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MEDICAL POLICY – 7.01.18

Automated Percutaneous and Percutaneous Endoscopic Discectomy

BCBSA Ref. Policy:	7.01.18
Effective Date:	Sep. 1, 2025
Last Revised:	Jan. 1, 2026
Replaces:	N/A

RELATED MEDICAL POLICIES:

7.01.72	Percutaneous Intradiscal Electrothermal Annuloplasty, Radiofrequency Annuloplasty, Biacuplasty and Intraosseous Basivertebral Nerve Ablation
7.01.551	Lumbar Spine Decompression Surgery: Discectomy, Foraminotomy, Laminotomy, Laminectomy
7.01.560	Cervical Spine Surgeries: Discectomy, Laminectomy, and Fusion in Adults

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POLICY CRITERIA | CODING | RELATED INFORMATION
EVIDENCE REVIEW | REFERENCES | HISTORY

Clicking this icon returns you to the hyperlinks menu above.

Introduction

The bones that make up the spine are called vertebrae. Between each of the vertebra is a disc, which prevents the bones from rubbing together. When the disc deteriorates, the gel-like material that's inside it can leak out and irritate nerves. Cutting away part of the disc is one way to relieve pain and other symptoms. The usual way of performing this surgery is by making an open incision (cut). Newer methods are being studied. One uses a probe and special tools that cut away the disc herniations and suction them out. Another new method uses a small scope with a camera at the end and specialized tools. Both of these methods are considered unproven (investigational). There is not enough medical evidence to show how effective they are.

Note: The Introduction section is for your general knowledge and is not to be taken as policy coverage criteria. The rest of the policy uses specific words and concepts familiar to medical professionals. It is intended for providers. A provider can be a person, such as a doctor, nurse, psychologist, or dentist. A provider also can be a place where medical care is given, like a hospital, clinic, or lab. This policy informs them about when a service may be covered.

Policy Coverage Criteria

Discectomy	Investigational
Automated percutaneous discectomy **Percutaneous endoscopic discectomy**	**Automated percutaneous discectomy and percutaneous endoscopic discectomy are considered investigational as techniques of intervertebral disc decompression in individuals with back pain and/or radiculopathy related to disc herniation in the lumbar, thoracic, or cervical spine.**

Coding

CPT code 62287 specifically describes a percutaneous decompression procedure of the lumbar spine. This code is specifically limited to the lumbar region. Although most percutaneous discectomies are performed on lumbar vertebrae, FDA labeling of the Stryker DeKompressor Percutaneous Discectomy Probe and the Nucleotome includes the thoracic and cervical vertebrae.

Code	Description
CPT	
0274T	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 (e.g., fluoroscopic, CT), with or without the use of an endoscope, single or multiple levels, unilateral or bilateral; cervical or thoracic
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 (e.g., fluoroscopic, CT), with or without the use of an endoscope, single or multiple levels, unilateral or bilateral; lumbar (code termed 01/01/26)
62287	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 the use of an endoscope, with discography and/or epidural injection(s) at the treated level(s), when performed, single or multiple levels, lumbar
62330	Decompression, percutaneous, with partial removal of ligamentum flavum, including laminotomy for access, epidurography, and imaging guidance (i.e., CT or fluoroscopy), bilateral; on interspace, lumbar (new code effective 01/01/26)
62331	Decompression, percutaneous, with partial removal of the ligamentum flavum, including laminotomy for access, epidurography, and imaging guidance (i.e., CT or fluoroscopy), bilateral;

Code	Description
	additional interspace(s), lumbar (list separately in addition to code for primary procedure) (new code effective 01/01/26)
62380	Endoscopic decompression of spinal cord, nerve root(s), including laminotomy, partial facetectomy, foraminotomy, discectomy and/or excision of herniated intervertebral disc, 1 interspace, lumbar
HCPCS	
C2614	Probe, percutaneous lumbar discectomy

Note: CPT codes, descriptions and materials are copyrighted by the American Medical Association (AMA). HCPCS codes, descriptions and materials are copyrighted by Centers for Medicare Services (CMS).

