MEDICAL POLICY
No. 91590-R6

LUMBAR FUSION

Effective Date: May 1, 2017
Review Dates: 4/11, 4/12, 4/13, 8/13, 5/14, 8/14, 8/15, 5/16
Date Of Origin: April 13, 2011
Status: Current

Summary of Changes

Clarifications:

Deletions:

Additions:

I. POLICY/CRITERIA

A. Lumbar spinal fusion is covered per the indications listed below:

Lumbar fusions are considered medically necessary for spinal instability associated with any of the following conditions:

1. Spinal fracture with either spinal instability or neural compression.
2. Spondylolisthesis with or without spondylosis, OR spinal stenosis
   a. Associated lumbar spondylolisthesis or stenosis demonstrated on x-ray, CT/MRI
   b. Back pain, neurogenic claudication or radicular pain from lateral recess or foraminal stenosis
   c. Functional impairment (interferes with ADLs)
   d. X-ray abnormality (not needed with CT or MRI)
      i. Instability by x-rays: sagittal plane translation > 3 mm or 15% of vertebral body width, or
      ii. Relative sagittal plane angulation of 22 degrees
   e. Documented unremitting pain for at least 6 months that is refractory to intensive conservative therapy for at least 12 weeks
   f. Participation in the SCOE physiatry program
3. Spinal repair as needed in operations for dislocation, abscess/infection and / or tumor
4. Severe degenerative scoliosis with one or more of the following:
   a. Curvature > 50 degrees with loss of function;
   b. Persistent significant radicular pain or weakness unresponsive to conservative care;
   c. Persistent neurogenic claudication unresponsive to conservative care.
5. Spinal tuberculosis.
6. Intra-operative spinal instability
B. Sacroiliac Joint Fusion

Sacroiliac (SI) joint fusion (open or minimally invasive percutaneous procedure including implants [e.g. iFuse implant system]) may be covered when all of the following are met:

1. Patient is skeletally mature
2. Patient has lower back pain for >6 months inadequately responsive to conservative care
3. Diagnosis of sacroiliac joint disruption or degenerative sacroiliitis based on BOTH of the following:
   a. Patient has pain at or close to the posterior superior iliac spine (PSIS) with possible radiation into buttocks, posterior thigh or groin and can point with a single finger to the location of pain (Fortin Finger Test), and
   b. Patient has improvement in lower back pain numeric rating scale (NRS) of at least 80% after a minimum of two local anesthetic blocks into affected SI joint(s)

And none of the following exclusion criteria:

1. Other known sacroiliac pathology such as:
   a. Sacral dysplasia
   b. Inflammatory sacroiliitis (e.g., ankylosing spondylitis or other HLA-associated spondyloarthropathy)
   c. Tumor
   d. Infection
   e. Crystal arthropathy
2. Osteomalacia or other metabolic bone disease
3. Chondropathy
4. Known allergy to titanium or titanium alloys
5. Prominent neurologic condition that would interfere with physical therapy
6. Current local or systemic infection that raises the risk of surgery
7. Currently pregnant or planning pregnancy in the next 2 years

C. Indications that are not covered

Lumbar fusions are not considered medically necessary or covered for the management of the following conditions:
1. Spinal degeneration without instability
2. With initial primary laminectomy / discectomy for nerve root decompression without documented instability
3. Multiple-level degenerative disc disease (more than 3 levels / vertebrae)
4. Minimally invasive fusions  
5. Chronic discogenic back pain  
6. All other conditions not listed under “Indications that are covered”

Lumbar fusions with any of the following devices or techniques are not covered because the following are considered experimental or investigational:

1. Anterior interbody fusion or implantation of intervertebral body fusion devices using a laparoscopic approach 
2. Axial interbody approach (AxiaLIF®) 
3. Dynamic spine stabilization device systems (e.g. Dynesys®, Stabilimax NZ®) 
4. Stand-alone spire plate for fusion 
5. Percutaneous endoscopic fusions 
6. Coflex interlaminar stabilization device 
7. Concentrated bone marrow aspirate for spinal surgery, including lumbar fusions, is not a covered benefit. There is insufficient evidence to determine safety and efficacy of this treatment.

