I. POLICY

Provocative discography

Lumbar provocative discography may be considered medically necessary for evaluation for disc pathology in persons with persistent, severe low back pain (LBP) and abnormal interspaces on magnetic resonance imaging (MRI), where other diagnostic tests have failed to reveal clear confirmation of a suspected disc as the source of pain, and surgical intervention is being considered.

Lumbar provocative discography is considered investigational for all other indications as there is insufficient evidence to support a conclusion concerning the health outcomes or benefits associated with this procedure.

Cervical and thoracic provocative discography

Cervical and thoracic provocative discography are considered investigational as there is insufficient evidence to support a conclusion concerning the health outcomes or benefits associated with this procedure.

Functional anesthetic discography

Functional anesthetic discography is considered investigational as there is insufficient evidence to support a conclusion concerning the health outcomes or benefits associated with this procedure.

Image-guided minimally invasive lumbar decompression
Image-guided minimally invasive lumbar decompression is considered investigational as there is insufficient evidence to support a conclusion concerning the health outcomes or benefits associated with this procedure.

Cross-references:
- MP-1.093 Artificial Intervertebral Disc (Lumbar and Cervical)
- MP-1.123 Automated Percutaneous Discectomy and Endoscopic Discectomy
- MP-1.125 Decompression of the Intervertebral Disc Using Laser Energy (Laser Discectomy) or Radiofrequency Coblation (Nucleoplasty)
- MP-1.124 Percutaneous IDET Annuloplasty and Percutaneous Intradiscal Radiofrequency Annuloplasty

II. PRODUCT VARIATIONS

This policy is applicable to all programs and products administered by Capital BlueCross unless otherwise indicated below.

BlueJourney HMO*  BlueJourney PPO*  FEP PPO**

* Refer to Centers for Medicare and Medicaid (CMS) National Coverage Determination (NCD) 150.13. Percutaneous Image-Guided Lumbar Decompression for Lumbar Spinal Stenosis. Effective for services performed on or after January 09, 2014, CMS has determined that PILD for LSS is not reasonable and necessary under section 1862(a)(1)(A) of the Social Security Act. Effective for services performed on or after January 09, 2014, the Centers for Medicare and Medicaid Services (CMS) has determined that PILD will be covered by Medicare when provided in a clinical study under section 1862(a)(1)(E) through coverage with evidence development for beneficiaries with LSS who are enrolled in an approved clinical study that meets the criteria described in the NCD.

** Refer to FEP Medical Policy Manual MP-7.01.126 Image-Guided Minimally Invasive Lumbar Decompression (IG_MLD) for Spinal Stenosis. The FEP Medical Policy Manual can be found at: www.fepblue.org

III. DESCRIPTION/BACKGROUND

Image-guided minimally invasive lumbar decompression
Background
Image-guided minimally invasive lumbar decompression (IG-MLD) describes a novel percutaneous procedure for decompression of the central spinal canal in patients with lumbar spinal stenosis. In this procedure, a specialized cannula and surgical tools (mild®) are used under fluoroscopic guidance for bone and tissue sculpting near the spinal canal. In LSS, the space around the spinal cord narrows, compressing the spinal cord and the nerve roots. The most common symptom of LSS is back pain with neurogenic claudication, ie, pain, numbness, or weakness in the legs that worsens with standing or walking and is alleviated with sitting or leaning forward. Compression of neural elements generally occurs from a combination of degenerative changes including ligamentum flavum hypertrophy, bulging of the intervertebral disc, and facet thickening with arthropathy. Spinal stenosis is often linked to age-related changes in disc height and arthritis of the facet joints. LSS is one of the most common reasons for back surgery and the most common reason for lumbar spine surgery in adults older than 65 years of age. The goal of surgical treatment is to “decompress” the spinal cord and/or nerve roots.