Related Information

Benefit Application

Percutaneous discectomy may be performed by surgeons, but anesthesiologists or other physicians whose practices focus on pain management may also perform this procedure.

Evidence Review

Description

Surgical management of herniated intervertebral discs most commonly involves discectomy or microdiscectomy, performed manually through an open incision. Automated percutaneous discectomy involves placement of a probe within the intervertebral disc under image guidance with aspiration of disc material using a suction cutting device. Endoscopic discectomy involves the percutaneous placement of a working channel under image guidance, followed by visualization of the working space and instruments through an endoscope, and aspiration of disc material.

Background

Back pain or radiculopathy related to herniated discs is an extremely common condition and a frequent cause of chronic disability. Although many cases of acute low back pain and radiculopathy will resolve with conservative care, surgical decompression is often considered when the pain is unimproved after several months and is clearly neuropathic in origin, resulting from irritation of the nerve roots. Open surgical treatment typically consists of discectomy in which the extruding disc material is excised. When performed with an operating microscope, the procedure is known as microdiscectomy.

Minimally invasive options have also been researched, in which some portion of the disc material is removed or ablated, although these techniques are not precisely targeted at the offending extruding disc material. Ablative techniques include laser discectomy and radiofrequency decompression (see **Related Policies**). Intradiscal electrothermal annuloplasty is another minimally invasive approach to low back pain. In this technique, radiofrequency energy is used to treat the surrounding disc annulus (see **Related Policies**).

Herein, BCBSA addresses automated percutaneous and endoscopic discectomy, in which the disc decompression is accomplished by the physical removal of disc material rather than its ablation. Traditionally, discectomy was performed manually through an open incision, using cutting forceps to remove nuclear material from within the disc annulus. This technique was modified by automated devices that involve placement of a probe within the intervertebral disc and aspiration of disc material using a suction cutting device. Endoscopic techniques may be intradiscal or may involve extraction of noncontained and sequestered disc fragments from inside the spinal canal using an interlaminar or transforaminal approach. Following insertion of the endoscope, decompression is performed under visual control.

Summary of Evidence

For individuals who have herniated intervertebral disc(s) who receive automated percutaneous discectomy, the evidence includes randomized controlled trials (RCTs) and systematic reviews of observational studies. The relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. The published evidence from small RCTs is insufficient to evaluate the impact of automated percutaneous discectomy on the net health outcome. Well-designed and executed RCTs are needed to determine the benefits and risks of this procedure. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have herniated intervertebral disc(s) who receive percutaneous endoscopic discectomy, the evidence includes a number of RCTs, systematic reviews and observational studies. The relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. Many of the more recent RCTs are conducted at institutions within China. There are few reports from the United States. Results do not reveal a consistently significant improvement in patient-reported outcomes and treatment-related morbidity with percutaneous endoscopic discectomy in comparison to other discectomy interventions. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Ongoing and Unpublished Clinical Trials

As of April 2025, no ongoing or unpublished studies were identified on **Clinicaltrials.gov** that would be relevant to this review.

Clinical Input Received from Physician Specialty Societies and Academic Medical Centers

The purpose of the following information is to provide reference material. Inclusion does not imply endorsement or alignment with the policy conclusions.

While the various physician specialty societies and academic medical centers may collaborate with and make recommendations during this process, through the provision of appropriate reviewers, input received does not represent an endorsement or position statement by the physician specialty societies or academic medical centers, unless otherwise noted.

2018 Input

Clinical input was sought to help determine whether the use of automated percutaneous discectomy or endoscopic percutaneous discectomy for individuals with herniated intervertebral discs would provide a clinically meaningful improvement in net health outcome and whether the use is consistent with generally accepted medical practice. In response to requests, clinical input was received from three respondents, including two specialty society-level responses; no physician-level responses identified through a specialty society; one physician-level response identified through an academic medical center.

