



CLINICAL GUIDELINES

CMM-601: Anterior Cervical Discectomy and Fusion Guidelines

Version 1.1.2022

Effective September 1, 2022



eviCore healthcare Clinical Decision Support Tool Diagnostic Strategies: This tool addresses common symptoms and symptom complexes. Requests for individuals with atypical symptoms or clinical presentations that are not specifically addressed will require physician review. Consultation with the referring physician, specialist and/or individual's Primary Care Physician (PCP) may provide additional insight.

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Clinical guidelines for medical necessity review of Comprehensive Musculoskeletal Management Services.

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CMM-601.1: General Guidelines

- The determination of medical necessity for the performance of cervical fusion with and without discectomy is always made on a case-by-case basis.
- For prior authorization requirements, see **CMM-600.1: Prior Authorization Requirements**.
- The presence of urgent/emergent indications/conditions warrants definitive surgical treatment. Confirmatory advanced imaging studies are required. The following criteria are **NOT** required for confirmed urgent/emergent conditions:
 - ◆ Provider-directed non-surgical management
 - ◆ Proof of smoking cessation
 - ◆ Recent (within 6 months) plain X-rays of the cervical spine
 - ◆ Absence of unmanaged significant mental and/or behavioral health disorders
- Urgent/emergent conditions for cervical fusion with and without discectomy include **ANY** of the following:
 - ◆ Acute/unstable traumatic spinal fractures or dislocations with neural compression
 - ◆ Central cord syndrome
 - ◆ Documentation of progressive neurological deficit on two separate physical examinations
 - ◆ **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
 - ◆ Epidural hematoma
 - ◆ Infection (e.g. discitis, epidural abscess, osteomyelitis)
 - ◆ Myelopathy or Cord signal changes on MRI due to cord compression
 - ◆ 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
 - ◆ Neoplasms of the spine
 - ◆ Primary or metastatic neoplastic disease causing pathologic fracture, cord compression or instability
 - ◆ Documentation of severe debilitating pain and/or dysfunction to the point of being incapacitated
 - ◆ Flexion-extension plain X-rays demonstrate instability and include **ANY** of the following:
 - >3.5 mm sagittal plane translation
 - >20% sagittal plane translation of vertebral body width
 - >11 degrees relative sagittal plane angulation

CMM-601.2: Initial Primary Anterior Cervical Discectomy and Fusion (ACDF)

Initial primary anterior cervical discectomy and fusion (ACDF) is considered **medically necessary** when **ALL** of the following are met:

- Recent (within 6 months) plain X-rays of the cervical spine have been performed
- 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)
- Performed for **EITHER** of the following conditions:
 - ◆ **Radiculopathy** when **ALL** of the following are met:
 - Subjective symptoms including **BOTH** of the following:
 - Significant level of pain on a daily basis defined as **EITHER** of the following:
 - Visual Analog Scale (VAS)/Numeric Rating Scale (NRS) as ≥ 7
 - Severe, disabling, crippling, or incapacitating pain
 - Unrelenting radicular pain to shoulder girdle and/or upper extremity with or without concordant objective physical examination findings resulting in disability
 - Objective physical examination findings including **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)
 - Unrelenting radicular pain to shoulder girdle and/or upper extremity without concordant objective physical examination findings
 - Less than clinically meaningful improvement with at least **TWO** of the following unless contraindicated:
 - Prescription strength analgesics, steroids, and/or NSAIDs for 6 weeks
 - Provider-directed exercise program prescribed by a physical therapist, chiropractic provider, osteopathic or allopathic physician for 6 weeks
 - Epidural steroid injection(s)/selective nerve root block(s)
 - Recent (within 6 months) MRI/CT identifies nerve root impingement caused by herniated disc(s) and/or osteophytes that is concordant with the patient's symptoms and physical examination findings
 - Documentation of nicotine-free status with **EITHER** of the following:
 - Patient is a never-smoker
 - Patient has refrained from smoking, use of smokeless tobacco products, and/or nicotine replacement therapy for at least 6 weeks prior to planned surgery as evidenced by blood cotinine lab results of ≤ 10 ng/mL

