

# Facet Joint and Medial Branch Block Injections for Spinal Pain

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[➔ Instructions for Use](#)

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<b>Related Community Plan Policies</b>
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## Application

This Medical Policy does not apply to the states listed below; refer to the state-specific policy/guideline, if noted:

State	Policy/Guideline
Indiana	None
Kentucky	None
Louisiana	<a href="#">Facet Injections for Spinal Pain (for Louisiana Only)</a>
Mississippi	<a href="#">Facet Joint Injections for Spinal Pain (for Mississippi Only)</a>
Nebraska	<a href="#">Facet Joint Injections for Spinal Pain (for Nebraska Only)</a>
New Jersey	<a href="#">Facet Joint Injections for Spinal Pain (for New Jersey Only)</a>
North Carolina	<a href="#">Facet Joint Injections for Spinal Pain (for North Carolina Only)</a>
Pennsylvania	<a href="#">Facet Joint and Medial Branch Block Injections for Spinal Pain (for Pennsylvania Only)</a>
Tennessee	<a href="#">Facet Joint Injections for Spinal Pain (for Tennessee Only)</a>

## Coverage Rationale

Diagnostic Facet Joint/Medial Branch Block injections of the cervical, thoracic, and lumbar levels of the spine are proven and medically necessary in certain circumstances.

For medical necessity clinical coverage criteria, refer to the InterQual® CP: Procedures, Facet Joint Injection.

Click [here](#) to view the InterQual® criteria.

Therapeutic Facet Joint/Medial Branch Block Injections at the cervical, thoracic, and lumbar levels of the spine are unproven and not medically necessary due to insufficient evidence of efficacy and safety.

## Definitions

**Acute Low Back Pain:** Low back pain present for up to six weeks. The early acute phase is defined as less than two weeks and the late acute phase is defined as two to six weeks, secondary to the potential for delayed-recovery or risk phases for the development of chronic low back pain. Low back pain can occur on a recurring basis. If there has been complete recovery between episodes, it is considered acute recurrent. (Goertz et al. 2012)

**Conservative Therapy:** Consists of an appropriate combination of medication (for example, NSAIDs, analgesics, etc.) in addition to physical therapy, spinal manipulation therapy, cognitive behavioral therapy (CBT) or other interventions based on the individual's specific presentation, physical findings and imaging results. (AHRQ 2013; Qassem 2017; Summers 2013)

**Facet Joint Injections (FJIs):** The injection of a local anesthetic and/or corticosteroid into the facet joint capsule. The injection/block applies directly to the facet joint(s) blocked and not to the number of nerves blocked that innervate the facet joint(s). Even though Facet Joint Injections can be used to diagnose facet joint pain, a Medial Branch Block is generally considered more appropriate. A diagnostic Facet Joint Injection/Medial Branch Block is considered positive when there is at least 50% relief of pain for at least the expected minimum duration of the effect of the local anesthetic used.

**Facet Joint Syndrome:** A condition that leads to chronic spinal pain due to unclear etiology. The classic findings of facet joint syndrome are pain in the cervical or thoracic spine or low back radiating to the buttock and posterior thigh, pain due to hyperextension, pain on palpation of joint, and absence of both radiculopathy below the knee and neurologic deficits.

**Facet Nerve Block:** The injection of a local anesthetic and/or corticosteroid along the nerves supplying the facet joints. A diagnostic Medial Branch Block is considered positive when there is at least 50% relief of pain for at least the expected minimum duration of the effect of the local anesthetic used.

**Medial Branch Block:** Refer to [Facet Nerve Block](#).

**Non-Radicular Back Pain:** Pain which does not radiate along a dermatome (sensory distribution of a single root). Appropriate imaging does not reveal signs of spinal nerve root compression and there is no evidence of spinal nerve root compression seen on clinical exam. (Lenahan, 2018)

**Radicular Back Pain:** Pain which radiates from the spine into the extremity along the course of the spinal nerve root. The pain should follow the pattern of a dermatome associated with the irritated nerve root identified. (Lenahan, 2018)

**Radiculopathy:** Radiculopathy is characterized by pain which radiates from the spine to extend outward to cause symptoms away from the source of the spinal nerve root irritation. (Lenahan, 2018)

