# Spine Surgery

Humana
Medicaid Medical Coverage Policy

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**State:** VA

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## Description

### Artificial Intervertebral Disc Replacement

Artificial intervertebral disc replacement is an alternative to cervical and lumbar spinal fusion surgery for an individual suffering from pain due to degenerative disc disease (DDD). The artificial disc was designed to restore normal disc height, to preserve spinal flexibility and decrease degeneration of adjacent discs, which can occur as a result of DDD.

Examples of FDA-approved devices for the lumbar spine include, but may not be limited to:

- **activL** artificial disc
- **ProDisc L** total disc replacement

### Minimally Invasive Sacroiliac Joint Fusion

Sacroiliac joint (SIJ) fusion has been suggested as a possible treatment option for an individual with low back pain due to sacroiliac joint dysfunction or syndrome. This procedure may be performed by an open surgical approach or as a minimally invasive procedure in order to place plates and/or screws to develop a bony fusion across the SIJ for stabilization.

The **iFUSE Implant System** consists of small triangular titanium implants placed *across* the sacroiliac joint (may be referred to as a lateral transiliac approach or placement of a transfixation device) to stabilize and fuse it via a percutaneous, minimally invasive approach with use of fluoroscopy to visualize placement of

the implants. The triangular shape of the implants helps minimize rotation while also maximizing surface area contact across the SIJ.

Minimally invasive SIJ fusion may also be accomplished via other anatomical approaches (eg, posterior, intra-articular [within the SI joint]) or with differently designed implants (eg, cylindrical threaded implants, hollow conical shaped barrel implants). Examples of other minimally invasive systems used for SIJ fusion include, but may not be limited to, the following:

- **Firebird SI Fusion System**
- **Genesys Sacroiliac Joint Fusion System**
- **LinQ**
- **Prolix SI Fusion System**
- **Rialto SI Fusion System**
- **Sacrofuse SIJFuse Sacroiliac Joint Fusion Device System**
- **SI-DESIS**
- **Siber Ti 3D**
- **Siconus SI Joint Fixation System**
- **SIFix**
- **SIJoin**
- **Silex Sacroiliac Joint System**
- **SILO TFX MIS Sacroiliac Joint Fixation System**
- **SImmetry Sacroiliac Joint Fusion System**
- **SIros 3D Printed SI Joint System (lateral, oblique, posterior, hybrid)**
- **TiLink-L**
- **TiLink-P**
- **TransLoc 3D**
- **Triton Sacroiliac Joint Fixation System**

**Spinal Fusion Surgery**

Spinal fusion, also known as spinal arthrodesis, is a surgical treatment for cervical (neck) or lumbar or thoracic (back) pain that fuses (unites) two or more vertebral bodies in the spinal column. The most common goal of spinal fusion surgery is to restrict spinal motion in order to relieve painful symptoms. Spinal fusion surgery is generally performed to treat degenerative disc disease (DDD), scoliosis or kyphosis (abnormal spinal curvatures), spondylolisthesis, trauma resulting in spinal nerve compression and vertebral instability caused by infections or tumors.

Spinal fusion may be performed using a minimally invasive or open approach. All fusion surgeries involve the placement of a bone graft between the vertebrae. The bone graft may be either autograft (from another bone in the individual) or allograft (bone from a bone bank). Bone graft substitute products may be used instead of an autograft or allograft. These products may be composed of synthetic materials, bone morphogenetic protein or recombinant human bone morphogenetic protein, and are designed to facilitate growth of bone to accomplish the fusion.

The spine may be approached, and the graft placed, from either an anterior (front of the body), posterior (back of the body), lateral (from the side) or by a combination anterior/posterior approach. A fusion can be performed with or without the use of supplemental hardware such as plates, screws or cages that serve as an internal splint while the bone graft heals. However, current practice most commonly employs hardware in addition to the grafts.