- ◆ **Myelopathy** when **ALL** of the following are met:
 - Subjective symptoms including **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 examination findings including at least **TWO** of the following:
 - Grip and release test
 - Ataxic gait
 - Hyperreflexia
 - Hoffmann sign
 - Pathologic Babinski sign
 - Tandem walking test demonstrating ataxia
 - Inverted brachial radial reflex
 - Increased muscle tone or spasticity
 - Clonus
 - Myelopathic hand
 - Recent (within 6 months) MRI/CT findings that are concordant with the patient's symptoms and physical examination findings including **EITHER** of the following:
 - MRI/CT demonstrates cervical spinal cord compression
 - MRI/CT identifies cervical spinal stenosis

CMM-601.3: 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** for **ANY** of the following:

- Painful pseudarthrosis documented by confirmatory imaging that is unresponsive to 6 months of non-surgical treatment
- Recent (within 6 months) post-operative plain X-rays of the cervical spine including flexion/extension lateral views with radiographic evidence of implant/structural bone graft malposition or implant/structural bone graft failure
- Performed for **ANY** of the following conditions:
 - ◆ **Unremitting neck pain** when **ALL** of the following are met:
 - Significant level of pain on a daily basis defined as **EITHER** of the following:
 - Visual Analog Scale (VAS)/Numeric Rating Scale (NRS) as ≥ 7
 - Severe, disabling, crippling, or incapacitating pain
 - Greater than 6 months since prior anterior cervical discectomy and fusion (ACDF) procedure at the same level
 - 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)

- Less than clinically meaningful improvement with **BOTH** of the following unless contraindicated:
 - Prescription strength analgesics, steroids, and/or NSAIDs for 6 weeks
 - Provider-directed exercise program prescribed by a physical therapist, chiropractic provider, osteopathic or allopathic physician for 6 weeks
- Recent (within 6 months) post-operative MRI/CT findings that are concordant with the patient's symptoms and/or physical examination findings presenting post-operatively
- Documentation of nicotine-free status including **EITHER** of the following:
 - Patient is a never-smoker
 - Patient has refrained from smoking, use of smokeless tobacco products, and/or nicotine replacement therapy for at least 6 weeks prior to planned surgery as evidenced by blood cotinine lab results of ≤ 10 ng/mL
- ◆ Radiculopathy secondary to herniated disc or osteophyte when **ALL** of the following are met:
 - Initial relief of symptoms following previous disc decompression procedure at the same level
 - 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)
 - Greater than 6 weeks since the initial anterior cervical discectomy/fusion surgery
 - Subjective symptoms including **BOTH** of the following:
 - Significant level of pain on a daily basis defined as **EITHER** of the following:
 - Visual Analog Scale (VAS)/Numeric Rating Scale (NRS) as ≥ 7
 - Severe, disabling, crippling, or incapacitating pain
 - Unrelenting radicular pain to shoulder girdle and/or upper extremity resulting in disability
 - Objective physical examination findings including **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)
 - Unrelenting radicular pain to shoulder girdle and/or upper extremity without concordant objective physical examination findings
 - Less than clinically meaningful improvement with at least **TWO** of the following unless contraindicated:
 - Prescription strength analgesics, steroids, and/or NSAIDs for 6 weeks
 - Provider-directed exercise program prescribed by a physical therapist, chiropractic provider, osteopathic or allopathic physician for 6 weeks
 - Selective nerve root block(s) performed at the same level(s) as the requested ACDF or epidural steroid injection(s)

- Recent (within 6 months) post-operative confirmatory imaging including **EITHER** of the following that is concordant with the patient's symptoms and physical examination findings:
 - MRI /CT confirms evidence of neural structure compression (e.g. either retained disc material or a recurrent disc herniation)
 - CT documenting pseudarthrosis, no less than 6 months after initial fusion
- Documentation of nicotine-free status including **EITHER** of the following:
 - Patient is a never-smoker
 - Patient has refrained from smoking, use of smokeless tobacco products, and/or nicotine replacement therapy for at least 6 weeks prior to planned surgery as evidenced by blood cotinine lab results of ≤ 10 ng/mL
- ◆ Myelopathy when **ALL** of the following are met:
 - Initial relief of symptoms following previous disc decompression procedure at the same level
 - 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)
 - Subjective symptoms including **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 examination findings including at least **TWO** of the following:
 - Grip and release test
 - Ataxic gait
 - Hyperreflexia
 - Hoffmann sign
 - Pathologic Babinski sign
 - Tandem walking test demonstrating ataxia
 - Inverted brachial radial reflex
 - Increased muscle tone or spasticity
 - Clonus
 - Myelopathic hand
 - Recent (within 6 months) post-operative confirmatory MRI/CT findings including **ANY** of the following:
 - MRI /CT confirms evidence of neural structure compression
 - MRI /CT identifies stenosis
 - CT scan documenting pseudarthrosis, no less than 6 months after initial fusion

