provider or physician
    - Epidural steroid injections and or facet injections /selective nerve root block

Lumbar Discectomy/Microdiscectomy

Lumbar discectomy **meets the definition of medical necessity** for the treatment of lumbar herniated disc when the following are met:

- Signs and symptoms of radiculopathy on history and physical exam, including at least 2 of the following:
    - 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.
    - Positive straight leg raise test
    - Loss of deep tendon reflexes corresponding to affected nerve root level
    - Loss of sensation in a dermatomal pattern, **AND**
- One of the following clinical presentations is present:
    - Rapidly progressing neurologic deficits, **OR**
    - Persistent debilitating back or leg pain (defined as daily pain with a visual analog scale score of 4 or greater and affects ADLs), that is refractory to at least 6 weeks of conservative nonsurgical therapy that included 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, unless contraindicated or not tolerated), **AND**
        - Participation in at least 6 weeks of physical therapy (including active exercise) or documentation of why the candidate could not tolerate physical therapy, **AND**
        - Evaluation and appropriate management of associated cognitive, behavioral, or addiction issues, if any, **AND**
- Documentation of nerve root compression and lumbar spine abnormality based on a magnetic resonance image or computerized tomography scan with myelogram of the lumbar spine, within the past 6 months

Lumbar Laminectomy (Laminotomy, Facetectomy, Foraminotomy)

Lumbar laminectomy **meets the definition of medical necessity** when the following are met:

- Spinal cord or nerve root compression due to spinal stenosis (with or without spondylolisthesis), **AND**
- Signs or symptoms of at least 1 of the following:
    - Neurologic deficits that are rapidly progressive, **OR**
    - Neurologic claudication that is persistent and refractory, **OR** persistent debilitating pain (defined as daily pain with a visual analog scale score of 4 or greater and affects ADLs), that is refractory to at least 6 weeks of conservative nonsurgical therapy that included 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, unless contraindicated or not tolerated), **AND**
        - Participation in at least 6 weeks of physical therapy (including active exercise) or documentation of why the candidate could not tolerate physical therapy, **AND**
        - Evaluation and appropriate management of associated cognitive, behavioral, or addiction issues, if any, **AND**
- Magnetic resonance image or computerized tomography scan with myelogram of the spine demonstrating spinal cord or nerve root compression corresponding to the level of symptoms, within the past 6 months

Lumbar laminectomy also **meets the definition of medical necessity** for space-occupying lesions of the spinal cord or spinal canal, including, but not limited to the following:

- Primary or metastatic tumors
- Abscesses or other localized infections

Lumbar Spinal Fusion (single or multi-level)

*Note: For multi-level fusion, criteria must be met for each level intended for fusion.

++Conservative nonsurgical therapy for lumbar spinal fusion 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, unless contraindicated or not tolerated), **AND**
- Participation in at least 6 weeks of physical therapy (including active exercise) or documentation of why the candidate could not tolerate physical therapy, **AND**
- Evaluation and appropriate management of associated cognitive, behavioral, or addiction issues, if any

Lumbar spinal fusion **meets the definition of medical necessity** for any of the following:

Spinal stenosis

- Spinal stenosis with one of the following:
    - Associated spondylolisthesis demonstrated on plain x-rays, **OR**
    - Spinal instability demonstrated on imaging studies, **OR**

- Spinal instability is anticipated due to need for bilateral or wide decompression with facetectomy or resection of pars interarticularis, **AND**
- Either of the following, a or b:
    a. Neurogenic claudication or radicular pain that results in significant functional impairment with documentation of central/lateral recess/or foraminal stenosis on MRI or other imaging, who has failed at least 3 months of conservative nonsurgical therapy that included:
        - 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, unless contraindicated or not tolerated), **AND**
        - Participation in at least 6 weeks of physical therapy (including active exercise) or documentation of why the candidate could not tolerate physical therapy, **AND**
        - Evaluation and appropriate management of associated cognitive, behavioral, or addiction issues, if any, **OR**
    b. Has severe or rapidly progressive symptoms of motor loss, neurogenic claudication, or cauda equina syndrome, **OR**

Severe, progressive idiopathic scoliosis

- Severe, progressive idiopathic scoliosis with either of the following:
    - Cobb angle greater than 40°
    - Spinal cord compression with neurogenic claudication or radicular pain that results in significant functional impairment in an individual who has failed at least 3 months of conservative nonsurgical therapy, **OR**

Severe degenerative scoliosis

- Severe degenerative scoliosis (ie, lumbar or thoracolumbar) with a minimum Cobb angle of 30°, or significant sagittal imbalance (eg, sagittal vertical axis >5 cm), and with any one of the following:
    - Documented progression of deformity with persistent axial (nonradiating) pain and impairment or loss of function unresponsive to at least 1 year of conservative nonsurgical therapy, **OR**
    - Persistent and significant neurogenic symptoms (claudication or radicular pain) with impairment or loss of function, unresponsive to at least 1 year of conservative nonsurgical therapy, **OR**
    - Severe or rapidly progressive symptoms of motor loss, neurogenic claudication, or cauda equina syndrome, **OR**

