



Instrumented Spinal Surgery

State(s):

Idaho Montana Oregon Washington Other:

LOB(s):

Commercial Medicare Medicaid

Enterprise Policy

Clinical Guidelines are written when necessary to provide guidance to providers and members in order to outline and clarify coverage criteria in accordance with the terms of the Member's policy. This Clinical Guideline only applies to PacificSource Health Plans, PacificSource Community Health Plans, and PacificSource Community Solutions in Idaho, Montana, Oregon, and Washington. Because of the changing nature of medicine, this list is subject to revision and update without notice. This document is designed for informational purposes only and is not an authorization or contract. Coverage determination are made on a case-by-case basis and subject to the terms, conditions, limitations, and exclusions of the Member's policy. Member policies differ in benefits and to the extent a conflict exists between the Clinical Guideline and the Member's policy, the Member's policy language shall control. Clinical Guidelines do not constitute medical advice nor guarantee coverage.

Background

Spondylosis is a general term for different forms of age-related degeneration of the spine.

Lumbar spondylosis can refer to degenerative arthritis, spinal stenosis, herniated discs, and facet joint arthritis. Spinal stenosis is a narrowing of the central spinal canal, the intervertebral foramina, and/or neural canals. A herniated (or slipped) disc occurs when a disc between the vertebrae is damaged and the inner gel-like substance (nucleus pulposus) either bulges or protrudes through the tougher outer layer of the disk (annulus). Most disc herniations occur in the lumbar spine and may put pressure on the nerves that exit the spinal cord. This pressure may cause pain and weakness in the leg, referred to as radicular pain or radiculopathy.

Standard therapy for back pain includes conservative medical management for example, physical therapy, medications. Surgical treatment may be considered for patients who have not improved with conservative medical management or who have a severe neurological impairment..

This policy pertains to non- urgent, non-emergent instrumented surgeries of the cervical, thoracic and lumbar spine.

Criteria

Commercial

Prior authorization is required.

Cervical Instrumented Fusions

- **Multilevel (2 or more level) fusion require MD review even if criteria met**

Anterior cervical fusion

Must meet MCG criteria for Cervical Fusion, Anterior ORG: S-320 (ISC) AND **All** of the following:

- Conservative Care
 - Documented failure of 3 consecutive months of physician-directed conservative medical management during current episodes of pain. Conservative Care must include both of the following:
 - Prescription strength analgesics, steroids and/or NSAIDS
 - Physical therapy or chiropractic treatment; **OR**
- Documentation of contraindication(s) for conservative care. Must be specific to the current pain episode
- Tobacco/Nicotine Cessation
 - Documentation of nicotine-free status by lab result (cotinine level) for tobacco-users is required. Labs are to be performed after 6 weeks of tobacco cessation with results included in the prior authorization request.

Posterior cervical fusion

- **Multilevel (2 or more level) fusion require MD review even if criteria met**

Must meet MCG criteria for Cervical Fusion, Posterior ORG: S-330 (ISC) AND **All** of the following:

- Conservative Care
 - Documented failure of 3 consecutive months of physician-directed conservative medical management during current episodes of pain. Conservative Care must include both of the following:
 - Prescription strength analgesics, steroids and/or NSAIDS
 - Physical therapy or chiropractic treatment; **OR**
- Documentation of contraindication(s) for conservative care. Must be specific to the current pain episode
- Tobacco/Nicotine Cessation
 - Documentation of nicotine-free status by lab result (cotinine level) for tobacco-users is required. Labs are to be performed after 6 weeks of tobacco cessation with results included in the prior authorization request.

Thoracic Instrumented fusion

- **Multilevel (2 or more level) fusion require MD review even if criteria met**

Thoracic instrumented fusion must meet All of the following criteria:

- Tobacco/Nicotine Cessation
 - Documentation of nicotine-free status by lab result (cotinine level) for tobacco-users is required. Labs are to be performed after 6 weeks of tobacco cessation with results included in the prior authorization request.
- Procedure is indicated for 1 or more of the following:

- MCG Care Guidelines for Scoliosis. (See Scoliosis section)
- Thoracic kyphosis resulting in spinal cord compression with related symptoms of pain, numbness, weakness, or tingling of an extremity
- Thoracic kyphotic curve greater than 75 degrees that is refractory to bracing and has failed 3 months of conservative care.
 - Conservative Care:
 - Documented failure of 3 consecutive months of physician-directed conservative medical management during current episodes of pain. Conservative Care must include both of the following:
 - Prescription strength analgesics, steroids and/or NSAIDS
 - Physical therapy or chiropractic treatment; **OR**
 - Documentation of contraindication(s) for conservative care. Must be specific to the current pain episode
 - Thoracic pseudoarthrosis after 12 months have elapsed since the time of fusion unless there is evidence of thoracic cord compression, or other indications for urgent intervention
 - Thoracic pseudoarthrosis with additional findings of hardware failure as evidenced by movement of implants or vertebrae at site of prior attempted arthrodesis on dynamic radiographs; OR imaging evidence of fracture/disconnection/dislocation of implants, or lucent rims around the screws on CT scan
 - Spinal fracture or dislocation associated with mechanical instability, locked facets or displaced fracture fragment confirmed by CT or MRI
 - Spinal infection confirmed by CT or MRI
 - Spinal tumor, primary or metastatic to spine, confirmed by CT or MRI
 - Spondylolisthesis with segmental instability confirmed by CT or MRI when both of the following criteria are met:
 - Significant spondylolisthesis, grades II, III, IV or V; AND
 - Symptomatic unremitting pain that has failed conservative management (unless there is evidence of thoracic cord compression, or other indications for urgent intervention)
 - Conservative Care:
 - Documented failure of 6 consecutive weeks of physician-directed conservative medical management

during current episodes of pain. Conservative Care must include both of the following:

- Prescription strength analgesics, steroids and/or NSAIDS
- Physical therapy or chiropractic treatment; **OR**
- Documentation of contraindication(s) for conservative care. Must be specific to the current pain episode
- Spinal stenosis where decompression is also performed for areas of segmental instability which is demonstrated by gross movement on flexion-extension radiographs; or
- Spinal stenosis with along with decompression in area of significant degenerative instability due to scoliosis or any degree of spondylolisthesis

Scoliosis Pediatric

Must meet MCG criteria: Spine, Scoliosis, Posterior Instrumentation, Pediatric guidelines (ORG: P-1056 (ISC))

Scoliosis Adult

Must meet MCG criteria: Spine, Scoliosis, Posterior Instrumentation guidelines (ORG: S-1056 (ISC))

Lumbar Instrumented Fusions – Adults and Pediatric Patients

Multilevel (2 or more level) fusion require MD review even if criteria met

Lumbar Instrumented Fusion

Must meet MCG criteria for Lumbar Fusion ORG: S-820 (ISC) AND **All** of the following:

- Conservative Care
 - Documented failure of 3 consecutive months of physician-directed conservative medical management during current episodes of pain. Conservative Care must include both of the following:
 - Prescription strength analgesics, steroids and/or NSAIDS
 - Physical therapy or chiropractic treatment; **OR**
- **Tobacco/Nicotine Cessation**
 - Documentation of nicotine-free status by lab result (cotinine level) for tobacco-users is required. Labs are to be performed after 6 weeks of tobacco cessation with results included in the prior authorization request.

Lumbar Instrumented Fusion for recurrent disc herniation at same level when **ALL** of the following are present:

- two prior disc surgeries (discectomies or microdiscectomies) at the same level with documented initial relief of symptoms;
- at least 3 months since the most recent disc surgery;
- Objective findings of neurological function impairment (e.g. changes in strength, sensation, or reflexes)
- Conservative care:

- Documented failure of 3 consecutive months of physician-directed conservative medical management during current episode of pain. Conservative care must include **both** of the following:
 - Prescription strength analgesics, steroids and/or NSAIDS
 - Physical therapy or chiropractic treatment
- Documentation of contraindication(s) for conservative care. Must be specific to the current pain episode

Removal of Spinal Instrumentation

Must meet MCG criteria for Removal of Posterior Spinal Instrumentation ORG: S-530 (ISC)

Medicare

PacificSource Medicare follows MCG: S-320 for Anterior Cervical Fusion, MCG: S-330 for Posterior Cervical Fusion, MCG: S-820 for Lumbar Fusion, MCG: S-530 for Removal of Posterior Spinal Instrumentation and MCG: S-1056 for Scoliosis, Posterior Instrumentation.

Medicaid

PacificSource Medicaid follows Guideline Notes 37, 100, & 136 of the OHP Prioritized List of Health Services for coverage of Cervical, Thoracic, or Lumbar Instrumented Fusions.

PacificSource Medicaid follows Guideline Notes 41 & 100 of the OHP Prioritized List of Health Services for surgical coverage of Scoliosis.