**Sub-Acute Low Back Pain:** Low back pain with duration of greater than six weeks after injury but no longer than 12 weeks after onset of symptoms. (Goertz et al. 2012)

## Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this policy does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by federal, state, or contractual requirements and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

CPT Code	Description
0213T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, cervical or thoracic; single level
0214T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, cervical or thoracic; second level (List separately in addition to code for primary procedure)
0215T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, cervical or thoracic; third and any additional level(s) (List separately in addition to code for primary procedure)
0216T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, lumbar or sacral; single level
0217T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, lumbar or sacral; second level (List separately in addition to code for primary procedure)
0218T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, lumbar or sacral; third and any additional level(s) (List separately in addition to code for primary procedure)
64490	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), cervical or thoracic; single level
64491	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), cervical or thoracic; second level (List separately in addition to code for primary procedure)
64492	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), cervical or thoracic; third and any additional level(s) (List separately in addition to code for primary procedure)
64493	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), lumbar or sacral; single level
64494	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), lumbar or sacral; second level (List separately in addition to code for primary procedure)
64495	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), lumbar or sacral; third and any additional level(s) (List separately in addition to code for primary procedure)

*CPT® is a registered trademark of the American Medical Association*

Diagnosis Code	Description
M47.812	Spondylosis without myelopathy or radiculopathy, cervical region
M47.813	Spondylosis without myelopathy or radiculopathy, cervicothoracic region
M47.814	Spondylosis without myelopathy or radiculopathy, thoracic region
M47.815	Spondylosis without myelopathy or radiculopathy, thoracolumbar region
M47.816	Spondylosis without myelopathy or radiculopathy, lumbar region
M47.817	Spondylosis without myelopathy or radiculopathy, lumbosacral region
M47.819	Spondylosis without myelopathy or radiculopathy, site unspecified
M47.892	Other spondylosis, cervical region
M47.893	Other spondylosis, cervicothoracic region
M47.894	Other spondylosis, thoracic region
M47.895	Other spondylosis, thoracolumbar region
M47.896	Other spondylosis, lumbar region

Diagnosis Code	Description
M47.897	Other spondylosis, lumbosacral region
M47.899	Other spondylosis, site unspecified
M47.9	Spondylosis, unspecified

## Description of Services

Facet Joint Injections and Medial Nerve Branch Blocks have been used to diagnose and treat pain that arises from facet joints. Imaging guidance, and local anesthetic of the skin over the injection site are used and the physician injects local anesthetic with or without corticosteroid into the facet joint that is identified as the probable source of pain. A medial nerve branch block (MBNB), utilizes the same techniques of imaging guidance and local anesthetic, to target the injection to the medial branch of the peripheral nerve dorsal ramus, which innervate the facet joints of the spine. (Funicello 2019)

These injections generally require local anesthetic only. However, for some patients, Moderate/Conscious Sedation, non-intravenous sedation, and Monitored Anesthesia Care (MAC) may be necessary. These sedation procedures are generally safe when administered by trained, certified providers with appropriate monitoring, but are not without risk. Examples of procedures that typically do not require moderate sedation or an anesthesia care team include but are not limited to epidural steroid injections; epidural blood patch; trigger point injections; shoulder, hip, sacroiliac, facet, and knee joint injections; medial branch nerve blocks; and peripheral nerve blocks (American Society of Anesthesiologists, 2021).

## Clinical Evidence

### Diagnostic Facet Joint/Medial Branch Block Injections

There is limited published high quality evidence regarding the efficacy and safety of Facet Joint / Medial Branch Block injections of the thoracic spine.

Boswell et al. (2015) conducted a systematic review of the diagnostic accuracy of spinal facet joint nerve blocks in chronic spinal pain. The evidence for the diagnostic accuracy of thoracic facet joint nerve blocks is based on three high quality studies (2 prospective, and one retrospective) with  $\geq 80\%$  pain relief as the standard and showed a prevalence ranging from 34% to 48%, and false-positive rates ranging from 42% to 48%. There were no randomized studies, and no studies evaluated single blocks. The authors concluded that there is a paucity of evidence related to these diagnostic injections and the thoracic spine, and more high quality research is needed.

