I. Policy: Percutaneous Discectomy and Disc Decompression (Nucleoplasty™)

II. Purpose/Objective:
To provide a policy of coverage regarding Percutaneous Discectomy and Disc Decompression (Nucleoplasty™)

III. Responsibility:
A. Medical Directors
B. Medical Management

IV. Required Definitions
1. Attachment – a supporting document that is developed and maintained by the policy writer or department requiring/authoring the policy.
2. Exhibit – a supporting document developed and maintained in a department other than the department requiring/authoring the policy.
3. Devised – the date the policy was implemented.
4. Revised – the date of every revision to the policy, including typographical and grammatical changes.
5. Reviewed – the date documenting the annual review if the policy has no revisions necessary.

V. Additional Definitions
Medical Necessity or Medically Necessary means Covered Services rendered by a Health Care Provider that the Plan determines are:

a. appropriate for the symptoms and diagnosis or treatment of the Member's condition, illness, disease or injury;
b. provided for the diagnosis, and the direct care and treatment of the Member's condition, illness disease or injury;
c. in accordance with current standards of good medical treatment practiced by the general medical community.
d. not primarily for the convenience of the Member, or the Member's Health Care Provider; and
e. the most appropriate source or level of service that can safely be provided to the Member. When applied to hospitalization, this further means that the Member requires acute care as an inpatient due to the nature of the services rendered or the Member's condition, and the Member cannot receive safe or adequate care as an outpatient.

Medicaid Business Segment
Medical Necessity shall mean a service or benefit that is compensable under the Medical Assistance Program and if it meets any one of the following standards:

(i) The service or benefit will, or is reasonably expected to, prevent the onset of an illness, condition or disability.
(ii) The service or benefit will, or is reasonably expected to, reduce or ameliorate the physical, mental or development effects of an illness, condition, injury or disability.
(iii) The service or benefit will assist the Member to achieve or maintain maximum functional
capacity in performing daily activities, taking into account both the functional capacity of the Member and those functional capacities that are appropriate for members of the same age.

**Coblation** - is a method of non-thermal volumetric tissue removal through molecular dissociation, using the electrically conductive fluid employed in arthroscopic surgeries in the gap between the electrode and tissue. When electrical current is applied to this fluid, it turns into a charged layer of particles, called a plasma layer. Charged particles accelerate through the plasma and gain sufficient energy to break the molecular bonds within cells. This causes the cells to disintegrate molecule by molecule, so that tissue is volumetrically removed.

**DESCRIPTION:**

Percutaneous manual disc decompression utilizing a cutting forceps or automated mechanical intervertebral disc decompression utilizing a Stryker Dekompressor® (a.k.a. Automated Percutaneous Nucleotomy) or SpineJet hydrodisectomy involves placement of a probe within the intervertebral disc under image guidance with mechanical aspiration of disc material using a suction cutting device.

Laser discectomy is a minimally invasive alternative to open surgical or mechanical methods of disc decompression for the treatment of symptomatic intervertebral disc herniation that has not responded to conservative therapy. The primary goals of laser discectomy are to relieve intractable back pain and/or neuropathy and allow return to normal activities

Percutaneous disc decompression using low-temperature, localized, radiofrequency energy (DISC Nucleoplasty™) is a minimally invasive surgical volumetric reduction of the nucleus pulposis utilizing Coblation technology to ablate or remove tissue as a treatment for discogenic back pain.

**INDICATIONS:**

Percutaneous manual disc decompression utilizing a cutting forceps or automated mechanical intervertebral disc decompression utilizing a Stryker Dekompressor® (a.k.a. Automated Percutaneous Nucleotomy) or SpineJet hydrodisectomy is considered medically necessary for members who have physical and diagnostic imaging evidence that a single lumbar disc has an uncomplicated herniation that is contained within the annulus.

Percutaneous laser lumbar discectomy is considered medically necessary for members who have physical and diagnostic imaging evidence that a single lumbar disc has an uncomplicated herniation that is contained within the annulus and in which a well-managed course of conservative therapy (defined as medication and physical therapy) has failed to relieve pain and other signs and symptoms, therefore, making the individual a candidate for invasive treatment.