Experimental / Investigational / Unproven

- Lumbar fusions for low back pain due to age-related degeneration of the spine **WITHOUT** progressive neurological deficit, stenosis or spondylolisthesis is considered **NOT** medically necessary.
- Sacroiliac Joint Fusion (SI open surgery joint stabilization): Open SIJ fusion involves opening the SIJ, denuding of cartilage, and bone grafting. (Medically necessary under certain circumstances (e.g. Tumor, fracture, infection), experimental and investigational for all other indications)

PacificSource Health Plans considers the following devices used in minimally invasive spine surgery to be experimental, investigational or unproven based on the lack of randomized, prospective, long-term studies demonstrating efficacy and safety: (This is not an all-inclusive list).

- Barricaid Annular Closure Device - an implant (device) inserted in the spinal bone
- Interspinous fixation devices (i.e. CD Horizon Spire Spinal System) were developed to aid in the stabilization of the spine. They are being evaluated as alternatives to pedicle screw and rod constructs in combination with interbody fusion. Interspinous fixation devices are also being evaluated for stand-alone use in patients with spinal stenosis.
- Superion (VertiFlex, Inc.) – a minimally invasive interspinous spacer device
- SynFix-LR (Synthes Spine) used in Laparoscopic Anterior Lumbar Interbody Fusion (LALIF) surgery. The surgeon employs a laparoscope to remove the diseased disc and insert and

implant (bone or devices) into the disc space. The spine is approached through the abdomen instead of the lower back.

- Vertos mild® devices) used in Minimally Invasive Lumbar Decompression (MILD) surgery. The surgeon uses the Vertos mild devices kit and guided imaging to resect the ligamentum flavum in order to increase the diameter of the spinal canal. Also known as image guided minimally invasive lumbar decompression (IG-MLD).
- XYcor Spinal Implant (Vertebration, Inc. purchased by AlphatecSpine) for use with all current minimally invasive surgery access systems.

PacificSource Health Plans considers the following **Dynamic Spinal Stabilization** and Interspinous Decompression Devices to be experimental, investigational or unproven. (This is not an all-inclusive list).

- AccuFlex (Globus Medical, Inc.)
- Coflex (Paradigm Spine) - a U-shaped metallic device which is inserted between the spinous processes while axially compressed. This allows the device to expand on flexion.
- DIAM Spinal Stabilization System (Medtronic Sofamor Danek) is an interspinous spacer made of silicone which is secured around the spinous process using two laces. The rubbery nature of the device acts as a bumper between the bones.
- Dynesys System (Zimmer Spine) which was given substantial equivalence FDA approval on 3/5/2004, consists of four pedicle screws, two cords and two spacers in a symmetric, bilateral arrangement. It is designed for use in skeletally mature patients to provide immobilization and stabilization of the spine.
- ExtenSure Bone Allograft Interspinous Spacer (NuVasive, Inc.)
- Isobar (Scient'X')

Coding Information: Codes Requiring Preauthorization

The following list of codes are for informational purposes only and may not be all-inclusive. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.

CPT	CPT Description
22532	Arthrodesis, lateral extracavitary technique, including minimal discectomy to prepare interspace (other than for decompression); thoracic
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)

22548	Arthrodesis, anterior transoral or extraoral technique, clivus-C1-C2 (atlas-axis), with or without excision of odontoid process
22551	Arthrodesis, anterior interbody, including disc space preparation, discectomy, osteophylectomy and decompression of spinal cord and/or nerve roots; cervical below C2
22552	Cervical below C2, each additional interspace (List separately in addition to code for separate procedure)
22554	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); cervical below C2
22556	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); thoracic
22558	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); lumbar
22585	each additional interspace (List separately in addition to code for primary procedure)
22586	Arthrodesis, Pre-Sacral Interbody Tech, With Posterior Instrumentation, With Image Guidance, L5-S1 Interspace
22590	Arthrodesis, posterior technique, craniocervical (occiput-C2)
22595	Arthrodesis, posterior technique, atlas-axis (C1-C2)
22600	Arthrodesis, posterior or posterolateral technique, single level; cervical below C2
22610	Arthrodesis, posterior or posterolateral technique, single level; thoracic (with or without lateral transverse technique)
22612	Arthrodesis, posterior or posterolateral technique, single level; lumbar (with or without lateral transverse technique)
22614	each additional vertebral segment (List separately in addition to code for primary procedure) [code not specific to cervical spine]
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 Post Or Postlatl Tech W Post Interbdy Tech, Incl. Laminectomy &/Discectomy,Sgl Interspace & Segmt; Lumbar
22634	Arthrodesis, Combined Post Or Postlatl Tech W Post Interbdy Tech, Incl Laminectomy &/Discectomy,Sgl Interspace & Segmt; Ea. Addl.
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,