II. DEFINITIONS

Spinal Stenosis – an abnormal narrowing of the spinal canal that may be either congenital or acquired

Spondylolisthesis – forward movement of one building block of the spine (vertebra) in relation to an adjacent vertebra

Scoliosis – a congenital lateral curvature of the spine

Kyphosis – a posterior curvature of the thoracic spine usually the result of a disease (lung disease, Paget’s disease) or a congenital problem

Cauda Equina – a bundle of spinal nerve roots which arise from the termination of the spinal cord proper, it comprises the roots of all the spinal nerves below the first lumbar (L1)

III. MEDICAL NECESSITY REVIEW

☒*Required ☐**Not Required ☐ Not Applicable

*Prior approval required for Sacroiliac Joint Fusions  
**Prior approval not required for other Lumbar Fusion procedures described in this medical policy.
IV. APPLICATION TO PRODUCTS

Coverage is subject to member’s specific benefits. Group specific policy will supersede this policy when applicable.

- **HMO/EPO**: This policy applies to insured HMO/EPO plans.
- **POS**: This policy applies to insured POS plans.
- **PPO**: This policy applies to insured PPO plans. Consult individual plan documents as state mandated benefits may apply. If there is a conflict between this policy and a plan document, the provisions of the plan document will govern.
- **ASO**: For self-funded plans, consult individual plan documents. If there is a conflict between this policy and a self-funded plan document, the provisions of the plan document will govern.
- **INDIVIDUAL**: For individual policies, consult the individual insurance policy. If there is a conflict between this medical policy and the individual insurance policy document, the provisions of the individual insurance policy will govern.
- **MEDICARE**: Coverage is determined by the Centers for Medicare and Medicaid Services (CMS); if a coverage determination has not been adopted by CMS, this policy applies.
- **MEDICAID/HEALTHY MICHIGAN PLAN**: For Medicaid/Healthy Michigan Plan members, this policy will apply. Coverage is based on medical necessity criteria being met and the appropriate code(s) from the coding section of this policy being included on the Michigan Medicaid Fee Schedule located at: [http://www.michigan.gov/mdch/0,1607,7-132-2945_42542_42543_42546_42551-159815--,00.html](http://www.michigan.gov/mdch/0,1607,7-132-2945_42542_42543_42546_42551-159815--,00.html). If there is a discrepancy between this policy and the Michigan Medicaid Provider Manual located at: [http://www.michigan.gov/mdch/0,1607,7-132-2945_5100-87572--,00.html](http://www.michigan.gov/mdch/0,1607,7-132-2945_5100-87572--,00.html), the Michigan Medicaid Provider Manual will govern. For Medical Supplies/DME/Prosthetics and Orthotics, please refer to the Michigan Medicaid Fee Schedule to verify coverage.

V. DESCRIPTION

Spinal fusion is a surgical procedure that aims to provide internal stability by fusing the vertebrae together, thus relieving pain, numbness, tingling and weakness, restoring nerve function, and preventing abnormal motion in the spine. The surgical techniques to achieve spinal fusion are numerous and include different surgical approaches, different areas of fusion and a variety of ancillary techniques to augment fusion.

VI. CODING INFORMATION

**ICD-10 Codes** that may apply:

Members with the following diagnoses may need evaluation per medical policy #91531 Spine Centers of Excellence. Diagnoses listed do not automatically verify that criteria are met.

- A18.01 Tuberculosis of spine
- C41.2 Malignant neoplasm of vertebral column
- D16.6 Benign neoplasm of vertebral column
G54.4   Lumbosacral root disorders, not elsewhere classified
G83.4   Cauda equina syndrome
G89.4   Chronic pain syndrome

G95.20   Unspecified cord compression
G95.29   Other cord compression
G95.9   Disease of spinal cord, unspecified
M 99.64   Osseous and subluxation stenosis of intervertebral foramina of sacral region

M41.117   Juvenile idiopathic scoliosis, lumbosacral region
M41.119   Juvenile idiopathic scoliosis, site unspecified
M41.126   Adolescent idiopathic scoliosis, lumbar region
M41.127   Adolescent idiopathic scoliosis, lumbosacral region
M41.129   Adolescent idiopathic scoliosis, site unspecified
M41.26   Other idiopathic scoliosis, lumbar region
M41.27   Other idiopathic scoliosis, lumbosacral region
M41.46   Neuromuscular scoliosis, lumbar region
M41.47   Neuromuscular scoliosis, lumbosacral region
M41.56   Other secondary scoliosis, lumbar region
M41.57   Other secondary scoliosis, lumbosacral region
M41.86   Other forms of scoliosis, lumbar region
M41.87   Other forms of scoliosis, lumbosacral region
M41.9   Scoliosis, unspecified

