

02-20000-48

Original Effective Date: 07/01/15

Reviewed: 05/23/24

Revised: 06/15/24

Next Review: 05/22/25

## 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.

[Position Statement](#)

[Billing/Coding](#)

[Reimbursement](#)

[Program Exceptions](#)

[Definitions](#)

[Related Guidelines](#)

[Other](#)

[References](#)

[Updates](#)

### 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.

**Summary and Analysis of Evidence:** A comprehensive systematic review and meta-analysis of 7 RCTs published between 1983 and 2017 (Washington State Health Care Authority, Health Technology Clinical Committee, 2018) concluded that at 6 months, open discectomy or microdiscectomy with or without endoscopy for treatment of lumbar radiculopathy/sciatica reduced mean VAS-leg pain scores by 6 to 26 points more than conservative interventions. The evidence was mixed for ODI scores, the Roland and Morris Disability Questionnaire (RMDQ), and the SF-36 Physical Functioning subscale. Surgery and nonsurgical interventions produced similar improvements in quality of life, neurologic symptoms, and return to work. No between-group differences were observed at 1 year or later. The as-treated analysis of the SPORT trial found persistently better outcomes for surgery in up to 8 years of follow-up. Clark et al (2020) published a systematic review assessing the efficacy, safety, and cost of surgical versus nonsurgical management of lumbar radiculopathy. The systematic review included 7 RCTs (N=1158) published between January 2007 and April 2019; 5 of these RCTs utilized discectomy and/or microdiscectomy as the surgical intervention for lumbar radiculopathy. Results were similar to the Washington State Health Care Authority review, and revealed that surgery reduced VAS-leg pain scores as compared to nonsurgical management at up to week 26. Arts et al (2019) conducted a comprehensive systematic review and meta-analysis of 8 RCTs and 6 prospective cohort studies and found that over 1 to 5 years of follow-up, compared with conservative treatment, lumbar discectomy reduced leg pain by 10 points on the VAS-leg pain scale and back pain by 7 points on the VAS-back pain scale.

Wei et al (2021) conducted a network meta-analysis of 34 RCTs that compared surgical and non-surgical interventions for lumbar spinal stenosis. Surgical interventions included decompression, decompression plus fusion, endoscopic decompression, interspinous process spacer device, laminectomy, laminotomy, minimally invasive decompression, and split spinous process decompression. The authors found that surgical interventions were superior to non-surgical interventions for the reduction of short-term and long-term pain. In the short-term, pain scores increased with non-surgical interventions versus laminectomy, and in the long-term, pain scores were reduced with laminectomy versus non-surgical interventions. Rank probabilities demonstrated that surgical interventions had a higher likelihood of being more effective at reducing short-term and long-term disability and pain when compared to non-surgical measures. The evidence evaluating the use of lumbar laminectomy to treat space-occupying lesions of the spinal canal and nerve root compression consists of small and retrospective case series. These series have reported that most patients with myelopathy experience improvements in symptoms or abatement of symptom progression after laminectomy (Tredway et al, 2006).

The North American Spine Society published updated coverage policy recommendations for lumbar spinal fusion in 2021 [BCBSA Evidence Positioning System® 7.01.141 (10/23)]. They recommended lumbar fusion in individuals with disc herniation who fulfill criteria for discectomy; in individuals with lumbar spinal stenosis who fulfill criteria for decompression; and in individuals with spondylolisthesis. They also recommended lumbar spinal fusion in cases in which decompression will likely result in iatrogenic instability, such as foraminal stenosis, during which greater than 50% of the facet joint will be removed to adequately decompress the exiting nerve root, and for adjacent level disease that has developed above or below a previous fusion. Bridwell et al (2009) reported on a prospective multicenter comparative cohort study that compared operative with nonoperative treatment of adult symptomatic lumbar scoliosis (defined as a minimum Cobb angle of 30°) in 160 consecutively enrolled patients. Operative versus nonoperative treatment was decided by the patient and medical team. Nonoperative

