

*National Imaging Associates, Inc.		
Clinical guidelines:	Original Date: June 2013	
LUMBAR SPINE SURGERY		
CPT Codes**:  - Lumbar Microdiscectomy: 62380, 63030, +63035  - Lumbar Decompression: 63005, 63012, 63017, 63042, +63044, 63047, +63048, 63056, +63057  - Lumbar Fusion - Single Level: 22533, 22558, 22612, 22630, 22633, +63052, +63053  - Lumbar Fusion - Multiple Levels: +22534, +22585, +22614, +22632, +22634, +63052, +63053  **See UM Matrix for allowable billed groupings and additional covered codes	Last Revised Date: May December 2023	
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#### **GENERAL INFORMATION**

It is an expectation that all patients receive care/services from a licensed clinician. All appropriate supporting documentation, including recent pertinent office visit notes, laboratory data, and results of any special testing must be provided. If applicable: All prior relevant imaging results and the reason that alternative imaging cannot be performed must be included in the documentation submitted.

## **STATEMENT**

Operative treatment is indicated when the natural history of surgically treated lesions is better than the natural history for non-operatively treated lesions. All operative interventions must be based on a positive correlation with clinical findings, the natural history of the disease, the clinical course, and diagnostic tests or imaging results. All individuals being considered for surgical intervention should receive a comprehensive neuromusculoskeletal examination to identify pain generators that may either respond to non-surgical techniques or may be refractory to surgical intervention.

In general, if the program of non-operative treatment fails, operative treatment is indicated when:
Improvement of the symptoms has plateaued or failed to occur, and the residual symptoms of pain
and functional disability are unacceptable at the end of 6 to 12 weeks of active treatment, or at the
end of longer duration of non-operative programs for debilitated individuals with complex problems;
and/or

Frequent recurrences of symptoms cause serious functional limitations even if a non-operative active treatment program provides satisfactory relief of symptoms, and restoration of function on each recurrence. Aggressive surgical approaches to fusion may be an indication for denial of cases (when such techniques have not been demonstrated to be superior to less morbid techniques) or recommendation for alternative procedure. Because of variable outcomes with fusion surgery,



individuals should be actively involved in the decision-making process and provided appropriate decision-support materials explaining potential risks/benefits and treatment alternatives when considering this intervention.

## **Purpose**

This guideline outlines the key surgical treatments and indications for common lumbar spinal disorders and is a consensus document based upon the best available evidence. Spine surgery is a complex area of medicine, and this document breaks out the clinical indications by surgical type.

This guideline does not address spinal deformity surgeries or the clinical indications for spinal deformity surgery.

## **Scope**

Spinal surgeries should be performed only by those with extensive surgical training (neurosurgery, orthopedic surgery). Choice of surgical approach is based on anatomy, pathology, and the surgeon's experience and preference.

Instrumentation, bone formation or grafting materials, including biologics, should be used at the surgeon's discretion; however, use should be limited to FDA approved indications regarding the specific devices or biologics.

See LEGISLATIVE LANGUAGE for specific mandates for the State of Washington

## **INDICATIONS**

## For Lumbar Discectomy/Microdiscectomy [1, 2]

Surgical indications for inter-vertebral disc herniation

- When **ALL of the following** are present:
  - Primary radicular symptoms noted upon clinical exam that significantly hinders daily activities <sup>2-7</sup>
  - Failure of to improve with at least 6 consecutive weeks in the last 6 months of documented, physician directed appropriate conservative treatment\* to include at least 2 of the following for a minimum of six (6) weeks within the last six (6) months 8.
  - Analgesics, steroids, and/or NSAIDs
  - Structured program of physical therapy



- Structured home exercise program prescribed by a physical therapist, chiropractic provider or physician
- Epidural steroid injections and or selective nerve root block AND
- Imaging studies showing evidence of inter-vertebral disc herniation that correlate exactly with the individual's symptoms/signs<sup>3, 7, 9, 10</sup> OR

