



CLINICAL GUIDELINES

CMM-604: Posterior Cervical Decompression (Laminectomy / Hemilaminectomy / Laminoplasty) with or without Fusion Guidelines

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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.

CMM-604: Posterior Cervical Decompression (Laminectomy/Hemilaminectomy/ Laminoplasty) with or without Fusion

CMM-604.1: General Guidelines	3
CMM-604.2: Initial Primary Posterior Cervical Decompression (Laminectomy/Hemilaminectomy/Laminoplasty) with or without Posterior Fusion	4
CMM-604.3: Posterior Cervical Fusion without Decompression	6
CMM-604.4: Repeat Posterior Cervical Decompression with or without Posterior Cervical Fusion at the Same Level	6
CMM-604.5: Failed Cervical Disc Arthroplasty Implant	8
CMM-604.6: Non-Indications	10
CMM-604.7: Procedure (CPT®) Codes	10
CMM-604.8: References	12

CMM-604.1: General Guidelines

- The determination of medical necessity for the performance of posterior cervical decompression with or without fusion 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 posterior cervical decompression with or without fusion include **ANY** of the following:
 - ◆ Acute/unstable traumatic spinal fractures or dislocations with neural compression
 - ◆ Central cord syndrome
 - ◆ Congenital cervical stenosis (AP canal diameter ≤ 10 mm)
 - ◆ Documentation of progressive neurological deficit on two separate physical examinations
 - ◆ 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) and/or spinal cord compression due to **ANY** of the following:
 - Rheumatoid arthritis
 - Congenital abnormality of occipitocervical/C1-C2 vertebrae
 - Os odontoideum
 - ◆ Ossification of the posterior longitudinal ligament at three (3) or more levels
 - ◆ Primary or metastatic neoplastic disease causing pathologic fracture, cord compression or instability
 - ◆ **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
 - ◆ Vascular malformations (e.g. AVM)
 - ◆ Documentation of severe debilitating pain and/or dysfunction to the point of being incapacitated
- Urgent/emergent conditions for posterior cervical fusion without decompression include:
 - ◆ 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-604.2: Initial Primary Posterior Cervical Decompression (Laminectomy/Hemilaminectomy/Laminoplasty) with or without Posterior Fusion

Initial primary posterior cervical decompression (laminectomy/hemilaminectomy/laminoplasty) with or without posterior fusion 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 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 **ANY** 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) 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, unless request is for decompression only:
 - 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
- ◆ A concurrent stabilization procedure with corpectomy, laminectomy, or other procedure at the cervicothoracic junction (i.e., C7 and T1)
- ◆ A concurrent stabilization procedure with a laminectomy, especially at C2
- ◆ Subluxation and/or spinal cord compression in patients with rheumatoid arthritis or clinical conditions with an increased incidence of congenital and/or acquired cervical spinal instability (e.g. Down syndrome, mucopolysaccharidoses, spondyloepiphyseal dysplasia, pseudoachondroplasia, etc.)
- ◆ Multi-level spondylotic myelopathy without kyphosis
- ◆ Primary or metastatic tumor with associated cord compression and/or instability
- ◆ Other symptomatic instability or spinal cord/root compression requiring posterior fusion with **BOTH** of the following:
 - Patient unresponsive to a reasonable and medically appropriate course of conservative treatment (e.g. rest, medication, cervical collar)
 - Recent (within 6 months) imaging study demonstrating corresponding pathologic anatomy

CMM-604.3: Posterior Cervical Fusion without Decompression

Posterior cervical fusion without decompression is considered **medically necessary** when **ALL** of the following criteria are met:

- 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 **ONE or MORE** of the following:
 - ◆ Symptomatic pseudarthrosis from a prior anterior or posterior fusion procedure
 - ◆ Symptomatic cervical spondylosis with instability as evidenced radiographically by **ONE or MORE** of the following:
 - Subluxation or translation of more than 3.5 mm on static lateral views or dynamic flexion/extension lateral plain X-rays
 - Sagittal plane angulation of more than 11 degrees between adjacent spinal segments
 - More than 4 mm of motion (subluxation) between the tips of the spinous processes on flexion/extension lateral plain X-rays
 - ◆ Klippel-Feil syndrome
 - ◆ Cervical instability in patients with Down syndrome, skeletal dysplasia, or connective tissue disorders
- Documentation of nicotine-free status with **EITHER** of the following:
 - ◆ Patient is a never-smoker
 - ◆ Patient has refrained from smoking, use of 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

CMM-604.4: Repeat Posterior Cervical Decompression with or without Posterior Cervical Fusion at the Same Level

Repeat posterior cervical decompression with or without posterior cervical fusion at the same level is considered **medically necessary** when there is recent (within 6 months) post-operative plain X-rays or CT evidence of implant/instrumentation or structural bone graft malposition or failure **OR** when **ALL** of the following criteria are met:

- Recent (within 6 months) post-operative MRI /CT confirms evidence of neural structure compression e.g.
- Greater than 12 weeks since last posterior cervical decompression with or without fusion surgery
- Initial relief of symptoms following previous posterior cervical decompression procedure at same level

