## Cigna Medical Coverage Policies – Musculoskeletal Lumbar Fusion (Arthrodesis) Guidelines

Effective December 18, 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:

- 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.

This evidence-based medical coverage policy has been developed by EviCore, Inc. Some information in this coverage policy may not apply to all benefit plans administered by Cigna.

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## **CMM-609: Lumbar Fusion (Arthrodesis)**

CMM-609.1: General Guidelines

CMM-609.2: Osteotomy

CMM-609.3: Pediatric Spinal Deformity

CMM-609.4: Lumbar Fusion (Arthrodesis) with Decompression

(Indirect or Direct)

CMM-609.5: Lumbar Fusion (Arthrodesis) without Decompression

CMM-609.6: Adjacent Segment Disease

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Following Failed Lumbar Disc Arthroplasty Surgery

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Codes (CMM-609)

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## **CMM-609.1: General Guidelines**

#### **Application of Guideline**

- ➤ The determination of medical necessity for the performance of lumbar fusion (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>.

#### <u>Urgent/Emergent Indications/Conditions</u>

- ➤ 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:
    - 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 lumbar fusion and/or osteotomy include ANY of the following:
  - Traumatic spinal fractures or dislocations (with or without neural compression) when instability is present or decompression of the spinal canal is anticipated to result in iatrogenic instability
  - Infection (e.g., discitis, epidural abscess, osteomyelitis) when instability is present or debridement and/or decompression is anticipated to result in iatrogenic instability
  - Primary or metastatic neoplastic disease causing pathologic fracture, cord compression, when instability is present or resection and/or decompression is anticipated to result in iatrogenic 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

#### **Health Equity Considerations**

Health equity is the highest level of health for all individuals; health inequity is the avoidable difference in health status or distribution of health resources due to the social conditions in which individuals are born, grow, live, work, and age. Social determinants of health are the conditions in the environment that affect a wide range of health, functioning, and quality of life outcomes and risks. Examples include the following: safe housing, transportation, and neighborhoods; racism, discrimination, and violence; education, job opportunities, and income; access to nutritious foods and physical activity opportunities; access to clean air and water; and, language and literacy skills.

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## CMM-609.2: Osteotomy

#### **Posterior Column Osteotomy (PCO)**

Lumbar posterior column osteotomy (PCO) (i.e., Smith-Peterson osteotomy [SPO] or Ponte osteotomy) is considered **medically necessary** (in addition to a fusion) when **ALL** of the following criteria are met:

- ➤ Correction of non-fixed deformity requiring 5° to 10° of correction (SPO) per spinal segment for **EITHER** of the following:
  - Lumbar sagittal plane deformities where sagittal vertical axis (SVA) is greater than 8 cm or pelvic incidence-lumbar lordosis (PI-LL) is >15°
  - ◆ Larger **coronal** deformities where there is limited flexibility and the Cobb angle is >30°
- ➤ Posterior column osteotomy is limited to a maximum of four (4) posterior column osteotomies performed in the apex of the deformity per correction surgery.
  - Criteria exception: There is no limit to posterior column osteotomies for correction of Scheuermann's Kyphosis as this deformity is long, gradual, rounded, and amendable to more than 4 posterior column osteotomies.
- ➤ ALL of the criteria for lumbar fusion have been met per the applicable procedurespecific section(s) below:
  - ◆ CMM-609.3: Pediatric Spinal Deformity
  - ◆ CMM-609.4: Lumbar Fusion (Arthrodesis) with Decompression (Indirect or Direct)
  - ◆ CMM-609.5: Lumbar Fusion (Arthrodesis) without Decompression
  - ◆ CMM-609.6: Adjacent Segment Disease
  - ◆ CMM-609.7: Lumbar Fusion (with or without Decompression) Following Failed Disc Arthroplasty Surgery
  - ◆ CMM-609.8: Repeat Lumbar Fusion (Arthrodesis) at the Same Level

### Three-Column Osteotomy

Lumbar three-column osteotomy (i.e., pedicle subtraction osteotomy (PSO) or vertebral column resection [VCR]) is considered **medically necessary** (in addition to a fusion) when **ALL** of the following criteria are met:

- Performed for EITHER of the following:
  - ◆ Correction of fixed **sagittal plane** deformity requiring more than 30° of correction (PSO)
  - ◆ Large fixed **coronal** deformities greater than 60° that are amenable to asymmetric osteotomy
- ➤ ALL of the criteria for lumbar fusion have been met per the applicable procedurespecific section(s) below:
  - CMM-609.3: Pediatric Spinal Deformity
  - ◆ CMM-609.4: Lumbar Fusion (Arthrodesis) with Decompression (Indirect or Direct)
  - ◆ CMM-609.5: Lumbar Fusion (Arthrodesis) without Decompression

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- ◆ CMM-609.6: Adjacent Segment Disease
- ◆ CMM-609.7: Lumbar Fusion (with or without Decompression) Following Failed Disc Arthroplasty Surgery
- ◆ CMM-609.8: Repeat Lumbar Fusion (Arthrodesis) at the Same Level

## **CMM-609.3: Pediatric Spinal Deformity**

#### **Pediatric Lumbar Fusion**

Lumbar fusion (arthrodesis) is considered **medically necessary** when the following criteria is met:

- ➤ Imaging studies (advanced imaging or plain X-rays) show the presence of **ANY** of the following pediatric spinal deformities that warrant definitive surgical treatment:
  - ◆ Adolescent idiopathic scoliosis with over 50° curve
  - Congenital scoliosis
  - Neuromuscular scoliosis
  - ◆ Infantile/juvenile scoliosis

#### Pediatric Osteotomy

Lumbar osteotomy is considered **medically necessary** (in addition to a lumbar fusion) when **ALL** of the criteria are met per **CMM-609.2: Osteotomy**.

# CMM-609.4: Lumbar Fusion (Arthrodesis) with Decompression (Indirect or Direct)

Lumbar fusion with decompression (indirect or direct) is considered **medically necessary** when performed for **ANY** of the following conditions when **ALL** of the associated criteria are met:

#### **Actual Instability**

- ➤ The individual is a candidate for lumbar decompression or corpectomy per <u>CMM-608: Lumbar Decompression</u>.
- ➤ Imaging shows **ANY** of the following:
  - Degenerative spondylolisthesis without spondylolysis with EITHER of the following:
    - Dynamic segmental instability on flexion-extension plain X-rays OR comparison of a supine and upright image, with a difference in translational alignment between vertebrae greater than 3 mm between views
    - Meyerding Grade II or higher spondylolisthesis
  - Spondylolisthesis with spondylolysis (e.g. Isthmic Spondylolisthesis) with ANY of the following:
    - Meyerding Grade I or II spondylolisthesis (anterolisthesis) and plain X-rays support progression of anterolisthesis
    - Meyerding Grade III or higher spondylolisthesis (anterolisthesis) with 50% or more anterior slippage OR plain X-rays support progression of anterolisthesis

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- Progressive spinal pain without confirmatory imaging showing progression of spondylolisthesis
- Multi-level spondylolysis on plain X-rays
- Post-operative instability created by the disruption of the posterior elements due to facet joint excision that exceeds 50% bilaterally or 75% or more of a single facet
- Pars fracture
- Previous lumbar spinal decompression that resulted in iatrogenic spondylolisthesis
- Criteria exception: When instability is created and/or identified intra-operatively, the above imaging criteria are NOT required.
  - See Anticipated latrogenic Instability
- ➤ 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

#### **Anticipated latrogenic Instability**

- ➤ The individual is a candidate for lumbar decompression or corpectomy per <u>CMM-608</u>: <u>Lumbar Decompression</u>.
- ➤ Anticipated iatrogenic instability with **ANY** of the following:
  - Created by disruption of the posterior elements due to facet joint excision that exceeds 50% bilaterally or 75% or more of a single facet during spinal decompression
  - Created by removal of the pars interarticularis that requires fusion to stabilize
  - Created by decompression for Meyerding Grade I or higher spondylolisthesis with foraminal stenosis
  - Created by complete or partial corpectomy (i.e., removal of at least one-third of the vertebral body [not for resection of osteophytes alone])
    - For lumbar corpectomy, see **CMM-608.3: Lumbar Corpectomy**
- 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