For patients with LSS, surgical laminectomy has established benefits in reducing pain and improving quality of life. Less invasive surgical procedures have been developed, such as open laminotomy and microendoscopic laminotomy. Limited evidence on the comparative efficacy of these procedures suggests that less invasive procedures may achieve a roughly similar benefit with less adverse effects. The present policy addresses posterior decompression of central LSS with a percutaneous treatment that is performed under fluoroscopic guidance.

Percutaneous IG-MLD using a specially designed tool kit (mild®) has been proposed as an ultraminimally invasive treatment of central LSS. In this procedure, the epidural space is filled with contrast medium under fluoroscopic guidance. Using a 6-gauge cannula that is clamped in place with a back plate, single-use tools (portal cannula, surgical guide, bone rongeur, tissue sculpter, trocar) are used to resect thickened ligamentum flavum and small pieces of lamina. The tissue and bone sculpting is conducted entirely under fluoroscopic guidance, with additional contrast media added throughout the procedure to aid visualization of the decompression. The process is repeated on the opposite side for bilateral decompression of the central canal. The devices are not intended to be used near the lateral neural elements and are contraindicated for disc procedures.

Alternative posterior decompressive surgical procedures include:

- Decompressive laminectomy, the classic treatment for LSS, which unroofs the spinal canal by extensive resection of posterior spinal elements, including the lamina, spinous processes, portions of the facet joints, ligamentum flavum, and the interspinous ligaments. Wide muscular dissection and retraction is needed to achieve adequate surgical visualization. The extensive resection and injury to the posterior spine and supporting muscles can lead to instability with significant morbidity, both postoperatively and longer term. Spinal fusion, performed at the same time as laminectomy or after symptoms have developed, may be required to reduce the
resultant instability. Laminectomy may be used for extensive multilevel decompression.

- Hemilaminotomy and laminotomy, sometimes termed laminoforaminotomy, are less invasive than laminectomy. These procedures focus on the interlaminar space, where most of the pathologic changes are concentrated, minimizing resection of the stabilizing posterior spine. A laminotomy typically removes the inferior aspect of the cranial lamina, superior aspect of the subjacent lamina, ligamentum flavum, and the medial aspect of the facet joint. In contrast to laminectomy, laminotomy does not disrupt the facet joints, supra- and interspinous ligaments, a major portion of the lamina, or the muscular attachments. Muscular dissection and retraction are required to achieve adequate surgical visualization.

- Microendoscopic decompressive laminotomy (MEDL) is similar to laminotomy but uses endoscopic visualization. The position of the tubular working channel is confirmed by fluoroscopic guidance, and serial dilators (METRx™ lumbar endoscopic system; Medtronic) are used to dilate the musculature and expand the fascia. For MEDL, an endoscopic curette, rongeur, and drill are used for the laminotomy, facetectomy, and foraminotomy. The working channel may be repositioned from a single incision for multilevel and bilateral dissections.

**Regulatory Status**

The mild® tool kit (Vertos Medical) initially received 510(k) marketing clearance as the X-Sten MILD Tool Kit (X-Sten Corp.) from FDA in 2006, with intended use as a set of specialized surgical instruments to be used to perform percutaneous lumbar decompressive procedures for the treatment of various spinal conditions.

Vertos’ mild® instructions for use state that the devices are not intended for disc procedures but rather for tissue resection at the perilaminar space, within the interlaminar space, and at the ventral aspect of the lamina. These devices are not intended for use near the lateral neural elements and remain dorsal to the dura using image guidance and anatomical landmarks.

Note: The abbreviation MILD has also been used for microscopic muscle-preserving interlaminar decompression, which involves a small skin incision at the interspinous level and partial drilling of the spinous process, with decompression performed under microscopic visualization.

FDA product code: HRX.