#### Other Indications

Microdiscectomy may be used as the first line of treatment (*no conservative treatment required*) in the following clinical scenarios<sup>3</sup>:

- Progressive nerve compression resulting in an acute neurologic deficit (motor) due to herniated disc. The neurological deficits should be significant: 0-2/5 on the motor function scale for L5 or S1 roots OR 0-3/5 for L3 or L4 roots. Lesser degrees of motor dysfunction may resolve with conservative treatment and are not considered an indication for early surgery OR
- Cauda equina syndrome (loss of bowel or bladder control)

**NOTE:** Percutaneous lumbar discectomy, radiofrequency disc decompression, and related procedures are deemed investigational procedures and are not approved. Discectomy and microdiscectomy are the gold standards.

## Lumbar Decompression [1, 2, 3, 4, 5]

#### Laminectomy, Laminotomy, Facetectomy, and Foraminotomy

#### **Surgical indications**

These procedures allow decompression by partial or total removal of various parts of vertebral bone and ligaments. Surgical indications for spinal canal decompression due to lumbar spinal stenosis\*:

- When **ALL of the following** are present:
  - Neurogenic claudication, and/or radicular leg pain that impairs daily activities<sup>2-7,9-14</sup>
  - Failure of conservative treatment\* for a minimum of six (6) weeks within the last six
     (6) months
  - to improve with at least 6 consecutive weeks in the last 6 months of documented, physician directed appropriate to include at least two (2) of the following<sup>3, 8</sup>:
  - Analgesics, steroids, and/or NSAIDs
  - Structured program of physical therapy
  - Structured home exercise program prescribed by a physical therapist, chiropractic provider or physician
  - Epidural steroid injections and or selective nerve root block
  - Imaging <u>studies</u> demonstrating moderate to severe stenosis consistent with clinical signs/symptoms<sup>3, 13, 14</sup> **OR**

#### Other Indications



Lumbar decompression may be used as the first line of treatment (*no conservative treatment required*) in any of the following clinical scenarios<sup>2, 7</sup>:

- Progressive nerve compression resulting in an acute neurologic (motor) deficit. The
  neurological deficits should be significant: 0-2/5 on the motor function scale for L5 or S1 roots
   OR 0-3/5 for L3 or L4 roots. Lesser degrees of motor dysfunction may resolve with
  conservative treatment and are not considered an indication for early surgery OR
- Cauda equina syndrome (loss of bowel or bladder control) **OR**
- Spinal stenosis due to tumor, infection, or trauma
- NOTE: Percutaneous decompressions, endoscopic decompression, and related procedures
  (laser, etc.) are deemed investigational procedures and are not approved. Open or
  microdecompression via laminectomy or laminotomy are the gold standards.<sup>3, 7</sup>

## Lumbar Spine Fusion [1, 5, 3, 4, 6, 7, 8, 9]

#### Single Level Fusion with or without Decompression

#### Surgical indications

Because of variable outcomes with fusion surgery, individuals should be actively involved in the decision making process and provided appropriate decision support materials explaining potential risks/benefits and treatment alternatives when considering this intervention.

- When ALL of the following are present\*:
  - Lumbar back pain, neurogenic claudication, and/or radicular leg pain without sensory or motor deficit that impairs daily activities for at least 6 months<sup>2-7, 12, 13, 15-22</sup>
  - Failure of conservative treatment\* for a minimum of six (6) weeks within the last six
     (6) months
  - to improve with at least 6 consecutive weeks in the last 6 months of documented, physician directed appropriate (6 months for isolated low back pain to include at least two (2) of the following<sup>2, 3, 5, 7, 8, 15, 18-21</sup>:
  - Analgesics, steroids, and/or NSAIDs
  - Structured program of physical therapy
  - Structured home exercise program prescribed by a physical therapist, chiropractic provider or physician
  - Epidural steroid injections and or facet injections/selective nerve root block
  - Imaging studies corresponding to the clinical findings<sup>3, 13 15, 18, 19, 21</sup>
  - At least ONE of the following clinical conditions:
    - Spondylolisthesis (neural arch defect spondylolytic spondylolisthesis, degenerative spondylolisthesis, and congenital unilateral neural arch hypoplasia)<sup>13, 18, 19, 21–25</sup>