#### **Adult Degenerative Spinal Deformity**

➤ The individual is a candidate for lumbar decompression or corpectomy per <u>CMM-608</u>: <u>Lumbar Decompression</u>

- Imaging findings include EITHER of the following:
  - Coronal plane deformity which includes ANY of the following:
    - Cobb angle greater than 30°
    - Asymmetric disk collapse causing symptomatic foraminal narrowing
    - Coronal imbalance causing head and trunk shift off the midline
  - Sagittal imbalance which includes ANY of the following:
    - Sagittal vertebral axis measurement greater than 8 cm
    - Pelvic incidence-lumbar lordosis greater than 15°
- ➤ 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

#### **Initial Disc Herniation**

- ➤ This individual is a candidate for an <u>initial</u> primary lumbar discectomy per the applicable section below:
  - ◆ For information related to excision of extradural lesion other than neoplasm, see CMM 606.1: General Guidelines.
  - ◆ For an initial primary lumbar discectomy, see <u>CMM-606.2: Initial Primary Lumbar Microdiscectomy (Laminotomy, Laminectomy, or Hemilaminectomy)</u>.
- ➤ Advanced Imaging shows **ANY** of the following:
  - Primary extraforaminal disc herniation at L5-S1, in which a far lateral approach is not feasible because of the presence of the iliac wings
  - Primary foraminal disc herniation for which facet resection is necessary to retrieve the disc, which will result in iatrogenic instability
  - Primary disc herniation in the lumbar spine that is at the level of the spinal cord (i.e., low lying conus medullaris)
- ➤ Documentation of nicotine-free status with **EITHER** of the following:
  - Individual is a never-smoker
  - Individual has refrained from smoking, use of 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

#### **Recurrent Disc Herniation**

- ➤ The individual is a candidate for repeat lumbar discectomy per CMM 606.3: Repeat Lumbar Microdiscectomy (Laminotomy or Laminectomy) at the Same Level.
- ➤ Imaging shows evidence of anterolisthesis at the requested level(s) that results in **EITHER** of the following:
  - Dynamic segmental instability on flexion-extension plain X-rays **OR** comparison of a supine and upright image, with a difference in translational alignment between vertebrae greater than 3 mm between views
  - Meyerding Grade II or higher spondylolisthesis
- > Documentation of nicotine-free status with **EITHER** of the following:
  - Individual is a never-smoker
  - ◆ Individual has refrained from smoking, use of 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

#### **Second or Greater Recurrent Disc Herniation**

- ➤ Individual is a candidate for repeat lumbar discectomy per CMM 606.3: Repeat Lumbar Microdiscectomy (Laminotomy or Laminectomy) at the Same Level.
- ➤ Documentation of nicotine-free status with **EITHER** of the following:
  - Individual is a never-smoker
  - ◆ Individual has refrained from smoking, use of 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

## CMM-609.5: Lumbar Fusion (Arthrodesis) without Decompression

Lumbar fusion (arthrodesis) without decompression is considered **medically necessary** when performed for ANY of the following conditions when ALL of the associated criteria are met:

#### **Degenerative Spondylolisthesis without Spondylolysis**

- Imaging at the requested level(s) shows **EITHER** of the following:
  - ◆ Dynamic segmental instability on flexion-extension plain X-rays **OR** comparison of a supine and upright image, with a difference in translational alignment between vertebrae greater than 3 mm between views
  - Meyerding Grade II or higher spondylolisthesis
- 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.)
- Less than clinically meaningful improvement with EITHER of the following for at least three (3) consecutive months (unless contraindicated):
  - Prescription strength analgesics, steroids, gabapentinoids, and/or NSAIDs

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- Provider-directed exercise program prescribed by a physical therapist, chiropractic provider, osteopathic or allopathic physician
- Absence of untreated, underlying mental and/or behavioral health disorders (e.g., depression, 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 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