For individuals who have herniated intervertebral discs who receive automated percutaneous discectomy or percutaneous endoscopic discectomy, clinical input does not support a clinically meaningful improvement in net health outcome and does not indicate this use is consistent with generally accepted medical practice. Clinical input suggests that automated percutaneous discectomy may be an appropriate treatment option for the highly selected individual who has a small focal disc fragment compressing a lumbar nerve causing radiculopathy in the absence of lumbar stenosis or severe bony foraminal stenosis. Similarly, clinical input suggests that endoscopic percutaneous discectomy may be an appropriate treatment option for the highly selected individual who has a small focal disc herniation causing lumbar radiculopathy. However, respondents were mixed in the level of support for this indication, and overall the clinical input is not generally supportive of a clinically meaningful improvement in net health outcome.

2013 Input

In response to requests, input was received from four physician specialty societies and three academic medical centers while this policy was under review in 2013. Overall, input agreed that percutaneous and endoscopic discectomy are investigational. Most reviewers considered discectomy with tubular retractors to be a variant of open discectomy, with the only difference being the type of retraction used.

Practice Guidelines and Position Statements

Guidelines or position statements will be considered for inclusion if they were issued by, or jointly by, a US professional society, an international society with US representation, or National Institute for Health and Care Excellence (NICE). Priority will be given to guidelines that are informed by a systematic review, include strength of evidence ratings, and include a description of management of conflict of interest.

National Institute for Health and Clinical Excellence

The NICE (2005) published guidance on automated percutaneous mechanical lumber discectomy, indicating that there was limited evidence of efficacy based on uncontrolled case series of heterogeneous groups of individuals, and evidence from small RCTs showed conflicting results.[27] The guidance indicated that, in view of uncertainty about the efficacy of the procedure, it should not be done without special arrangements for consent and for audit or research. The

guidance was considered for update in 2009, but failed review criteria; the 2005 guidance is therefore considered to be current.

A NICE (2016) guidance on percutaneous transforaminal endoscopic lumbar discectomy for sciatica was published.[28] The guidance stated that current evidence is adequate to support the use of percutaneous transforaminal endoscopic lumbar discectomy for sciatica. Choice of operative procedure (open discectomy, microdiscectomy, or percutaneous endoscopic approaches) may be influenced by symptoms, location, and size of prolapsed disc.

A NICE (2016) guidance on percutaneous interlaminar endoscopic lumbar discectomy for sciatica was also published.[29] The guidance stated that current evidence is adequate to support the use of percutaneous interlaminar endoscopic lumbar discectomy for sciatica. Choice of operative procedure (open discectomy, microdiscectomy, or percutaneous endoscopic approaches) may be influenced by symptoms, location, and size of prolapsed disc.

American Pain Society

The clinical practice guidelines from the American Pain Society (2009) found insufficient evidence to evaluate alternative surgical methods to standard open discectomy and microdiscectomy, including laser or endoscopic-assisted techniques, various percutaneous techniques, coblation nucleoplasty, or the Dekompressor.[25]

American Society of Interventional Pain Physicians

The guidelines from the American Society of Interventional Pain Physicians (2013) indicated that the evidence for percutaneous disc decompression with the Dekompressor was limited.[3] There were no recommended indications for the DeKompressor.

North American Spine Society

The North American Spine Society (2014) published clinical guidelines on the diagnosis and treatment of lumbar disc herniation.[30] **Table 1** summarizes recommendations specific to percutaneous endoscopic discectomy and automated percutaneous discectomy.

