Spinal Fusion Surgery

Medicare Advantage Medical Coverage Policy

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Disclaimer

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Related Medical/Pharmacy Coverage Policies

None

Related Documents

Please refer to CMS website for the most current applicable CMS Online Manual System (IOMs)/National Coverage Determination (NCD)/ Local Coverage Determination (LCD)/ Local Coverage Article (LCA)/ Transmittals.

<table>
<thead>
<tr>
<th>Type</th>
<th>Title</th>
<th>ID Number</th>
<th>Jurisdiction Medicare Administrative Contractors (MACs)</th>
<th>Applicable States/Territories</th>
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</thead>
</table>
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), spondylolisthesis, trauma resulting in spinal nerve compression, scoliosis or kyphosis (abnormal spinal curvatures) 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 taken 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.

Spinal fusion surgeries may also be performed in conjunction with a laminectomy, laminotomy, foraminectomy, foraminotomy, laminoplasty, corpectomy or facetectomy procedure.

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.
Interlaminar lumbar instrumented fusion (ILIF), utilizing an interspinous process fusion device, has been proposed as an alternative to traditional fusion procedures.

Devices used for ILIF are interlaminar or interspinous fixation devices, rather than traditional hardware (ie, plates, screws or cages). These devices are described as non-pedicle supplemental fixation systems and are attached to the spinous processes of adjoining vertebrae. They differ from interspinous process decompression spacers and nonrigid spinal stabilization devices in that they are intended to be used as an adjunct to interbody vertebral fusion and allow the use of a bone graft (or bone graft substitute), rather than stand-alone procedures. Examples of these devices include, but may not be limited to, the Alpine XC System, Aspen MIS Fusion System, Aurora Zip MIS Interspinous Fusion System, Aurora Zip Ultra Interlaminar Fixation Implant, BacFus, coflex-F, InSpan Spinous Process Plate System, PrimaLOK SP, SP-Fix and StabiLink MIS Spinal Fixation System.

A proposed minimally invasive approach to spinal fusion uses a laparoscope (endoscope) and purports to decrease injury to surrounding tissues and promote a quicker recovery time. There are several types of these procedures/techniques including, but may not be limited to, direct lateral interbody fusion (DLIF), extreme lateral interbody fusion (XLIF), laparoscopic anterior lumbar interbody fusion (LALIF) and minimally invasive transforaminal lumbar interbody fusion (MITLIF).

Alternative, minimally invasive (percutaneous) approaches have been proposed for lumbar fusion. One such procedure utilizes a percutaneous axial or presacral lumbar interbody fusion including, but may not be limited to, the AxiaLIF+ (Axial Lumbar Interbody Fusion System). Another procedure proposed as an alternative to traditional spinal fusion is the OptiLIF procedure, which is a percutaneous transforaminal lumbar interbody fusion (TLIF). It utilizes the OptiMesh expandable interbody fusion system, which consists of an expandable interbody mesh cage to hold bone graft material, and instruments for implanting the cage.

Facet joint replacement/implant is a relatively new device/procedure for facet joint degeneration, which has been proposed to be used in conjunction with a spinal fusion or as a stand-alone procedure. When performed as a stand-alone procedure, it is purported as a system for facet joint reconstruction, matching the joint shape and size in order to provide pain relief, normal motion and stability. Examples include, but may not be limited to, the Acadia Facet Replacement System (which is not US Food & Drug Administration [FDA] approved) and the TOPS Spinal Arthroplasty System (currently limited to investigational use).

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) 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.

Other minimally invasive systems used for SIJ fusion include, but may not be limited to, the following:
The **LigaPass 2.0 Ligament Augmentation System** has been proposed as an alternative to pedicle screws, hooks or as an adjunct to other posterior spinal instrumentation in spinal surgeries where ligament augmentation is needed. It consists of a polyester band and titanium connectors that lace around the vertebra to purportedly mimic muscle and ligament functionality and stability.

### Coverage Determination

*iCare follows the CMS requirements that only allows coverage and payment for services that are reasonable and necessary for the diagnosis and treatment of illness or injury or to improve the functioning of a malformed body member except as specifically allowed by Medicare.*

*In interpreting or supplementing the criteria above and in order to determine medical necessity consistently, iCare may consider the following criteria:*  

### Spinal Fusion Surgery

*The use of the criteria in this Medicare Advantage Medical Coverage Policy provides clinical benefits highly likely to outweigh any clinical harms. Services that do not meet the criteria above are not medically necessary and thus do not provide a clinical benefit. Medically unnecessary services carry risks of adverse outcomes and may interfere with the pursuit of other treatments which have demonstrated efficacy.*

