

## Clinical Policy: Disc Decompression Procedures

Reference Number: LA.CP.MP.114

Date of Last Revision: 07/24

Coding Implications
Revision Log

See <u>Important Reminder</u> at the end of this policy for important regulatory and legal information.

#### **Description**

Microdiscectomy or open discectomy (MD/OD) are the standard procedures for symptomatic lumbar disc herniation, and they involve removal of the portion of the intervertebral disc compressing the nerve root or spinal cord (or both) with or without the aid of a headlight loupe or microscope magnification. Potential advantages of newer minimally invasive discectomy (MID) procedures over standard MD/OD include less blood loss, less postoperative pain, shorter hospitalization and earlier return to work.<sup>1</sup>

#### Policy/Criteria

- **I.** It is the policy of Louisiana Healthcare Connections that open discectomy and microdiscectomy are **medically necessary** when meeting all of the following:
  - A. Age  $\geq$  18 years;
  - B. Diagnosis of herniated lumbar disc;
  - C. Nerve root compression confirmed by imaging and one of the following:
    - 1. Radiculopathy with motor deficit and one of the following:
      - a. Severe weakness in a nerve root distribution, as evidenced by: a score of  $\leq 3$  on the Medical Research Council 0 to 5 muscle strength scale, or the inability to ambulate;
      - b. Mild to moderate weakness in a nerve root distribution, as evidenced by a score of 4 on the Medical Research Council 0 to 5 muscle strength scale and one of the following:
        - i. Worsening weakness or motor deficit;
        - ii. Patient has failed to respond to conservative therapy, within the last year, including all of the following:
          - a)  $\geq$  four weeks physical therapy or prescribed home exercise program;
          - b)  $\geq$  four weeks activity modification;
          - c) One of the following:
            - 1) Nonsteroidal anti-inflammatory drug (NSAID) or acetaminophen ≥ three weeks unless contraindicated or not tolerated;
            - 2) Epidural steroid injection;
    - 2. Radiculopathy with sensory deficit as evidenced by pain, parasthesias or numbness in a nerve root distribution, and patient has failed to respond to conservative therapy including all the following:
      - a.  $\geq$  four weeks physical therapy or prescribed home exercise program;
      - b.  $\geq$  four weeks activity modification;
      - c. One of the following:
        - i. NSAID or acetaminophen ≥ three weeks unless contraindicated or not tolerated;
        - ii. Epidural steroid injection.

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- **II.** It is the policy of Louisiana Healthcare Connections that the following minimally invasive procedures for spinal decompression have not been proven superior to other existing technologies:
  - A. Percutaneous Lumbar Discectomy (manual or automated [APLD] and/or MILD);
  - B. Percutaneous Laser Discectomy (PLD);
  - C. Laser-assisted Disc Decompression (LADD);
  - D. Percutaneous laser disc decompression (PLDD);
  - E. Percutaneous nuclectomy;
  - F. Percutaneous endoscopic discectomy;
  - G. Endoscopic laser percutaneous discectomy or LASE;
  - H. Endoscopic Spinal Surgery System;
  - I. Interspinous/interlaminar process stabilization/spacer device.

#### **Background**

A variety of discectomy techniques are available<sup>1</sup>:

- The traditional open discectomy (OD) is performed with a standard surgical incision, often with the aid of eyepiece (loupe) magnification. It frequently involves a laminectomy (removal of the vertebral lamina to relieve pressure on nerve roots).
- Microdiscectomy (MD) is a refinement of open discectomy and involves a smaller incision in the back, with visualization through an operating microscope. This may include a laminotomy or hemilaminectomy in order to adequately visualize the disc, followed by removal of the disc fragment compressing the affected nerve or nerves.
- Minimally invasive discectomy (MID) techniques include percutaneous manual nucleotomy, automated percutaneous lumbar discectomy, laser discectomy, endoscopic discectomy, microendoscopic discectomy, coblation nucleoplasty, and the disc DeKompressor. Tubular or trochar discectomy is a less invasive technique in which a tubular retractor is inserted over a guidewire, gaining access to the disc by muscle splitting rather than muscle incision and detachment.

MID procedures involve smaller incisions and surgery with the aid of indirect visualization. Some techniques employ lasers to vaporize parts of the disc or automated techniques for removing portions of the disc. There is the potential advantage of quicker recovery from surgery compared to standard OD or MD.<sup>1</sup>

A systematic review of MID versus MD/OD for symptomatic lumbar disc herniation found MID may be inferior in terms of relief of leg pain, low back pain and re-hospitalization. Additionally, MID may be associated with lower risk of infection and shorter hospital stay, but more research is needed due to inconsistent evidence.<sup>2</sup>

Evaniew and colleagues came to a similar conclusion in their 2014 systematic review of MID versus open surgery for cervical and lumbar discectomy.<sup>3</sup> They state that moderate-quality evidence suggests no advantage of MID in short- and long-term function, and low-quality evidence shows no advantage in short-and long-term pain.<sup>3</sup> At this time the risks due to the more technically complicated MID and potential for inadequate decompression render more conventional spinal decompression procedures the preferred choice.

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Chou echoes the findings of the systematic reviews, stating that definitive evidence of advantages of MID techniques is needed before adopting them over OD or MD.<sup>1</sup>

The National Institute for Health and Clinical Excellence (NICE)

According to NICE, evidence regarding automated percutaneous mechanical lumbar discectomy does not show any major safety concerns at this time. Evidence of efficacy is limited and "based on uncontrolled case series of heterogeneous groups of patients, but evidence from small randomized controlled trials shows conflicting results." Special arrangements should be used for consent and audit or research due to the incertitude regarding the efficacy of this procedure.