Isthmic spondylolisthesis

- Isthmic spondylolisthesis, when all of the following are present:
    - Congenital (Wiltse type I) or acquired pars defect (Wiltse type II), documented on x-ray, and, **AND**
    - Persistent back pain (with or without neurogenic symptoms), with impairment or loss of function, **AND**

- Unresponsive to at least 3 months of conservative nonsurgical therapy, **OR** with severe or rapidly progressive symptoms of motor loss, neurogenic claudication, or cauda equina syndrome, **OR**

Recurrent same-level disc herniation

- Recurrent, same-level disc herniation, at least 3 months after previous disc surgery, when all of the following are present:
  - Recurrent neurogenic symptoms (radicular pain or claudication) or evidence of nerve root irritation, as demonstrated by a positive nerve root tension sign or positive femoral tension sign or a corresponding neurologic deficit, **AND**
  - Impairment or loss of function, **AND**
  - Unresponsive to at least 3 months of conservative nonsurgical therapy or with severe or rapidly progressive symptoms of motor loss, neurogenic claudication, or cauda equina syndrome, **AND**
  - Neural structure compression and instability documented by imaging at a level and side corresponding to the clinical symptoms, **OR**

Pseudoarthrosis

- Pseudarthrosis, documented radiologically, when all of the following are present:
  - No less than 6 months after initial fusion, **AND**
  - With persistent axial back pain, with or without neurogenic symptoms, or with severe or rapidly progressive symptoms of motor loss, neurogenic claudication, or cauda equina syndrome, **AND**
  - Impairment or loss of function, in an individual who had experienced significant interval relief of prior symptoms, **OR**

Instability

- Instability due to fracture, dislocation, infection, abscess, or tumor when extensive surgery is required that could create an unstable spine, **OR**

Iatrogenic or degenerative flatback syndrome

- Iatrogenic or degenerative flatback syndrome with significant sagittal imbalance; when fusion is performed with spinal osteotomy or interbody spacers, **OR**

Adjacent level disease

- Adjacent-level disease when all of the following are present:
  - Persistent back pain (with or without neurogenic symptoms) with impairment or loss of function that is unresponsive to at least 3 months of conservative nonsurgical therapy, **AND**
  - Eccentric disc space collapse, spondylolisthesis, acute single-level scoliosis, or lateral listhesis on imaging, **AND**
  - Symptoms and functional measures correlate with imaging findings, AND
  - The previous fusion resulted in significant relief for at least 6 months

Lumbar spinal fusion is considered **experimental or investigational** if the sole indication for fusion is any one of the following conditions:

- Disc herniation
- Chronic nonspecific low back pain without radiculopathy
- Degenerative disc disease
- Initial discectomy/laminectomy for neural structure decompression
- Facet syndrome

Lumbar Total Disc Arthroplasty

Lumbar total disc arthroplasty **meets the definition of medical necessity** when ALL of the following are met:

- The lumbar total disc is FDA approved for lumbar disc arthroplasty and used in accordance with FDA labeling
- Candidate is age 18 to 60
- Significant pain with visual analog score of 5 or greater
- Lumbar degenerative disc disease or significant discogenic back pain with disc degeneration at a single level at L3-4, L4-L5 or L5-S1, confirmed by history, physical, and imaging
- No more than Grade 1 spondylolisthesis demonstrated on x-ray at the operative levels
- Failure of at least six months of conservative nonsurgical therapy that included:
    - 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, unless contraindicated or not tolerated), **AND**
    - Participation in at least 6 weeks of physical therapy (including active exercise) or documentation of why the candidate could not tolerate physical therapy, **AND**
    - Evaluation and appropriate management of associated cognitive, behavioral, or addiction issues, if any.
- Total disc arthroplasty will be performed at one or two consecutive levels from L3-S1 using an anterior retroperitoneal approach
- There are no contraindications to lumbar disc arthroplasty, including but not limited to:
    - Disease above L3-4
    - Active systemic or local infection
    - Osteoporosis or osteopenia (T-score less than or equal to -1.0)
    - Lumbar scoliosis (> 11 degrees of sagittal plane deformity)
    - Degenerative or lytic spondylolisthesis > 3mm
    - Disc degeneration requiring treatment at more than two levels
    - Severe facet arthrosis or joint degeneration
    - Ankylosing spondylitis, rheumatoid arthritis, lupus, or other autoimmune disorder
    - Presence of free disc fragment.