**Vertebral Body Tethering**
Vertebral body tethering has been proposed as a surgical treatment for scoliosis. In this procedure, screws are implanted into each side of the vertebra, which are then attached to polyethylene-terephthalate cords. The procedure is based on the theory of growth modulation – partially restraining one side of the spine (pulling one cord tighter than the other) to purportedly allow growth on the other side, to reverse the abnormal scoliosis growth pattern in the anterior thoracic (upper) spine. An example of a device used for this procedure includes, but may not be limited to, **The Tether Vertebral Body Tethering System**. A variation of this device is the **Auctus VBT system**, which was granted an FDA Breakthrough Device Designation; it utilizes an external magnet controller for nonsurgical adjustment of the spinal curvature over time.

## Coverage Determination

**Lumbar Artificial Intervertebral Disc Replacement**
Humana members may be eligible under the Plan for **lumbar artificial intervertebral disc replacement** for an *individual 60 years of age or younger* when **ALL** of the following requirements are met:

- An FDA-approved lumbar artificial intervertebral disc for replacement at ***ONE*** level, from L3 to S1[34]; **AND**
- Degenerative disc disease confirmed by a complex imaging study[49,50] (eg, CT, MRI, positive concordant discography); **AND**
- Absence of contraindications[49,50]; **AND**
- Documentation of skeletal maturity***[49,50]; **AND**
- Failure of at least 6 months of conservative treatment[11,40,49,50] under the direction of a healthcare professional within the past 12 months with **ALL** of the following:
    - Epidural steroid injections if medically appropriate and not contraindicated[11]; **AND**
    - Modification of pain-inducing activities[11]; **AND**
    - NSAIDs if medically appropriate and not contraindicated[11]; **AND**
    - PT including a home exercise program (HEP)[11]; **AND**
- Implantation via an anterior or anterior retroperitoneal approach[40,49,50]; **AND**

- No more than grade I spondylolisthesis at the involved level[49,50]; **AND**

- Presurgical psychological evaluation conducted by a qualified behavioral health provider to identify surgical readiness and potential postoperative challenges that may contribute to a poor postoperative outcome[4]; **AND**

- Unremitting low back pain and functional impairment**[12]

**Revision or Replacement of a Lumbar Artificial Intervertebral Disc**
Humana members may be eligible under the Plan for **revision or replacement** of a lumbar artificial intervertebral disc *at the same level as the previous surgery* when **ALL** of the following criteria are met:

- Original surgery was performed with an FDA-approved device, and in accordance with those approved indications; **AND**

- Imaging studies confirm implanted device mechanical failure (eg, dislodgement, implanted device breakage, infection, loosening, vertebral body fracture); **AND**

- Symptoms were relieved by original procedure, but reoccurred upon failure of the implanted device

*Skeletally mature refers to a system of fused skeletal bones which occurs when bone growth ceases.

**Functional impairment is defined as a direct and measurable reduction in physical performance of an organ or body part limiting the ability to perform activities of daily living such as bathing, dressing and mobility (eg, sit, stand, walk) due to illness or pain.

**Spinal Fusion Surgery**
Humana members may be eligible under the Plan for **a bone graft utilizing an allograft or autograft** and/or **use of cages, instrumentation, plates, screws** or **wires** when a medically necessary spinal fusion is performed.

The following codes may apply: **20930, 20931, 20936, 20937, 20938, 22532, 22556, 22610, 22808, 22810, 22812, 22830, 22840, 22841, 22845, 22846, 22847, 22848, 22853, 22854, 22859**

## Coverage Limitations

**Lumbar Artificial Intervertebral Disc Replacement**

Humana members may **NOT** be eligible for **lumbar artificial intervertebral disc replacement** for any indications other than those listed above including, but not limited to:

- Multilevel lumbar disc replacement[34]; **OR**
- Planned procedure includes combined use of a lumbar artificial intervertebral disc replacement adjacent to a spinal fusion (also referred to as hybrid surgery)[28,40]; **OR**
- Prior spinal fusion surgery at the planned treatment level[49]

A review of the current medical literature shows that the **evidence is insufficient** to determine that this service is standard medical treatment. There is an absence of current, widely-used treatment guidelines or acceptable clinical literature examining benefit and long-term clinical outcomes establishing the value of this service in clinical management.