CMM-601.4: 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 **ALL** of the following are met:

- Recent (within 6 months) plain X-rays of the cervical spine including flexion/extension lateral views and advanced diagnostic imaging demonstrating successful decompression and/or fusion at the adjacent level
- The prior decompression or fusion procedure at an adjacent level was performed at least 6 months prior.
- 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)
- Performed for **EITHER** of the following conditions:
 - ◆ Radiculopathy when **ALL** of the following are met:
 - Subjective symptoms including **BOTH** of the following:
 - Significant level of pain on a daily basis defined as **EITHER** of the following:
 - Visual Analog Scale (VAS)/Numeric Rating Scale (NRS) as ≥ 7
 - Severe, disabling, crippling, or incapacitating pain
 - Unrelenting radicular pain to shoulder girdle and/or upper extremity resulting in disability
 - Objective physical examination findings including **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)
 - Unrelenting radicular pain to shoulder girdle and/or upper extremity without concordant objective physical examination findings
 - Less than clinically meaningful improvement with at least **TWO** of the following unless contraindicated:
 - Prescription strength analgesics, steroids, and/or NSAIDs for 6 weeks
 - Provider-directed exercise program prescribed by a physical therapist, chiropractic provider, osteopathic or allopathic physician for 6 weeks
 - Epidural steroid injection(s)/selective nerve root block(s)
 - Recent (within 6 months) MRI/CT identifies nerve root impingement caused by herniated disc(s) or osteophytes that is concordant with the patient's symptoms and physical examination findings
 - Documentation of nicotine-free status with **EITHER** of the following:
 - Patient is a never-smoker
 - Patient has refrained from smoking, use of smokeless tobacco products, and/or nicotine replacement therapy for at least 6 weeks prior to planned surgery as evidenced by blood cotinine lab results of ≤ 10 ng/mL

- ◆ **Myelopathy** when **ALL** of the following are met:
 - Subjective symptoms including **ANY** of the following:
 - Upper/lower extremity weakness, numbness, or pain
 - Fine motor dysfunction (buttoning, handwriting, clumsiness of hands)
 - Gait disturbance
 - New-onset bo due to a neurocompressive pathology
 - Frequent falls
 - Objective physical examination findings including at least **TWO** of the following:
 - Grip and release test
 - Ataxic gait
 - Hyperreflexia
 - Hoffmann sign
 - Pathologic Babinski sign
 - Tandem walking test demonstrating ataxia
 - Inverted brachial radial reflex
 - Increased muscle tone or spasticity
 - Clonus
 - Myelopathic hand
 - Recent (within 6 months) MRI/CT findings that is concordant with the patient's symptoms or physical examination findings including **EITHER** of the following:
 - MRI/CT demonstrates cervical spinal cord compression
 - MRI/CT identifies cervical spinal stenosis

CMM-601.5: Failed Cervical Disc Arthroplasty Implant

Anterior cervical decompression and fusion following failed cervical disc arthroplasty implant is considered **medically necessary** for **EITHER** of the following:

- Recent (within 6 months) post-operative imaging studies demonstrating failure of a cervical disc arthroplasty implant (i.e. subsidence, loosening, infection, dislocation, subluxation, vertebral body fracture, dislodgement)
- Performed for **ANY** of the following conditions:
 - ◆ Unremitting neck pain when **ALL** of the following are met:
 - Significant level of pain on a daily basis defined as **EITHER** of the following:
 - Visual Analog Scale (VAS)/Numeric Rating Scale (NRS) as ≥ 7
 - Severe, disabling, crippling, or incapacitating pain
 - Greater than 6 months since prior since prior cervical disc arthroplasty procedure at the same level
 - 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)
 - Less than clinically meaningful improvement with prescription strength analgesics, steroids, and/or NSAIDs for 6 weeks unless contraindicated
 - Recent (within 6 months) post-operative MRI/CT findings that are concordant with the patient's symptoms or physical examination findings