- Recent (within 6 months) post-operative plain X-rays of the cervical spine including flexion/extension lateral views instability as evidenced by **ONE or MORE** of the following:
 - ◆ Subluxation or translation of more than 3.5 mm on static lateral views or dynamic flexion/extension lateral plain X-rays
 - ◆ Sagittal plane angulation of more than 11 degrees between adjacent spinal segments
 - ◆ More than 4 mm of motion (subluxation) between the tips of the spinous processes on flexion/extension lateral plain X-rays
- 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) post-operative 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, unless request is for decompression only:
 - 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) post-operative 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-604.5: Failed Cervical Disc Arthroplasty Implant

Posterior cervical decompression with or without posterior cervical fusion following failed cervical disc arthroplasty implant is considered **medically necessary** when there is a failed cervical disc arthroplasty implant diagnosed by recent (within 6 months) post-operative plain film, CT and/or CT myelogram (i.e., subsidence, loosening, infection, dislocation/subluxation, vertebral body fracture, dislodgement) **OR** when **ALL** of the following criteria are met:

- Recent (within 6 months) post-operative MRI/CT findings that correlate with the patient's symptoms or physical examination findings demonstrating neural structure compression
- Greater than 12 weeks since the cervical disc arthroplasty
- Initial relief of symptoms following previous cervical disc arthroplasty 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)

- 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)
 - Documentation of nicotine-free status with **EITHER** of the following, unless request is for decompression only:
 - 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

CMM-604.6: Non-Indications

Not Medically Necessary

- Posterior cervical decompression (laminectomy, hemilaminectomy, and laminoplasty) with or without posterior fusion is considered **not medically necessary** for **ANY** of the following sole indications:
 - ◆ Signs and symptoms with no correlation to imaging studies
 - ◆ Annular tears
 - ◆ Disc bulge with no neural impingement or cord compression on imaging
 - ◆ Concordant Discography
 - ◆ MR Spectroscopy results
 - ◆ Degenerative disc disease
 - ◆ Isolated facet fusion, with or without instrumentation, including allograft bone graft substitutes used exclusively as stand-alone stabilization devices (e.g. DTRAX® [cervical], TruFuse [any level], NuFix® [any level])

CMM-604.7: 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
22590	Arthrodesis, posterior technique, craniocervical (occiput-C2)
22595	Arthrodesis, posterior technique, atlas-axis (C1-C2)
22600	Arthrodesis, posterior or posterolateral technique, single interspace; cervical below C2 segment
+22614	Each additional vertebral segment (List separately in addition to code for primary procedure)
+22840	Posterior non-segmental instrumentation (e.g., Harrington rod technique, pedicle fixation across 1 interspace, atlantoaxial transarticular screw fixation, sublaminar wiring at C1, facet screw fixation) (List separately in addition to code for primary procedure)
+22841	Internal spinal fixation by wiring of spinous processes (List separately in addition to code for primary procedure)
+22842	Posterior segmental instrumentation (e.g. pedicle fixation, dual rods with multiple hooks and sublaminar wires); 3 to 6 vertebral segments (List separately in addition to code for primary procedure)
+22843	Posterior segmental instrumentation (e.g. pedicle fixation, dual rods with multiple hooks and sublaminar wires); 7 to 12 vertebral segments (List separately in addition to code for primary procedure)
63001	Laminectomy with exploration and/or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (e.g. spinal stenosis), 1 or 2 vertebral segments; cervical
63015	Laminectomy with exploration and/or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (e.g. spinal stenosis), more than 2 vertebral segments; cervical

63045	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [e.g. spinal or lateral recess stenosis]), single vertebral segment; cervical
+63048	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [e.g. spinal or lateral recess stenosis]), single vertebral segment; each additional vertebral segment, cervical, thoracic, or lumbar (List separately in addition to code for primary procedure)
63050	Laminoplasty, cervical, with decompression of the spinal cord, 2 or more vertebral segments;
63051	Laminoplasty, cervical, with decompression of the spinal cord, 2 or more vertebral segments; with reconstruction of the posterior bony elements (including the application of bridging bone graft and non-segmental fixation devices (e.g. wire, suture, mini-plates), when performed)
63265	Laminectomy for excision or evacuation of intraspinal lesion other than neoplasm, extradural; cervical
63270	Laminectomy for excision of intraspinal lesion other than neoplasm, intradural; cervical
63275	Laminectomy for biopsy/excision of intraspinal neoplasm; extradural, cervical
63280	Laminectomy for biopsy/excision of intraspinal neoplasm; intradural, extramedullary, cervical
63285	Laminectomy for biopsy/excision of intraspinal neoplasm; intradural, intramedullary, cervical
63290	Laminectomy for biopsy/excision of intraspinal neoplasm; combined extradural-intradural lesion, any level
+63295	Laminectomy for biopsy/excision of intraspinal neoplasm; osteoplastic reconstruction of dorsal spinal elements, following primary intraspinal procedure (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-604.8: References

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