**Functional anesthetic discography (FAD)**

Functional anesthetic discography is a diagnostic procedure that involves injecting an anesthetic agent directly into a spinal disc. Proponents suggest FAD can be used to confirm the presence of injured discs as the source of the patient’s low back pain symptoms. According to the manufacturer, FAD is designed to diagnose and potentially treat low back pain caused by
degenerative disc disease. During this procedure, under light sedation and x-ray guidance, a small catheter is inserted into the suspected disc and anchored in place with a small balloon. After recovering from light sedation, the patient is asked to engage in physical activity to reproduce pain. Local anesthetic is then injected in the disc believed to be causing the patient’s pain. Reduction in pain is considered diagnostic. If the injection into a specific disc relieves the patient's back pain, the disc can be further evaluated for potential treatment. If the test does not relieve the patient's pain, the physician can investigate other possible causes of pain.

The FAD™ System (originally developed by InnoSpine, Inc., Palo Alto, CA, and later acquired by Kyphon Inc., Sunnyvale, CA) received 510(k) approval through the U.S. Food and Drug Administration (FDA) in April 2005 (FDA, K043500). According to the FDA, the intended use of the system is to deliver either a single dose or continuous administration of radiopaque contrast, local anesthetics, and/or saline solution to the intradiscal space.

Provocative Discography

Lumbar discography (also known as lumbar provocative discography and provocative lumbar discography) is a test that is used to ascertain if a disc is painful on injection. It is an invasive procedure that entails the injection of radiopaque contrasting materials (1 to 3 ml) into the intervertebral disc followed by computed tomography (CT) to examine disc abnormality. Discography can provide radiographical evaluation of the integrity of the nucleus pulposus and annular rings to determine tears or other lesions that could be the cause of LBP. It can measure disc nociception -- a normal disc should not cause pain when injected; however, a disc that is physiologically compromised can mimic the pain experienced by the patient. Discography is usually carried out when other diagnostic tests have failed to identify the cause of LBP. However, its use is still controversial.

IV. RATIONALE

Image-guided minimally invasive lumbar decompression

Conventional Posterior Decompressive Surgery

A 2009 systematic review of surgery for back pain, commissioned by the American Pain Society, was conducted by the Oregon Health Sciences University Evidence-based Practice Center.1,2 Four higher-quality randomized trials were reviewed that compared surgery with nonsurgical therapy for spinal stenosis, including 2 studies from the multicenter Spine Patient Outcomes Research Trial (SPORT) evaluating laminectomy for spinal stenosis (specifically with or without degenerative spondylolisthesis).3,4 All 4 four trials found that initial decompressive surgery (laminectomy) was slightly to moderately superior to initial nonsurgical therapy (eg, average 8- to 18-point difference on the 36-Item Short-Form Health Survey [SF-36] and Oswestry
Disability Index (ODI). There was insufficient evidence to determine the optimal adjunctive surgical methods for laminectomy (ie, with or without fusion, and instrumented vs noninstrumented fusion) in patients with or without degenerative spondylolisthesis.

