Artificial Intervertebral Disc – Cervical

I. Policy

University Health Alliance (UHA) will reimburse for artificial disc replacement when it is determined to be medically necessary and when it meets the medical criteria guidelines (subject to limitations and exclusions) indicated below.

Artificial cervical disc replacement surgery or cervical disc arthroplasty (CDA) is a developing technique for the treatment of cervical radiculopathy that has been used in situations when an anterior cervical discectomy and fusion (ACDF) would otherwise be appropriate. Mounting evidence suggests that CDA is equal or superior to ACDF in terms of clinical outcomes. In a 2016 systematic review and meta-analysis of eight randomized controlled trials and over 2,300 subjects comparing CDA with ACDF with at least four years of follow-up, pooled analysis found that CDA led to significantly higher rates of success on most clinical outcome measures (e.g., overall success, neurologic success, improvement of disability scores) and lower rates of implant or surgically-related serious adverse events.

II. Criteria/Guidelines

A. Cervical intervertebral disc replacement or spinal arthroplasty is covered (subject to Limitations/Exclusions and Administrative Guidelines) when performed at one level (22856, 22861, 22864) in individuals with cervical degenerative disc disease when all of the following criteria are met:

1. Skeletally mature patient; AND
2. Patient has intractable radiculopathy caused by one or two level disease (either herniated disc or spondolytic osteophyte) located at C3-C7; AND
3. Persistent or recurrent symptoms/pain with functional limitations that are unresponsive to at least 6 weeks of appropriate conservative treatment; AND
4. Documented failure of at least 6 consecutive weeks of any 2 of the following physician-directed conservative treatments:
   a. Analgesics, steroids, and/or NSAIDs
   b. Structured program of physical therapy
   c. Structured home exercise program prescribed by a physical therapist, chiropractic provider or physician
   d. Epidural steroid injections and or facet injections /selective nerve root block; AND
5. Imaging studies confirm the presence of compression at the level(s) corresponding with the clinical findings (MRI or CT); AND
6. No prior neck surgery; AND
7. Use of an FDA-approved prosthetic intervertebral discs.

B. Cervical artificial intervertebral disc implantation at an adjacent level is covered (subject to Limitations and Administrative Guidelines) when all of the following are met:

1. Criteria above are met; and
2. The device is FDA-approved for 2 levels
NOTE:

This UHA payment policy is a guide to coverage, the need for prior authorization and other administrative directives. It is not meant to provide instruction in the practice of medicine and it should not deter a provider from expressing his/her judgment.

Even though this payment policy may indicate that a particular service or supply is considered covered, specific provider contract terms and/or members' individual benefit plans may apply, and this policy is not a guarantee of payment. UHA reserves the right to apply this payment policy to all UHA companies and subsidiaries.

UHA understands that opinions about and approaches to clinical problems may vary. Questions concerning medical necessity (see Hawaii Revised Statutes §432E-1.4) are welcome. A provider may request that UHA reconsider the application of the medical necessity criteria in light of any supporting documentation.

### III. Limitations/Exclusions

**A. Cervical Artificial Disc Replacement is NOT indicated when any of the following clinical scenarios exists:**

1. Symptomatic multiple level disease affecting 3 or more levels
2. Adjacent level disease: degenerative disease adjacent to a previous cervical fusion
3. Infection (at site of implantation or systemic)
4. Osteoporosis or osteopenia
5. Instability
   a. Translation greater than 3mm difference between lateral flexion-extension views at the symptomatic levels;
   b. 11 degrees of angular difference between lateral flexion-extension views at the symptomatic levels
6. Sensitivity or allergy to implant materials
7. Severe spondylosis defined as:
   a. > 50% disc height loss compared to minimally or non-degenerated levels; OR
   b. Bridging osteophytes: OR
   c. Absence of motion on lateral flexion-extension views at the symptomatic site
8. Severe facet arthropathy
9. Ankylosing spondylitis
10. Rheumatoid arthritis
11. Previous fracture with anatomical deformity
12. Ossification of the posterior longitudinal ligament (OPLL)
13. Active cervical spine malignancy

**B. Cervical artificial disc replacement at one level combined with cervical spinal fusion at another level (adjacent or non-adjacent) is not covered as it has not been shown in the scientific literature to improve health care outcomes.**
IV. Administrative Guidelines

A. Prior authorization is required.
B. To request prior authorization, please submit via UHA’s online portal.
C. All of the following documentation must be submitted:
   1. Imaging studies;
   2. Clinical notes describing symptoms and physical findings; and
   3. Documentation of failure of conservative management for six weeks or more.

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>22856</td>
<td>Total disc arthroplasty (artificial disc), anterior approach, including discectomy with end plate preparation (includes osteophytectomy for nerve root or spinal cord decompression and microdissection); single interspace, cervical</td>
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<tr>
<td>22861</td>
<td>Revision including replacement of total disc arthroplasty (artificial disc), anterior approach, single interspace; cervical</td>
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<tr>
<td>22864</td>
<td>Removal of total disc arthroplasty (artificial disc), anterior approach, single interspace; cervical</td>
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</tbody>
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V. Policy History

Policy Number: MPP-0041-120301
Current Effective Date: 10/18/19
Original Document Effective Date: 03/01/2012
Previous Revision Dates: 07/01/2013, 01/01/2017, 09/19/2018
PAC Approved Date: 03/01/2013
Previous Policy Title: Artificial Disc Replacement – Cervical

References: