



MASSACHUSETTS

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Medical Policy Facet Arthroplasty

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Policy Number: 174

BCBSA Reference Number: 7.01.120 (For Plan internal use only)
NCD/LCD: N/A

Related Policies

- Artificial Intervertebral Disc: Lumbar Spine, [#592](#)
- Interspinous Distraction Devices (Spacers), [#584](#)

Policy

Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO BlueSM and Medicare PPO BlueSM Members

Total facet arthroplasty in individuals with lumbar spinal stenosis undergoing spinal decompression is considered [INVESTIGATIONAL](#).

Prior Authorization Information

Inpatient

- For services described in this policy, precertification/preauthorization **IS REQUIRED** for all products if the procedure is performed **inpatient**.

Outpatient

- For services described in this policy, see below for products where prior authorization **might be required** if the procedure is performed **outpatient**.

| | Outpatient |
|---------------------------------------|---------------------------------------|
| Commercial Managed Care (HMO and POS) | This is not a covered service. |
| Commercial PPO and Indemnity | This is not a covered service. |
| Medicare HMO Blue SM | This is not a covered service. |
| Medicare PPO Blue SM | This is not a covered service. |

CPT Codes / HCPCS Codes / ICD Codes

Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

The following CPT code is considered investigational for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:

CPT Codes

| CPT codes: | Code Description |
|------------|---|
| 0202T | Posterior vertebral joint(s) arthroplasty (e.g. facet joint[s] replacement) including facetectomy, laminectomy, foraminotomy and vertebral column fixation, with or without injection of bone cement, including fluoroscopy, single level, lumbar spine |

Description

Spinal fusion is a common surgical treatment following surgical decompression when conservative treatment fails.¹ However, spinal fusion alters the normal biomechanics of the back, which may potentially lead to premature disc degeneration at adjacent levels. A variety of implants have been investigated as alternatives to rigid interbody or posterolateral intertransverse spinal fusion. This evidence review addresses the implantation of prostheses intended to replace the facet joints and excised posterior elements, termed facet arthroplasty.

The objective of facet arthroplasty is to stabilize the spine while retaining normal intervertebral motion of the surgically removed segment following neural decompression.² It is proposed that facet arthroplasty should also maintain the normal biomechanics of the adjacent vertebrae. If normal motion patterns are achieved by artificial joints in the spine, the risk of adjacent-level degeneration thought to be associated with fusion may be mitigated.

Summary

Description

Facet arthroplasty refers to the implantation of a spinal prosthesis to restore posterior element structure and function as an adjunct to neural decompression. This procedure is proposed as an alternative to posterior spinal fusion for patients with facet arthrosis, spinal stenosis, and spondylolisthesis.

Summary of Evidence

For individuals who have lumbar spinal stenosis who receive spinal decompression with facet arthroplasty, the evidence includes a preliminary report of an otherwise unpublished randomized controlled trial (RCT), 2 planned interim analyses of an ongoing RCT, and a few case series studies. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. Interim results from a pivotal trial of the ACADIA Facet Replacement System were reported in 2012. No additional publications from this trial, which was completed in October 2017, have been identified to date. Interim results from a pivotal randomized trial of the Total Posterior Spine (TOPS) System indicated substantial improvement compared to baseline at 1 year and over transforaminal lumbar interbody fusion (TLIF) in multiple patient-reported outcomes related to functional status and symptoms up to 2 years post-operatively; the results further suggested relatively preserved range of motion at the treated vertebral level with TOPS versus TLIF, without increased risk of adverse events. Based on 24-month results, the TOPS System received U.S. Food and Drug Administration approval in June 2023; the final trial results have not yet been published. While the interim results are promising, clarity is needed on the final results of the trial to determine if adjustments for increased risk of type 1 error were made and to evaluate other strengths and limitations of the trial. Additionally, continued follow-up of the TOPS trial is ongoing, which will shed light on longer-term safety profiles of TOPS versus TLIF with lumbar spinal decompression. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Policy History

| Date | Action |
|----------------|--|
| 6/2024 | Annual policy review. Policy updated with literature review through March 5, 2024. References added. Minor editorial refinements to policy statements; intent unchanged. |
| 6/2023 | Annual policy review. Description, summary, and references updated. Policy statements unchanged. |
| 6/2022 | Annual policy review. Policy statements unchanged. |
| 5/2021 | Annual policy review. Description, summary, and references updated. Policy statements unchanged. |
| 6/2020 | Annual policy review. Description, summary, and references updated. Policy statements unchanged. |
| 5/2019 | Annual policy review. Description, summary, and references updated. Policy statements unchanged. |
| 2/2017 | Annual policy review. New references added. |
| 11/2015 | Added coding language. |
| 11/2011-4/2012 | Medical policy ICD 10 remediation: Formatting, editing and coding updates. No changes to policy statements. |
| 6/2011 | Reviewed - Medical Policy Group – Orthopedics, Rehabilitation and Rheumatology. No changes to policy statements. |
| 7/2010 | Reviewed - Medical Policy Group – Orthopedics, Rehabilitation Medicine and Rheumatology. No changes to policy statements. |
| 3/2010 | Medical Policy #174 effective 3/1/2010. |

Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

[Medical Policy Terms of Use](#)

[Managed Care Guidelines](#)

[Indemnity/PPO Guidelines](#)

[Clinical Exception Process](#)

[Medical Technology Assessment Guidelines](#)

References

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2. Gu BJ, Blue R, Yoon J, et al. Posterior Lumbar Facet Replacement and Arthroplasty. *Neurosurg Clin N Am*. Oct 2021; 32(4): 521-526. PMID 34538478
3. U.S. Food and Drug Administration. Premarket Approval (PMA): TOPS System. June 15, 2023. <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpma/pma.cfm?id=P220002>. Accessed March 5, 2024.
4. ClinicalTrials.gov. A Pivotal Study of a Facet Replacement System to Treat Spinal Stenosis (NCT00401518). Updated September 10, 2020. Accessed March 5, 2024.
5. Smorgick Y, Mirovsky Y, Floman Y, et al. Long-term results for total lumbar facet joint replacement in the management of lumbar degenerative spondylolisthesis. *J Neurosurg Spine*. Oct 04 2019; 1-6. PMID 31585417
6. Pinter ZW, Freedman BA, Nassr A, et al. A Prospective Study of Lumbar Facet Arthroplasty in the Treatment of Degenerative Spondylolisthesis and Stenosis: Results from the Total Posterior Spine System (TOPS) IDE Study. *Clin Spine Surg*. Mar 01 2023; 36(2): E59-E69. PMID 36191093
7. Coric D, Nassr A, Kim PK, et al. Prospective, randomized controlled multicenter study of posterior lumbar facet arthroplasty for the treatment of spondylolisthesis. *J Neurosurg Spine*. Jan 01 2023; 38(1): 115-125. PMID 36152329

8. U.S. Food and Drug Administration. Summary of safety and effectiveness data (SSED): TOPS System. June 15, 2023. https://www.accessdata.fda.gov/cdrh_docs/pdf22/P220002B.pdf. Accessed March 4, 2024.
9. Palmer DK, Inceoglu S, Cheng WK. Stem fracture after total facet replacement in the lumbar spine: a report of two cases and review of the literature. *Spine J.* Jul 2011; 11(7): e15-9. PMID 21703940
10. Myer J, Youssef JA, Rahn KA, et al. ACADIA facet replacement system IDE clinical trial: Preliminary outcomes at two-and four-years postoperative [abstract]. *Spine J.* 2014;11(Suppl. 1):S160-161.
11. Goodwin ML, Spiker WR, Brodke DS, et al. Failure of facet replacement system with metal-on-metal bearing surface and subsequent discovery of cobalt allergy: report of 2 cases. *J Neurosurg Spine.* Jul 2018; 29(1): 81-84. PMID 29652237