treatment included observation (21%), medications (26%), medications plus physical therapy and/or injections (40%), and other treatment without medications (13%). At the 2-year follow-up, nonoperative treatment did not improve quality of life or any other outcome measures, while the operative treatment showed significant improvement in all outcomes. For individuals who have isthmic spondylolisthesis who undergo lumbar spinal fusion, the evidence includes an RCT. Moller and Hedlund (2000) reported on a study of 111 adults with isthmic spondylolisthesis who were randomized to posterolateral fusion (with or without instrumentation, n=77) or to an exercise program (n=34). Inclusion criteria were lumbar isthmic spondylolisthesis of any grade, at least 1 year of low back pain or sciatica, and severely restricted functional ability. Mean age of patients was 39 years, with a mean age at onset of symptoms of 26 years. The authors concluded that surgical management of adult isthmic spondylolisthesis improves function and relieves pain more efficiently than an exercise program. Diarbakerli et al (2016) evaluated health-related quality of life in adults with idiopathic scoliosis diagnosed before maturity and treated either with brace or with surgery. They included 1,187 adults with juvenile or adolescent idiopathic scoliosis with a mean age of 38.8 years. Of these, 347 were untreated, 459 had been brace treated, and 381 had been surgically treated. The authors concluded that untreated adults with idiopathic scoliosis had similar health-related quality of life to previously brace-treated individuals, and they had marginally higher health-related quality of life compared with surgically treated individuals. Therefore, both surgical and brace treatments for idiopathic scoliosis could be considered successful from a health-related quality-of-life point of view in adulthood. The age of onset of idiopathic scoliosis does not seem to influence quality of life in adulthood. Nakajima et al (2022) studied clinical and imaging findings in patients with adult spinal deformity (ASD) with postural and radiological abnormalities. 26 subjects underwent a novel three-level limited lumbar fusion as two-stage surgery in an attempt to propose a better tolerated alternative to spinopelvic long fusion to the pelvis. Minimum follow up was 2 years, at which time Cobb angle, C7 sagittal vertical axis, and pelvic incidence (PI) minus lumbar lordosis (LL) were significantly improved after surgery and maintained. For patients with Scheuermann's kyphosis (SK), surgical intervention is indicated in patients with greater than 70° to 75° thoracic curves, greater than 25° to 30° thoracolumbar curves, intractable pain, neurologic deficit, cardiopulmonary compromise, or poor cosmesis. Because of advances in posterior spinal instrumentation, surgery can typically be performed through a posterior-only approach (Sardar et al, 2019). Revision surgery for pseudoarthrosis following adult spinal deformity surgery requires extensive evaluation to determine why the initial surgery failed. The revision surgeon is tasked with restoring the global alignment through anterior or posterior osteotomies to achieve sagittal and coronal balance, obtaining a solid fixation with sufficient levels above and below the osteotomies sites, and in some cases using pelvic screws and four rods (Quad-Rod) techniques. The outcome is in most cases satisfactory if these goals are achieved (Sherif and Arlet, 2020).

An National Institute for Health and Care Excellence (NICE) interventional procedures guidance (IPG) "Prosthetic intervertebral disc replacement in the lumbar spine" (IPG-306, 2009) states that current evidence on the safety and efficacy of prosthetic intervertebral disc replacement in the lumbar spine is adequate to support its use. The current evidence includes studies with a maximum follow-up of 13 years, but the majority of evidence is from studies with shorter durations of follow-up. A randomized controlled trial (RCT) of 304 patients (205 treated with a prosthetic lumbar disc and 99 with spinal fusion) used the Oswestry Disability Index (ODI) to assess outcomes. The RCT reported significantly greater improvement in ODI score from baseline in patients treated by prosthetic disc implantation compared with spinal fusion at 6-week, 3-month, and 6-month follow-up (absolute figures and