BILLING/CODING INFORMATION:

CPT Coding

0164T	Removal of total disc arthroplasty, (artificial disc), anterior approach, each additional interspace, lumbar (List separately in addition to code for primary procedure)
0165T	Revision including replacement of total disc arthroplasty (artificial disc), anterior approach, each additional interspace, lumbar (List separately in addition to code for primary procedure)
22533	Arthrodesis, lateral extracavitary technique, including minimal discectomy to prepare interspace (other than for decompression); lumbar
22534	Arthrodesis, lateral extracavitary technique, including minimal discectomy to prepare interspace (other than for decompression); thoracic or lumbar, each additional vertebral segment (List separately in addition to code for primary procedure)
22558	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); lumbar
22585	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); each additional interspace (List separately in addition to code for primary procedure)
22612	Arthrodesis, posterior or posterolateral technique, single interspace; lumbar (with lateral transverse technique, when performed)
22614	Arthrodesis, posterior or posterolateral technique, single interspace; each additional interspace (List separately in addition to code for primary procedure)
22630	Arthrodesis, posterior interbody technique, including laminectomy and/or discectomy to prepare interspace (other than for decompression), single interspace; lumbar
22632	Arthrodesis, posterior interbody technique, including laminectomy and/or discectomy to prepare interspace (other than for decompression), single interspace; each additional interspace (List separately in addition to code for primary procedure)
22633	Arthrodesis, combined posterior or posterolateral technique with posterior interbody technique including laminectomy and/or discectomy sufficient to prepare interspace (other than for decompression), single interspace; lumbar
22634	Arthrodesis, combined posterior or posterolateral technique with posterior interbody technique including laminectomy and/or discectomy sufficient to prepare interspace (other than for decompression), single interspace; each additional interspace and segment (List separately in addition to code for primary procedure)
22857	Total disc arthroplasty (artificial disc), anterior approach, including discectomy to prepare interspace (other than for decompression); single interspace, lumbar
22860	Total disc arthroplasty (artificial disc), anterior approach, including discectomy to prepare interspace (other than for decompression); second interspace, lumbar (List separately in addition to code for primary procedure)
22862	Revision including replacement of total disc arthroplasty (artificial disc), anterior approach, single interspace; lumbar
22865	Removal of total disc arthroplasty (artificial disc), anterior approach, single interspace; lumbar

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
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 (eg, 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
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)
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], [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)
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 segment (List separately in addition to code for primary procedure)
63056	Transpedicular approach with decompression of spinal cord, equina and/or nerve root(s) (eg, herniated intervertebral disc), single segment; lumbar (including transfacet, or lateral extraforaminal approach) (eg, far lateral herniated intervertebral disc)
63057	Transpedicular approach with decompression of spinal cord, equina and/or nerve root(s) (eg, herniated intervertebral disc), single segment; each additional segment, thoracic or lumbar (List separately in addition to code for primary procedure)

REIMBURSEMENT INFORMATION:

Refer to section entitled **POSITION STATEMENT**.

PROGRAM EXCEPTIONS:

Federal Employee Program (FEP): Follow FEP guidelines.

State Account Organization (SAO): Follow SAO guidelines.

Medicare Advantage products:

The following National Coverage Determination (NCD) was reviewed on the last guideline reviewed date: Lumbar ARTIFICIAL DISC Replacement (LADR) (150.10), located at cms.gov.

The following Local Coverage Determinations (LCDs) were reviewed on the last guideline reviewed date: Lumbar Spinal Fusion for Instability and Degenerative Disc Conditions (L33382), located at cms.gov.

DEFINITIONS:

No guideline specific definitions apply.

RELATED GUIDELINES:

02-20000-45, Cervical Spine Surgery

OTHER:

None applicable.

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COMMITTEE APPROVAL:

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Medical Policy and Coverage Committee on 03/23/23.

GUIDELINE UPDATE INFORMATION:

07/01/15	New Medical Coverage Guideline.
04/15/17	Revision: clarified requirements for conservative treatment by adding additional detail; revised criteria for lumbar decompression (laminectomy, laminotomy, facetectomy and foraminotomy), single level fusion, and multi-level fusion. Updated references.
10/15/17	Revision: updated position statement section regarding intra-operative/surgically induced segmental instability.
07/15/18	Scheduled review. Revised criteria for lumbar discectomy/microdiscectomy; lumbar decompression (laminectomy, laminotomy, facetectomy and foraminotomy); single level

	and multiple level lumbar spine fusion. Revised definition of conservative treatment, contraindications to spine surgery, and program exceptions section. Updated references.
03/15/19	Revision: deleted “sensory” from select coverage criteria. Updated references.
07/15/19	Scheduled review. Revised description and definition of conservative treatment. Added nicotine cessation criteria for fusion procedures. Updated references.
10/15/19	Unscheduled review. Maintain position statement and update references.
07/15/20	Scheduled review. Revised description and position statement. Updated references.
09/15/20	Revision. Updated language regarding decision making for fusion and artificial disc replacement.
02/15/21	Revision. Updated description. Added criteria for spinal deformity surgery. Updated references.
05/15/21	Scheduled review. Added coverage for lumbar artificial disc replacement at two levels. Updated references.
01/01/22	Annual CPT/HCPCS coding update. Added 63052, 63053. Revised descriptor 22612, 22614, 22633, 22634 and 63048.
01/01/23	Annual CPT/HCPCS coding update. Added 22860. Revised 22857. Deleted 0163T.
06/10/23	Scheduled review. Revised MCG title, description and position statement. Updated references.