MEDICAL MUTUAL

Medical Policy

Policy:	**200813**	**Effective Date:**	**01/13/2026**
SUBJECT:	**Artificial Intervertebral Disc Replacement** • **Cervical** • **Thoracic** • **Lumbosacral**	**Annual Review Date:** **Last Revised Date:**	**12/13/2025** **12/13/2025**

Prior approval is required for some or all procedure codes listed in this Corporate Medical Policy. Some or all procedure codes listed in this Corporate Medical Policy may be considered experimental/investigational.

Definition: Artificial intervertebral disc replacement (AIDR) is a surgical procedure that involves removal of a degenerated intervertebral disc followed by implantation of an artificial intervertebral disc. AIDR was developed as an alternative to spinal fusion for the treatment of symptomatic degenerative disc disease (DDD) that has not responded to conservative treatment. The goal of AIDR is to relieve pain, restore disc height, maintain motion of the natural spine, and prevent degeneration of adjacent discs. Artificial disc devices have been developed for use in cervical, thoracic and lumbosacral portions of the spine.

Medical Necessity:

I. Cervical AIDR: The Company considers cervical AIDR at ***1 or 2 contiguous levels*** between C3 and C7 **medically necessary** and eligible for reimbursement providing that ***all*** of the following medical criteria are met:

- FDA-approved artificial disc (vertebra-specific); and
- Age ≥18 years and skeletally mature; and
- Candidate for anterior cervical discectomy and fusion (ACDF); and
- Symptomatic cervical disc disease (neck or arm [radicular] pain and/or a functional/neurological deficit with ≥ 1 of the following conditions confirmed by imaging [CT, MRI, or x-rays]: herniated nucleus pulposus, spondylosis [defined by the presence of osteophytes], and/or loss of disc height); and
- Significant vertebral osteophyte formation and/or herniated nucleus pulposus believed to be responsible for the clinical findings; and
- Failure of, intolerance to, or unable to receive ≥ 6 weeks of conventional medical therapy including ***all*** of the following:

    1. Physical therapy; and
    2. Anti-inflammatory medication; and
    3. Analgesic medication; and

4. Avoidance of exacerbating activities.

AND

- ***None*** of the following is present:

    1. Active systemic infection or infection at the operating site; or
    2. Allergy or sensitivity to implant materials; or
    3. Osteopenia or osteoporosis (bone density T-score -2.5 or lower measured by dual energy x-ray absorptiometry [DEXA]); or
    4. Moderate to advanced spondylosis characterized by any bridging osteophytes, marked reduction or absence of motion, or collapse of the intervertebral disc space of >50% of its normal height.
    5. Marked cervical instability on imaging (e.g., signs of subluxation >3.5 mm or angulation of the disc space >11º greater than adjacent segments); or
    6. Severe facet joint arthropathy; or
    7. Significant cervical anatomical deformity or compromised vertebral bodies at the index level due to systemic disease, diffuse idiopathic skeletal hyperostosis, ankylosing spondylitis , degeneration, trauma, and surgery related trauma
    8. Significant kyphotic deformity, significant reversal of lordosis significant spondylolisthesis; or
    9. Symptoms necessitating surgical treatment at > 2 cervical level; or
    10. Congenital stenosis; or
    11. Previous surgery at the involved level; or
    12. Spinal metastases; or
    13. Current medical condition requires long-term use of medications affecting bone quality and fusion rates (e.g., systemic corticosteroids); or
    14. Medical-surgical clearance not obtained from appropriate specialty provider(s).

II. **Thoracic AIDR:** Based upon our findings, the Company has determined thoracic AIDR, implantation, removal and revision have not demonstrated equivalence or superiority to currently accepted standard means of treatment. The Company considers thoracic AIDR, implantation, removal and revision **investigational** and **not** eligible for reimbursement.

III. **Lumbosacral AIDR:** The Company considers lumbosacral AIDR at any ***single level*** between L3 and S1 **medically necessary** and eligible for reimbursement providing that ***all*** of the following medical criteria are met:

- FDA-approved artificial disc (vertebra-specific); and
- Age 18 to 60 years and skeletally mature; and
- Spondylolisthesis at the involved level per the FDA-approved artificial disc specific limits; and
- Candidate for lumbosacral spinal fusion; and

- Symptomatic lumbosacral DDD (discogenic back pain with degeneration of the disc confirmed by imaging [CT, MRI, or x-rays]), which has failed at least 6 months of conservative treatment, including ***all*** of the following:

    1. Physical therapy; and
    2. Anti-inflammatory medication; and
    3. Analgesic medication; and
    4. Avoidance of exacerbating activities.

AND

- ***None*** of the following is present:

    1. Active systemic infection or infection at the operating site; or
    2. Allergy or sensitivity to implant materials; or
    3. Osteopenia or osteoporosis (bone density T-score -2.5 or lower measured by dual energy x-ray absorptiometry [DEXA]); or
    4. Moderate to advanced spondylosis characterized by bridging osteophytes, marked reduction or absence of motion, or collapse of the intervertebral disc space of >50% of its normal height; or
    5. Marked lumbosacral instability on imaging (e.g., signs of subluxation >3.5 mm or angulation of the disc space >11º greater than adjacent segments); or
    6. Severe facet joint arthropathy; or
    7. Significant lumbosacral anatomical deformity or compromised vertebral bodies at the index level due to systemic disease, diffuse idiopathic skeletal hyperostosis, ankylosing spondylitis , degeneration, trauma, and surgery related trauma.
    8. Significant kyphotic deformity, significant reversal of lordosis, or significant spondylolisthesis; or
    9. Symptoms necessitating surgical treatment at > 1 lumbosacral level; or
    10. Congenital stenosis; or
    11. Previous surgery at the involved level; or
    12. Spinal metastases; or
    13. Nerve root compression; or
    14. Stenosis; or
    15. Current medical condition requires long-term use of medications affecting bone quality and fusion rates (e.g., systemic corticosteroids); or
    16. Medical-surgical clearance not obtained from appropriate specialty provider(s).

IV. Revision or Replacement of a Cervical and Lumbar Artificial Intervertebral Disc: The Company considers revision or replacement of a cervical and lumbar artificial intervertebral disc, at the same level as the previous surgery **medically necessary** and eligible for reimbursement when ALL the following criteria are met:

- Original surgery was performed with an FDA-approved device, and in accordance with those approved indications; and
- Imaging studies confirm implanted device mechanical failure (e.g., dislodgement, implanted device breakage, infection loosening, vertebral body fracture); and
- Symptoms were relieved by original procedure, but reoccurred upon failure of the implanted device

Documentation Requirements:

The Company reserves the right to request additional documentation as part of its coverage determination process. The Company may deny reimbursement when it has determined that the services performed were not medically necessary, investigational or experimental, not within the scope of benefits afforded to the member, and/or a pattern of billing or other practice has been found to be either inappropriate or excessive. Additional documentation supporting medical necessity for the services provided must be made available upon request to the Company. Documentation requested may include patient records, test results, and/or credentials of the provider ordering or performing a service. The Company also reserves the right to modify, revise, change, apply, and interpret this policy at its sole discretion, and the exercise of this discretion shall be final and binding.

Prior approval is required for CPT Codes 22856, 22857, 22858, 22860, 22861, 22862, 22899; Category III Codes 0095T, 0098T, 0164T, 0165T; and applicable ICD-10-CM Procedure Codes.

CPT Code 22899 (when unlisted procedure, spine [22899] is determined to be thoracic artificial disc replacement) and applicable ICD-10-CM Procedure Codes are considered investigational and not eligible for reimbursement.

NOTE: After reviewing the relevant documentation, the Company reserves the right to apply this policy to the service, or procedure, supply, product, or accommodation performed or furnished regardless of how the service, or procedure, supply, product, or accommodation was coded by the Provider.

Approval or clearance by the U.S. Food and Drug Administration alone is not a basis for coverage.

Coverage may differ for Medicare Advantage plan members; please see any applicable national and/or local coverage determinations for details. This information may be available at the Centers for Medicare & Medicaid Services (CMS) website.

Sources of Information:

- Biswas JK, Rana M, Malas A, Roy S, Chatterjee S, Choudhury S. (2022). Effect of single and multilevel artificial inter-vertebral disc replacement in lumbar spine: A finite element study. *Int J Artif Organs*. 45(2):193-199.
- Boselie TFM, Willems PC, van Mameren H, de Bie RA, Benzel EC, van Santbrink H. (2013). Arthroplasty versus fusion in single-level cervical degenerative disc disease: a Cochrane review. *Spine (Phila Pa 1976), 38*(17):E1096-1107.
- Chou R, Loeser JD, Owens DK, Rosenquist RW, Atlas SJ, Baisden J, … American Pain Society Low Back Pain Guideline Panel. (2009). Interventional therapies, surgery, and interdisciplinary rehabilitation for low back pain: an evidence-based clinical practice guideline from the American Pain Society. *Spine, 34*(10):1066–1077.
- Davis RJ, Nunley PD, Kim KD, Hisey MS, Jackson RJ, Bae HW, … Stone MB. (2015). Two-level total disc replacement with Mobi-C cervical artificial disc versus anterior discectomy and fusion: a prospective, randomized, controlled multicenter clinical trial with 4-year follow-up results. *J Neurosurg Spine*, *22*(1):15–25.
- Goldstein ZH, Boody B, Sasso R. (2020). Two-Level Anterior Cervical Discectomy and Fusion Versus Cervical Disc Arthroplasty-Long-Term Evidence Update. *Int J Spine Surg*, *14*(s2):S36–S40.
- Hayes, Inc.
    - Comparative Effectiveness Review of Lumbar Total Disc Replacement for Degenerative Disc Disease. (April 1, 2019). Annual review March 24, 2022.
    - Comparative Effectiveness Review of Multilevel Artificial Disc Replacement for Cervical Degenerative Disc Disease. (October 3, 2017). Annual review November 18, 2021.
    - Comparative Effectiveness Review of Single-Level Artificial Disc Replacement for Cervical Degenerative Disc Disease. (August, 21, 2017). Annual review September 22, 2021.
    - Hybrid Lumbar Disc Arthroplasty with Fusion for Treatment of Multilevel Degenerative Disc Disease. (April 5, 2024). Annual review April 25, 2025.
    - Lumbar Total Disc Replacement for Degenerative Disc Disease. (April 1, 2019). Annual review March 24, 2022.
    - Multilevel Cervical Artificial Disc Replacement for Treatment of Degenerative Disc Disease. (April 23, 2023).
    - Two-Level Lumbar Total Disk Replacement for Two-Level Degenerative Disk Disease. (November 15, 2024). Annual review November 07, 2025.
- Murtagh R, Castellvi AE. (2014). Motion preservation surgery in the spine. *Neuroimaging Clin N Am, 24*(2):287–294.
- Robinson Y, Sandén B. (2009). Spine imaging after lumbar disc replacement: pitfalls and current recommendations. *Patient Saf Surg*, *3*(1):15.
- Schroeder GD, Vaccaro AR, Divi SN, et al. (2021). 2021 Position Statement From the International Society for the Advancement of Spine Surgery on Cervical and Lumbar Disc Replacement. Int J Spine Surg. 15(1):37-46.
- Thavaneswaran P, Vandepeer M. (2014). Lumbar artificial intervertebral disc replacement: a systematic review. *ANZ J Surg*, *84*(3):121–127.
- Tuchman A, Chen I, Walker CT, Kanim LE, Bae HW, Skaggs DL. (2023) Is single-level cervical disc arthroplasty associated with a lower reoperation rate than anterior cervical discectomy and fusion?. *J Neurosurg Spine*. 40(3):282-290.

- Wen DJ, Tavakoli J, Tipper JL. (2024). Lumbar Total Disc Replacements for Degenerative Disc Disease: A Systematic Review of Outcomes With a Minimum of 5 years Follow-Up. *Global Spine J*. 14(6):1827-1837.
- Yue JJ, Garcia R, Blumenthal S, Coric D, Patel VV, Dinh DH, … Ferko NC. (2019). Five-year Results of a Randomized Controlled Trial for Lumbar Artificial Discs in Single-level Degenerative Disc Disease. *Spine (Phila Pa 1976)*, *44*(24):1685–1696.
- Zigler J, Gornet MF, Ferko N, et.al., (2018) Comparison of Lumbar Total Disc Replacement With Surgical Spinal Fusion for the Treatment of Single-Level Degenerative Disc Disease: A Meta-Analysis of 5-Year Outcomes From Randomized Controlled Trials. *Global Spine J*. 2018;8(4):413-423.

Applicable Code(s):	
CPT:	**22856, 22857, 22858, 22860, 22861, 22862, 22864, 22865, and 22899** **Category III 0095T, 0098T, 0164T, and 0165T**
HCPCS:	
ICD10 Procedure Codes:	**0RR30JZ, 0RR50JZ, 0RP90JZ, 0RPB0JZ, 0RR50JZ, 0RR90JZ, 0RRB0JZ, 0RW50JZ, 0RW53JZ, 0RW54JZ, 0RW90JZ, 0RW93JZ, 0RW94JZ, 0RWB0JZ, 0RWB3JZ, 0RWB4JZ, 0SR20JZ, 0SR40JZ, 0SW20JZ, 0SW23JZ, 0SW24JZ, 0SW40JZ, 0SW43JZ and 0SW44JZ**