Cigna Medical Coverage Policies – Musculoskeletal Anterior Cervical Discectomy and Fusion

Effective July 1, 2025





Instructions for use

The following coverage policy applies to health benefit plans administered by Cigna. Coverage policies are intended to provide guidance in interpreting certain standard Cigna benefit plans and are used by medical directors and other health care professionals in making medical necessity and other coverage determinations. Please note the terms of a customer's particular benefit plan document may differ significantly from the standard benefit plans upon which these coverage policies are based. For example, a customer's benefit plan document may contain a specific exclusion related to a topic addressed in a coverage policy.

In the event of a conflict, a customer's benefit plan document always supersedes the information in the coverage policy. In the absence of federal or state coverage mandates, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of:

- 1. The terms of the applicable benefit plan document in effect on the date of service
- 2. Any applicable laws and regulations
- 3. Any relevant collateral source materials including coverage policies
- 4. The specific facts of the particular situation

Coverage policies relate exclusively to the administration of health benefit plans. Coverage policies are not recommendations for treatment and should never be used as treatment guidelines.

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CMM-601: Anterior Cervical Discectomy and Fusion

CMM-601.1: General Guidelines

CMM-601.2: Osteotomy

CMM-601.3: Anterior Cervical Discectomy

CMM-601.4: Initial Primary Anterior Cervical Discectomy and Fusion (ACDF)

CMM-601.5: Anterior Cervical Corpectomy

CMM-601.6: Repeat Anterior Cervical Discectomy and Fusion (ACDF) at the Same Level

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CMM-601.1: General Guidelines

Application of Guideline

- The determination of medical necessity for the performance of anterior cervical fusion with discectomy/corpectomy (with or without osteotomy) is always made on a case-by-case basis.
- ➤ For additional timing and documentation requirements, see <u>CMM-600.1: Prior</u> <u>Authorization Requirements.</u>

Urgent/Emergent Indications/Conditions

- The presence of urgent/emergent indications/conditions warrants definitive surgical treatment. Imaging findings noted in the applicable procedure section(s) are required.
 - The following criteria are NOT required for confirmed urgent/emergent conditions:
 - Plain X-rays of the cervical spine
 - Provider-directed non-surgical management
 - Proof of smoking cessation
 - Absence of unmanaged significant mental and/or behavioral health disorders (e.g., major depressive disorder, chronic pain syndrome, secondary gain, opioid and alcohol use disorders)
 - Timeframe for repeat procedure
- Urgent/emergent conditions for anterior cervical fusion with discectomy/corpectomy include ANY of the following:
 - Acute/unstable traumatic spinal fractures or dislocations with neural compression
 - Central cord syndrome
 - Myelopathy or Cord signal changes on MRI due to cord compression
 - Documentation of progressive neurological deficit on two separate physical exams
 - **ANY** of the following due to a neurocompressive pathology:
 - Motor weakness of grade 3/5 or less of specified muscle(s)
 - Rapidly progressive symptoms of motor loss
 - Bowel incontinence
 - Bladder incontinence/retention
 - Occipitocervical and/or Atlantoaxial (C1-C2) instability (non-traumatic) due to ANY of the following:
 - Rheumatoid arthritis
 - Congenital abnormality of occipitocervical/C1-C2 vertebrae
 - Os odontoideum
 - Plain X-rays show instability and include EITHER of the following findings:
 - Subluxation or translation of more than 3.5 mm on static lateral or dynamic flexion/extension views
 - Sagittal plane angulation of more than 11 degrees between adjacent spinal segments on static or dynamic flexion/extension lateral plain X-rays
 - Epidural hematoma

- Infection (e.g., discitis, epidural abscess, osteomyelitis)
- Neoplasms of the spine
- Primary or metastatic neoplastic disease causing pathologic fracture, cord compression, or instability
- A condition otherwise meeting criteria listed in the applicable procedure section(s) with documentation of severe debilitating pain and/or dysfunction to the point of being incapacitated

CMM-601.2: Osteotomy

Anterior Osteotomy or Vertebral Column Resection

Anterior cervical osteotomy or vertebral column resection [VCR]) is considered medically necessary (in addition to fusion) when ALL of the following criteria have been met:

- > Performed for **EITHER** of the following:
 - Correction of fixed cervical kyphotic deformity
 - Convert a cervical kyphotic deformity from fixed to mobile
- Correction of cervical kyphotic deformity cannot be attained by cervical fusion (with or without decompression/corpectomy) alone
- > ALL of the criteria for anterior cervical discectomy/corpectomy and fusion have been met per the applicable procedure-specific section(s):
 - CMM-601.4: Initial Primary Anterior Cervical Discectomy and Fusion (ACDF)
 - CMM-601.5: Anterior Cervical Corpectomy
 - <u>CMM-601.6: Repeat Anterior Cervical Discectomy and Fusion (ACDF) at the</u> Same Level
 - CMM-601.7: Adjacent Segment Disease
 - CMM-601.8: ACDF Following Failed Cervical Disc Arthroplasty Surgery

CMM-601.3: Anterior Cervical Discectomy

- > Anterior cervical discectomy **must be performed with a cervical fusion** due to the iatrogenic instability/increased disc degeneration of the anterior cervical discectomy procedure.
- > Anterior cervical discectomy is considered **medically necessary** when performed with a cervical fusion when the criteria in the applicable procedure-specific section(s) have been met:
 - CMM-601.4: Initial Primary Anterior Cervical Discectomy and Fusion (ACDF)
 - CMM-601.6: Repeat Anterior Cervical Discectomy and Fusion (ACDF) at the Same Level
 - CMM-601.7: Adjacent Segment Disease
 - CMM-601.8: ACDF Following Failed Cervical Disc Arthroplasty Surgery

<u>CMM-601.4: Initial Primary Anterior Cervical Discectomy and Fusion</u> (ACDF)

Initial primary anterior cervical discectomy and fusion (ACDF) is considered medically necessary when performed for **EITHER** of the following conditions when **ALL** of the associated criteria have been met:

Radiculopathy

- > Subjective symptoms include **BOTH** of the following:
 - Significant level of pain on a daily basis defined as clinically significant functional impairment (e.g., inability to perform household chores, prolonged standing, etc.)
 - Unremitting radicular pain to shoulder girdle and/or upper extremity resulting in disability
- > Objective physical exam findings include **ANY** of the following:
 - Dermatomal sensory deficit
 - Motor deficit (e.g., biceps, triceps weakness)
 - Reflex changes
 - Shoulder abduction relief sign
 - Nerve root tension sign (e.g., Spurling's maneuver)
 - Unremitting radicular pain to shoulder girdle and/or upper extremity without concordant objective physical exam findings
- Less than clinically meaningful improvement with at least TWO of the following (unless contraindicated):
 - Prescription strength analgesics, steroids, gabapentinoids, and/or NSAIDs for six
 (6) weeks
 - Provider-directed exercise program (prescribed by a physical therapist, chiropractic provider, osteopathic or allopathic physician) for six (6) weeks
 - Epidural steroid injection(s) or selective nerve root block(s) performed at the same level(s) as the requested surgery
- Plain X-rays of the cervical spine including flexion/extension lateral views have been performed
- MRI/CT shows neural structure compression at the requested level(s) that is concordant with the individual's symptoms **and** physical exam findings and that is caused by **ANY** of the following:
 - Herniated disc(s) (retained disc material or a recurrent disc herniation)
 - Synovial cyst or arachnoid cyst
 - Central/lateral/foraminal stenosis
 - Osteophytes
- Absence of unmanaged significant mental and/or behavioral health disorders (e.g., major depressive disorder, chronic pain syndrome, secondary gain, opioid and alcohol use disorders)

- > Documentation of nicotine-free status with **EITHER** of the following:
 - Individual is a never-smoker
 - Individual has refrained from smoking, use of smokeless tobacco products, and/or nicotine replacement therapy for at least six (6) weeks prior to planned surgery as evidenced by blood cotinine lab results of ≤10 ng/mL

<u>Myelopathy</u>

- > Subjective symptoms include **ANY** of the following:
 - Upper/lower extremity weakness, numbness, or pain
 - Fine motor dysfunction (buttoning, handwriting, clumsiness of hands)
 - Gait disturbance
 - New-onset bowel or bladder dysfunction
 - Frequent falls
- > Objective physical exam findings include **ANY** of the following:
 - Grip and release test
 - Ataxic gait
 - Hyperreflexia
 - Hoffmann sign
 - Babinski sign
 - Tandem walking test demonstrating ataxia
 - Inverted brachial radial reflex
 - Increased muscle tone or spasticity
 - Clonus
 - Myelopathic hand
- MRI/CT shows findings that are concordant with the individual's symptoms and physical exam findings and that are caused by EITHER of the following:
 - Cervical spinal cord compression
 - Cervical spinal stenosis

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CMM-601.5: Anterior Cervical Corpectomy

Comprehensive Musculoskeletal Management Guidelines

Anterior cervical corpectomy with fusion considered **medically necessary** and can be performed **as an alternative** for anterior cervical discectomy and fusion (ACDF) when **ALL** of the following criteria have been met:

- Complete corpectomy or partial corpectomy (i.e., removal of at least one-half of the vertebral body [not for resection of osteophytes alone]) is being performed for ANY of the following:
 - Infection
 - Trauma
 - Tumor
 - Compression at or behind the level of the vertebral body
- Anterior cervical corpectomy must be performed with a cervical fusion due to the iatrogenic instability of the cervical corpectomy procedure.
- ALL of the criteria for anterior cervical discectomy and fusion have been met per the in the applicable procedure-specific section(s):
 - <u>CMM-601.4: Initial Primary Anterior Cervical Discectomy with Fusion</u> (ACDF)
 - <u>CMM-601.6: Repeat Anterior Cervical Discectomy with Fusion (ACDF) at the</u>
 <u>Same Level</u>
 - <u>CMM-601.7</u>: Adjacent Segment Disease
 - CMM-601.8: ACDF Following Failed Cervical Disc Arthroplasty Surgery

CMM-601.6: Repeat Anterior Cervical Discectomy and Fusion (ACDF) at the Same Level

Repeat anterior cervical discectomy and fusion (ACDF) at the same level is considered **medically necessary** when performed for **ANY** of the following conditions when **ALL** of the associated criteria have been met:

Malposition or Failure of Implant/Instrumentation or Structural Bone Graft

 Post-operative imaging shows evidence of malposition or failure of the implant/instrumentation or structural bone graft (e.g., migration, pedicle screw breakage, pedicle screw loosening, dislodged hooks, rod breakage, rod bending, rod loosening, loss of curve correction, decompensation, etc.)

Unremitting Neck Pain with Pseudoarthrosis

- Greater than six (6) months since the prior anterior cervical discectomy and fusion (ACDF) at the same level
- Subjective symptoms include significant level of pain on a daily basis defined as clinically significant functional impairment (e.g., inability to perform household chores, prolonged standing, etc.)
- > Post-operative physical exam findings are concordant with the individual's symptoms
- ► Less than clinically meaningful improvement with six (6) weeks of non-surgical treatment with **BOTH** of the following (unless contraindicated):
 - Prescription strength analgesics, steroids, gabapentinoids, and/or NSAIDs
 - Provider-directed exercise program prescribed by a physical therapist, chiropractic provider, osteopathic or allopathic physician
- Post-operative imaging (performed at no less than six (6) months after the prior cervical fusion) shows pseudoarthrosis at the requested level(s)
- > Post-operative MRI/CT findings are concordant with the individual's symptoms
- Absence of unmanaged significant mental and/or behavioral health disorders (e.g., major depressive disorder, chronic pain syndrome, secondary gain, opioid and alcohol use disorders)
- > Documentation of nicotine-free status including **EITHER** of the following:
 - Individual is a never-smoker
 - Individual has refrained from smoking, use of smokeless tobacco products, and/or nicotine replacement therapy for at least six (6) weeks prior to planned surgery as evidenced by blood cotinine lab results of ≤10 ng/mL

Radiculopathy with Pseudoarthrosis

- Greater than six (6) months since the prior anterior cervical discectomyand fusion (ACDF) at the same level
- > Subjective symptoms include **BOTH** of the following:
 - Significant level of pain on a daily basis defined as clinically significant functional impairment (e.g., inability to perform household chores, prolonged standing, etc.)
 - Unremitting radicular pain to shoulder girdle and/or upper extremity resulting in disability
- > Objective physical exam findings include **ANY** of the following:
 - Dermatomal sensory deficit
 - Motor deficit (e.g., biceps, triceps weakness)
 - Reflex changes
 - Shoulder abduction relief sign
 - Nerve root tension sign (e.g., Spurling's maneuver)
 - Unremitting radicular pain to shoulder girdle and/or upper extremity without concordant objective physical exam findings