- Documentation of nicotine-free status including **EITHER** of the following:
 - Patient is a never-smoker
 - Patient has refrained from smoking, use of smokeless tobacco products, and/or nicotine replacement therapy for at least 6 weeks prior to planned surgery as evidenced by blood cotinine lab results of ≤ 10 ng/mL
- ◆ Radiculopathy when **ALL** of the following are met:
 - Greater than 6 months since the prior cervical disc arthroplasty procedure
 - 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)
 - Subjective symptoms including **BOTH** of the following:
 - Significant level of pain on a daily basis defined as **EITHER** of the following:
 - Visual Analog Scale (VAS)/Numeric Rating Scale (NRS) as ≥ 7
 - Severe, disabling, crippling, or incapacitating pain
 - Unrelenting radicular pain to shoulder girdle and/or upper extremity resulting in disability
 - Objective physical examination findings including **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)
 - Unrelenting radicular pain to shoulder girdle and/or upper extremity without concordant objective physical examination findings
 - Less than clinically meaningful improvement with any **TWO** of the following unless contraindicated:
 - Prescription strength analgesics, steroids, and/or NSAIDs for 6 weeks
 - Provider-directed exercise program prescribed by a physical therapist, chiropractic provider, osteopathic or allopathic physician for 6 weeks
 - Epidural steroid injection(s)/selective nerve root block(s)
 - Recent (within 6 months) post-operative MRI/CT identifies nerve root impingement caused by herniated disc(s) or osteophytes that is concordant with the patient's symptoms or physical examination findings
 - Documentation of nicotine-free status including **EITHER** of the following:
 - Patient is a never-smoker
 - Patient has refrained from smoking, use of smokeless tobacco products, and/or nicotine replacement therapy for at least 6 weeks prior to planned surgery as evidenced by blood cotinine lab results of ≤ 10 ng/mL

- ◆ Myelopathy when **ALL** of the following are met:
 - Greater than 6 months since the prior cervical disc arthroplasty procedure
 - 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)
 - Subjective symptoms including **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 examination findings including at least **TWO** of the following:
 - Grip and release test
 - Ataxic gait
 - Hyperreflexia
 - Hoffmann sign
 - Pathologic Babinski sign
 - Tandem walking test demonstrating ataxia
 - Inverted brachial radial reflex
 - Increased muscle tone or spasticity
 - Clonus
 - Myelopathic hand
 - Recent (within 6 months) post-operative MRI/CT findings that are concordant with the patient's symptoms or physical examination findings including **ANY** of the following:
 - MRI/CT demonstrates cervical spinal cord compression
 - MRI/CT identifies cervical spinal stenosis

CMM-601.6: Non-Indications

Not medically Necessary

- Anterior cervical discectomy and fusion (ACDF) is **not medically necessary** for **EITHER** of the following:
 - ◆ Chronic non-specific neck or arm pain of unknown etiology
 - ◆ Cervical degenerative disc disease without radiculopathy or myelopathy

CMM-601.7: Procedure (CPT®) Codes

This guideline relates to the CPT® code set below. Codes are displayed for informational purposes only. Any given code's inclusion on this list does not necessarily indicate prior authorization is required.

CPT®	Code Description/Definition
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) (eg, synthetic cage, mesh) with integral anterior instrumentation for device anchoring (eg, screws, flanges), when performed, to intervertebral disc space in conjunction with interbody arthrodesis, each interspace (List separately in addition to code for primary procedure)
+22854	Insertion of intervertebral biomechanical device(s) (eg, synthetic cage, mesh) with integral anterior instrumentation for device anchoring (eg, 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)
+22859	Insertion of intervertebral biomechanical device(s) (eg, 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
+63076	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; cervical, each additional interspace (List separately in addition to code for primary procedure)
63081	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)

This list may not be all inclusive and is not intended to be used for coding/billing purposes. The final determination of reimbursement for services is the decision of the health plan and is based on the individual's policy or benefit entitlement structure as well as claims processing rules.

CMM-601.8: References

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