POLICY STATEMENT:

I. Based upon our criteria and assessment of the peer-reviewed literature, radiofrequency joint denervation/ablation has been medically proven to be effective and therefore, **medically necessary** for facet mediated pain resulting from disease, injury or surgery and confirmed by provocative testing when BOTH of the following criteria are met:
   
   A. Failure of at least three (3) months of conservative care (e.g., exercise, physical methods including physical therapy, chiropractic care, NSAID’s and/or analgesics)

   B. Two positive diagnostic medial branch block or facet joint injections using either a local anesthetic or a local anesthetic combined with corticosteroid as evidenced by EITHER of the following:

      1) A beneficial clinical response to an intra-articular facet injection or medial branch block performed with a local anesthetic with greater than 80% pain relief reported for the duration of the effect of the local anesthetic when no corticosteroids are added to the injectate

      2) A beneficial clinical response to an intra-articular facet joint injection or medial branch block performed with a local anesthetic and a corticosteroid with at least a 50% reduction in pain for at least one week.

II. Based upon the literature and/or available information, radiofrequency joint denervation/ablation is **not medically necessary** in the absence of two sequential positive diagnostic facet joint injections/medial branch blocks.

III. Based upon the literature and/or available information, radiofrequency joint denervation/ablation is **not medically necessary** when performed for neck pain or low back pain in the absence of an untreated radiculopathy.

IV. Based upon our criteria and assessment of the peer-reviewed literature, a repeat radiofrequency joint denervation/ablation has been medically proven to be effective and therefore, **medically necessary** when there is documented pain relief of at least 50% which has lasted for a minimum of 12 weeks. While repeat radiofrequency joint denervations/ablations may be required, they should not occur at an interval of less than six (6) months from the first procedure. No more than two (2) procedures at the same level(s) should be performed in a 12 month period.

V. Based upon the literature and/or available information, radiofrequency joint denervation/ablation is not medically necessary when performance of the procedure is on more than three (3) levels. It is considered **medically necessary** to perform the procedure at the same level or levels bilaterally during the same session/procedure.

VI. Based upon our criteria and assessment of the peer-reviewed literature, radiofrequency joint denervation/ablation has been medically proven to be effective and therefore, **medically necessary** when performed on an individual with previous spinal fusion only when performed at levels above or below the fusion.

VII. Based upon our criteria and the lack of peer-reviewed literature, these methods of ablation have not been medically proven to be effective and are considered **investigational** for the following:

   A. Pulsed radiofrequency ablation for chronic pain syndromes

   B. Endoscopic radiofrequency denervation/endoscopic dorsal ramus rhizotomy

   C. Cryoablation/cryoneurolysis/cryodenervation

   D. Chemical ablation (e.g., alcohol, phenol, glycerol)
E. Laser ablation
F. Ablation by any method for sacroiliac (SI) joint pain
G. Cooled radiofrequency ablation

VIII. Based upon the literature and/or available information, radiofrequency joint denervations/ablations is **not medically necessary** when performed without the use of fluoroscopic guidance.

*Refer to Corporate Medical Policy #11.01.03 regarding Experimental and Investigational Services.*

*Refer to Corporate Medical Policy #7.01.87 regarding Spinal Injections (Epidural and Facet Injections) for Pain Management.*

**DESCRIPTION:**

The facet joints (zygapophyseal joints) are located at the posterior aspect of the spine and are designed to provide stability and control motion between the vertebrae. These small joints are prone to injury, deterioration, and inflammation. There are a number of proposed causes of facet joint syndrome. The facet joints may be irritated from trauma, repetitive movements, or arthritic changes. It is very common to develop degenerative changes in facet joints after trauma to the spine, as a result of an injury to the intervertebral disc or secondary to degenerative disc disease. If the intervertebral disc is damaged and the cushioning effect of the disc is lost, the facet joints at that level will undergo more stress, which may result in degeneration of the facet joint. Diagnosis of facet joint pain is confirmed by response (pain alleviation) to nerve blocks with a least a 50% improvement on 2 positive blocks being required.

Percutaneous radiofrequency facet denervation is a low-risk means of treating “mechanical” pain syndromes in previously unoperated patients with back and/or leg pain. Under local anesthesia, needle placement is made under fluoroscopy to the facet (zygapophyseal) joint. The cannula is then redirected until contact with the bone is lost. Following the removal of the guide needle stylet, a thermal monitoring electrode with an exposed tip is passed, and the guide needle pulled back on the electrode beyond the skin. Electrostimulation is then performed and a lesion is made using a radiofrequency lesion generator. Control of the temperature over the nerve roots permits selective denervation of the pain conduction fibers. The nerves regenerate, and repeat procedures are effective though it is not known how many times the procedure can be repeated or if the duration of relief will change.

Pulsed radiofrequency consists of short bursts of electrical current of high voltage in the radio frequency range but without heating the tissue enough to cause coagulation. It is suggested as a possibly safer alternative to thermal radio frequency facet denervation. Temperatures do not exceed 42°C at the probe tip vs. temperatures in the 60s C. reached in thermal radiofrequency denervation, and tissues may cool between pulses. It is postulated that transmission across small unmyelinated nerve fibers is disrupted but not permanently damaged, while large myelinated fibers are not affected.

**RATIONALE:**

Radiofrequency facet denervation as a procedure does not require FDA approval. Several RF generators and probes have been cleared for marketing through the FDA’s 510(k) process.

Peer-reviewed literature reporting small randomized, controlled studies of the efficacy and safety of radiofrequency facet denervation as well as evidence from larger case series is sufficient to permit conclusions that the technology provides significant and sustained relief of pain with minimal side effects in appropriately selected patients.

There is very limited literature on pulsed radiofrequency denervation. The mechanism of its action not completely understood, and published data is insufficient to draw conclusions about its efficacy.
Eligibility for reimbursement is based upon the benefits set forth in the member’s subscriber contract.

CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY.

Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than policy updates.

<table>
<thead>
<tr>
<th>CPT</th>
<th>Description</th>
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<tr>
<td>64633</td>
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<tr>
<td>64634</td>
<td>cervical or thoracic each additional facet joint</td>
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<tr>
<td>64636</td>
<td>lumbar or sacral, each additional facet joint</td>
</tr>
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</table>

**REFERENCES:**


*key article

**KEY WORDS:**
Denervation, Facet, Radiofrequency.

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**CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS**

There is currently a Local Coverage Determination that addresses Facet Joint Injections, Medial Branch Blocks, and Facet Joint Radiofrequency Neurotomy (L35936). Please refer to the following LCD web site for Medicare Members: https://www.cms.gov/medicare-coverage-database/details/lcd-details.aspx?LCDId=35936&ContrId=298&ver=22&ContrVer=1&CntrctrSelected=298*1&Cntrctr=298&name=National+Government+Services%2c+Inc.++(13201%2c+A+and+B+and+HHH+MAC%2c+J+-+K)&s=All&DocType=Active&bc=AggAAAQAAAAAA%3d%3d&0