M43.06   Spondylolysis, lumbar region
M43.07   Spondylolysis, lumbosacral region
M43.16   Spondylolisthesis, lumbar region
M43.17   Spondylolisthesis, lumbosacral region
M43.8X6   Other specified deforming dorsopathies, lumbar region
M43.8X7   Other specified deforming dorsopathies, lumbosacral region
M43.8X9   Other specified deforming dorsopathies, site unspecified
M43.9   Deforming dorsopathy, unspecified Curvature of spine NOS
M45.6   Ankylosing spondylitis lumbar region
M45.7   Ankylosing spondylitis of lumbosacral region
M45.9   Ankylosing spondylitis of unspecified sites in spine
M46.1   Sacroiliitis, not elsewhere classified
M46.06   Spinal enthesopathy, lumbar region
M46.07   Spinal enthesopathy, lumbosacral region
M47.10   Other spondylosis with myelopathy, site unspecified
M47.16   Other spondylosis with myelopathy, lumbar region
M47.17   Other spondylosis with myelopathy, lumbosacral region
M47.20   Other spondylosis with radiculopathy, site unspecified
M47.26   Other spondylosis with radiculopathy, lumbar region
M47.27   Other spondylosis with radiculopathy, lumbosacral region
M47.816   Spondylosis without myelopathy or radiculopathy, lumbar region
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<th>Code</th>
<th>Description</th>
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<td>M47.897</td>
<td>Other spondylosis, lumbosacral region</td>
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<td>M48.07</td>
<td>Spinal stenosis, lumbosacral region</td>
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<td>M48.08</td>
<td>Spinal stenosis, sacral and sacrococcygeal region</td>
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<td>Low back pain</td>
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<td>M48.46XA - M48.46XS</td>
<td>Fatigue fracture of vertebra, lumbar region</td>
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<td>Fatigue fracture of vertebra, lumbosacral region</td>
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<td>M48.56XA - M48.56XS</td>
<td>Collapsed vertebra, not elsewhere classified, lumbar region,</td>
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<td>Collapsed vertebra, not elsewhere classified, lumbosacral region,</td>
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<td>M80.08XA - M80.08XS</td>
<td>Age-related osteoporosis with current pathological fracture, vertebra(e)</td>
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<td>M80.88XA - M80.88XS</td>
<td>Other osteoporosis with current pathological fracture, vertebra(e)</td>
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<td>M84.58XA - M84.58XS</td>
<td>Pathological fracture in neoplastic disease, vertebrae</td>
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<td>M84.68XA - M84.68XS</td>
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<td>S32.000A - S32.059S</td>
<td>Fracture of lumbar spine</td>
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<td>Subluxation/dislocation of lumbar vertebra</td>
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<td>M90.88</td>
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<td>M96.1</td>
<td>Postlaminectomy syndrome, not elsewhere classified</td>
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<td>M99.23</td>
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M99.24   Subluxation stenosis of neural canal of sacral region  
M99.33   Osseous stenosis of neural canal of lumbar region  
M99.34   Osseous stenosis of neural canal of sacral region  
M99.43   Connective tissue stenosis of neural canal of lumbar region  
M99.44   Connective tissue stenosis of neural canal of sacral region  
M99.53   Intervertebral disc stenosis of neural canal of lumbar region  
M99.54   Intervertebral disc stenosis of neural canal of sacral region  
M99.63   Osseous and subluxation stenosis of intervertebral foramina of lumbar region  
M99.73   Connective tissue and disc stenosis of intervertebral foramina of lumbar region  
M99.74   Connective tissue and disc stenosis of intervertebral foramina of sacral region  
M99.83   Other biomechanical lesions of lumbar region  

Q76.2   Congenital spondylolisthesis  
Q76.49   Other congenital malformations of spine, not associated with scoliosis  

S34.101A – S34.129S   Unspecified injury to lumbar spinal cord  
S34.21XA - S34XS   Injury of nerve root of lumbar spine  
S34.3XXA - S34.3XXS   Injury of cauda equina  
S34.4XXA - S34.4XXS   Injury of lumbosacral plexus  
T84.63XA - T84.63XS   Infection and inflammatory reaction due to internal fixation device of spine  
T84.7XXA - T84.7XXS   Infection and inflammatory reaction due to other internal orthopedic prosthetic devices, implants and grafts  