#### Spondylolisthesis with Spondylolysis (e.g., Isthmic Spondylolisthesis)

- ➤ Imaging at the requested level(s) shows **ANY** of the following:
  - Meyerding Grade I or II spondylolisthesis (anterolisthesis) with plain X-rays supporting progression of anterolisthesis
  - Meyerding Grade III or higher spondylolisthesis (anterolisthesis) identified on plain x-rays with 50% or more anterior slippage OR plain X-rays supporting progression of anterolisthesis
  - Progressive spinal pain without confirmatory imaging of progression of spondylolisthesis
  - Multi-level spondylolysis on plain X-rays
- 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.)
- ➤ Less than clinically meaningful improvement with EITHER of the following for at least 3 consecutive months (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
- Absence of untreated, underlying mental and/or behavioral health disorders (e.g., depression, 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 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>Discogenic Lower Back Pain/Degenerative Disc Disease</u>

- ➤ Plain X-rays **and** advanced diagnostic imaging studies (i.e., CT, MRI) at the requested level(s)show moderate to severe **single-level** disc degeneration
- ➤ Presence of chronic, unremitting, discogenic axial lower back pain and associated disability secondary to single-level degenerative lumbar disc disease (DDD) for at least one year

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- ➤ 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.)
- Structured physician-supervised, multi-modal, non-operative management of medical care with licensed healthcare professionals which includes ALL of the following:
  - Regularly scheduled appointments
  - ◆ Follow-up evaluation
  - Less than clinically meaningful improvement with at least TWO of the following (unless contraindicated):
    - Prescription strength analgesics, steroids, gabapentinoids, and/or NSAIDs for at least 12 consecutive months
    - Provider-directed exercise program prescribed by a physical therapist, chiropractic provider, osteopathic or allopathic physician for at least 12 consecutive months
    - Epidural steroid injection(s)/ or selective nerve root block(s)
    - Facet joint injection(s)/medial branch block(s)/radiofrequency ablation(s)
- ➤ Absence of untreated, underlying mental and/or behavioral health disorders (e.g., depression, 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 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

#### Adult Degenerative Spinal Deformity

- Imaging shows EITHER of the following:
  - ◆ Coronal plane deformity which includes **ANY** of the following:
    - Cobb angle of greater than 30°
    - Asymmetric disk collapse causing symptomatic foraminal narrowing
    - Coronal imbalance causing head and trunk shift off the midline
  - Sagittal imbalance which includes ANY of the following:
    - Sagittal vertebral axis measurement greater than 8 cm
    - Pelvic incidence-lumbar lordosis greater than 15°
- ➤ Less than clinically meaningful improvement with **EITHER** of the following for **at least 3 consecutive months** (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
- ➤ 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)

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- ➤ 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

## **CMM-609.6: Adjacent Segment Disease**

Lumbar fusion (arthrodesis) for adjacent segment disease is considered **medically necessary** when **ALL** of the following are met:

- ➤ The individual meets criteria for lumbar fusion per the applicable section below:
  - ◆ CMM-609.4: Lumbar Fusion with Decompression
  - ◆ CMM-609.5: Lumbar Fusion (Arthrodesis) without Decompression
- ➤ The prior adjacent-level lumbar fusion was performed at least six (6) months prior

## CMM-609.7: Lumbar Fusion (with or without Decompression) Following Failed Lumbar Disc Arthroplasty Surgery

Lumbar fusion (with or without decompression) following failed lumbar disc arthroplasty surgery is considered **medically necessary** when performed for **EITHER** of the following conditions when **ALL** of the associated criteria are met:

#### Failed Lumbar Disc Arthroplasty Implant

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

#### **Evidence of Neural Structure Compression**

- ➤ Greater than six (6) months since the prior lumbar disc arthroplasty surgery at the same level
- ➤ The individual meets criteria for lumbar fusion per the applicable section below:
  - ◆ CMM-609.4 : Lumbar Fusion (Arthrodesis) with Decompression
  - ◆ CMM-609.5: Lumbar Fusion (Arthrodesis) without Decompression
- ➤ Post-operative MRI /CT shows evidence of neural structure compression (e.g., either retained disc material or a recurrent disc herniation)

# CMM-609.8: Repeat Lumbar Fusion (Arthrodesis) at the Same Level

Repeat lumbar fusion (arthrodesis) (with or without decompression) at the same level is considered **medically necessary** for **EITHER** of the following conditions when **ALL** of the associated criteria are met:

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#### 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.)