- Evidence of segmental instability Excessive motion, as in degenerative spondylolisthesis, segmental instability, and surgically induced segmental instability<sup>13, 18, 19, 21 25</sup>
- Revision surgery for failed previous operation(s) for pseudoarthrosis at the same level at least 6-12 months from prior surgery\*\* if significant functional gains are anticipated<sup>26</sup>
- Revision surgery for failed previous operation(s) repeat disk herniations if significant functional gains are anticipated (Note: Many recurrent disc herniations can be treated with discectomy alone, so specific indications for the addition of fusion will be required)<sup>3</sup>
- Fusion for the treatment of spinal tumor, cancer, or infection<sup>26</sup>
- Chronic low back pain or degenerative disc disease (disc degeneration without significant neurological compression presenting with low back pain) must have failed at least 6 months of appropriate active non-operative treatment (completion of a comprehensive cognitive -behavioral rehabilitation program is mandatory) and must be evaluated on a case-by-case basis<sup>2, 5, 7, 9, 10, 16, 17, 20, 23, 25</sup>

**NOTE:** The results of several randomized trials suggests that in many degenerative cases uninstrumented posterolateral intertransverse fusion has similar results to larger instrumented (PLIF, TLIF, etc.) fusion techniques with fewer morbidities and less likelihood of revision surgery. Accordingly, specific findings suggesting more significant instability should be present when larger techniques are used (gaping of facets, gross motion on flexion/extension radiographs, wide disc spaces) [9, 10] 22, 23, 25, 27, 29 OR

#### Other Indications

Lumbar spinal fusion may be used as the first line of treatment (*no conservative treatment required*) in the following clinical scenarios [1]<sup>3,-7</sup>:

- Progressive nerve compression resulting in an acute neurologic deficit (motor) AND
  - One of the aforementioned clinical conditions, <u>except</u> chronic low back pain or degenerative disc disease. The neurological deficits must be significant: 0-2/5 on the motor function scale for L5 or S1 roots **OR** 0-3/5 for L3 or L4 roots. Lesser degrees of motor dysfunction may resolve with conservative treatment and are not considered an indication for early surgery.
- Cauda equina syndrome (loss of bowel or bladder control) AND
  - One of the aforementioned clinical conditions, <u>except</u> chronic low back pain or degenerative disc disease.

#### Multi-Level Fusion With Or Without Decompression

Surgical indications (all multi-level fusion surgeries will be reviewed on a case-by-case basis):



- When **ALL of the following** are present\*:
  - Lumbar back pain, neurogenic claudication, and/or radicular leg pain without sensory or motor deficit that impairs daily activities for at least 6 months
  - Failure of conservative treatment\* for a minimum of six (6) weeks within the last six
     (6) months
  - Imaging studies corresponding to the clinical findings
  - At least ONE of the following clinical conditions:
    - Multiple level spondylolisthesis (Note: Fusions in cases with single level spondylolisthesis should be limited to the unstable level)
    - Fusion for the treatment of spinal tumor, trauma, cancer, or infection affecting multiple levels
    - Intra-operative segmental instability OR

#### **Other Indications**

<u>Lumbar spinal fusion may be used as the first line of treatment (no conservative treatment required)</u> in the following clinical scenarios:

- Progressive nerve compression resulting in an acute neurologic deficit (motor) AND
  - One of the aforementioned clinical conditions except chronic low back pain or degenerative disc disease. The neurological deficits must be significant: 0-2/5 on the motor function scale for L5 or S1 roots OR 0-3/5 for L3 or L4 roots. Lesser degrees of motor dysfunction may resolve with appropriate conservative treatment and are not considered an indication for early surgery OR
- Cauda equina syndrome (loss of bowel or bladder control) AND

One of the aforementioned clinical conditions, except chronic low back pain or degenerative disc disease

## **NOTE**

Failure of conservative treatment is defined as one of the following:

- Lack of meaningful improvement after a full course of treatment; OR
- Progression or worsening of symptoms during treatment; OR
- Documentation of a medical reason the member is unable to participate in treatment Closure of medical or therapy offices, patient inconvenience, or noncompliance without explanation does not constitute "inability to complete" treatment.

## **INDICATIONS FOR REPEAT LUMBAR SPINE FUSION OPERATIONS**

Repeat lumbar fusion operations will be reviewed on a <u>case-by-case</u> basis upon submission of medical records and imaging studies that demonstrate remediable pathology. The below must also be **documented and available for review of repeat** fusion requests<sup>2, 5, 7, 17, 20, 23, 25</sup>:



- Rationale as to why surgery is preferred over other non-invasive or less invasive treatment procedures
- Signed documentation that the individual has participated in the decision-making process and understands the high rate of failure/complications



MULTI-LEVEL FUSION WITH OR WITHOUT DECOMPRESSION

(ALL MULTI-LEVEL FUSION SURGERIES WILL BE REVIEWED ON A CASE-BY-CASE BASIS):

BECAUSE OF VARIABLE OUTCOMES WITH FUSION SURGERY,
INDIVIDUALS SHOULD BE ACTIVELY INVOLVED IN THE DECISIONMAKING PROCESS AND PROVIDED APPROPRIATE DECISIONSUPPORT MATERIALS EXPLAINING POTENTIAL RISKS/BENEFITS
AND TREATMENT ALTERNATIVES WHEN CONSIDERING THIS
INTERVENTION.

WHEN ALL OF THE FOLLOWING ARE PRESENT\*:

LUMBAR BACK PAIN, NEUROGENIC CLAUDICATION, AND/OR RADICULAR LEG PAIN WITHOUT SENSORY OR MOTOR DEFICIT THAT IMPAIRS DAILY ACTIVITIES FOR AT LEAST 6 MONTHS<sup>2, 4-7, 12, 13, 16, 17, 20</sup>

THE LAST 6 MONTHS OF DOCUMENTED, PHYSICIAN DIRECTED APPROPRIATE CONSERVATIVE THERAPY TO INCLUDE AT LEAST TWO (2) OF THE FOLLOWING 8, 18-21;

ANALGESICS, STEROIDS, AND/OR NSAIDS

STRUCTURED PROGRAM OF PHYSICAL THERAPY

STRUCTURED HOME EXERCISE PROGRAM PRESCRIBED BY A
PHYSICAL THERAPIST, CHIROPRACTIC PROVIDER OR PHYSICIAN

EPIDURAL STEROID INJECTIONS AND OR FACET INJECTIONS/SELECTIVE NERVE ROOT BLOCK



IMAGING STUDIES CORRESPONDING TO THE CLINICAL 13-15, 18, 19, 21

AT LEAST ONE OF THE FOLLOWING CLINICAL CONDITIONS 18, 19, 21-<del>25</del>.