Table 1. Recommendations for Lumbar Disc Herniation with Radiculopathy

Recommendations	Grade or LOE[a]
Endoscopic percutaneous discectomy is suggested for carefully selected patients to reduce early postoperative disability and reduce opioid use compared with open discectomy.	B
There is insufficient evidence to make a recommendation for or against the use of automated percutaneous discectomy compared with open discectomy.	I
Endoscopic percutaneous discectomy may be considered for treatment.	C
Automated percutaneous discectomy may be considered for treatment.	C
Patients undergoing percutaneous endoscopic discectomy experience better outcomes if <40 years and symptom duration <3 months.	II

LOE: level of evidence

[a] Grade B: fair evidence (level II or III studies with consistent findings; grade C: poor quality evidence (level IV or V studies). Level of evidence II: lesser quality randomized controlled trial (e.g., <80% follow-up, no blinding, or improper randomization), prospective comparative study, systematic review of level II studies or level I studies with inconsistent results; level of evidence III: case control, retrospective, systematic review of level III studies; level of evidence IV: case series; level of evidence V: expert opinion.

American Society of Pain and Neuroscience

The American Society of Pain and Neuroscience (ASPN; 2022) published clinical guidance for interventional treatments for low back pain.[26] The guideline states that discectomy procedures (such as percutaneous and endoscopic disc procedures) have favorable safety and efficacy profiles for the treatment of lumbar disc herniation with persistent radicular symptoms; however, it is stated that further research is needed to evaluate complications rates in order for these procedures to supplant classic open microdiscectomy. Recommendations specific to percutaneous endoscopic discectomy are summarized in **Table 2.**

Table 2. Recommendations for Percutaneous and Endoscopic Procedures

Recommendation	Grade[a]	Level of Evidence[b]	Level of Certainty [Net Benefit][c]
Percutaneous Endoscopic Discectomy	B	I-A	High

[a] Grade B: (The ASPN Back Group recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.
[b] Evidence Level: I-A: At least one controlled and randomized clinical trial, properly designed

Medicare National Coverage

There is no national coverage determination.

Regulatory Status

The DeKompressor Percutaneous Discectomy Probe (Stryker), Herniatome Percutaneous Discectomy Device (Gallini Medical Devices), and the Nucleotome (Clarus Medical) are examples of percutaneous discectomy devices that have been cleared for marketing by the US Food and Drug Administration (FDA) through the 510(k) process. The FDA indication for these products is for "aspiration of disc material during percutaneous discectomies in the lumbar, thoracic and cervical regions of the spine."

FDA product code: HRX

A variety of endoscopes and associated surgical instruments have also been cleared for marketing by FDA through the 510(k) process.

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History

Date	Comments
01/97	Add to Surgery Section - New Policy
08/13/02	Replace Policy - Policy reviewed without literature review; new review date only
07/13/04	Replace Policy - Policy reviewed without literature review; new review date only.
06/14/05	Replace Policy - Policy revised with literature review; now considered investigational; references provided. Status changed to BC. Title changed by removing Lumbar. Hold for notification; publish 11/1/05.
06/16/06	Replace Policy - Policy reviewed with literature search; no change in policy statement; Scope and Disclaimer updated.
11/13/07	Replace Policy - Policy reviewed with literature search; no change in policy statement; references added.
05/13/08	Cross Reference Update - No other changes
10/14/08	Cross Reference Update - No other changes.
01/13/09	Replace Policy - Policy reviewed with literature search; no change in policy statement; references added.
03/09/10	Replace Policy - Policy updated with literature search; no change to the policy statement. References added.
05/10/11	Replace Policy - Policy updated with literature review, rationale section extensively revised, no change in policy statement. Title changed to “Automated Percutaneous Discectomy”. ICD-10 codes added to policy.