#### **Symptomatic Pseudoarthrosis**

- ➤ Greater than six (6) months since the prior lumbar fusion
- ➤ 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 lumbar 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

### **CMM-609.9: Non-Indications**

#### **Not Medically Necessary**

➤ Lumbar fusion performed without meeting the criteria in the <u>General Guidelines</u> section (when applicable for urgent/emergent conditions) and the criteria in the applicable procedure-specific section(s) (<u>pediatric spinal deformity</u>; <u>fusion with decompression</u>; <u>fusion without decompression</u>; <u>adjacent segment disease</u>; <u>fusion following failed disc arthroplasty</u>; or, <u>repeat fusion</u>) is considered **not medically necessary**.

- Lumbar osteotomy performed without meeting the criteria in the <u>General</u> <u>Guidelines</u> (when applicable for urgent/emergent conditions) and the criteria in the applicable procedure-specific section (<u>osteotomy</u>; <u>pediatric spinal deformity</u>; <u>fusion with decompression</u>; <u>fusion without decompression</u>; <u>adjacent segment disease</u>; <u>fusion following failed disc arthroplasty</u>; or, <u>repeat fusion</u> is considered **not medically necessary**.
- ➤ Lumbar fusion and/or osteotomy performed for ANY of the following sole indications is considered not medically necessary:
  - Disc herniation in the absence of **ANY** of the following:
    - Primary extraforaminal disc herniation at L5-S1, in which a far lateral approach is not feasible because of the presence of the iliac wings
    - Primary foraminal disc herniation for which facet resection is necessary to retrieve the disc, which will result in iatrogenic instability
    - Primary disc herniation in the lumbar spine that is at the level of the spinal cord (i.e., low lying conus medullaris)
  - Multi-level degenerative disc disease without instability
  - Neurocompressive pathology
  - Facet joint disorders without instability
  - Initial discectomy/laminectomy without instability
  - An adjunct to primary decompression of central and/or lateral recess stenosis in the absence of instability, spondylolisthesis, or an actual or anticipated bony resection that will result in iatrogenic instability
  - Spondylolysis without spondylolisthesis

#### **Experimental, Investigational, or Unproven (EIU)**

- ➤ ALL of the following devices/procedures are considered experimental, investigational, or unproven (EIU) (not an all-inclusive list):
  - Pre-sacral interbody fusion including AxiaLIF
  - Minimally invasive lumbar spinal fusions using direct visualization via endoscopy (endoscopic fusion) or indirect visualization (e.g., percutaneous fusion)
  - Anterior interbody fusion or implantation of intervertebral body fusion devices using laparoscopic approach
  - Device/implant not FDA approved
  - ◆ Dynamic (intervertebral) stabilization (e.g., Dynesys®, Stabilimax NZ®)
  - Interlaminar lumbar instrumented fusion (e.g., ILIF)
  - Interspinous and interlaminar distraction devices
  - ◆ Interspinous fixation/posterior non-pedicle supplemental fixation devices for spinal fusion (e.g., Affix®, Aspen® Spinous Process Fixation System, Coflex®-F)
  - Personalized anterior and lateral body interbody cage (implantable) (e.g., Aprevo<sup>®</sup>)
  - Least invasive lumbar decompression interbody fusion (e.g., LINDIF)
  - Isolated facet fusion, with or without instrumentation, including allograft bone graft substitutes used exclusively as stand-alone stabilization devices (e.g., TruFuse<sup>®</sup> [any level], NuFix<sup>®</sup> [any level])
  - Total facet arthroplasty