MULTIPLE LEVEL SPONDYLOLISTHESIS (NOTE: FUSIONS IN CASES WITH SINGLE LEVEL SPONDYLOLISTHESIS SHOULD BE LIMITED TO THE UNSTABLE LEVEL)

FUSION FOR THE TREATMENT OF SPINAL TUMOR, TRAUMA. CANCER. OR INFECTION AFFECTING MULTIPLE LEVELS

INTRA-OPERATIVE SEGMENTAL INSTABILITY OR

\*OTHER INDICATIONS: LUMBAR SPINAL FUSION MAY BE USED AS THE FIRST LINE OF TREATMENT (NO CONSERVATIVE TREATMENT REQUIRED) IN THE FOLLOWING CLINICAL SCENARIOS<sup>3,7</sup>:

DROGRESSIVE NERVE COMPRESSION RESULTING IN AN ACUTE NEUROLOGIC DEFICIT (MOTOR) AND

ONE OF THE AFOREMENTIONED CLINICAL CONDITIONS EXCEPT CHRONIC LOW BACK PAIN OR DEGENERATIVE DISC DISEASE. NEUROLOGICAL DEFICITS MUST BE SIGNIFICANT: 0-2/5 ON THE MOTOR FUNCTION SCALE FOR L5 OR S1 ROOTS OR 0-3/5 FOR L3 OR L4 ROOTS. LESSER DEGREES OF MOTOR DYSFUNCTION MAY RESOLVE WITH APPROPRIATE CONSERVATIVE TREATMENT AND ARE NOT CONSIDERED AN INDICATION FOR EARLY SURGERY OR CALIDA FOLINA SYNDROME (LOSS OF ROWEL OR READDER

CONTROL) AND



# ONE OF THE AFOREMENTIONED CLINICAL CONDITIONS, EXCEPT CHRONIC LOW BACK PAIN OR DEGENERATIVE DISC DISEASE.

NOTE: INSTRUMENTATION, BONE FORMATION OR GRAFTING MATERIALS, INCLUDING BIOLOGICS, SHOULD BE USED AT THE SURGEON'S DISCRETION; HOWEVER, USE SHOULD BE LIMITED TO FDA APPROVED INDICATIONS REGARDING THE SPECIFIC DEVICES OR BIOLOGICS.

NOTE: THIS LUMBAR SURGERY GUIDELINE DOES NOT ADDRESS SPINAL DEFORMITY SURGERIES OR THE CLINICAL INDICATIONS FOR SPINAL DEFORMITY SURGERY.

NOTE: PRE-SACRAL, AXIAL LUMBAR INTERBODY FUSION (AXIALIF)
IS NOT AN APPROVED SURGICAL APPROACH DUE TO
INSUFFICIENT EVIDENCE.

#### RELATIVE CONTRAINDICATIONS FOR SPINE SURGERY

(NOTE: Cases may not be approved if the below contraindications exist):

- **Medical contraindications** to surgery (e.g., severe osteoporosis; infection of soft tissue adjacent to the spine and may be at risk for spreading to the spine; severe cardiopulmonary disease; anemia; malnutrition and systemic infection) [11]. 30,31
- **Psychosocial risk factors**. It is imperative to rule out non-physiologic modifiers of pain presentation or non-operative conditions mimicking radiculopathy or instability (e.g., peripheral neuropathy, piriformis syndrome, myofascial pain, sympathetically mediated pain syndromes, sacroiliac dysfunction, psychological conditions, etc.) prior to consideration of elective surgical intervention [1].<sup>3,7</sup> Individuals with clinically significant depression or other psychiatric disorders being considered for elective spine surgery will be reviewed on a caseby-case basis and the surgery may be denied for risk of failure.
- Active Tobacco or Nicotine use prior to fusion surgery. Individuals must be free from smoking and/or nicotine use for at least six weeks prior to surgery and during the entire period of fusion healing [12, 13, 14]. 32-37



Morbid Obesity. Contraindication to surgery in cases where there is significant risk and concern for improper post-operative healing, post-operative complications related to morbid obesity, and/or an inability to participate in post-operative rehabilitation [15]. These cases will be reviewed on a case-by-case basis and may be denied given the risk of failure.