### Coverage Limitations

## 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.

<table>
<thead>
<tr>
<th>CPT® Code(s)</th>
<th>Description</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>20930</td>
<td>Allograft, morselized, or placement of osteopromotive material, for spine surgery only (List separately in addition to code for primary procedure)</td>
<td></td>
</tr>
<tr>
<td>20931</td>
<td>Allograft, structural, for spine surgery only (List separately in addition to code for primary procedure)</td>
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<tr>
<td>20936</td>
<td>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)</td>
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<tr>
<td>20937</td>
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<tr>
<td>20938</td>
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<td>22116</td>
<td>Partial excision of vertebral body, for intrinsic bony lesion, without decompression of spinal cord or nerve root(s), single vertebral segment; each additional vertebral segment (List separately in addition to code for primary procedure)</td>
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<tr>
<td>22532</td>
<td>Arthrodesis, lateral extracavitary technique, including minimal discectomy to prepare interspace (other than for decompression); thoracic</td>
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<tr>
<td>22533</td>
<td>Arthrodesis, lateral extracavitary technique, including minimal discectomy to prepare interspace (other than for decompression); lumbar</td>
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<tr>
<td>22534</td>
<td>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)</td>
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<tr>
<td>22548</td>
<td>Arthrodesis, anterior transoral or extraoral technique, clivus-C1-C2 (atlas-axis), with or without excision of odontoid process</td>
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<td>Code</td>
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<tr>
<td>22551</td>
<td>Arthrodesis, anterior interbody, including disc space preparation, discectomy, osteophytectomy and decompression of spinal cord and/or nerve roots; cervical below C2</td>
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<tr>
<td>22552</td>
<td>Arthrodesis, anterior interbody, including disc space preparation, discectomy, osteophytectomy and decompression of spinal cord and/or nerve roots; cervical below C2, each additional interspace (List separately in addition to code for separate procedure)</td>
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<td>22554</td>
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<tr>
<td>22558</td>
<td>Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); lumbar</td>
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<td>22585</td>
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<td>22595</td>
<td>Arthrodesis, posterior technique, atlas-axis (C1-C2)</td>
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<td>22600</td>
<td>Arthrodesis, posterior or posterolateral technique, single level; cervical below C2 segment</td>
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<td>22610</td>
<td>Arthrodesis, posterior or posterolateral technique, single level; thoracic (with lateral transverse technique, when performed)</td>
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<tr>
<td>22612</td>
<td>Arthrodesis, posterior or posterolateral technique, single level; lumbar (with lateral transverse technique, when performed)</td>
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<td>Arthrodesis, posterior or posterolateral technique, single level; each additional vertebral segment (List separately in addition to code for primary procedure)</td>
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<tr>
<td>22630</td>
<td>Arthrodesis, posterior interbody technique, including laminectomy and/or discectomy to prepare interspace (other than for decompression), single interspace; lumbar</td>
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<tr>
<td>Code</td>
<td>Description</td>
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<tr>
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<td>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)</td>
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<tr>
<td>22633</td>
<td>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 and segment; lumbar</td>
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</tr>
<tr>
<td>22634</td>
<td>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 and segment; each additional interspace and segment (List separately in addition to code for primary procedure)</td>
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<tr>
<td>22800</td>
<td>Arthrodesis, posterior, for spinal deformity, with or without cast; up to 6 vertebral segments</td>
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<td>22802</td>
<td>Arthrodesis, posterior, for spinal deformity, with or without cast; 7 to 12 vertebral segments</td>
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<tr>
<td>22804</td>
<td>Arthrodesis, posterior, for spinal deformity, with or without cast; 13 or more vertebral segments</td>
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<tr>
<td>22808</td>
<td>Arthrodesis, anterior, for spinal deformity, with or without cast; 2 to 3 vertebral segments</td>
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<td>22810</td>
<td>Arthrodesis, anterior, for spinal deformity, with or without cast; 4 to 7 vertebral segments</td>
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<tr>
<td>22812</td>
<td>Arthrodesis, anterior, for spinal deformity, with or without cast; 8 or more vertebral segments</td>
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<td>22818</td>
<td>Kyphectomy, circumferential exposure of spine and resection of vertebral segment(s) (including body and posterior elements); single or 2 segments</td>
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<tr>
<td>22819</td>
<td>Kyphectomy, circumferential exposure of spine and resection of vertebral segment(s) (including body and posterior elements); 3 or more segments</td>
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<tr>
<td>22830</td>
<td>Exploration of spinal fusion</td>
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<tr>
<td>22840</td>
<td>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)</td>
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<tr>
<td>22841</td>
<td>Internal spinal fixation by wiring of spinous processes (List separately in addition to code for primary procedure)</td>
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<td>22842</td>
<td>Posterior segmental instrumentation (eg, pedicle fixation, dual rods with</td>
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<td></td>
<td>multiple hooks and sublaminar wires); 3 to 6 vertebral segments (List</td>
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<td>separately in addition to code for primary procedure)</td>
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<td>Posterior segmental instrumentation (eg, pedicle fixation, dual rods with</td>
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<td></td>
<td>multiple hooks and sublaminar wires); 7 to 12 vertebral segments (List</td>