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## <u>Codes (CMM-609)</u>

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                                                                              |
|--------|----------------------------------------------------------------------------------------------------------|
| 22207  | Osteotomy of spine, posterior or posterolateral approach, 3 columns, 1                                   |
|        | vertebral segment (e.g., Pedicle/vertebral body subtraction); lumbar                                     |
| +22208 | Osteotomy of spine, posterior or posterolateral approach, 3 columns, 1                                   |
|        | vertebral segment (e.g., Pedicle/vertebral body subtraction); each                                       |
|        | additional vertebral segment (List separately in addition to code for                                    |
|        | primary procedure)                                                                                       |
| 22214  | Osteotomy of spine, posterior or posterolateral approach, 1 vertebral                                    |
|        | segment; lumbar                                                                                          |
| +22216 | Osteotomy of spine, posterior or posterolateral approach, 1 vertebral                                    |
|        | segment; each additional vertebral segment (List separately in addition                                  |
|        | to code for primary procedure)                                                                           |
| 22224  | Osteotomy of spine, including discectomy, anterior approach, single                                      |
|        | vertebral segment; lumbar                                                                                |
| +22226 | Osteotomy of spine, including discectomy, anterior approach, single                                      |
|        | vertebral segment, each additional vertebral segment (List separately in                                 |
|        | addition to code for primary procedure)  Arthrodesis, lateral extracavitary technique, including minimal |
| 22533  | discectomy to prepare interspace (other than for decompression);                                         |
|        | lumbar                                                                                                   |
|        | Arthrodesis, lateral extracavitary technique, including minimal                                          |
|        | discectomy to prepare interspace (other than for decompression);                                         |
| +22534 | thoracic or lumbar, each additional vertebral segment (List separately in                                |
|        | addition to code for primary procedure)                                                                  |
|        | Arthrodesis, anterior interbody technique, including minimal discectomy                                  |
| 22558  | to prepare interspace (other than for decompression); lumbar                                             |
| +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)                                   |
|        | Arthrodesis, pre-sacral interbody technique, including disc space                                        |
| 22586  | preparation, discectomy, with posterior instrumentation, with image                                      |
|        | guidance, includes bone graft when performed, L5-S1 interspace                                           |
| 22642  | Arthrodesis, posterior or posterolateral technique, single interspace;                                   |
| 22612  | lumbar (with lateral transverse technique, when performed)                                               |
| +22614 | Arthrodesis, posterior or posterolateral technique, single interspace;                                   |
|        | each additional vertebral segment (List separately in addition to code                                   |
|        | for primary procedure)                                                                                   |
| 22630  | Arthrodesis, posterior interbody technique, including laminectomy                                        |
|        | and/or discectomy to prepare interspace (other than for                                                  |
|        | decompression), single interspace; lumbar                                                                |

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| Code            | Code Description/Definition                                                                                     |
|-----------------|-----------------------------------------------------------------------------------------------------------------|
| +22632          | Arthrodesis, posterior interbody technique, including laminectomy                                               |
|                 | and/or discectomy to prepare interspace (other than for                                                         |
|                 | decompression), single interspace; each additional interspace (List                                             |
|                 | separately in addition to code for primary procedure)                                                           |
| 22633           | Arthrodesis, combined posterior or posterolateral technique with                                                |
|                 | posterior interbody technique including laminectomy and/or discectomy                                           |
| 22033           | sufficient to prepare interspace (other than for decompression), single                                         |
|                 | interspace; lumbar                                                                                              |
|                 | Arthrodesis, combined posterior or posterolateral technique with                                                |
| 00004           | posterior interbody technique including laminectomy and/or discectomy                                           |
| +22634          | sufficient to prepare interspace (other than for decompression); each                                           |
|                 | additional interspace (List separately in addition to code for primary                                          |
| 22800           | procedure)                                                                                                      |
|                 | Arthrodesis, posterior, for spinal deformity, with or without cast; up to 6 vertebral segments                  |
|                 | Arthrodesis, posterior, for spinal deformity, with or without cast; 7 to 12                                     |
| 22802           | vertebral segments                                                                                              |
|                 | Arthrodesis, posterior, for spinal deformity, with or without cast; 13 or                                       |
| 22804           | more vertebral segments                                                                                         |
|                 | Arthrodesis, anterior, for spinal deformity, with or without cast; 2 to 3                                       |
| 22808           | vertebral segments                                                                                              |
| 22240           | Arthrodesis, anterior, for spinal deformity, with or without cast; 4 to 7                                       |
| 22810           | vertebral segments                                                                                              |
| 22812           | Arthrodesis, anterior, for spinal deformity, with or without cast; 8 or                                         |
| 22012           | more vertebral segments                                                                                         |
|                 | Posterior non-segmental instrumentation (e.g. Harrington rod                                                    |
| +22840          | 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)  Posterior segmental instrumentation (e.g., pedicle fixation, dual rods |
| +22842          | with multiple hooks and sublaminar wires); 3 to 6 vertebral segments                                            |
|                 | (List separately in addition to code for primary procedure)                                                     |
|                 | Posterior segmental instrumentation (e.g., pedicle fixation, dual rods                                          |
| +22843          | with multiple hooks and sublaminar wires); 7 to 12 vertebral segments                                           |
| 122010          | (List separately in addition to code for primary procedure)                                                     |
|                 | Posterior segmental instrumentation (e.g., pedicle fixation, dual rods                                          |
| +22844          | with multiple hooks and sublaminar wires); 13 or more vertebral                                                 |
|                 | segments (List separately in addition to code for primary procedure)                                            |
| +22845          | Anterior instrumentation; 2 to 3 vertebral segments (List separately in                                         |
| +22040          | addition to code for primary procedure)                                                                         |
| +22846          | Anterior instrumentation; 4 to 7 vertebral segments (List separately in                                         |
| + <b>∠∠</b> 040 | addition to code for primary procedure)                                                                         |
| +22847          | Anterior instrumentation; 8 of more vertebral segments (List separately                                         |
| 722071          | in addition to code for primary procedure)                                                                      |
| 200             | Pelvic fixation (attachment of caudal end of instrumentation to pelvic                                          |
| +22848          | bony structures) other than sacrum (List separately in addition to code                                         |
|                 | for primary procedure)                                                                                          |