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
22840	Posterior non-segmental instrumentation (e.g., Harrington rod technique, pedicle fixation across one interspace, atlantoaxial transarticular screw fixation, sublaminar wiring at C1, facet screw fixation)
22841	Internal spinal fixation by wiring of spinous process
22842	Posterior segmental instrumentation (e.g., pedicle fixation, dual rods with multiple hooks and sublaminar wires); 3 to 6 vertebral segments (List separately in addition to code for primary procedure)
22843	7 to 12 vertebral segments (List separately in addition to code for primary procedure)
22844	Posterior segmental instrumentation (e.g., pedicle fixation, dual rods with multiple hooks and sublaminar wires); 13 or more vertebral segments
22845	Anterior instrumentation; 2 to 3 vertebral segments (List separately in addition to code for primary procedure)
22846	4 to 7 vertebral segments (List separately in addition to code for primary procedure)
22847	Anterior instrumentation; 8 or more vertebral segments
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)
22849	Reinsertion of spinal fixation device
22850	Removal of posterior nonsegmental instrumentation (e.g., Harrington rod)
22852	Removal of posterior segmental instrumentation
22853	Insertion of interbody biomechanical device(s) (e.g., synthetic cage, mesh) with integral anterior instrumentation for device anchoring (e.g., screws, flanges), when performed, to intervertebral disc space in conjunction with interbody arthrodesis, each interspace
22854	Insertion of intervertebral biomechanical device(s) (e.g., synthetic cage, mesh) with integral anterior instrumentation for device anchoring (e.g., screws, flanges), when performed, to vertebral corpectomy(ies) (vertebral body resection, partial or complete) defect, in conjunction with interbody arthrodesis, each contiguous defect
22855	Removal of anterior instrumentation
22859	Insertion of intervertebral biomechanical device(s) (e.g., synthetic cage, mesh, methylmethacrylate) to intervertebral disc space or vertebral body defect without interbody arthrodesis, each contiguous defect.

Exclusions

22867	Insertion of interlaminar/inter spinous process stabilization/distraction devices, without fusion, including image guidance when performed, with open decompression
22868	Insertion of interlaminar/inter spinous process stabilization/distraction devices, without fusion, including image guidance when performed, lumbar
22869	Insertion of interlaminar/inter spinous process stabilization/distraction devices, without open decompression or fusion, including image guidance when performed, lumbar
22870	Insertion of interlaminar/interspinous process stabilization/distraction device, without open decompression or fusion, including image guidance when performed, lumbar
22899	Unlisted Proc, Spine
C1821	Interspinous process distraction device (implantable)
27280	Arthrodesis, open, Sacroiliac Joint, including obtaining graft, including instrumentation when performed

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References

Aliabadi, H and Isaacs, R. Lumbar Spinal Stenosis. Neurosurgery Quarterly. 2009; 19(3): 200-206.

Burkus, John K. New Bone Graft Techniques and Applications in the Spine. Medscape CME. 11/7/02. <http://www.medscape.com/viewprogram/2073>

Hayes Clinical Research Response. Superior Interspinous Spacer System (Vertiflex Inc.) for Spinal Stenosis. Winifred S. Hayes. May 17, 2018. Archived

Hayes Evolving Evidence Review. Superior Interspinous Spacer System (Vertiflex) for Treatment of Neurogenic Claudication Caused by Spinal Stenosis (2020, October 6). Hayes a Division of TractManager

Hayes Technology Assessment Minimally Invasive Lumbar Decompression (Mild: Vertos Medical Inc.) Device Kit for Treatment of Lumbar Spinal Stenosis (2019, March 26) Hayes a Division of TractManager

Hayes Technology Brief. Coflex Interlaminar Stabilization Device (Paradigm Spine LLC) for Treatment of Lumbar Spinal Stenosis. (2018, September 21) Annual review 2019, October 11.) Hayes a Division of TractManager

Hayes Evidence Analysis Research Brief, Annular Closure with the Barricaid Annular Closure Device. (2020, September 21). Hayes, a Division of TractManager.

Hayes Health Technology Brief. Dynesys Dynamic Stabilization System (Zimmer Inc.) for Degenerative Spondylolisthesis. Winifred S. Hayes Inc., December 29, 2007. Archived January 29, 2011.