Date	Comments
04/10/12	Replace policy. Endoscopic discectomy added to policy with literature review through October 2011; Rationale revised; references added and reordered; 1 reference removed; title changed to "Automated Percutaneous and Endoscopic Discectomy". Endoscopic discectomy is considered investigational.
09/26/12	Update Related Policies – Add 7.01.126; ICD-10 codes are now effective 10/01/2014.
06/10/13	Replace policy. Policy updated with literature review through January 9, 2013; references added and reordered; clinical input reviewed; policy statement clarified to read "back pain and/or radiculopathy".
09/30/13	Update Related Policies. Change title to 7.01.72 and 7.01.93.
01/21/14	Update Related Policies. Add 7.01.551.
03/11/14	Coding Update. Code 80.59 was removed per ICD-10 mapping project; this code is not utilized for adjudication of policy.
06/19/14	Annual Review. Policy updated with literature review through March 27, 2014, references 13-14 and 18 added; policy statements unchanged. Diagnosis and procedure codes removed (ICD-9 and ICD-10) – performed outpatient.
06/17/15	Annual Review. Policy updated with literature review through March 23, 2015; references 17-18, 27, and 34 added; policy statements unchanged. CPT codes 0274T and 0275T added to the policy Coding section.
08/25/15	Update Related Policies. Remove deleted policy 7.01.537.
07/01/16	Annual Review, approved June 14, 2016. Policy updated with literature review through February 23, 2016; references 10 and 18 added. Policy statements unchanged.
01/01/17	Coding update. Added new CPT code 62380 effective 1/1/17.
07/01/17	Annual Review, approved June 6, 2017. Policy moved into new format. Policy updated with literature review through March 6, 2017; references 15-16 and 21 added. Policy statements unchanged. Policy title changed to "Automated Percutaneous and Percutaneous Endoscopic Discectomy".
01/01/19	Annual Review, approved December 19, 2018. Policy updated with literature review through June 2018; reference 21 added. Policy statements unchanged.
02/01/19	Minor update, added 7.01.560 to related policies.
09/01/19	Annual Review, approved August 6, 2019. Policy updated with literature review through April 2019; references added. Policy statements unchanged.
09/01/20	Annual Review, approved August 4, 2020. Policy updated with literature review through May 2020; references added. Policy statements unchanged.
11/01/20	Coding update. Added HCPCS code C2614.
07/01/21	Related Policies updated; removed policy 7.01.93 as it has been archived.

Date	Comments
09/01/21	Annual Review, approved August 3, 2021. Policy updated with literature review through April 26, 2021; references added. Policy statements unchanged.
08/01/22	Annual Review, approved July 25 2022. Policy updated with literature review through April 22, 2022; references added. Minor editorial refinements to policy statements; intent unchanged.
09/01/23	Annual Review, approved August 21, 2023. Policy updated with literature review through May 5, 2023; references added. Policy statements unchanged. Changed the wording from "patient" to "individual" throughout the policy for standardization.
09/01/24	Annual Review, approved August 12, 2024. Policy updated with literature review through April 15, 2024; references added. Policy statements unchanged.
09/01/25	Annual Review, approved August 11, 2025. Policy updated with literature review through April 30, 2025; no references added. Policy statements unchanged.
01/01/26	Coding update. Added new CPT codes 62330 and 62331, replacing 0275T, effective January 1, 2026.

Disclaimer: This medical policy is a guide in evaluating the medical necessity of a particular service or treatment. The Company adopts policies after careful review of published peer-reviewed scientific literature, national guidelines and local standards of practice. Since medical technology is constantly changing, the Company reserves the right to review and update policies as appropriate. Member contracts differ in their benefits. Always consult the member benefit booklet or contact a member service representative to determine coverage for a specific medical service or supply. CPT codes, descriptions and materials are copyrighted by the American Medical Association (AMA). ©2026 Premera All Rights Reserved.

Scope: Medical policies are systematically developed guidelines that serve as a resource for Company staff when determining coverage for specific medical procedures, drugs or devices. Coverage for medical services is subject to the limits and conditions of the member benefit plan. Members and their providers should consult the member benefit booklet or contact a customer service representative to determine whether there are any benefit limitations applicable to this service or supply. This medical policy does not apply to Medicare Advantage.