Image-Guided Minimally Invasive Lumbar Decompression

Primary literature on image-guided minimally invasive lumbar decompression (IG-MLD) consists of 1 small controlled trial and a number of prospective and retrospective cohort studies and case series. Members of the Standards Division of the International Spine Intervention Society published a systematic review of the IG-MLD literature in 2014. Included in the review were 1 randomized controlled trial (described next) and 12 cohort studies/series. Pain measurements using a visual analog score (VAS) or Zurich Claudication Questionnaire (ZCQ) showed a weighted mean improvement of 41% in the short-term (4-6 weeks), 46% at 3 months, 42% at 6 months, and 49% at 1 year. However, mean VAS remained greater than 3 at all times after treatment. Ten studies assessed function using the ODI or Roland-Morris Disability Questionnaire. With a baseline ODI score of 47.0, the ODI improved by a weighted mean of 16.5 at 6 weeks, 16.2 at 12 weeks, 15.4 at 6 months, and 14.0 at 1 year. However, mean VAS remained greater than 3 at all times after treatment. The single randomized trial included in the systematic review was a small (N=38) double-blind study of mild® compared with epidural steroid injections. The study included patients with painful lower limb neurogenic claudication and hypertrophic ligamentum flavum as a contributing factor. Patients with a history of recent spinal fractures, disabling back or leg pain from causes other than lumbar spinal stenosis (LSS), fixed spondylolisthesis greater than grade 1, disc protrusion or osteophyte formation, or excessive facet hypertrophy were excluded from the study. To maintain blinding, patients receiving steroid injection also received skin anesthesia with a small incision, followed by trocar placement under fluoroscopy. The primary efficacy end point was pain measured by VAS at 6 weeks after treatment. Results showed that 76.2% of mild®-treated patients had a 2-point or greater improvement in pain scores, compared with 35.3% of steroid-treated patients. ODI score improved significantly from 38.8 to 27.4 after mild®, while the steroid-treated patients showed a nonsignificant improvement from 40.5 to 34.8. There was no significant difference between groups on ZCQ (2.2 for mild® vs 2.8 for steroid) at 6 weeks. After the 6-week assessment, patients were unblinded and allowed to cross over to the other treatment. Fourteen (82%) of the steroid-treated patients crossed over to mild®. Follow-up at 12 weeks in patients treated with mild® showed no significant change in mean VAS from 6 to 12 weeks (6.3 at baseline, 3.8 at 6 weeks, 3.4 at 12 weeks). There were no major procedure-related or device-related complications. The study was continued with crossover
allowed for the epidural steroid group until 26-week results. The study was completed in 2013. The 26-week results have been posted online (available at ClinicalTrials.gov; NCT00995371).

MiDAS I (NCT00956631) is an industry-sponsored multicenter study of IG-MLD at 14 centers. In 2010, Chopko and Caraway reported 6-week results of this study. Included were patients with symptomatic LSS that was primarily caused by dorsal element hypertrophy with a hypertrophic ligamentum flavum greater than 2.5 mm and central canal sectional area of 100 square mm or less and had failed conservative therapy. Of 78 patients treated, 6-week follow-up was available for 75 (96%). Thirty-nine of the patients (52%) were discharged from the hospital on the same day, and 36 patients (48%) stayed for 1 night. No major device or procedure-related complications (eg, dural tears, nerve root injury, postoperative infection, hemodynamic instability, or postoperative spinal structural instability) were reported. The average VAS pain score improved from 7.3 at baseline to 3.7 at the 6-week follow-up. Scores on the ODI improved from 47.4 to 29.5, an 18% improvement. Scores on the Symptom Severity subscale and 17.5% for physical function. Scores on all subscales of the SF-12 health survey were improved. At 1-year follow-up, VAS for pain from 58 patients was 4.5. The ODI improved from 48.6 to 36.7, and there was significant improvement on all domains of the ZCQ and the SF-12 Physical Component Summary score (27.4 to 33.5). Functional and self-reported outcomes were also reported for 40 of the 78 patients at 1 year. In 2013, Chopko reported 2-year outcomes with 45 patients from this trial. Validity of the longer term results is uncertain due to the high loss to follow-up.

Chopko also reported on IG-MLD in 14 patients who were considered at high risk for complications from open spine surgery and general anesthesia. Comorbidities included obesity, diabetes mellitus, hypertension, chronic obstructive pulmonary disease, chemotherapy, and coronary artery disease. Nine of the 14 patients (64%) reported an improvement in VAS pain scores of 3 points or more. The average VAS score improved from 7.6 to 3.6 (53% improvement) at a mean follow-up of 23.5 weeks (range, 4-72 weeks). Scores on the ODI were 50% at baseline and 43.9% at follow-up; this change was not statistically significant. Two postoperative complications (calf deep venous thrombosis, pulmonary embolism) related to the procedure were observed in a single patient. One patient subsequently received open lumbar decompressive laminectomy due to continued decline in function.