significance not stated). At 12-month and 24-month follow-up, the differences between the two patient groups in ODI scores from baseline was no longer significant (absolute figures not stated;  $p = 0.14$ ,  $p = 0.54$ , respectively). The RCT also reported that the rate of major neurological adverse events (not otherwise described) was higher after fusion surgery (5.4%) than after prosthetic disc implantation (2.4%) at 42-day follow-up (absolute figures and significance not stated). An RCT of 236 patients (161 treated with a prosthetic lumbar disc and 75 with spinal fusion) reported that mean quality of life scores (using the Short Form-36 questionnaire) improved by 87% in the prosthetic disc group compared with 70% in those who underwent spinal fusion ( $p = 0.004$ ) at 3-month follow-up. This difference was no longer significant at 24-month follow-up ( $p = 0.09$ ). A case series of 106 patients treated with a prosthetic lumbar disc reported that 42% (45/106) had 'excellent', 40% (42/106) 'good', 8% (8/106) 'fair', and 10% (11/106) 'poor' clinical outcomes (on a 4-grade Stauffer–Coventry scale from poor [no improvement or worse than preoperative condition] to excellent [no pain, treatment or medications]) at a mean follow-up of 13 years. In the same study, 90% (86/96) of patients eligible for work at baseline had returned to work, and 78% (28/36) had returned to manual labor (mean follow-up 13 years).

## 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.

## DEFINITIONS:

No guideline specific definitions apply.

## RELATED GUIDELINES:

[02-20000-45, Cervical Spine Surgery](#)

## OTHER:

None applicable.

## REFERENCES:

1. Abi-Hanna D, Kerferd J, Phan K, Rao P, Mobbs R. Lumbar disc arthroplasty for degenerative disc disease: a literature review. *World Neurosurg.* 2017 Oct 4. pii: S1878-8750(17)31669-8. PMID: 28987839 DOI: 10.1016/j.wneu.2017.09.153.
2. Aghayev E, Etter C, Bärlocher C, Sgier F, Otten P, Heini P, Hausmann O, Maestretti G, Baur M, Porchet F, Markwalder TM, Schären S, Neukamp M, Röder C. Five-year results of lumbar disc prostheses in the SWISSpine registry. *Eur Spine J.* 2014 Oct;23(10):2114-26. PMID: 24947182. DOI: 10.1007/s00586-014-3418-4.
3. Arts MP, Kuršumović A, Miller LE, Wolfs JFC, Perrin JM, Van de Kelft E, Heidecke V. Comparison of treatments for lumbar disc herniation: Systematic review with network meta-analysis. *Medicine (Baltimore).* 2019 Feb;98(7):e14410. doi: 10.1097/MD.0000000000014410.
4. Arunakul R, Metzger M, Kanim L, Bae H, Kropf M, Delamarter R. Radiographic Analysis of the Lumbosacral Juncture: Is There a Critical Sacral Angle for Total Disc Replacement? *Asian Spine J.* 2017 Apr;11(2):249-255.
5. Atlas, S.J., Keller, R.B., Wu, Y.A., Deyo, R.A., & Singer, D.E. (2005). Long-term outcomes of surgical and nonsurgical management of lumbar spinal stenosis: 8 to 10 year results from the Maine lumbar spine study. *Spine*, 30(8), 936-43.
6. Blue Cross Blue Shield Association Evidence Positioning System®. 2.01.83 - Interventions for Progressive Scoliosis, 05/23.
7. Blue Cross Blue Shield Association Evidence Positioning System®. 7.01.87 - Artificial Intervertebral Disc: Lumbar Spine, 05/23.
8. Blue Cross Blue Shield Association Evidence Positioning System®. 7.01.108 - Artificial Intervertebral Disc: Cervical Spine, 05/23.
9. Blue Cross Blue Shield Association Evidence Positioning System®. 7.01.141 - Lumbar Spinal Fusion, 10/23.
10. Blue Cross Blue Shield Association Evidence Positioning System®. 7.01.145 - Laminectomy, 07/23.
11. Blue Cross Blue Shield Association Evidence Positioning System®. 7.01.146 - Discectomy, 10/23.
12. Blue Cross and Blue Shield Association Technology Evaluation Center (TEC). Artificial lumbar disc arthroplasty. TEC Assessments. 2013; Volume 28, Tab 7.