Humana members may **NOT** be eligible under the Plan for **lumbar artificial intervertebral disc replacement** for any of the following contraindications[49,50]:

- Abdominal pathology precluding an anterior retroperitoneal approach; **OR**
- Active or chronic infection, systemic or infection localized to the operative site; **OR**
- Allergy or sensitivity to the implant materials (eg, calcium phosphate, cobalt, chromium, molybdenum, polyethylene, tantalum or titanium); **OR**
- Bony lumbar stenosis; **OR**
- Chronic radiculopathy over a period of at least 1 year; **OR**
- Clinically compromised vertebral bodies at the affected level due to current or past disease (eg, ankylosing spondylitis) or trauma (eg, fracture); **OR**
- Extruded disc material with sequestrum (free disc fragment); **OR**
- Facet ankylosis or moderate or severe[25] facet joint degeneration; **OR**
- Involved vertebral endplate dimensionally smaller than 31 mm for activL or 34.5 mm for ProDisc L in the medial lateral and/or 26 mm for activL or 27 mm for ProDisc L in the anterior posterior directions; **OR**
- Isolated lumbar radiculopathy, especially due to herniated disc; **OR**
- Myelopathy; **OR**

- Osteoporosis or osteopenia defined as DEXA bone mineral density T-score less than or equal to negative 1.0; **OR**
- Pars defect; **OR**
- Preoperative remaining disc height less than 3 mm; **OR**
- Scoliosis; **OR**
- Spondylolisthesis (degenerative, isthmic or lytic) greater than grade I or segmental instability

A review of the current medical literature shows that the **evidence is insufficient** to determine that these services are standard medical treatments. There is an absence of current, widely-used treatment guidelines or acceptable clinical literature examining benefit and long-term clinical outcomes establishing the value of these services in clinical management.

**Minimally Invasive Sacroiliac Joint Fusion**

Humana members may **NOT** be eligible for **minimally invasive SIJ fusion via an approach *other than lateral transiliac with placement of the implant across the SIJ*** including, but not be limited to:

- Insertion of both a lateral transfixing and an intra-articular (nontransfixing) implant in the same operative procedure (may also be referred to as a hybrid SIJ fusion procedure); **OR**
- Percutaneous intra-articular implant (without placement of transfixation device); **OR**
- Posterior or dorsal approach/procedure (including those using only bone grafts and no internal fixation devices)

A review of the current medical literature shows that the **evidence is insufficient** to determine that these services are standard medical treatments. There is an absence of current, widely-used treatment guidelines or acceptable clinical literature examining benefit and long-term clinical outcomes establishing the value of these services in clinical management.

**Vertebral Body Tethering**

Humana members may **NOT** be eligible for **vertebral body tethering** for any indication including, but not limited to, treatment of scoliosis. A review of the current medical literature shows that the **evidence is insufficient** to determine that this service is standard medical treatment. There is an absence of current, widely-used treatment guidelines or acceptable clinical literature examining benefit and long-term clinical outcomes establishing the value of this service in clinical management.

## Coding Information

Any codes listed on this policy are for informational purposes only. Do not rely on the accuracy and inclusion of specific codes. Inclusion of a code does not guarantee coverage and/or reimbursement for a service or procedure.