Several other reports on IG-MLD have been published by Deer et al. A 2012 report by Deer et al describes a prospective study of mild® in 46 consecutive patients with neurogenic claudication related to LSS that was primarily caused by ligamentum flavum hypertrophy (NCT01076244). Complete follow-up to 1 year was available for 35 patients (76%). VAS improved from 6.9 at baseline to 4.0 at 1 year, ODI scores improved from a mean of 49.4 to 32.0, and the ZCQ scores improved for all ZCQ domains. A 2010 publication by Deer and Kapural describes a chart review of 90 consecutive patients treated in the United States (14 physicians in 12 facilities) with mild® devices under fluoroscopic guidance. No major adverse events (dural puncture or tear, blood transfusion, nerve injury, epidural bleeding, hematoma) were found in the chart review.
The safety review was updated in 2012 by Levy and Deer with a total of 373 patients treated with IG-MLD.13

Another retrospective review from 2010 reported outcomes from a consecutive series of 42 patients who underwent IG-MLD by interventional pain specialists.14 All patients met magnetic resonance imaging criteria (spinal stenosis and ligamentum flavum hypertrophy) for IG-MLD and had undergone previous conservative treatment to include lumbar epidural steroid injections, opioid and nonopioid medication and physical therapy. Most patients were considered nonsurgical candidates in consultation with or referral from a spine surgeon (no further details were provided). All patients had bilateral IG-MLD with most (n=26) at 2 levels. VAS pain scores averaged 9.6 at baseline and 5.8 at 30 days after the procedure, with 80% of patients reporting a change in VAS of 3 or more. Thirty patients (71%) reported an improvement in function following IG-MLD. No major adverse events were identified.

Section Summary
One small randomized trial with short-term follow-up reports improved outcomes from mild® compared with epidural steroid injections. Evidence from prospective case series in patients who have failed conservative management reports that pain is reduced and functional status is improved following treatment with mild®.

This evidence is insufficient to determine the efficacy of mild® compared with placebo and is also insufficient to determine the comparative efficacy of IG-MLD in relation to alternative surgical approaches. Because of the variable natural history of back pain and the subjective nature of the outcomes of pain and functional status, randomized controlled trials are necessary to determine which surgical approach to LSS achieves the best outcomes. Further trials with larger numbers of subjects, longer follow-up, and relevant control groups are needed to determine the effect on health outcomes with greater certainty.

Ongoing and Unpublished Clinical Trials
Some currently unpublished trials that might influence this policy are listed in Table 1.

Table 1. Summary of Key Trials

<table>
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<tr>
<th>NCT No.</th>
<th>Trial Name</th>
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<td>Unpublished</td>
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<td>NCT01129921a</td>
<td>Comparative Study of Sham Versus Mild® Procedure in Patients Diagnosed With Symptomatic Lumbar Central Canal Stenosis</td>
<td>40</td>
<td>2012</td>
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<tr>
<td>NCT01315145a</td>
<td>MiDAS III (Mild® Decompression Alternative to Open Surgery): Vertos Mild Patient Evaluation Study</td>
<td>138</td>
<td>May 2014</td>
</tr>
</tbody>
</table>

NCT: national clinical trial.
a Denotes industry-sponsored or cosponsored trial.
Summary of Evidence
Posterior decompression for lumbar spinal stenosis (LSS) has been evolving toward increasingly minimally invasive procedures in an attempt to minimize postoperative morbidity and spinal instability. In general, the literature comparing surgical procedures is limited. The evidence available suggests that less invasive surgical decompression may reduce perioperative morbidity without impairing long-term outcomes when performed in appropriately selected patients.

In contrast to conventional surgical decompression, the mild® procedure is a percutaneous decompressive procedure performed solely under fluoroscopic guidance (eg, without endoscopic or microscopic visualization of the work area). This procedure is indicated for central stenosis only, without the capability of addressing nerve root compression or disc herniation, should it be required. One small controlled trial with short-term follow-up and small case series of patients treated with image-guided minimally invasive lumbar decompression report improvements in pain and functioning, but controlled trials are lacking, and the efficacy of this procedure compared with alternatives cannot be determined at this time. Due to the unknown impact on health outcomes, randomized controlled trials in appropriate patients are needed to compare this novel procedure with the established alternatives. Therefore, this procedure is considered investigational.