13. Bridwell KH, Glassman S, Horton W, Shaffrey C, Schwab F, Zebala LP, Lenke LG, Hilton JF, Shainline M, Baldus C, Wootten D. Does treatment (nonoperative and operative) improve the two-year quality of life in patients with adult symptomatic lumbar scoliosis: a prospective multicenter evidence-based medicine study. *Spine (Phila Pa 1976)*. 2009 Sep 15;34(20):2171-8. doi: 10.1097/BRS.0b013e3181a8fdc8. PMID: 19752703.
14. Centers for Medicare and Medicaid Services (CMS). Local Coverage Determination (LCD): Noncovered Services (L33777) (Retired 07/01/20).
15. Centers for Medicare and Medicaid Services (CMS). Local Coverage Determination (LCD): Lumbar Spinal Fusion for Instability and Degenerative Disc Conditions (L33382) (10/01/15) (Retired 03/28/24).
16. Centers for Medicare and Medicaid Services. National Coverage Determination (NCD) for Lumbar ARTIFICIAL DISC Replacement (LADR) (150.10) (08/14/07).
17. Centinel Spine Clinical Compendium: Prodisc® L Lumbar TDR System.
18. Charles YP, Ntilikina Y. Scoliosis surgery in adulthood: what challenges for what outcome? *Ann Transl Med*. 2020 Jan;8(2):34. doi: 10.21037/atm.2019.10.67.
19. Clark R, Weber RP, Kahwati L. Surgical Management of Lumbar Radiculopathy: a Systematic Review. *J Gen Intern Med*. 2020 Mar;35(3):855-864. doi: 10.1007/s11606-019-05476-8. Epub 2019 Nov 11.
20. Deyo RA, Hickam D, Duckart JP, Piedra M. Complications after surgery for lumbar stenosis in a veteran population. *Spine (Phila Pa 1976)*. 2013 Sep 1;38(19):1695-702.
21. Deyo, R.A., Mirza, S.K., Martin, B.I., Kreuter, W., Goodman, D.C., & Jarvik, J.G. (2010). Trends, major medical complications, and charges associated with surgery for lumbar spinal stenosis in older adults. *JAMA*, 303(13), 1259-1265.
22. Diarbakerli E, Grauers A, Danielsson A, Gerdhem P. Health-Related Quality of Life in Adulthood in Untreated and Treated Individuals with Adolescent or Juvenile Idiopathic Scoliosis. *J Bone Joint Surg Am*. 2018 May 16;100(10):811-817. doi: 10.2106/JBJS.17.00822. PMID: 29762275.
23. First Coast Service Options, Inc. (FCSO). LCD for Noncovered Services (L29288), 04/15. Retired 09/30/15.
24. Furunes H, Storheim K, Brox JI, Johnsen LG, Skouen JS, Franssen E, Solberg TK, Sandvik L, Hellum C. Total disc replacement versus multidisciplinary rehabilitation in patients with chronic low back pain and degenerative discs: 8-year follow-up of a randomized controlled multicenter trial. *Spine J*. 2017 Oct;17(10):1480-1488. PMID: 28583869. DOI: 10.1016/j.spinee.2017.05.011.
25. Gonzalez Alvarez A, Dearn KD, Shepherd DET. Design and material evaluation for a novel lumbar disc replacement implanted via unilateral transforaminal approach. Design and material evaluation for a novel lumbar disc replacement implanted via unilateral transforaminal approach. *J Mech Behav Biomed Mater*. 2019 Mar;91:383-390. doi: 10.1016/j.jmbbm.2018.12.011. Epub 2018 Dec 20. PMID: 30660051 DOI: 10.1016/j.jmbbm.2018.12.011.
26. Inose H, Kato T, Sasaki M, Matsukura Y, Hirai T, Yoshii T, Kawabata S, Hirakawa A, Okawa A. Comparison of decompression, decompression plus fusion, and decompression plus stabilization: a long-term follow-up of a prospective, randomized study. *Spine J*. 2022 May;22(5):747-755. doi: 10.1016/j.spinee.2021.12.014. Epub 2021 Dec 25. PMID: 34963630.
27. Kang K, Rodriguez-Olaverri JC, Schwab F, Hashem J, Razi A, Farcy JP. Partial facetectomy for lumbar foraminal stenosis. *Adv Orthop*. 2014;2014:534658.
28. Kelly MP, Lurie JD, Yanik EL, Shaffrey CI, Baldus CR, Boachie-Adjei O, Buchowski JM, Carreon LY, Crawford CH 3rd, Edwards C 2nd, Errico TJ, Glassman SD, Gupta MC, Lenke LG, Lewis SJ, Kim HJ, Koski T, Parent S, Schwab FJ, Smith JS, Zebala LP, Bridwell KH. Operative Versus Nonoperative Treatment for Adult Symptomatic Lumbar Scoliosis. *J Bone Joint Surg Am*. 2019 Feb