**For Medicare Business Segment**

Percutaneous Image-guided Lumbar Decompression (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 Lumbar Spinal Stenosis (LSS) unresponsive to conservative therapy. This procedure is generally described as a non-invasive 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 (e.g., fluoroscopic, CT) with the assistance of contrast media to identify and monitor the compressed area via epidurogram. The Centers for Medicare & 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 (CED) for beneficiaries with LSS who are enrolled in an approved clinical study.

See MP263 Minimally Invasive Lumbar Decompression (MILD) and Percutaneous Image-guided Lumbar Decompression (PILD)

**EXCLUSIONS:** The Plan does **NOT** provide coverage for Percutaneous disc decompression using low-temperature, localized, radiofrequency energy (DISC Nucleoplasty™) because it is considered experimental, investigational or unproven. The Geisinger Technology Assessment Committee evaluated this technology and concluded that there is insufficient evidence in the peer-reviewed published medical literature to establish the effectiveness of this test on health outcomes when compared to established tests or technologies.

The Plan does **NOT** provide coverage for any of the following because they are considered experimental, investigational or unproven. There is insufficient evidence in the peer-reviewed published medical literature to establish the effectiveness of these treatments on health outcomes when compared to established treatments or technologies.

- Chemonucleolysis
- Intradiscal electrothermal annuloplasty (IDET) – See MP 30
- Microendoscopic discectomy (MED) procedure for decompression of lumbar spine stenosis, lumbar disc herniation, or other indications
Note: A complete description of the process by which a given technology or service is evaluated and determined to be experimental, investigational or unproven is outlined in MP 15 - Experimental Investigational or Unproven Services or Treatment.

CODING ASSOCIATED WITH: Percutaneous Discectomy and Disc Decompression (Nucleoplasty™)

The following codes are included below for informational purposes and may not be all inclusive. Inclusion of a procedure or device code(s) does not constitute or imply coverage nor does it imply or guarantee provider reimbursement. Coverage is determined by the member specific benefit plan document and any applicable laws regarding coverage of specific services.

22899   Unlisted procedure, spine
64999   Unlisted procedure, nervous system
62267   Percutaneous aspiration within the nucleus pulposus, intervertebral disc, or paravertebral tissue for diagnostic purposes
62287   Aspiration or decompression procedure, percutaneous, of nucleus pulposis of intervertebral disc, any method, single or multiple levels, lumbar (manual or automated percutaneous discektomy, percutaneous laser discektomy)
S2348   Decompression procedure, percutaneous, of nucleus pulposis in intervertebral disc, using radiofrequency energy, single or multiple levels, lumbar
0275T   Percutaneous laminotomy/laminectomy (intralaminar 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
G0276   Blinded procedure for lumbar stenosis, percutaneous image-guided lumbar decompression (PILD) or placebo-control, performed in an approved coverage with evidence development (CED) clinical trial


LINE OF BUSINESS:
Eligibility and contract specific benefits, limitations and/or exclusions will apply. Coverage statements found in the line of business specific benefit document will supersede this policy. For Medicare, applicable LCD’s and NCD’s will supercede this policy. For PA Medicaid Business segment, this policy applies as written.

REFERENCES:


Sharps L, “Percutaneous Disc Decompression Using Nucleoplasty™” Study Summary, ArthroCare Corporation.

Sanders NR, “Percutaneous Disc Decompression - An Historical Perspective”, ArthroCare Corporation [not published].

Sharps L, " Perc-D Represents the Latest Generation of Instrumentation and Technology Designed Specifically for the Treatment of Contained Disc Disease” [Submitted for publication in Orthopaedic Technology Review].


Percutaneous Disc Decompression - Nucleoplasty™, Geisinger Technology Assessment Committee [review], April 10, 2002.; Re-review Jan 12, 2005.


This policy will be revised as necessary and reviewed no less than annually.

Devised: 5/02
Revised: 6/03 (added definition, code); 7/04; 4/05; 4/06; 4/07; 4/09 (coding); 5/10 (refs); 4/17 (coverage clarification and combine related policies)