### Therapeutic Facet Joint/Medial Branch Block Injections

A 2018 Hayes technology assessment, updated in 2021, stated that low-quality body of evidence from RCTs of lumbar facet joint injections (FJIs) shows that this technique may provide a significant degree of pain relief and improve function/disability ODI (Oswestry Disability Index) compared with baseline levels in patients with chronic nonresponsive spinal pain in that region. However, the duration of pain relief is variable, with follow-up of 3 to 6 months. The lack of appropriate placebo control groups in the RCTs precluded an accurate assessment of the treatment effect of the intervention; thus, there is considerable uncertainty regarding the magnitude and durability of benefit. The use of FJIs in the lumbar spine region appears to be generally safe, with relatively few minor side effects. Evidence is insufficient to assess the efficacy and safety of FJIs in treating chronic, nonresponsive spinal pain of facet joint origin in the thoracic or cervical spine. Additional studies are needed to evaluate the long-term efficacy and safety of FJIs versus placebo for treatment of chronic lumbar, thoracic, or cervical spinal pain, and to assess the comparative effectiveness of this treatment versus definitive alternatives such as RFD and PRF.

Manchikanti et al. (2016) conducted a systematic evidence-based assessment methodology of controlled trials of diagnostic validity and randomized controlled trials to investigate the diagnostic validity and therapeutic value of lumbar facet joint interventions in managing chronic low back pain. The literature search was extensive utilizing various types of electronic search media, and inclusion criteria encompassed all facet joint interventions performed in a controlled fashion. Across all databases, 16 high quality diagnostic accuracy studies were identified, and multiple studies assessed the influence of multiple factors on diagnostic validity. In contrast to diagnostic validity studies, therapeutic efficacy trials were limited to a total of 14 randomized controlled trials, assessing the efficacy of intraarticular injections, facet or zygapophysial joint nerve blocks, and radiofrequency

neurotomy of the innervation of the facet joints. The pain relief of greater than 50% was the outcome measure for diagnostic accuracy assessment of the controlled studies with ability to perform previously painful movements, whereas, for randomized controlled therapeutic efficacy studies, the primary outcome was significant pain relief and the secondary outcome was a positive change in functional status. For the inclusion of the diagnostic controlled studies, all studies must have utilized either placebo-controlled facet joint blocks or comparative local anesthetic blocks. In assessing therapeutic interventions, short-term and long-term reliefs were defined as either up to 6 months or greater than 6 months of relief. The evidence for the diagnostic validity of lumbar facet joint nerve blocks with at least 75% pain relief with ability to perform previously painful movements was level I, based on a range of level I to V derived from a best evidence synthesis. For therapeutic interventions, the evidence was variable from level II to III, with level II evidence for lumbar facet joint nerve blocks and radiofrequency neurotomy for long-term improvement (greater than 6 months), and level III evidence for lumbosacral zygapophysial joint injections for short-term improvement only. The authors concluded that this review provides significant evidence for the diagnostic validity of facet joint nerve blocks, and moderate evidence for therapeutic radiofrequency neurotomy and therapeutic facet joint nerve blocks in managing chronic low back pain.

Vekaria et al. (2016) conducted a systematic review, including a narrative synthesis to determine if intra-articular facet joint injections with active drug are more effective in reducing back pain and back pain-related disability than a sham procedure or a placebo/inactive injection. The authors also evaluated if intra-articular facet joint injections with active drug or placebo/inactive injection are more effective in reducing back pain and back pain-related disability than conservative treatment. Electronic databases were searched through April 2015. Data were screened and single extraction with independent verification and risk of bias assessment was performed. A total of 391 records were screened, and six trials were included. The trials included were small (range 18-109 participants) and overall, in terms of pain and disability outcomes, most were inconclusive. Only two of the trials report any significant between-group differences in pain or disability outcomes. The authors addressed limitations and flaws in these trials that were clinically diverse and precluded any meta-analysis. A number of methodological issues were identified. The positive results are interpreted with caution and suggest that there is a need for further high-quality work in this area. Further randomized controlled trials of higher methodological standard comparing facet joint injection with a sham/placebo control or conservative treatment are needed from which to base any conclusion on the effectiveness of facet joints in improving pain and disability outcomes.