## **NON-COVERED PROCEDURES**

- Percutaneous lumbar discectomy,
- radiofrequency disc decompressionn,
- and related procedures are deemed investigational procedures and are not approved.
  Discectomy and microdiscectomy are the gold standards. Percutaneous decompressions, and related procedures (laser, etc.) are deemed investigational procedures and are not approved.
  Open or microdecompression via laminectomy or laminotomy are the gold standards.<sup>3, 7</sup>
- Laser discectomy
- intradiscal electrothermal annuloplasty (IDEA) or more commonly called IDET (intradiscal electrothermal therapy)
- nucleus pulpous replacement
- pre-sacral fusion

## **LEGISLATIVE LANGUAGE**

## **Washington**

Washington State Health Care Authority: Health Technology Clinical Committee

#### **Number and Coverage Topic:**

1. 20151120A – Lumbar Fusion for Degenerative Disc Disease [16]

#### **HTCC Coverage Determination:**

<u>Lumbar fusion for degenerative disc disease uncomplicated by comorbidities is **not a covered benefit.**</u>

The population addressed in this decision includes individuals > 17 years of age with chronic (3 or more months) lumbar pain and uncomplicated degenerative disc disease; excluded conditions include radiculopathy, spondylolisthesis (> Grade 1) or severe spinal stenosis, as well as acute trauma or systemic disease affecting the lumbar spine (e.g., malignancy).

#### **HTCC Reimbursement Determination:**

<u>Limitations of Coverage: N/A</u> <u>Non-Covered Indicators: N/A</u>



#### **Number and coverage topic:**

## <u> 20180518A - Surgery for lumbar radiculopathy/ sciatica [17]</u>

**HTCC** coverage determination:

Surgery for lumbar radiculopathy or sciatica is a covered benefit with conditions.

**HTCC** reimbursement determination:

#### **Limitations of coverage:**

Open discectomy or microdiscectomy with or without endoscopy (lumbar laminectomy, laminotomy, discectomy, foraminotomy) are covered with the following conditions:

- For adult patients with lumbar radiculopathy with subjective and objective neurologic findings that are corroborated with an advanced imaging test (i.e., Computed Tomography (CT) scan, Magnetic Resonance Imaging (MRI) or myelogram), AND
- There is a failure to improve with a minimum of six weeks of non-surgical care, unless progressive motor weakness is present

#### **Non-covered indicators:**

Minimally invasive procedures that do not include laminectomy, laminotomy, or foraminotomy including but not limited to energy ablation techniques, Automated Percutaneous Lumbar Discectomy (APLD), percutaneous laser, nucleoplasty, etc. are not covered.

#### **BACKGROUND**

## **Definitions**

**Lumbar Discectomy/Microdiscectomy** is a surgical procedure to remove part of the damaged spinal disc. The damaged spinal disc herniates into the spinal canal and compresses the nerve roots. Nerve root compression leads to symptoms like low back pain, radicular pain, numbness and tingling, muscular weakness, and paresthesia. Typical disc herniation pain is exacerbated with any movement that causes the disc to increase pressure on the nerve roots.

#### Lumbar Decompression (Laminectomy, Laminotomy, Facetectomy, and Foraminotomy):

Laminectomy is a common decompression surgery. The American Association of Neurological Surgeons defines laminectomy as a surgery to remove the back part of vertebra, lamina, to create more space for the spinal cord and nerves. The most common indication for laminectomy is spinal stenosis. Spondylolisthesis and herniated disk are also frequent indications for laminectomy. Decompression surgery is usually performed as part of lumbar fusion surgery.

**Lumbar Fusion Surgery:** Lumbar spinal fusion (arthrodesis) is a surgical procedure used to treat spinal conditions of the lumbar, e.g., degenerative disc disease, spinal stenosis, injuries/fractures of the spine, spinal instability, and spondylolisthesis. Spinal fusion is a "welding" process that permanently fuses or joins together two or more adjacent bones in the spine, immobilizing the



vertebrae and restricting motion at a painful joint. It is usually performed after other surgical procedures of the spine, such as discectomy or laminectomy. The goal of fusion is to increase spinal stability, reduce irritation of the affected nerve roots, compression on the spinal cord, disability, and pain and/or numbness. Clinical criteria for single level fusion versus multiple level fusions are outlined under the indications section.