**CPT/HCPCS Codes:**

22533   Arthrodesis, lateral extra-axial technique, including minimal discectomy to prepare interspace (other than for decompression); lumbar  
22534   Arthrodesis, lateral extra-axial 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 level; lumbar (with or without lateral transverse technique)  
22614   Arthrodesis, posterior or posterolateral technique, single level; each additional vertebral segment (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 and segment; 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 and segment; each additional interspace and segment (List separately in addition to code for primary procedure)

22800  Arthrodesis, posterior, for spinal deformity, with or without cast; up to 6 vertebral segments

22802  Arthrodesis, posterior, for spinal deformity, with or without cast; 7 to 12 vertebral segments

22804  Arthrodesis, posterior, for spinal deformity, with or without cast; 13 or more vertebral segments

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

Instrumentation – not covered when billed for Not Covered device implantation

22840  Posterior non-segmental instrumentation (e.g, 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)

22851  Application of intervertebral biomechanical device(s) (e.g, synthetic cage(s), methylmethacrylate) to vertebral defect or interspace (List separately in addition to code for primary procedure)

AxiaLIFT™ Axial Lumbar Interbody Fusion – Not Covered:

0195T  Arthrodesis, pre-sacral interbody technique, disc space preparation, discectomy, without instrumentation, with image guidance, includes bone graft when performed; L5-S1 interspace

0196T  Arthrodesis, pre-sacral interbody technique, disc space preparation, discectomy, without instrumentation, with image guidance, includes bone graft when performed; L4-L5 (List separately in addition to code for primary procedure)
0309T  Arthrodesis, pre-sacral interbody technique, including disc space preparation, discectomy, with posterior instrumentation, with image guidance, includes bone graft, when performed, lumbar, L4-L5 interspace (List separately in addition to code for primary procedure)

22586  Arthrodesis, pre-sacral interbody technique, including disc space preparation, discectomy, with posterior instrumentation, with image guidance, includes bone graft when performed, L5-S1 interspace

Sacroiliac Joint Fusion - authorization required:
27279  Arthrodesis, sacroiliac joint, percutaneous or minimally invasive (indirect visualization), with image guidance, includes obtaining bone graft when performed, and placement of transfixing device
27280  Arthrodesis, sacroiliac joint (including obtaining graft)

Not Covered:
0200T  Percutaneous sacral augmentation (sacroplasty), unilateral injection(s), including the use of a balloon or mechanical device, when used, 1 or more needles
0201T  Percutaneous sacral augmentation (sacroplasty), bilateral injections, including the use of a balloon or mechanical device, when used, 2 or more needles
0202T  Posterior vertebral joint(s) arthroplasty (e.g. facet joint(s) replacement) inc facetectomy, laminectomy, foraminoectomy and vertebral column fixation, with or without injection of bone cement, inc fluoroscopy, single level, lumbar spine
0219T  Placement of posterior intrafacet implant(s), unilateral or bilateral, including imaging and placement of bone graft(s) or synthetic device(s), single level; cervical
0220T  Placement of posterior intrafacet implant(s), unilateral or bilateral, including imaging and placement of bone graft(s) or synthetic device(s), single level; thoracic
0221T  Placement of posterior intrafacet implant(s), unilateral or bilateral, including imaging and placement of bone graft(s) or synthetic device(s), single level; lumbar
0222T  Placement of posterior intrafacet implant(s), unilateral or bilateral, including imaging and placement of bone graft(s) or synthetic device(s), single level; each additional vertebral

38220  Bone marrow; aspiration only  (Not covered when billed in conjunction with spinal fusion procedure)

22899  Unlisted procedure, spine - when billed for not covered procedures  (Explanatory notes must accompany claim)
VII. REFERENCES

Hayes, Inc. Sacroiliac Joint Fusion for the Treatment of Adult Low Back Pain
Health Technology Brief, December 24, 2012


Davis, R. et.al, Can low-grade spondylolisthesis be effectively treated by either coflex interlaminar stabilization or laminectomy and posterior spinal fusion? Two-year clinical and radiographic results from the randomized, prospective, multicenter US investigational device exemption trial. J Neurosurg: Spine May 31, 2013

Hayes, Inc. Concentrated Bone Marrow Aspirate for Spinal Surgery, March 10, 2016