SUPPLEMENTAL INFORMATION

Practice Guidelines and Position Statements
The American Pain Society (APS) published clinical practice guidelines in 2009 on interventional therapies, surgery, and interdisciplinary rehabilitation for low back pain.2 The guidelines were based on a systematic review commissioned by APS and conducted at the Oregon Health Sciences University Evidence-based Practice Center.1 APS provided a strong recommendation (high-quality evidence) that clinicians discuss risks and benefits of surgery as an option for patients with persistent and disabling radiculopathy due to spinal stenosis. This recommendation was based on evidence showing that decompressive laminectomy is associated with moderate benefits compared with nonsurgical therapy through 1 to 2 years for persistent and disabling leg pain due to spinal stenosis, either with or without degenerative spondylolisthesis. There was insufficient evidence to determine if laminectomy with fusion was more effective than laminectomy without fusion. APS recommended that shared decision making regarding surgery include a specific discussion about average benefits, which appear to decrease over time in patients who undergo surgery. It should be noted that this recommendation was based on randomized trials of laminectomy. Evidence for more recent decompressive surgical procedures was not reviewed.

U.S. Preventive Services Task Force Recommendations
Not applicable.
Medicare National Coverage
Effective for services performed on or after January 09, 2014, the Centers for Medicare and Medicaid Services (CMS) has determined that percutaneous image guided lumbar decompression (PILD) for LSS is not reasonable and necessary under section 1862(a)(1)(A) of the Social Security Act.\textsuperscript{15}

CMS has determined that PILD will be covered by Medicare when provided in a clinical study under section 1862(a) (1) (E) through coverage with evidence development for beneficiaries with LSS who are enrolled in an approved clinical study that meets the criteria in the decision memo.

According to the national coverage decision, PILD is a posterior decompression of the lumbar spine performed under indirect image guidance without any direct visualization of the surgical area. This is a procedure proposed as a treatment for symptomatic LSS unresponsive to conservative therapy. This procedure is generally described as a noninvasive procedure using specially designed instruments to percutaneously remove a portion of the lamina and debulk the ligamentum flavum. The procedure is performed under x-ray guidance (eg, fluoroscopic, computed tomography) with the assistance of contrast media to identify and monitor the compressed area via epiduragram.

Functional Anesthetic Discography (FAD)

Although researchers are presently investigating the use of FAD for diagnosing discogenic pain, there is insufficient evidence in the published, peer-reviewed scientific literature to support safety and efficacy at this time. The clinical utility of functional anesthetic discography (FAD) and contrast disc analysis mapping and its role in the management of discogenic back pain is unknown at this time.

Provocative Discography

Lumbar discography
The clinical value of lumbar discography is more widely debated than cervical or thoracic. The diagnosis of discogenic pain due to disc degeneration, internal disc disruption or annular tears, for example, is considered difficult and controversial by many authors.

Professional Society/Organizations: The International Society of Interventional Pain Physicians published guidelines for interventional techniques in the management of chronic spinal pain (Manchikanti et al., 2003; Boswell, et al., 2005,Boswell et al., 2007) The guideline is an evidence-based clinical practice guideline with review of all types of evidence. Within this practice guideline, among the diagnostic interventions, the authors reported that the evidence supporting lumbar discography is strong (i.e., Level IV) for discogenic pain provided, “Lumbar discography is performed based on the history, physical examination, imaging data and analysis of other precision diagnostic techniques. There is no evidence to support discography without
other noninvasive or less-invasive modalities of treatment or other precision diagnostic injections.”

Cervical Discography
Cervical discography is utilized less frequently than lumbar discography as a diagnostic tool and has not been as widely studied.