<u>Isolated Low Back Pain</u> - Pain isolated to the lumbar region of the spine and the surrounding paraspinal musculature. Also referred to 'mechanical low back pain' or 'discogenic pain' No associated neurogenic claudication or radiculopathy.

## \*Conservative Treatment

Non-operative conservative treatment should include a multimodality approach consisting of at least one active and one inactive component targeting the affected spinal region.

- Active components
  - physical therapy
  - a physician-supervised home exercise program (HEP)\*\*
  - o chiropractic care [18, 19]
- Inactive components
  - Medications (e.g., NSAIDs, steroids, analgesics)
  - Injections (e.g., epidural steroid injection, selective nerve root block)
  - Medical devices (e.g., TENS unit, bracing)

## \*\*Home Exercise Program (HEP)

The following two elements are required to meet conservative therapy guidelines for HEP:

- Documentation of an exercise prescription/plan provided by a physician, physical therapist, or chiropractor [18]; AND
- Follow-up documentation regarding completion of HEP after the required 6-week timeframe or inability to complete HEP due to a documented medical reason (i.e., increased pain or inability to physically perform exercises).

#### **OVERVIEW**

This guideline outlines the key surgical treatments and indications for common lumbar spinal disorders and is a consensus document based upon the best available evidence. Spine surgery is a complex area of medicine, and this document breaks out the treatment modalities for lumbar spine disorders into surgical categories: lumbar discectomy/microdiscectomy, lumbar decompression, and lumbar fusion surgery. See below for procedures considered not medically necessary. Spinal surgeries should be performed only by those with extensive surgical training (neurosurgery, orthopedic surgery)

**Services Not Covered:** The following procedures are considered either still under investigation or are not recommended based upon the current evidence: Percutaneous lumbar discectomy; Laser



discectomy; percutaneous radiofrequency disc decompression; intradiscal electrothermal annuloplasty (IDEA) or more commonly called IDET (intradiscal electrothermal therapy); nucleus pulpous replacement; and pre-sacral fusion.

PERCUTANEOUS DISCECTOMY is an invasive operative procedure to accomplish partial removal of the disc through a needle which allows aspiration of a portion of the disc under imaging control. Its only indication is to obtain diagnostic tissue, such as, for a biopsy for discitis. Its effectiveness has not been fully established.

LASER DISCECTOMY is a procedure which involves the delivery of laser energy into the center of the nucleus pulposus using a fluoroscopically guided laser fiber under local anesthesia. The energy denatures protein in the nucleus, causing a structural change which is intended to reduce intradiscal pressure. Its effectiveness has not been fully established.

INTRADISCAL ELECTROTHERMAL ANNULOPLASTY (IDEA) (more commonly called IDET, or Intradiscal Electrothermal therapy) is an outpatient non-operative procedure in which a wire is guided into the identified painful disc using fluoroscopy. The wire is then heated at the nuclear-annular junction within the disc. It has not been shown to be effective.

NUCLEUS PULPOSUS REPLACEMENT—Involves the introduction of a prosthetic implant into the intervertebral disc, replacing the nucleus pulposus while preserving the annulus fibrosus. It has not been shown to be effective relative to other gold standard interventions.

Conservative Therapy: (Musculoskeletal) includes primarily physical therapy and/or injections; and a combination of modalities, such as rest, ice, heat, modified activities, medical devices (such as braces), medications, diathermy, chiropractic treatments, or physician supervised home exercise program.