| CPT® Code(s) | Description | Comments |
|---|---|---|
| 20930 | Allograft, morselized, or placement of osteopromotive material, for spine surgery only (List separately in addition to code for primary procedure) | |
| 20931 | Allograft, structural, for spine surgery only (List separately in addition to code for primary | |
| 20936 | Autograft for spine surgery only (includes harvesting the graft); local (eg, ribs, spinous process, or laminar fragments) obtained from same incision (List separately in addition to code for primary procedure) | |
| 20937 | Autograft for spine surgery only (includes harvesting the graft); morselized (through separate skin or fascial incision) (List separately in addition to code for primary procedure) | |
| 20938 | Autograft for spine surgery only (includes harvesting the graft); structural, bicortical or tricortical (through separate skin or fascial incision) (List separately in addition to code for primary procedure) | |
| 22532 | Arthrodesis, lateral extracavitary technique, including minimal discectomy to prepare interspace (other than for decompression); thoracic | |
| 22556 | Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); thoracic | |
| 22610 | Arthrodesis, posterior or posterolateral technique, single interspace; thoracic (with lateral transverse technique, when performed) | |
| 22808 | Arthrodesis, anterior, for spinal deformity, with or without cast; 2 to 3 vertebral segments | |
| 22810 | Arthrodesis, anterior, for spinal deformity, with or without cast; 4 to 7 vertebral segments | |
| 22812 | Arthrodesis, anterior, for spinal deformity, with or without cast; 8 or more vertebral segments | |
| 22830 | Exploration of spinal fusion | |
| 22836 | Anterior thoracic vertebral body tethering, including thoracoscopy, when performed; up to 7 vertebral segments | |
| 22837 | Anterior thoracic vertebral body tethering, including thoracoscopy, when performed; 8 or more vertebral segments | |
| 22838 | Revision (eg, augmentation, division of tether), replacement, or removal of thoracic vertebral body tethering, including thoracoscopy, when performed | |
| 22840 | Posterior non-segmental instrumentation (eg, Harrington rod technique, pedicle fixation across 1 interspace, atlantoaxial transarticular screw fixation, sublaminar wiring at C1, facet screw fixation) (List separately in addition to code for primary procedure) | |

| | | |
|---|---|---|
| 22841 | Internal spinal fixation by wiring of spinous processes (List separately in addition to code for primary procedure) | |
| 22845 | Anterior instrumentation; 2 to 3 vertebral segments (List separately in addition to code for primary procedure) | |
| 22846 | Anterior instrumentation; 4 to 7 vertebral segments (List separately in addition to code for primary procedure) | |
| 22847 | Anterior instrumentation; 8 or more vertebral segments (List separately in addition to code for primary procedure) | |
| 22848 | Pelvic fixation (attachment of caudal end of instrumentation to pelvic bony structures) other than sacrum (List separately in addition to code for primary procedure) | |
| 22853 | Insertion of interbody biomechanical device(s) (eg, synthetic cage, mesh) with integral anterior instrumentation for device anchoring (eg, screws, flanges), when performed, to intervertebral disc space in conjunction with interbody arthrodesis, each interspace (List separately in addition to code for primary procedure) | |
| 22854 | Insertion of intervertebral biomechanical device(s) (eg, synthetic cage, mesh) with integral anterior instrumentation for device anchoring (eg, screws, flanges), when performed, to vertebral corpectomy(ies) (vertebral body resection, partial or complete) defect, in conjunction with interbody arthrodesis, each contiguous defect (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 | |
| 22859 | Insertion of intervertebral biomechanical device(s) (eg, synthetic cage, mesh, methylmethacrylate) to intervertebral disc space or vertebral body defect without interbody arthrodesis, each contiguous defect (List separately in addition to code for primary | |
| 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 | |
| 27278 | Arthrodesis, sacroiliac joint, percutaneous, with image guidance, including placement of intra-articular implant(s) (eg, bone allograft[s], synthetic device[s]), without placement of transfixation device | |
| 64866 | Anastomosis; facial-spinal accessory | |
| **CPT® Category III Code(s)** | **Description** | **Comments** |

| | | |
|---|---|---|
| 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) | |
| **HCPCS Code(s)** | **Description** | **Comments** |
| No code(s) identified | | |

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## Appendix

**Appendix A**
**Spondylolisthesis Grades**[13]
In this system the slip grade is calculated by determining the ratio between the anteroposterior diameter in the top of the first sacral vertebra and the distance the L5 has slipped anteriorly.

| | |
|---|---|
| **Grade I** | 25% or less displacement |
| **Grade II** | Between 25% and 50% displacement |
| **Grade III** | Between 50% and 75% displacement |
| **Grade IV** | More than 75% displacement |
| **Grade V** | L5 vertebra positioned completely below the top of the sacrum |

## Change Summary

04/01/2025 New Policy.