Professional Society/Organizations: The International Society of Interventional Pain Physicians has published guidelines for interventional techniques in the management of chronic spinal pain (Manchikanti et al., 2003; Boswell, et al., 2005, Boswell et al., 2007). The guideline is an evidence-based clinical practice guideline with utilization of all types of evidence for review. Within this practice guideline, among the diagnostic interventions, the authors state that the evidence supporting cervical discography is limited (i.e., Level IV) and inconclusive—in one study there was evidence indicating that up to 40% of the positive cervical discograms may be false-positive results, and in another study cervical discography induced pain in 50% of the patients with neurological symptoms due to spondylosis but no neck pain. It was also stated that the validity of cervical discography has been established in asymptomatic patients, and some authors have concluded the test is safe and valid. However, the authors also reported in their review that there is no modern normative data that establish cervical discography as a specific test for cervical discogenic pain.

Thoracic Discography
Thoracic discography is considered by some providers to be useful in clinical practice for the assessment of thoracic, chest and upper abdominal pain (Williams and Park, 2003). However, the evidence supporting the use of thoracic discography is also limited.

Professional Societies/Organizations: The International Society of Interventional Pain Physicians has published guidelines for interventional techniques in the management of chronic spinal pain (Manchikanti et al., 2003; Boswell, et al., 2005, Boswell et al., 2007). The guideline is an evidence-based clinical practice guideline with review of all types of evidence. Within this practice guideline, among the diagnostic interventions, the authors reported that the evidence supporting thoracic discography is limited (i.e., Level IV) and inconclusive—it was stated in one study evaluating thoracic discography pain that was produced in lifelong asymptomatic patients, although the pain was not concordant or familiar. In addition, the authors state it has been reported that thoracic discography may demonstrate disc pathology not seen on MRI. Consequently, the authors concluded that the value of thoracic discography is considered preliminary at this time.
V. Definitions

Collagen is a strong, fibrous insoluble protein found in connective tissue, including the dermis, tendons, ligaments, deep fascia, bone and cartilage.

Intervertebral Disc is the fibrocartilaginous tissue between the vertebral bodies. The outer portion is the annulus fibrosus; the inner portion is the nucleus pulposus. The disc is the shock absorber, or cushion, and permits movement.

Minimally Invasive Procedures also called minimal access procedures used to perform spinal surgeries. These may include the following: (Note; this is not an all-inclusive list.)

- ALIF – anterior lumbar interbody fusion
- AxiaLIF – axial approach to interbody fusion which is performed perpendicular to the long axis of the spine with access through the sacrum. Also called anterior para-axial, trans-sacral or paracoccygeal interbody fusion performed with the AxiaLIF® and AxiaLIF 2 Level systems.
- DLIF - Direct lateral interbody fusion
- IDET – intradiscal electrothermal annuloplasty
- IG-MLD – image-guided minimally invasive lumbar decompression.
- LASE – annuloplasty using a laser-assisted spinal endoscopy
- LTIF – lateral transpsoas interbody fusion
- MEDL – microendoscopic decompressive laminotomy
- MILD – microscopic muscle-preserving interlaminar decompression involves a small skin incision at the interspinous level and partial drilling of the spinous process.
- PELA – percutaneous endoscopic laser annuloplasty.
- PLD – percutaneous lumbar discectomy
- PIRFT – percutaneous intradiscal radiofrequency thermocoagulation
- PLIF – posterior lumbar interbody fusion
- TLIF – transforaminal interbody fusion
- XLIF – Extreme lateral interbody fusion

Thermocoagulation is the use of high-frequency currents to produce coagulation to destroy tissue.
MEDICAL POLICY

VI. BENEFIT VARIATIONS

The existence of this medical policy does not mean that this service is a covered benefit under the member’s contract. Benefit determinations should be based in all cases on the applicable contract language. Medical policies do not constitute a description of benefits. A member’s individual or group customer benefits govern which services are covered, which are excluded, and which are subject to benefit limits and which require preauthorization. Members and providers should consult the member’s benefit information or contact Capital for benefit information.

VII. DISCLAIMER

Capital’s medical policies are developed to assist in administering a member’s benefits, do not constitute medical advice and are subject to change. Treating providers are solely responsible for medical advice and treatment of members. Members should discuss any medical policy related to their coverage or condition with their provider and consult their benefit information to determine if the service is covered. If there is a discrepancy between this medical policy and a member’s benefit information, the benefit information will govern. Capital considers the information contained in this medical policy to be proprietary and it may only be disseminated as permitted by law.