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| Code   | Code Description/Definition                                                                                                                                                                                                                                                                                                                                                                            |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 22849  | Reinsertion of spinal fixation device                                                                                                                                                                                                                                                                                                                                                                  |
| +22853 | Insertion of interbody biomechanical device(s) (e.g., 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) (e.g., 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) (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)                                                                                                                           |
| 0202T  | Posterior vertebral joint(s) arthroplasty (e.g., facet joint[s] replacement), including facetectomy, laminectomy, foraminotomy, and vertebral column fixation, injection of bone cement, when performed, including fluoroscopy, single level, lumbar spine                                                                                                                                             |
| 0221T  | Placement of a posterior intrafacet implant(s), unilateral or bilateral, including imaging and placement of bone graft(s) or synthetic device(s), single level; lumbar                                                                                                                                                                                                                                 |
| +0222T | Placement of a posterior intrafacet implant(s), unilateral or bilateral, including imaging and placement of bone graft(s) or synthetic device(s), single level; each additional vertebral segment (List separately in addition to code for primary procedure)                                                                                                                                          |

## **Evidence Discussion (CMM-609)**

#### **Lumbar Fusion (Arthrodesis)**

Risks of lumbar fusion surgery include, but are not limited to, the following: infection; neurovascular injury; persistent or incomplete relief of symptoms; pseudoarthrosis; hardware failure; possible need for more surgery; dural tear; deep vein thrombosis; pulmonary embolus; paralysis; and, death. Given the potential possibility for significant complications, proper surgical candidacy selection is critical to minimize the risk benefit ratio. As recommended by the North American Spine Society (NASS) *Coverage Policy Recommendations: Lumbar Fusion*, there are multiple indications for fusion, including the following: infection; tumor; traumatic injuries; deformity; stenosis; disc herniation; synovial facet cysts; discogenic low back pain; and, pseudoarthrosis.

In the cases of infection, tumor, and traumatic injuries there will be underlying instability or anticipated instability from the appropriate debridement, resection, or decompression. In the cases of stenosis, disc herniation, and synovial cysts there needs to be documented instability or anticipated iatrogenic instability from the approach or need for removal of greater than 50 percent of facets. For discogenic low back pain and pseudoarthrosis, there is need for a longer presence of pain and failed conservative measures. More complex revision surgeries are required for the treatment of pseudoarthrosis and persistent pseudoarthrosis is not uncommon. Regarding fusion surgery for discogenic low back pain, studies have noted no significant differences in outcomes between fusion and non-surgical conservative measures. Multiple studies support spinal fusion for spinal stenosis associated with degenerative spondylolisthesis graded of at least Meyerding Grade II.

It has been shown in the literature that individuals with psychosocial disorders or with a smoking history undergoing fusion have poorer outcomes and higher complication rates. Proper identification and treatment of these conditions prior to surgery may significantly improve many outcome measures.

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