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<td>separately in addition to code for primary procedure)</td>
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<td>22844</td>
<td>Posterior segmental instrumentation (eg, pedicle fixation, dual rods with</td>
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<td></td>
<td>multiple hooks and sublaminar wires); 13 or more vertebral segments (List</td>
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<td>22845</td>
<td>Anterior instrumentation; 2 to 3 vertebral segments (List separately in</td>
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<td></td>
<td>addition to code for primary procedure)</td>
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<td>22846</td>
<td>Anterior instrumentation; 4 to 7 vertebral segments (List separately in</td>
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<td>addition to code for primary procedure)</td>
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<td>22847</td>
<td>Anterior instrumentation; 8 or more vertebral segments (List separately</td>
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<td>in addition to code for primary procedure)</td>
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<tr>
<td>22848</td>
<td>Pelvic fixation (attachment of caudal end of instrumentation to pelvic</td>
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<td>bony structures) other than sacrum (List separately in addition to code</td>
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<td>for primary procedure)</td>
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<td>22853</td>
<td>Insertion of interbody biomechanical device(s) (eg, synthetic cage, mesh)</td>
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<td>with integral anterior instrumentation for device anchoring (eg, screws,</td>
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<td></td>
<td>flanges), when performed, to intervertebral disc space in conjunction</td>
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<td></td>
<td>with interbody arthrodesis, each interspace (List separately in addition</td>
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<td>to code for primary procedure)</td>
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<tr>
<td>22854</td>
<td>Insertion of intervertebral biomechanical device(s) (eg, synthetic cage,</td>
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<td></td>
<td>mesh) with integral anterior instrumentation for device anchoring (eg,</td>
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<td></td>
<td>screws, flanges), when performed, to vertebral corpectomy(ies) (vertebral</td>
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<td>body resection, partial or complete) defect, in conjunction with interbody</td>
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<td>arthrodesis, each contiguous defect (List separately in addition to code</td>
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<td></td>
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<tr>
<td>22859</td>
<td>Insertion of intervertebral biomechanical device(s) (eg, synthetic cage,</td>
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<td></td>
<td>mesh, methylmethacrylate) to intervertebral disc space or vertebral body</td>
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<td></td>
<td>defect without interbody arthrodesis, each contiguous defect (List</td>
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<td></td>
<td>separately in addition to code for primary procedure)</td>
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<td>22899</td>
<td>Unlisted procedure, spine</td>
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<tr>
<td>27278</td>
<td>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</td>
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<td>27279</td>
<td>Arthrodesis, sacroiliac joint, percutaneous or minimally invasive (indirect visualization), with image guidance, includes obtaining bone graft when performed, and placement of transfixing device</td>
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<tr>
<td>27280</td>
<td>Arthrodesis, open, sacroiliac joint, including obtaining bone graft, including instrumentation, when performed</td>
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<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>63052</td>
<td>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)</td>
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<tr>
<td>63053</td>
<td>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)</td>
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<tr>
<th>CPT® Category III Code(s)</th>
<th>Description</th>
<th>Comments</th>
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<tbody>
<tr>
<td>0202T</td>
<td>Posterior vertebral joint(s) arthroplasty (eg, facet joint[s] replacement), including facetectomy, laminectomy, foraminotomy, and vertebral column fixation, injection of bone cement, when performed, including fluoroscopy, single level, lumbar spine</td>
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<tr>
<td>0219T</td>
<td>Placement of a posterior intrafacet implant(s), unilateral or bilateral, including imaging and placement of bone graft(s) or synthetic device(s), single level; cervical</td>
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<td>0220T</td>
<td>Placement of a posterior intrafacet implant(s), unilateral or bilateral, including imaging and placement of bone graft(s) or synthetic device(s), single level; thoracic</td>
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<tr>
<td>0221T</td>
<td>Placement of a posterior intrafacet implant(s), unilateral or bilateral, including imaging and placement of bone graft(s) or synthetic device(s), single level; lumbar</td>
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<tr>
<td>Code</td>
<td>Description</td>
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<tr>
<td>0222T</td>
<td>Placement of a posterior intrafacet implant(s), unilateral or bilateral, including imaging and placement of bone graft(s) or synthetic device(s), single level; each additional vertebral segment (List separately in addition to code for primary procedure)</td>
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<tr>
<td>0719T</td>
<td>Posterior vertebral joint replacement, including bilateral facetectomy, laminectomy, and radical discectomy, including imaging guidance, lumbar spine, single segment</td>
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<td>0775T</td>
<td>Arthrodesis, sacroiliac joint, percutaneous, with image guidance, includes placement of intra-articular implant(s) (eg, bone allograft[s], synthetic device[s])</td>
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<td>0809T</td>
<td>Arthrodesis, sacroiliac joint, percutaneous or minimally invasive (indirect visualization), with image guidance, placement of transfixing device(s) and intra-articular implant(s), including allograft or synthetic device(s)</td>
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<tr>
<td>C1831</td>
<td>Personalized, anterior and lateral interbody cage (implantable)</td>
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**References**


**Change Summary**

- 01/01/2024 New Policy.