VIII. CODING INFORMATION

Note: This list of codes may not be all-inclusive, and codes are subject to change at any time. The identification of a code in this section does not denote coverage as coverage is determined by the terms of member benefit information. In addition, not all covered services are eligible for separate reimbursement.

Cervical and thoracic provocative discography are considered investigational; therefore, not covered:

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<th>CPT Codes ®</th>
<th>62291</th>
<th>72285</th>
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Image-guided minimally invasive lumbar decompression (IG-MLD) is considered investigational; therefore, not covered:

<table>
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<tr>
<th>CPT Codes ®</th>
<th>64999</th>
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STENOSIS is a constriction or narrowing of a passage or orifice.
**Medical Policy**

**Policy Title**: Image-Guided Minimally Invasive Lumbar Decompression (IG-MLD) for Spinal Stenosis and Discography

**Policy Number**: MP-1.021

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**Lumbar provocative discography may be considered medically necessary:**

*Functional anesthetic discography (FAD) is investigational*

**CPT Codes®**

| 62290 | 72295 |


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<td>Intervertebral disc disorders with radiculopathy, lumbar region</td>
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<td>Intervertebral disc disorders with radiculopathy, lumbosacral region</td>
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<td>Other intervertebral disc displacement, lumbar region</td>
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<td>M51.86</td>
<td>Other intervertebral disc disorders, lumbar region</td>
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IX. REFERENCES

Image-guided minimally invasive lumbar decompression


Functional Anesthetic Discography


Provocative Discography


X. POLICY HISTORY

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<th>MP 1.021</th>
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<td>CAC 11/24/09 Policy statement revised to include axial lumbar interbody fusion and</td>
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**MEDICAL POLICY**

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<th>POLICY TITLE</th>
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Functional anesthetic discography considered investigational.

CAC 7/27/10 Policy statement revised to include Image-Guided Minimally Invasive Lumbar Decompression (IG-MLD) as an investigational procedure.

CAC 7/26/11 Adopt BCBSA for IG-MLD. Title changed. No change to policy statement regarding this procedure remains investigational. Other minimally invasive procedures extracted from this policy and separated into individual policies. See MP 1.123 Automated Percutaneous Discetomy, MP 1.124 Percutaneous Intradiscal Electrothermal (IDET) Annuloplasty and Percutaneous intradiscal Radiofrequency Annuloplasty, MP 1.125 Decompression of the Intervertebral Disc Using Laser Energy (Laser Discectomy) or Radiofrequency Coblation (Nucleoplasty) and MP 1.126 Minimally Invasive Lumbar Interbody Fusion. The statement indicating functional anaesthetic discography is considered investigational remains in this policy with no changes.

CAC 10/30/12 Consensus. No change to policy statements. FEP variation changed to reference MP-7.01.126 Image-Guided Minimally Invasive Lumbar Decompression (IG_MLD) for Spinal Stenosis.

Codes reviewed 10/18/12 klr

CAC 11/26/13 Consensus review. References updated; no changes to the policy statements.

CAC 11/25/14 Consensus review. No changes to the policy statements. Background and references updated. Rationale added.

CAC 1/27/15 Minor revision. Policy title revised to “Image-Guided Minimally Invasive Lumbar Decompression (IG-MLD) for Spinal Stenosis and Discography”. Policy now addresses provocative lumbar, cervical, and thoracic discography. Lumbar provocative discography considered medically necessary for specific indications of low back pain when surgical intervention is being considered. All other indications of lumbar provocative discography are considered investigational. Cervical and thoracic provocative discography also added as investigational. Background, rationale, and reference update.

CAC 1/26/16 Consensus. No change to policy statements. References and rationale updated. Added Medicare variation to reference NCD 150.13. Coding reviewed/updated.

7/1/16 Coding updated.

Admin update 1/1/17: Product variation section updated.

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