#### **Coding Implications**

This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2023, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only and may not support medical necessity. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

NOTE: Coverage is subject to each requested code's inclusion on the corresponding LDH fee schedule. Non-covered codes are denoted (\*) and are reviewed for Medical Necessity for members under 21 years of age on a per case basis.

**CPT Codes That Support Coverage Criteria** 

CPT® Codes	Description
622871	Decompression procedure, percutaneous, of nucleus pulposus of intervertebral disc, any method utilizing needle based technique to remove disc material under fluoroscopic imaging or other form of indirect visualization, with discography and/or epidural injection(s) at the treated level(s), when performed, single or multiple levels, lumbar

**CPT Codes That Do Not Support Coverage Criteria** 

CPT®	Description
Codes	
0275T*	Percutaneous laminotomy/laminectomy (interlaminar approach) for decompression of neural elements, (with or without ligamentous resection, discectomy, facetectomy and/or foraminotomy), any method, under indirect image guidance (eg, fluoroscopic, CT), single or multiple levels, unilateral or bilateral; lumbar

<sup>&</sup>lt;sup>1</sup> This code encompasses various disc procedures, not all of which are considered medically necessary by Louisiana Healthcare Connections. To determine medical necessity, the actual procedure to be performed must be specified.



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<b>CPT</b> ®	Description
Codes	
22867	Insertion of interlaminar/interspinous process stabilization/distraction device, without fusion, including image guidance when performed, with open decompression, lumbar; single level
22868	Insertion of interlaminar/interspinous process stabilization/distraction device, without fusion, including image guidance when performed, with open decompression, lumbar; second level (List separately in addition to code for primary procedure)
22869	Insertion of interlaminar/interspinous process stabilization/distraction device, without open decompression or fusion, including image guidance when performed, lumbar; single level
22870	Insertion of interlaminar/interspinous process stabilization/distraction device, without open decompression or fusion, including image guidance when performed, lumbar; second level (List separately in addition to code for primary procedure)

**HCPCS Codes That Support Coverage Criteria** 

HCPCS Codes	Description
S2350*	Diskectomy, anterior, with decompression of spinal cord and/or nerve root(s),
	including osteophytectomy; lumbar, single interspace
S2351*	Diskectomy, anterior, with decompression of spinal cord and/or nerve root(s),
	including osteophytectomy; lumbar, each additional interspace (list separately
	in addition to code for primary procedure)

**HCPCS Codes That Do Not Support Coverage Criteria** 

HCPCS	Description
Codes	
C1821*	Interspinous process distraction device (implantable)
S2348*	Decompression procedure, percutaneous, of nucleus pulposus of intervertebral
	disc, using radiofrequency energy, single or multiple levels, lumbar

Reviews, Revisions, and Approvals	Revision Date	Approval Date	Effective Date
Converted corporate to local policy.	08/15/20		
Changed policy statement in II. regarding minimally invasive procedures from "investigational" to stating that the listed procedures are not superior to other technologies. Codes and references reviewed and updated. Replaced all instances of "member" with "member/enrollee."	1/22	1/22	
Annual review. Added code S2348 to table of HCPCS codes that do not support coverage criteria. References reviewed and updated. Changed "date," in the revision log header to, "revision date."	7/22	9/26/22	

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Reviews, Revisions, and Approvals	Revision	Approval	Effective	
	Date	Date	Date	
Annual review. Minor rewording in Description, Criteria, and	06/23	8/24/23		
Background sections with no impact on criteria. ICD-10 codes				
removed. References reviewed and updated. Added CPT codes				
63075, 63076, 63077, and 63078. Added footnote to code				
62287				
Annual review. Removed "unilateral" for radiculopathy in	07/24	9/24/24	10/25/24	
Criteria I.C.1. Updated muscle strength score in Criteria I.C.1.a.				
from $< 3$ to $\le 3$ . Updated muscle strength score in Criteria				
I.C.1.b. from 3 or 4 to 4. Added "within the last year" for				
conservative therapy in Criteria I.C.1.b.ii. Updated physical				
therapy from $\geq$ six weeks to $\geq$ four weeks in Criteria				
I.C.1.b.ii.a). Updated activity modification from ≥ six weeks to				
≥ four weeks in Criteria I.C.1.b.ii.b). Updated Criteria				
I.C.1.b.ii.c) to specify one of the following: 1) NSAID or				
acetaminophen ≥ 3 weeks unless contraindicated or not				
tolerated 2) Epidural steroid injection. Removed "unilateral" for				
radiculopathy in Criteria I.C.2. Updated physical therapy from				
$\geq$ six weeks to $\geq$ four weeks in Criteria I.C.2.a. Updated activity				
modification from ≥ six weeks to ≥ four weeks in Criteria				
I.C.2.b. Updated Criteria I.C.2.c. to specify one of the				
following: i. NSAID or acetaminophen ≥ 3 weeks unless				
contraindicated or not tolerated ii. Epidural steroid injection.				
References reviewed and updated. Reviewed by external				
specialist. Removed CPT codes 63075, 63076, 63077, and				
63078.				

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#### **Important Reminder**

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. LHCC makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved.

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