Hayes Health Technology Assessment, Open Sacroiliac Joint Fusion For Unspecified Sacroiliac Joint Dysfunction. (2017, June 22. Archived 2020, July) Hayes, a Division of TractManager

Heary, R., & Kumar, S. (n.d.). Decision-making in burst fractures of the thoracolumbar and lumbar spine. National Center for Biotechnology Information. PubMed Central. US National Library of Medicine. Retrieved November 19, 2020, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2989512/>

International Society for the Advancement of Spine Surgery: Policy Statement on Lumbar Spinal Fusion Surgery. 7/2011. Accessed 1/12/2018, 12/26/2018, 11/25/2019, 7/20/2020
https://www.isass.org/public_policy/2011-07-15_policy_statement_lumbar_surgery.html

Joseph, SA et al. Lumbar Spine Fusion: Types, Principles, and Outcomes. Neurosurgery Quarterly 2008; 18(1): 34-44. Accessed 7/20/2020 <https://insights.ovid.com/neurosurgery-quarterly/nesuq/2008/03/000/lumbar-spine-fusion-types-principles-outcomes/7/00013414>

Kaiser MG Guideline update for the performance of fusion procedures for degenerative disease of the lumbar spine. Part 1: introduction and methodology. J Neurosurg Spine. 2014 Jul;21(1): 2-6. Accessed 11/25/2019, 7/20/2020. <https://www.ncbi.nlm.nih.gov/pubmed/24980578>

Kaner, T., & Ozer, A. (2013, April 15). Dynamic Stabilization for Challenging Lumbar Degenerative Diseases of the Spine: A Review of the Literature. National Center for Biotechnology Information. PubMed Central. US National Library of Medicine. Accessed 7/20/2020
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3639681/>

MCG Cervical Fusion, Anterior ORG: S-320 (ISC) 24th Edition.

MCG Cervical Fusion, Posterior ORG: S-330 (ISC) 24th Edition.

MCG Lumbar Fusion ORG: S-820 (ISC) 24th Edition.

MCG Removal of Posterior Spinal Instrumentation ORG: S530 (ISC) 24th Edition.

MCG Spine, Scoliosis, Posterior Instrumentation ORG: S-1056 (ISC) 24th Edition.

Matz, P, Meagher, RJ, Lamer T, Tontz W diagnosis and Treatment of Degenerative lumbar spondylolisthesis 2nd Edition (2014). North American Spine Society, Clinical Guidelines for Multidisciplinary Spine Care
<https://www.spine.org/Portals/0/assets/downloads/ResearchClinicalCare/Guidelines/Spondylolisthesis.pdf>

Oregon Health Plan (OHP) Prioritized List of Health Services, Guideline note 173

Page, B., Hubert, Z., Rahm, M., & Leahy, M. (2020, October 7). *Thoracic Spine Fractures and Dislocations*. Emedicine. Medscape.Com. <https://emedicine.medscape.com/article/1267029-overview>
Pui Yin Cheung, J., & Dip-Kei Luk, K. (2016, April 15). *Complications of Anterior and Posterior Cervical Spine Surgery*. The National Center for Biotechnology Information. US National Library of Medicine. National Institutes of Health. (Ncbi.Nlm.Nih.Gov).
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4843080/>

Sacroiliac Joint Fusion, (2019, January 18) Washington State Health Care Authority, Health Technology Clinical Committee Findings and Decision
<https://www.hca.wa.gov/assets/program/si-joint-fusion-final-findings-decision-20190517.pdf>

Sengupta, DK et al. Degenerative Spondylolisthesis: Review of Current Trends and Controversies. Spine. 2005; 30(6S) Supplement: S71-S81. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6736093/>

Spivak, J. (2010, December 21). *Multilevel Fusion Risks*. Spine-Health.Com. <https://www.spine-health.com/treatment/spinal-fusion/multilevel-fusion-risks>

Streng KB et al Multicenter study of lumbar discectomy with Barricaid annular closure device for prevention of lumbar disc reherniation in US patients. Medicine (Baltimore) 2019 Aug, 98(35)

Tram, J., Srinivas, S., Wali, A., Lewis, C., & Pham, M. (2020, January 8). Decompression Surgery versus Interspinous Devices for Lumbar Spinal Stenosis: A Systematic Review of the Literature. National Center for Biotechnology Information. PubMed Central. US National Library of Medicine.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7435320/>

Watters WC 3rd, Bono CM, Gilbert TJ, Kreiner DS, Mazanec DJ, Shaffer WO, Baisden J et al. North American Spine Society. An evidence-based clinical guideline for the diagnosis and treatment of degenerative lumbar spondylolisthesis. Spine J. 2009 Jul; 9(7):609-14. Epub 2009 May 17.

Washington State Health Care Authority, Health Technology Reviews, 2020
<https://www.hca.wa.gov/about-hca/health-technology-assessment/health-technology-reviews>

Appendix

Policy Number:

Effective: 11/1/2020

Next review: 11/1/2021

Policy type: Enterprise

Author(s):

Depts: Health Services

Applicable regulation(s):

Government Ops: 6/2021

Commercial Ops: 6/2021