- 20;101(4):338-352. doi: 10.2106/JBJS.18.00483. Erratum in: J Bone Joint Surg Am. 2019 Dec 18;101(24):e138.
29. Laugesen LA, Paulsen RT, Carreon L, Ernst C, Andersen MØ. Patient-reported outcomes and revision rates at a mean follow-up of 10 years after lumbar total disc replacement. *Spine (Phila Pa 1976)*. 2017 Nov 1;42(21):1657-1663. PMID: 28368983.
  30. Levin DA, Bendo JA, Quirno M, Errico T, Goldstein J, Spivak J. Comparative Charge Analysis of One- and Two-Level Lumbar Total Disc Arthroplasty Versus Circumferential Lumbar Fusion. *Spine (Phila Pa 1976)*. 2007 Dec 1;32(25):2905-9. PMID: 18246016.
  31. Liu G, Liu S, Zuo YZ, Li QY, Wu ZH, Wu N, Yu KY, Qiu GX. Recent Advances in Technique and Clinical Outcomes of Minimally Invasive Spine Surgery in Adult Scoliosis. *Chin Med J (Engl)*. 2017 Nov 5;130(21):2608-2615. doi: 10.4103/0366-6999.212688.
  32. Lurie J, Tomkins-Lane C. Management of lumbar spinal stenosis. *BMJ*. 2016 Jan 4;352:h6234. doi: 10.1136/bmj.h6234.
  33. McClelland S 3rd, Kim SS. Successful operative management of an upper lumbar spinal canal stenosis resulting in multilevel lower nerve root radiculopathy. *J Neurosci Rural Pract*. 2015 Jan;6(1):108-11.
  34. Möller H, Hedlund R. Surgery versus conservative management in adult isthmic spondylolisthesis--a prospective randomized study: part 1. *Spine (Phila Pa 1976)*. 2000 Jul 1;25(13):1711-5. doi: 10.1097/00007632-200007010-00016. PMID: 10870148.
  35. Mu X, Wei J, A J, Li Z, Ou Y. The short-term efficacy and safety of artificial total disc replacement for selected patients with lumbar degenerative disc disease compared with anterior lumbar interbody fusion: A systematic review and meta-analysis. *PLoS One*. 2018 Dec 28;13(12):e0209660. doi: 10.1371/journal.pone.0209660. eCollection 2018.
  36. Nakajima H, Matsuo H, Naruse H, Watanabe S, Honjoh K, Shoji K, Kubota A, Matsumine A. Clinical impact of short limited lumbar fusion for adult spinal deformity with postural and radiological abnormalities. *Sci Rep*. 2022 Nov 14;12(1):19439. doi: 10.1038/s41598-022-23933-z.
  37. National Institute for Health & Care Excellence (NICE). Interventional procedures guidance [IPG306]: Prosthetic intervertebral disc replacement in the lumbar spine (July 2009). Accessed at <https://www.nice.org.uk/>.
  38. Nerland US, Jakola AS, Solheim O, Weber C, Rao V, Lønne G, Solberg TK, Salvesen Ø, Carlsen SM, Nygaard ØP, Gulati S. Minimally invasive decompression versus open laminectomy for central stenosis of the lumbar spine: pragmatic comparative effectiveness study. *BMJ*. 2015 Apr 1;350:h1603.
  39. North American Spine Society (NASS). (2009). Clinical Guidelines for Multidisciplinary Spine Care: Diagnosis and Treatment of Degenerative Lumbar Spondylolisthesis. doi: 10.1016/j.spinee.2009.03.016.
  40. North American Spine Society (NASS) Coverage Policy Recommendations: Lumbar Artificial Disc Replacement. April 30, 2014. Accessed at <https://www.spine.org>.
  41. North American Spine Society (NASS) Coverage Policy Recommendations: Lumbar Artificial Disc Replacement. February 2019. Accessed at <https://www.spine.org>.
  42. North American Spine Society (NASS) Evidence-Based Clinical Guidelines for Multidisciplinary Spine Care: Diagnosis & Treatment of Low Back Pain (2020). Accessed at <https://www.spine.org>.
  43. Park SJ, Lee CS, Chung SS, Lee KH, Kim WS, Lee JY. Long-Term Outcomes Following Lumbar Total Disc Replacement Using ProDisc-II: Average 10-Year Follow-Up at a Single Institute. *Spine (Phila Pa 1976)*. 2016 Jun;41(11):971-7.
  44. Radcliff K, Spivak J, Darden B 2nd, Janssen M, Bernard T, Zigler J. Five Year Reoperation Rates of 2-Level Lumbar Total Disk Replacement Versus Fusion: Results of a Prospective, Randomized Clinical Trial. *Clin Spine Surg*. 2018 Feb;31(1):37-42. PMID: 28005616.