Manchikanti et al. (2010a) conducted a double-blind randomized controlled trial of facet joint nerve blocks to manage chronic low back pain. One hundred twenty patients were equally randomized to receive either a local anesthetic only (group I) or a local anesthetic mixed with a steroid (group II). Outcomes were measured at baseline, 3, 6, 12, 18- and 24-months post-treatment with the Numeric Rating Scale (NRS), the Oswestry Disability Index 2.0 (ODI), work status, and opioid intake. Significant pain relief ( $\geq 50\%$ ) and functional improvement of  $\geq 40\%$  were observed in 85% in group I, and 90% in group II, at 2-year follow-up. The authors found that both groups had equal relief with or without the addition of steroids to the treatment, and experienced significant pain relief for 82 to 84 weeks of 104 weeks. Treatment required approximately 5 to 6 injections, with an average relief of 19 weeks per episode of treatment. The authors concluded that therapeutic lumbar facet joint nerve blocks, with or without steroids, may provide a management option for chronic function-limiting low back pain of facet joint origin, and additional research is needed.

In a prospective, randomized, double-blind trial by Manchikanti et al. (2007), data from a total of 60 patients were included, with 15 patients in each of four groups. Thirty patients were in a non-steroid group consisting of groups I (control, with lumbar facet joint nerve blocks using bupivacaine) and II (with lumbar facet joint nerve blocks using bupivacaine and Sarapin); another 30 patients were in a steroid group consisting of groups III (with lumbar facet joint nerve blocks using bupivacaine and steroids) and IV (with lumbar facet joint nerve blocks using bupivacaine, Sarapin, and steroids). Significant improvement in pain and functional status were observed at 3 months, 6 months, and 12 months, compared to baseline measurements. The average number of treatments for 1 year was 3.7 with no significant differences among the groups. Duration of average pain relief with each procedure was  $14.8 \pm 7.9$  weeks in the non-steroid group and  $12.5 \pm 3.3$  weeks in the steroid group, with no significant differences among the groups. Therapeutic lumbar facet joint nerve blocks with local anesthetic, with or without Sarapin or steroids, may be effective in the treatment of chronic low back pain of facet joint origin. The findings are limited by lack of placebo comparison group.

## ***Clinical Practice Guidelines***

### **American Association of Neurological Surgeons (AANS) and Congress of Neurological Surgeons (CNS)**

In 2014, the AANS and CNS published updated guidelines on the treatment of degenerative disease of the lumbar spine. AANS/CNS recommended to use a double-injection technique with an improvement threshold of 80% or greater to establish a diagnosis of lumbar facet-mediated pain and noted that there is no evidence to support the use of diagnostic facet blocks as a predictor of lumbar fusion outcome in patients with chronic low-back pain from degenerative lumbar disease.

### **American College of Occupational and Environmental Medicine (ACOEM)**

In the 2021 guidelines for invasive treatments for low back disorders, the ACOEM states the following for therapeutic facet joint injections:

- Not Recommended (I), Moderate Confidence for treatment of acute, subacute low back pain (LBP) or for any radicular pain syndrome.
- Not Recommended (I), Moderate Confidence for treatment of acute, subacute LBP or for any radicular pain syndrome.
- Moderately Not Recommended (B), Moderate Confidence for routine treatment of chronic non-specific axial pain.
- Repeat use of intra-articular therapeutic facet joint injections are Moderately Not Recommended (B), Moderate Confidence for patients who have failed to achieve lasting functional improvements with a prior injection.

### **American Society of Interventional Pain Physicians (ASIPP)**

In 2020, the American Society of Interventional Pain Physicians updated the evidence-based guidelines on use of facet joint interventions for management of chronic spinal pain, and made the following recommendations:

- The use of facet joint nerve blocks for the diagnosis of facet joint pain is recommended for:
  - Lumbar spine (moderate to strong) – based on the results of ten relevant diagnostic accuracy studies with 4 of 10 studies utilizing controlled comparative local anesthetics with concordant pain relief. The prevalence rates ranged from 27% to 40% with false-positive rates of 27% to 47%, with  $\geq 80\%$  pain relief.
  - Cervical spine (moderate) – based on the results of ten relevant diagnostic accuracy studies, 9 of the 10 studies with either controlled comparative local anesthetic blocks or placebo controls with concordant pain relief with a criterion standard of  $\geq 80\%$  were included. The prevalence and false-positive rates ranged from 29% to 60% and of 27% to 63%, with high variability.
  - Thoracic spine (moderate) – based on the results of three relevant diagnostic accuracy studies, with controlled comparative local anesthetic blocks, with concordant pain relief, with a criterion standard of  $\geq 80\%$  were included. The prevalence varied from 34% to 48%, whereas false-positive rates varied from 42% to 58%.
- The use of facet joint nerve blocks for the treatment of facet joint pain is recommended for:
  - Lumbar spine (moderate) – based on the results of 3 relevant randomized controlled trials with long-term improvement.
  - Cervical spine (moderate) – based on the results of one relevant randomized controlled trial and 3 observational studies with long-term improvement.
  - Thoracic spine:
    - Therapeutic facet joint nerve blocks (moderate) – based on the results of 2 randomized controlled trials and 2 observational studies with long-term improvement.
    - Therapeutic intraarticular facet joint injections (weak) – based on one randomized controlled trial with 6-month follow-up and emerging evidence.

### **American Society of Regional Anesthesia and Pain Medicine**

Consensus practice guidelines on interventions for lumbar facet joint pain from a multispecialty, international working group (Cohen et al., 2020) makes the following recommendations and observations:

- A 3-month trial of different conservative treatments before facet joint interventions. Conservative therapies may include medications (e.g., non-steroidal anti-inflammatory drugs, antidepressants), physical treatments (exercise, heat or cold therapy, massage), integrative treatments (acupuncture, spinal manipulation if indicated) and others (nutrition, weight loss, sleep hygiene).
- Lumbar [median branch blocks (MBBs)] should be performed with  $< 0.5$  mL (total volume) to reduce spread to adjacent structures.
- Lumbar [interarticular (IA)] facet joint injections should be performed with a volume of  $< 1.5$  mL to prevent capsular rupture and reduce spread to adjacent structures.



- Recommend against the routine use of therapeutic facet injections, but acknowledge that in patients who may be at risk of adverse consequences from [radiofrequency ablation (RFA)] (e.g., young athletes, older individuals on anticoagulation therapy or with implantable cardiac devices) or in whom there is a strong likelihood of success (e.g., individuals who obtained prolonged relief from previous diagnostic injections with or without steroids), it may be reasonable to add steroids to a block in the hope of deriving intermediate-term relief.
- A > 50% reduction in pain be considered a positive block, but recognize that studies should be performed to determine whether lower cut-offs may prove to be optimal.
- A single block is recommended. There is moderate evidence that dual blocks result in a higher subsequent success rate for medial branch [radiofrequency (RF)], but that the use of a zero-block paradigm results in the highest overall number of patients with a positive response to the RFA.
- Facet joint injections meet criteria for diagnostic interventions for facet-mediated pain but are less predictive than medial branch blocks.
- As diagnostic tools, medial branch blocks suffer from limitations related to aberrant lumbar facet joint innervation.
- Compared with saline controls, both facet and medial branch injections with local anesthetic provide better predictive information for medial branch radiofrequency ablation.

Consensus practice guidelines on interventions for cervical spine facet joint pain from a multispecialty, international working group (Hurley et al., 2021) makes the following recommendations and observations:

- History and physical examination cannot reliably identify painful atlanto-occipital (C0-C1) (AO) or atlanto-axial (C1-C2) (AA) joints, but can guide injection decisions which could confirm the joints as pain generators.
- When selecting targets for blocks, levels should be determined based on clinical presentation (tenderness on palpation, preferably performed under fluoroscopy, pain referral patterns).
- Conservative management before prognostic blocks in patients with at least 3 months of neck pain.
  - At least a 6 week trial of conservative therapy, which may vary based on a personalized medicine paradigm.
  - Concomitant use of conservative measures to accompany prognostic blocks.
- Pre-procedural advanced imaging of the cervical spine with either CT or MRI should be obtained prior to performing AO and AA joint injections to ascertain pathology and help guide needle trajectory.
- $\geq 50\%$  reduction in pain should be considered a positive prognostic block.
  - Non-pain measures such as activity level should not be used as the sole criterion to determine the success or failure of a prognostic block, but may be used in conjunction with pain assessment.
- