Intervertebral Artificial Disc Arthroplasty

LOB(s):	State(s):
☒ *Commercial* ☒ *Medicare*	☒ *Idaho* ☒ *Montana* ☒ *Oregon* ☒ *Washington* ☐ *Other:*
☒ *Medicaid*	☒ *Oregon* ☐ *Washington*

Enterprise Policy

PacificSource is committed to assessing and applying current regulatory standards, widely-used treatment guidelines, and evidenced-based clinical literature when developing clinical criteria for coverage determination. Each policy contains a list of sources (references) that serves as the summary of evidence used in the development and adoption of the criteria. The evidence was considered to ensure the criteria provide clinical benefits that promote patient safety and/or access to appropriate care. Each clinical policy is reviewed, updated as needed, and readopted, at least annually, to reflect changes in regulation, new evidence, and advancements in healthcare.

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 determinations 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

Intervertebral artificial disc replacement is an alternative to cervical and lumbar spinal fusion surgery for those individuals suffering from back or neck pain due to degenerative disc disease (DDD). The artificial disc was designed to restore normal disc height, to preserve the spinal flexibility and decrease degeneration of adjacent discs, which can occur as a result of DDD.

Cervical

Artificial Cervical Disc Arthroplasty is a surgical strategy indicated for the treatment of Degenerative Disc Disease (DDD) or herniated disc resulting in symptomatic cervical nerve compression. The procedure is designed to surgically secure an artificial disc into a prepared cervical intervertebral space. The intended outcomes are to relieve pain by reducing pressure on cervical spinal nerves, restoration of disc height and normal spinal curvature, and motion preservation with reduced risk of adjacent-level DDD.

Lumbar

Artificial Lumbar Disc Arthroplasty is a surgical strategy for the treatment of the disc of the lumbar spine with symptomatic DDD and no more than Grade 1 spondylolisthesis at the involved level. The procedure is designed to surgically secure an artificial disc into a prepared lumbar intervertebral space. The intended outcomes are to relieve pain by reducing pressure on spinal nerves, restoration of disc height and normal spinal curvature, and motion preservation with reduced risk of adjacent-level DDD.

Criteria

Commercial

Prior authorization is required

A. Artificial Cervical Disc Arthroplasty

PacificSource considers surgical implantation of cervical intervertebral disc for Degenerative Disc Disease with intractable radiculopathy and/or myelopathy between C3-C7 medically necessary when there are no contraindications, and **ALL** of the following criteria is met:

1. Must have documented closure of growth plates for skeletally mature adolescents
2. Implantation up to two adjacent/adjoining levels. Note: More than two levels and or non-adjacent / non-adjoining levels are E/I/U (see section below)
3. MRI or other neuroimaging finding correlates with clinical signs and symptoms and demonstrates cord compression due to herniated disk, osteophyte, spinal stenosis, or nerve root compression and **ONE** of the following diagnoses:

   a. Cervical Radiculopathy and **ALL** of the following:

   - Patient has unremitting radicular pain or progressive weakness secondary to nerve root compression for at least three months
   - Failure of at least 3 consecutive months physician-directed conservative medical management for cervical pain occurring within the current year **AND BOTH** of the following:
     - Physical therapy or chiropractic treatment- targeted at the specific disc level of the requested procedure
     - Prescription strength analgesics, steroids or NSAIDS

   OR

   b. Cervical Spondylotic Myelopathy with treatment indicated by **ALL** of the following:

   - Signs or symptoms of myelopathy are present as indicated by **ONE** or more of the following:
     - Upper limb weakness in more than single nerve root distribution
     - Lower limb weakness in upper motor neuron distribution
     - Loss of dexterity (e.g., clumsiness of hands)
     - Bowel or bladder incontinence
     - Frequent falls
     - Hyperreflexia
     - Hoffmann sign
     - Increased extremity muscle tone or spasticity
     - Gait abnormality
     - Positive Babinski sign
     - Myelopathy

4. Absence of contraindications which include, but not limited to the following:
    a. Osteoporosis, osteomalacia, or osteopenia (e.g., T-score of -3.5 or -2.5, with associated compression fracture)
    b. Active or chronic infection that is localized at operative site or is systematic
    c. Allergy or sensitivity to implant materials
    d. Paget disease, osteomalacia, osteoporosis or any other metabolic bone disease
    e. Rheumatoid arthritis or other autoimmune disease
    f. Progressive neurological deficit or deterioration due to another disease process
    g. There is radiological evidence of **ANY** of the following:
        - Clinically significant cervical instability, such as kyphotic deformity or spondylolisthesis (e.g., > 3 mm subluxation or > 11 degrees angulation)
        - Significant cervical anatomical deformity or compromised vertebral bodies at the index level (e.g., ankylosing spondylitis, rheumatoid arthritis, or compromise due to current or past trauma)
        - Spinal malignancy or metastases from primary malignancy

B. Artificial Lumbar Disc Arthroplasty

PacificSource considers surgical implantation of lumbar intervertebral disc prosthesis for treating single level lumbar Degenerative Disc Disease medically necessary when there are no contraindications, and **ALL** of the following criteria is met