45. Salzman SN, Plais N, Shue J, Girardi FP. Lumbar disc replacement surgery-successes and obstacles to widespread adoption. *Curr Rev Musculoskelet Med*. 2017 Jun;10(2):153-159.
46. Sardar ZM, Ames RJ, Lenke L. Scheuermann's Kyphosis: Diagnosis, Management, and Selecting Fusion Levels. *J Am Acad Orthop Surg*. 2019 May 15;27(10):e462-e472. doi: 10.5435/JAAOS-D-17-00748. PMID: 30407981.
47. Scott-Young M, McEntee L, Schram B, Rathbone E, Hing W, Nielsen D. The Concurrent Use of Lumbar Total Disc Arthroplasty and Anterior Lumbar Interbody Fusion: the Lumbar Hybrid Procedure for the Treatment of Multi-Level Symptomatic Degenerative Disc Disease- A Prospective Study. *Spine (Phila Pa 1976)*. 2018 Jan 15; 43(2): E75–E81.
48. Shein D, Shue J, Girardi F. Evaluation of Aesculap Implant Systems activi Artificial Disc for the treatment of degenerative disc disease. *Expert Rev Med Devices*. 2016 Dec;13(12):1069-1072. PMID: 27807981.
49. Sherif S, Arlet V. Revision surgery for non-union in adult spinal deformity. *Eur Spine J*. 2020 Feb;29(Suppl 1):103-115. doi: 10.1007/s00586-020-06331-9. Epub 2020 Feb 11. PMID: 32048051.
50. Shin MH, Ryu KS, Rathi NK, Park CK. Segmental translation after lumbar total disc replacement using ProDisc-L®: associated factors and relation to facet arthrosis. *J Neurosurg Sci*. 2017 Feb;61(1):14-21. PMID: 25649063. DOI: 10.23736/S0390-5616.16.03135-0.
51. Siepe CJ, Heider F, Wiechert K, Hitzl W, Ishak B, Mayer M. Mid to long term results of total lumbar disc replacement: a prospective analysis with 5- to 10-year follow up. *Spine J*. 2014 Aug 1;14(8):1417-31. PMID: 244448028.
52. Tosteson, ANA, et al. (2008). Surgical treatment of spinal stenosis with and without degenerative spondylolisthesis: Cost-effectiveness after 2 years. *Ann Intern Med*, 149(2), 845-853.
53. Tredway TL, Santiago P, Hrubes MR, Song JK, Christie SD, Fessler RG. Minimally invasive resection of intradural-extramedullary spinal neoplasms. *Neurosurgery*. 2006 Feb;58(1 Suppl):ONS52-8; discussion ONS52-8. doi: 10.1227/01.neu.0000192661.08192.1c. PMID: 16479629.
54. Tumialan LM, Ponton RP, Garvin A, Gluf W. Arthroplasty in the military; a preliminary experience with ProDisc-C and ProDisc-L. *Neurosurg Focus*. 2010 May;28(5):E18. PMID: 20568934.
55. UpToDate. Lumbar spinal stenosis: Treatment and prognosis. 2021. Accessed at uptodate.com.
56. UpToDate. Scoliosis in the adult. 2018. Accessed at uptodate.com.
57. UpToDate. Subacute and chronic low back pain: Surgical treatment. 2023. Accessed at uptodate.com.
58. Washington State Health Care Authority. Surgery for Lumbar Radiculopathy/ Sciatica. Final Evidence Report. Prepared by the RTI-UNC Evidence-based Practice Center. 2018. Available at: <https://www.hca.wa.gov/about-hca/programs-and-initiatives/health-technology-assessment/surgery-lumbar-radiculopathy/sciatica>.
59. Wei FL, Zhou CP, Liu R, Zhu KL, Du MR, Gao HR, Wu SD, Sun LL, Yan XD, Liu Y, Qian JX. Management for lumbar spinal stenosis: A network meta-analysis and systematic review. *Int J Surg*. 2021 Jan;85:19-28. doi: 10.1016/j.ijsu.2020.11.014. Epub 2020 Nov 27.
60. Weinstein, J.N., Lurie, J.D., Tosteson, T.D., Hanscom, B., Tosteson, A.N.A., Blood E.A., Hu, S.S. (2007). Surgical versus nonsurgical treatment for lumbar degenerative spondylolisthesis. *N Engl J Med*, 356(22), 2257-2270.
61. Wuertinger C, Annes RD, Hitzl W, Siepe CJ. Motion preservation following total lumbar disc replacement at the lumbosacral junction: a prospective long-term clinical and radiographic investigation. *Spine J*. 2017 Jun 30. pii: S1529-9430(17)30309-1. PMID: 28673830 DOI: 10.1016/j.spinee.2017.06.035.



