Policy Number	**SUR712.032**
Policy Effective Date	**03/15/2025**
Policy End Date	**12/31/2025**

Isolated Facet Joint Fusion

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Related Policies (if applicable)
None

Disclaimer

Carefully check state regulations and/or the member contract.
Each benefit plan, summary plan description or contract defines which services are covered, which services are excluded, and which services are subject to dollar caps or other limitations, conditions or exclusions. Members and their providers have the responsibility for consulting the member's benefit plan, summary plan description or contract to determine if there are any exclusions or other benefit limitations applicable to this service or supply. **If there is a discrepancy between a Medical Policy and a member's benefit plan, summary plan description or contract, the benefit plan, summary plan description or contract will govern.**

Coverage

This medical policy has become inactive as of the end date above. There is no current active version and this policy is not to be used for current claims adjudication or business purposes.

Isolated facet joint fusion, with or without instrumentation, that includes prepared allograft bone graft dowel, whether used exclusively as stand-alone stabilization devices or as part of another procedure, **is considered experimental, investigational and/or unproven**. Examples include but are not limited to, TruFUSE® (any level), and NuFix™ (any level).

Policy Guidelines

None.

Description

A facet joint fusion is a procedure that fuses facet joints together to provide stabilization to the spinal column and reduce pain. It can be performed in conjunction with a posterior lumbar fusion. However, an isolated facet joint fusion has been proposed as a treatment option for individuals with facet pain that does not respond to conservative treatment. Various types of materials can be used during facet fusion procedures; autograft, allograft, or prepared allograft bone dowel (e.g., TruFUSE®, [minSURG™ Corp., Clearwater, FL.]; NuFix [Nutech Medical, Birmingham, AL]). The U.S. Food and Drug Administration (FDA) classifies the allograft bone dowels as biologics. (1)

TruFUSE® (minSURG Corp., Clearwater, Florida) is a posterior fusion option. The procedure can be performed open, minimally invasively through a cylindrical tissue retractor, or entirely percutaneously. TruFUSE uses specially shaped, small pieces of human bone, called allograft, to stabilize the spine. A compaction reamer is used to make a tunnel in the facet joint. The allograft is then inserted to secure the facet joints. By stopping the joint from moving, TruFUSE provides support that allows for fusion. (2)

NuFix™ (NuFix, Inc., Birmingham, Alabama) is another facet stabilization and fusion device constructed of allograft bone. It is placed in the facet joint after an appropriate drill hole has been made. This effectively "locks" the facet joint preventing flexion, extension and rotation. This procedure can be done both open and percutaneously with fluoroscopic assistance. (3)

Rationale

This medical policy was created in January 2009 and has been updated regularly with searches of the PubMed database. The most recent literature update was performed through January 19, 2024.

In 2010, Gavaskar and Achimuthu conducted a prospective, non-randomized study of 30 patients with low-grade spondylolisthesis of lumbar and lumbosacral spine who underwent facet fusion using two cortical screws and bone grafts. Visual analogue scale and Oswestry disability assessment were used to measure outcomes which revealed twenty-nine of the thirty patients with significant improvement at one-year follow-up. The study is limited to short-term follow-up, subjective outcomes and lack of comparison to other treatment modalities. (4)

In a retrospective analysis, Pirris et al. (2014) evaluated fusion outcomes in patients who underwent facet bone dowel placement. (7) A cohort of 96 patients underwent facet bone dowel implantation with postoperative imaging to determine fusion status. The bone dowels were placed after open exploration of the facet complex or percutaneously through a tubular retractor on the contralateral side from a microdiscectomy or synovial cyst resection. The authors note that 86 (89.6%) patients were shown on imaging to not have a solid fusion either by visualizing a patent facet joint on CT or measurable movement between the flexion and extension lumbar x-rays.

Smaller studies that included the use of bone dowels include Trangco-Evans et al. (presented at the American Academy of Pain Medicine 2011 annual meeting) (5) and Cook et al. (2015) (6).

Professional Guidelines and Position Statements

American Society of Interventional Pain Physicians (ASIPP) Guidelines

A comprehensive evidence-based Guidelines for Facet Joint Interventions in the Management of Chronic Spinal Pain was created by ASIPP in 2020. The literature pertaining to all aspects of facet joint interventions, was reviewed. Information addressed included non-interventional diagnosis, imaging, interventional diagnosis, and therapeutic facet joint interventions. Facet joint fusion was not addressed in the guidelines. (8)

Summary of Evidence

Clinical evidence is limited to small, uncontrolled trials with lack of blinding or long-term follow-up. Randomized, controlled trials are needed to determine long-term efficacy and impact on health outcomes. Therefore, isolated facet joint fusion remains experimental, investigational and/or unproven.