1. A request for a single level artificial disc replacement between L3 and S1
2. MRI or other neuroimaging finding correlates with clinical signs and symptoms and demonstrates cord compression due to herniated disk, osteophyte, spinal stenosis, or nerve root compression
3. Must have documented closure of growth plates for skeletally mature adolescents
4. Presence of symptoms for at least three months
5. No more than Grade 1 Spondylolisthesis at the involved level
6. Failure of at least three months of **ALL** of the following conservative treatments for mechanical low back pain occurring within the current year (unless contraindicated)
    a. Physical therapy- targeted at the specific disc level of the requested procedure
    b. Medications (e.g., Anti-inflammatory, Analgesics, Muscle relaxants)
    c. Epidural steroid injections
7. Absence of contraindications, which include, but are not limited to the following:
    a. Moderate or severe facet arthropathy or pars defect at the operative level on a preoperative MRI scan, CT scan or plain radiograph
    b. Lumbosacral spine fracture
    c. Scoliosis of the lumbosacral spine

d. Active systemic infection or infection localized to the site of implantation

e. Allergy or sensitivity to implant materials

f. Tumor in the peritoneum, retroperitoneum, or site of implantation

g. Osteoporosis, osteomalacia, or osteopenia

h. Isolated radicular compression syndromes, especially due to disc herniation

i. History of any spinal surgery at operative level.

j. Prior fusion at an adjacent cervical or lumbar level.

k. Vascular, urological, or other peritoneal or retroperitoneal pathology that may preclude safe and adequate anterior spine exposure as required for the surgery

Medicaid

PacificSource Community Solutions follows Oregon Health Plan (OHP) Oregon Administrative Rules (OARs) 410-141-3820 to 3830 and 410-151-0000 to 410-151-0003 for Artificial Disc Replacement.

PacificSource Community Solutions follows Guideline Note 101 of the Oregon Health Plan (OHP) Prioritized List of Health Services for coverage of Artificial Disc Replacement and Guideline Note 173 of the Oregon Health Plan Prioritized List of Health Services for coverage of code 22860 to have insufficient evidence of effectiveness.

Medicare

PacificSource Medicare follows National Coverage Determination, NCD 150.10 for coverage of Lumbar Artificial Disc Replacement (LADR).

PacificSource Medicare follows CMS guidelines and criteria. In the absence of CMS guidelines and criteria, PacificSource Medicare will follow internal policy for determination of coverage and medical necessity.

Experimental/Investigational/Unproven

The following procedures are not supported by sufficient evidence-based data or outcome studies to deem them a standard of care for coverage and are considered experimental/investigational or unproven according to PacificSource criteria:

- Thoracic artificial disc arthroplasty
- The planned procedure includes the combined use of a prosthesis and spinal fusion (i.e., hybrid surgery)
- Intervertebral disc prosthesis implantation of more than 2 consecutive cervical spinal disc levels
- Intervertebral disc prosthesis implantation of non-adjacent / non-adjoining cervical spinal disc
- Intervertebral disc prosthesis implantation of more than 1 consecutive lumbar spinal disc levels

Coding Information

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.

0095T Removal of total disc arthroplasty, anterior approach, each additional interspace

0098T Revision of total disc arthroplasty, anterior approach, each additional interspace.

0164T	Removal of Total Disc Arthroplasty, Anterior Approach, Lumbar, Each Additional Interspace
0165T	Revision of Total Disc Arthroplasty, Anterior Approach, Lumbar, Each Additional Interspace
22856	Total Disc Arthroplasty, Anterior Approach, Including Discectomy with End Plate Preparation, Single Interspace, Cervical
22857	Total Disc Arthroplasty (Artificial Disc), Anterior Approach, Including Discectomy, Lumbar, Single Interspace
22858	Total disc arthroplasty (artificial disc), anterior approach, including discectomy with end plate preparation (includes osteophytectomy for nerve root or spinal cord decompression and microdissection); second level, cervical (List separately in addition to code for primary procedure)
22860	Total disc arthroplasty (artificial disc), anterior approach, including discectomy to prepare interspace (other than for decompression); second interspace, lumbar
22861	Revision including replacement of total disc arthroplasty (artificial disc), anterior approach, single interspace; cervical
22862	Revision Including Replacement of Total Disc Arthroplasty (Artificial Disc) Anterior Approach, Lumbar, Single Interspace
22864	Removal of total disc arthroplasty (artificial disc), anterior approach, single interspace; cervical
22865	Removal of Total Disc Arthroplasty (Artificial Disc), Anterior Approach, Lumbar, Single Interspace
22899	Arthrodesis, Pre-Sacral Interbody Technique, Inc Instrumentation, Imaging, and Discectomy, Lumbar; Single Interspace

Definitions

Cervical Spondylotic Myelopathy – a condition in which facet joints in the neck become enlarged causing the ligaments around the spinal canal to thicken, bone spur formation and narrowing of the spinal canal resulting in compression of the spinal cord and nerve root.

Degenerative Disc Disease (DDD) – degeneration of the disc confirmed by patient history, physical examination, and radiographic studies resulting in back pain, paresthesia and/or weakness of one or both lower extremities.

Skeletally Mature – a measure of bone development incorporating the size, shape and degree of mineralization determined by radiological studies

Spinal Stenosis – a narrowing of the spaces in your spine which can result in compression of the spinal cord and nerve roots exiting the vertebrae

Spondylosis - a broad term that simply refers to a type of degeneration in the spine affecting the vertebral disc and facet joints that gradually develops with age

Spondylolisthesis Grades:

Grade 1	25% or less of vertebral body has slipped forward

Grade 2	Between 25% and 50% of vertebral body has slipped forward
Grade 3	Between 50% and 75% of vertebral body has slipped forward
Grade 4	More than 75% of vertebral body has slipped forward
Grade 5	L5 vertebra positioned completely below the top of the sacrum

Related Polices

Care of the Surgical Patient

Instrumented Spinal Surgery

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Appendix

Policy Number:

Effective: 5/1/2020 **Next review:** 6/1/2025

Policy type: Enterprise

Author(s):

Depts.: Health Services

Applicable regulation(s): OARs 410-141-3820 through 3830, 410-151-0000 through 0003, Guideline Note 101 of the OHP Prioritized List of Health Services, LCD L38033, NCD 150.10

Commercial Ops: 5/2024

Government Ops: 5/2024