62. Yue JJ, Garcia R Jr, Miller LE. The activL(®) Artificial Disc: a next-generation motion-preserving implant for chronic lumbar discogenic pain. *Med Devices (Auckl)*. 2016 May 10;9:75-84.
63. Zigler, JE, et al. Comparison of therapies in lumbar degenerative disc disease: A network meta-analysis of randomized controlled trials. *J Comp Eff*. 2017 Sep.
64. Zigler J, Gornet MF, Ferko, N. Comparison of Lumbar Total Disc Replacement With Surgical Spinal Fusion for the Treatment of Single-Level Degenerative Disc Disease: A Meta-Analysis of 5-Year Outcomes From Randomized Controlled Trials.
65. Zigler JE, Blumenthal SL, et al. Progression of Adjacent-level Degeneration After Lumbar Total Disc Replacement. Results of a Post-hoc Analysis of Patients With Available Radiographs From a Prospective Study With 5-year Follow-up. *Spine (Phila Pa 1976)*. 2018 Oct 15; 43(20): 1395–1400.
66. Zigler JE, Glenn J, Delamarter RB. Five year adjacent-level degenerative changes in patients with single-level disease treated using lumbar total disc replacement with ProDisc-L versus circumferential fusion. *J Neurosurg Spine*. 2012 Dec;17(6):504-11.
67. Zigler JE, Delamarter RB. Five-year results of the ProDisc-L Multicenter, Prospective, Randomized, Controlled Trial Comparing ProDisc-L with Circumferential Spinal Fusion for Single-Level Disabling Degenerative Disk Disease. *J Nuerusurg Spine*. 2012 Dec:17:493-501.
68. Zigler JE, Delamarter RB, Spivak JM et al. Results of the Prospective, Randomized, Multicenter Food and Drug Administration Investigational Device Exemption Study of the ProDisc-L Total Disc Replacement versus Circumferential Fusion for the Treatment of 1-Level Degenerative Disc Disease. *SPINE* 2007 May 15; 32(11); 1155-62. PMID: 17495770.

## COMMITTEE APPROVAL:

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Medical Policy and Coverage Committee on 05/23/24.

## 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.
06/15/24	Scheduled review. Revised description. Maintained position statement and updated references.