Home Exercise Program - (HEP) - the following two elements are required to meet guidelines for completion of conservative therapy:

Documentation provided of an exercise prescription/plan AND

Follow up with member with information provided regarding completion of HEP (after suitable 4–6-week period) or inability to complete HEP due to physical reason-i.e., increased pain, inability to physically perform exercises. (Inconvenience or noncompliance without explanation does not constitute "inability to complete" HEP).

Isolated Low Back Pain - Pain isolated to the lumbar region of the spine and the surrounding paraspinal musculature. Also referred to 'mechanical low back pain' or 'discogenic pain'. No associated neurogenic claudication or radiculopathy.

**Lumbar Fusion** Fusions can be performed either anteriorly, laterally, or posteriorly, or via a combined approach, although simple posterolateral fusions are indicated in the great majority of cases requiring fusion. Aggressive surgical approaches to fusion may be an indication for denial of cases (when such techniques have not been demonstrated to be superior to less morbid techniques) or recommendation for alternative procedure. These are the surgical approaches:

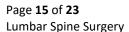
Intertransverse fusion or posterolateral fusion

Anterior interbody fusion (ALIF)

Lateral or transpsoas interbody fusion (XLIF)

Posterior or trans-foraminal interbody fusion (PLIF or TLIF)

Anterior/posterior fusion (360-degree)





Pre-sacral, axial lumbar interbody fusion (AxiaLIF) is still being investigated and is not recommended. Use of bone grafts including autologous or allograft which might be combined with metal or biocompatible devices to produce a rigid, bony connection between two or more adjacent vertebrae are common. Bone formation or grafting materials including biologics should be used at the surgeon's discretion; however, use of biologics should be limited to FDA approved indications in order to limit complications (especially BMP).

All operative interventions must be based upon positive correlation of clinical findings, clinical course, and diagnostic tests and must be performed by surgeons with appropriate training (neurosurgery, orthopedic surgery). A comprehensive assimilation of these factors must lead to a specific diagnosis with positive identification of pathologic condition(s). A failure of accurate correlation may be an indication for denial of cases. It is imperative to rule out non-physiologic modifiers of pain presentation or non-operative conditions mimicking radiculopathy or instability (e.g., peripheral neuropathy, piriformis syndrome, myofascial pain, sympathetically mediated pain syndromes, sacroiliac dysfunction, psychological conditions, etc.) prior to consideration of elective surgical intervention.

Operative treatment is indicated when the natural history of surgically treated lesions is better than the natural history for non-operatively treated lesions.

All individuals being considered for surgical intervention should first undergo a comprehensive neuro-musculoskeletal examination to identify mechanical pain generators that may respond to non-surgical techniques or may be refractory to surgical intervention.

While sufficient time allowances for non-operative treatment are required to determine the natural cause and response to non-operative treatment of low back pain disorders, timely decision making for operative intervention is critical to avoid de-conditioning and increased disability (exclusive of "emergent" or urgent pathology such as cauda equina syndrome or associated rapidly progressive neurologic loss).

In general, if the program of non-operative treatment fails, operative treatment is indicated when: Improvement of the symptoms has plateaued or failed to occur, and the residual symptoms of pain and functional disability are unacceptable at the end of 6 to 12 weeks of active treatment, or at the end of longer duration of non-operative programs for debilitated individuals with complex problems; and/or

Frequent recurrences of symptoms cause serious functional limitations even if a non-operative active treatment program provides satisfactory relief of symptoms, and restoration of function on each recurrence.



## **POLICY HISTORY**

Date	Summary	
December 2023	Added conservative tx language	
	Added legislative language for WA state	
	<ul> <li>Removed endoscopic surgery as non-covered procedure</li> </ul>	
May 2023	Updated references	
	Removed Claims Billing/Coding from background	
May 2022	Replaced "patients" with "individuals" where appropriate	
January 2022	Added CPT Codes +63052, +63053	



## **REFERENCES**

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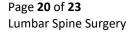


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#### Reviewed / Approved by NIA Clinical Guideline Committee

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