Coding

Procedure codes on Medical Policy documents are included **only** as a general reference tool for each policy. **They may not be all-inclusive.**

The presence or absence of procedure, service, supply, or device codes in a Medical Policy document has no relevance for determination of benefit coverage for members or reimbursement for providers. **Only the written coverage position in a Medical Policy should be used for such determinations.**

Benefit coverage determinations based on written Medical Policy coverage positions must include review of the member's benefit contract or Summary Plan Description (SPD) for defined coverage vs. non-coverage, benefit exclusions, and benefit limitations such as dollar or duration caps.

CPT Codes	0219T, 0220T, 0221T, 0222T
HCPCS Codes	None

*Current Procedural Terminology (CPT®) ©2024 American Medical Association: Chicago, IL.

References

1. U. S. Food and Drug Administration – Vaccines, Blood & Biologics. Available at <https://www.fda.gov> (accessed January 19, 2024).
2. TruFuse Facet Fusion. © miniSURG™ Corp. Clearwater, Florida: TruFUSE®. Available at <https://www.minisurg.com> (accessed January 19, 2024).
3. NuFix Precision Machined Allograft Antimigration Dowel. Birmingham, Alabama. Available at <https://www.NuFix.org> (accessed May 11, 2011).
4. Gavaskar A, Achimuthu R. Transfacetal fusion for low-grade degenerative spondylolisthesis of the lumbar spine: results of a prospective single center study. J Spinal Disord Tech. May 2010; 23(3):162-165. PMID 20072033

5. Trangco-Evans RA, Bejjani FJ, Shah R, et al. TruFuse Facet Fusion Outcome: A Retrospective Case Series. American Academy of Pain Medicine (AAPM), Presented at the 2011 AAPM Annual Meeting. Available at <www.painmed.org> (accessed July 18, 2017).
6. Cook DJ, Yeager MS, Oh MY, et al. Lumbar Intrafacet Bone Dowel Fixation. Neurosurgery. Apr 2015; 76(4):470-478. PMID 25621985
7. Pirris SM, Nottmeier EW, Rahmathulla G, et al. Radiographic fusion rate after implantation of facet bone dowels. Spine J. Sep 1 2014; 14(9):2102-2111. PMID 24448193
8. Manchikanti L, Kay AD, Soin A, et al. Comprehensive Evidence-Based Guidelines for Facet Joint Interventions in the Management of Chronic Spinal Pain: American Society of Interventional Pain Physicians (ASIPP) Guidelines Facet Joint Interventions 2020 Guidelines. Pain Physician. May 2020; 23(3S):S1-S127. PMID 32503359

Centers for Medicare and Medicaid Services (CMS)

The information contained in this section is for informational purposes only. HCSC makes no representation as to the accuracy of this information. It is not to be used for claims adjudication for HCSC Plans.

The Centers for Medicare and Medicaid Services (CMS) does not have a national Medicare coverage position. Coverage may be subject to local carrier discretion.

A national coverage position for Medicare may have been developed since this medical policy document was written. See Medicare's National Coverage at <https://www.cms.hhs.gov>.

Policy History/Revision

Date	Description of Change
12/31/2025	Document became inactive.
03/15/2025	Reviewed. No changes.
03/15/2024	Document updated with literature review. Coverage unchanged. Reference 8 was added, some references were removed.
03/15/2023	Reviewed. No changes.
08/15/2022	Document updated with literature review. Coverage unchanged. No new references added.
07/01/2021	Reviewed. No changes.
01/15/2021	Document updated with literature review. Coverage unchanged. No new references added.
02/15/2019	Reviewed. No changes.
10/15/2017	Document updated with literature review. Coverage unchanged.
07/15/2016	Reviewed. No changes.
04/15/2015	Document updated with literature review. Coverage unchanged.
05/15/2013	Document updated with literature review. Coverage was changed to: Isolated facet joint fusion, with or without instrumentation, that includes prepared allograft bone graft dowel, whether used exclusively as stand-

	alone stabilization devices or as part of another procedure, is considered experimental, investigational and unproven, including but not limited to, e.g., TruFUSE® [any level], NuFix™ [any level]). Title changed from Minimally Invasive Percutaneous Facet Joint Fusion (TruFUSE). The entire Description and Rationale were revised.
01/01/2010	Document number changed. CPT/HCPCS code(s) updated.
01/15/2009	New medical document. Minimally invasive percutaneous joint fusion (i.e., TruFUSE®) is considered experimental, investigational and unproven when performed as a stand-alone inpatient procedure or as an outpatient procedure.