- Less than clinically meaningful improvement with at least TWO of the following (unless contraindicated):
 - Prescription strength analgesics, steroids, gabapentinoids, and/or NSAIDs for six (6) weeks
 - Provider-directed exercise program (prescribed by a physical therapist, chiropractic provider, osteopathic or allopathic physician) for six (6) weeks
 - Epidural steroid injection(s) or selective nerve root block(s) performed at the same level(s) as the requested surgery
- Post-operative imaging (performed at no less than six (6) months after the prior cervical fusion) shows pseudoarthrosis at the requested level(s)
- Post-operative MRI/CT shows neural structure compression at the requested level(s) that is concordant with the individual's symptoms and physical exam findings and that is caused by ANY of the following:
 - Herniated disc(s) (retained disc material or a recurrent disc herniation)
 - Synovial cyst or arachnoid cyst
 - Central/lateral/foraminal stenosis
 - Osteophytes
- Absence of unmanaged significant mental and/or behavioral health disorders (e.g., major depressive disorder, chronic pain syndrome, secondary gain, opioid and alcohol use disorders)
- > Documentation of nicotine-free status including **EITHER** of the following:
 - Individual is a never-smoker
 - Individual has refrained from smoking, use of smokeless tobacco products, and/or nicotine replacement therapy for at least six (6) weeks prior to planned surgery as evidenced by blood cotinine lab results of ≤ 10 ng/mL

Myelopathy with Pseudoarthrosis

- Greater than six (6) months since the prior anterior cervical discectomy and fusion (ACDF) at the same level
- > Subjective symptoms include **ANY** of the following:
 - Upper/lower extremity weakness, numbness, or pain
 - Fine motor dysfunction (buttoning, handwriting, clumsiness of hands)
 - Gait disturbance
 - New-onset bowel or bladder dysfunction
 - Frequent falls
- > Objective physical exam findings include **ANY** of the following:
 - Grip and release test
 - Ataxic gait
 - Hyperreflexia
 - Hoffmann sign
 - Babinski sign
 - Tandem walking test demonstrating ataxia
 - Inverted brachial radial reflex
 - Increased muscle tone or spasticity

- Clonus
- Myelopathic hand
- Post-operative imaging (performed at no less than (six) 6 months after the prior cervical fusion) shows pseudoarthrosis at the requested level(s)
- Post-operative MRI/CT shows findings that are concordant with the individual's symptoms and physical exam findings and that are caused by EITHER of the following:
 - Cervical spinal cord compression
 - Cervical stenosis

CMM-601.7: Adjacent Segment Disease

Anterior cervical discectomy and fusion (ACDF) for a degenerative spinal segment adjacent to a previous decompression or fusion procedure is considered **medically necessary** when performed for **EITHER** of the following conditions when **ALL** of the associated criteria have been met:

Radiculopathy

- Greater than six (6) months since the prior cervical decompression or fusion at an adjacent level
- > Subjective symptoms include **BOTH** of the following:
 - Significant level of pain on a daily basis defined as clinically significant functional impairment (e.g., inability to perform household chores, prolonged standing, etc.)
 - Unremitting radicular pain to shoulder girdle and/or upper extremity resulting in disability
- > Objective physical exam findings include **ANY** of the following:
 - Dermatomal sensory deficit
 - Motor deficit (e.g., biceps, triceps weakness)
 - Reflex changes
 - Shoulder Abduction Relief Sign
 - Nerve root tension sign (e.g., Spurling's maneuver)
 - Unremitting radicular pain to shoulder girdle and/or upper extremity without concordant objective physical exam findings
- Less than clinically meaningful improvement with at least TWO of the following (unless contraindicated):
 - Prescription strength analgesics, steroids, gabapentinoids, and/or NSAIDs for six (6) weeks
 - Provider-directed exercise program (prescribed by a physical therapist, chiropractic provider, osteopathic or allopathic physician) for six (6) weeks
 - Epidural steroid injection(s) or selective nerve root block(s) performed at the same level(s) as the requested surgery
- Plain X-rays of the cervical spine (including flexion/extension lateral views) and advanced diagnostic imaging show successful decompression and fusion at the previous operative level

- MRI/CT shows neural structure compression at the requested level(s) that is concordant with the individual's symptoms and physical exam findings and that is caused by ANY of the following:
 - Herniated disc(s) (retained disc material or a recurrent disc herniation)
 - Synovial cyst or arachnoid cyst
 - Central/lateral/foraminal stenosis
 - Osteophytes
- Absence of unmanaged significant mental and/or behavioral health disorders (e.g., major depressive disorder, chronic pain syndrome, secondary gain, opioid and alcohol use disorders)
- > Documentation of nicotine-free status with **EITHER** of the following:
 - Individual is a never-smoker
 - Individual has refrained from smoking, use of smokeless tobacco products, and/or nicotine replacement therapy for at least six (6) weeks prior to planned surgery as evidenced by blood cotinine lab results of ≤ 10 ng/mL

Myelopathy

- > Subjective symptoms include **ANY** of the following:
 - Upper/lower extremity weakness, numbness, or pain
 - Fine motor dysfunction (buttoning, handwriting, clumsiness of hands)
 - Gait disturbance
 - New-onset bowel or bladder dysfunction due to a neurocompressive pathology
 - Frequent falls
- > Objective concordant physical exam findings include **ANY** of the following:
 - Grip and release test
 - Ataxic gait
 - Hyperreflexia
 - Hoffmann sign
 - Babinski sign
 - Tandem walking test demonstrating ataxia
 - Inverted brachial radial reflex
 - Increased muscle tone or spasticity
 - Clonus
 - Myelopathic hand
- MRI/CT shows findings that are concordant with the individual's symptoms and physical exam findings and that are caused by EITHER of the following:
 - Cervical spinal cord compression
 - Cervical spinal stenosis

<u>CMM-601.8: ACDF Following Failed Cervical Disc Arthroplasty</u> <u>Surgery</u>

Anterior cervical discectomy and fusion (ACDF) following failed cervical disc arthroplasty surgery is considered **medically necessary** when performed for **ANY** of the following conditions when **ALL** of the associated criteria have been met:

Failed Cervical Disc Arthroplasty Implant

 Post-operative imaging shows evidence of cervical disc arthroplasty implant malposition or failure (i.e., subsidence, loosening, infection, dislocation, subluxation, vertebral body fracture, dislodgement)

Unremitting Neck Pain

- Greater than six (6) months since the prior cervical disc arthroplasty at the same level
- Subjective symptoms include significant level of pain on a daily basis defined clinically significant functional impairment (e.g., inability to perform household chores, prolonged standing, etc.)
- Post-operative physical exam findings that are concordant with the individual's symptoms
- Less than clinically meaningful improvement with BOTH of the following for at least six (6) weeks (unless contraindicated):
 - Prescription strength analgesics, steroids, gabapentinoids, and/or NSAIDs
 - Provider-directed exercise program prescribed by a physical therapist, chiropractic provider, osteopathic or allopathic physician
- Post-operative MRI/CT shows findings that are concordant with the individual's symptoms
- Absence of unmanaged significant mental and/or behavioral health disorders (e.g., major depressive disorder, chronic pain syndrome, secondary gain, opioid and alcohol use disorders)

- > Documentation of nicotine-free status including **EITHER** of the following:
 - Individual is a never-smoker
 - Individual has refrained from smoking, use of smokeless tobacco products, and/or nicotine replacement therapy for at least six (6) weeks prior to planned surgery as evidenced by blood cotinine lab results of ≤10 ng/mL

Radiculopathy

- Greater than six (6) months since the prior cervical disc arthroplasty at the same level
- > Subjective symptoms include **BOTH** of the following:
 - Significant level of pain on a daily basis defined as clinically significant functional impairment (e.g., inability to perform household chores, prolonged standing, etc.)
 - Unremitting radicular pain to shoulder girdle and/or upper extremity resulting in disability
- > Objective physical exam findings include **ANY** of the following:
 - Dermatomal sensory deficit
 - Motor deficit (e.g., biceps, triceps weakness)
 - Reflex changes
 - Shoulder abduction relief sign
 - Nerve root tension sign (e.g., Spurling's maneuver)
 - Unremitting radicular pain to shoulder girdle and/or upper extremity without concordant objective physical exam findings
- Less than clinically meaningful improvement with any TWO of the following (unless contraindicated):
 - Prescription strength analgesics, steroids, gabapentinoids, and/or NSAIDs for six (6) weeks
 - Provider-directed exercise program (prescribed by a physical therapist, chiropractic provider, osteopathic or allopathic physician) for six (6) weeks
 - Epidural steroid injection(s) or selective nerve root block(s) performed at the same level(s) as the requested surgery
- Post-operative MRI/CT shows neural structure compression at the requested level(s) that is concordant with the individual's symptoms and physical exam findings and that is caused by ANY of the following:
 - Herniated disc(s) (retained disc material or a recurrent disc herniation)
 - Synovial cyst or arachnoid cyst
 - Central/lateral/foraminal stenosis
 - Osteophytes
- Absence of unmanaged significant mental and/or behavioral health disorders (e.g., major depressive disorder, chronic pain syndrome, secondary gain, opioid and alcohol use disorders)
- > Documentation of nicotine-free status including **EITHER** of the following:
 - Individual is a never-smoker

 individual has refrained from smoking, use of smokeless tobacco products, and/or nicotine replacement therapy for at least six (6) weeks prior to planned surgery as evidenced by blood cotinine lab results of ≤10 ng/mL

Myelopathy

- Greater than six (6) months since the prior cervical disc arthroplasty procedure at the same level
- > Subjective symptoms include **ANY** of the following:
 - Upper/lower extremity weakness, numbness, or pain
 - Fine motor dysfunction (buttoning, handwriting, clumsiness of hands)
 - Gait disturbance
 - New-onset bowel or bladder dysfunction
 - Frequent falls
- > Objective physical exam findings include **ANY** of the following:
 - Grip and release test
 - Ataxic gait
 - Hyperreflexia
 - Hoffmann sign
 - Babinski sign
 - Tandem walking test demonstrating ataxia
 - Inverted brachial radial reflex
 - Increased muscle tone or spasticity
 - Clonus
 - Myelopathic hand
- Post-operative MRI/CT shows findings that are concordant with the individual's symptoms and physical exam findings and that are caused by EITHER of the following:
 - Cervical spinal cord compression
 - Cervical spinal stenosis

CMM-601.9: Non-Indications

Not Medically Necessary

- Anterior cervical discectomy/corpectomy and fusion performed without meeting the criteria listed in the <u>General Guidelines</u> section (when applicable for urgent/emergent conditions) and the criteria in the applicable procedure-specific section(s) (initial fusion, corpectomy, repeat fusion, adjacent segment disease, or fusion following failed disc arthroplasty) is considered not medically necessary.
- Anterior cervical discectomy/corpectomy and fusion performed for ANY other reason is considered not medically necessary including, but not limited to, performed for EITHER of the following conditions:
 - Chronic non-specific neck or arm pain of unknown etiology
 - Cervical degenerative disc disease without radiculopathy or myelopathy

- Anterior cervical discectomy/corpectomy performed alone (i.e., performed without a cervical fusion) is considered not medically necessary.
- Anterior cervical osteotomy or vertebral column resection (VCR) performed without meeting the criteria listed in the <u>General Guidelines</u> section (when applicable for urgent/emergent conditions) and the criteria in <u>CMM-601.2</u> <u>Osteotomy</u> is considered not medically necessary.

Experimental, Investigational, or Unproven (EIU)

- Anterior endoscopic cervical disc/nerve root decompression is considered experimental, investigational or unproven (EIU), including ANY of the following procedures:
 - Anterior endoscopic cervical decompression with microforaminotomy (e.g., Jho procedure)
 - Anterior endoscopic cervical disc decompression (e.g., Cervical Deuk Laser Disc Repair)

Codes (CMM-601)

The inclusion of any code in this table does not imply that the code is under management or requires prior authorization. Refer to the applicable health plan for management details. Prior authorization of a code listed in this table is not a guarantee of payment. The Certificate of Coverage or Evidence of Coverage policy outlines the terms and conditions of the member's health insurance policy.

Code	Code Description/Definition
22220	Osteotomy of spine, including discectomy, anterior approach, single vertebral
	segment, cervical
+22226	Osteotomy of spine, including discectomy, anterior approach, single vertebral
	segment, each additional vertebral segment (List separately in addition to code for
	primary procedure)
22548	Arthrodesis, anterior transoral or extraoral technique, clivus-C1-C2 (atlas-axis), with or
	without excision of odontoid process
22551	Arthrodesis, anterior interbody, including disc space preparation, discectomy,
	osteophytectomy and decompression of spinal cord and/or nerve roots; cervical below
	C2
+22552	Arthrodesis, anterior interbody, including disc space preparation, discectomy,
	osteophytectomy and decompression of spinal cord and/or nerve roots; cervical below
	C2, each additional interspace (List separately in addition to code for separate
	procedure)
22554	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare
	interspace (other than for decompression); cervical below C2
+22585	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare
	interspace (other than for decompression); each additional interspace (List separately
	in addition to code for primary procedure)
+22845	Anterior instrumentation; 2 to 3 vertebral segments (List separately in addition to code
	for primary procedure)
+22846	Anterior instrumentation; 4 to 7 vertebral segments (List separately in addition to code
	for primary procedure)
+22853	Insertion of interbody biomechanical device(s) (e.g., synthetic cage, mesh) with
	integral anterior instrumentation for device anchoring (e.g., screws, flanges), when
	performed, to intervertebral disc space in conjunction with interbody arthrodesis, each
	interspace (List separately in addition to code for primary procedure)
	Insertion of intervertebral biomechanical device(s) (e.g., synthetic cage, mesh) with
	integral anterior instrumentation for device anchoring (e.g., screws, flanges), when
	performed, to vertebral corpectomy(ies) (vertebral body resection, partial or complete)
	defect, in conjunction with interbody arthrodesis, each contiguous defect (List
	separately in addition to code for primary procedure)
	Insertion of intervertebral biomechanical device(s) (e.g., synthetic cage, mesh,
	methylmethacrylate) to intervertebral disc space or vertebral body defect without
	interbody arthrodesis, each contiguous defect (List separately in addition to code for primary procedure)
63075	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including
	osteophytectomy; cervical, single interspace
	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including
+63076	osteophytectomy; cervical, each additional interspace (List separately in addition to
	code for primary procedure)

Code	Code Description/Definition
	Vertebral corpectomy (vertebral body resection), partial or complete, anterior approach with decompression of spinal cord and/or nerve roots(s); cervical, single segment
+63082	Vertebral corpectomy (vertebral body resection), partial or complete, anterior approach with decompression of spinal cord and/or nerve roots(s); cervical, single segment; cervical, each additional segment (List separately in addition to code for primary procedure)

Evidence Discussion (CMM-601)

Anterior Cervical Discectomy and Fusion

Risks of anterior discectomy and fusion include, but are not limited to, the following: infection; dysphagia; dysphonia; bleeding; vertebral artery injury; recurrent laryngeal nerve injury; esophageal or tracheal injury; dural tear; hematoma; nerve root injury; spinal cord injury; paralysis; and, death. Complications related to the implants (e.g., migration, subsidence, screw failure/backout) are also possible. Late complications include adjacent segment disease and pseudoarthrosis often necessitating revision surgery at the adjacent or index levels. This may start a cascade of multiple fusions, more complications and poor long term outcome. Indications for surgery include individuals with underlying cervical degenerative disc disease with the clinical presentation of cervical radiculopathy or myelopathy. Given the possibility of significant surgical complications, proper surgical candidacy selection is crucial to minimize the risk benefit ratio. Supportive subjective symptoms and physical exam findings should be present and concordant with imaging findings as abnormal advanced imaging findings are not uncommon in asymptomatic individuals.

Multiple studies have shown that the vast majority of individuals with cervical radiculopathy will improve with a 4-6 week course of non-operative treatment. Initial non-operative management is also noted as a recommendation in the North American Spine Society (NASS) *Coverage Policy Recommendations: Cervical Fusion.* However, for individuals with myelopathy or other urgent/emergent conditions (e.g., progressive neurologic deficit), a trial of non-operative treatment would not be necessary.

Contraindications to anterior cervical discectomy and fusion, as noted in North American Spine Society (NASS) *Coverage Policy Recommendations: Cervical Fusion*, include treatment of discogenic axial neck pain and isolated cervical radiculopathy due to foraminal stenosis amenable to simple foraminotomy.

Jackson et al. (2020) noted higher rates of postoperative complications and worse functional outcomes in individuals with psychological disorders undergoing spinal surgery. It was concluded that proper identification and treatment of these conditions prior to surgery may significantly improve many outcome measures in this population.

References (CMM-601)

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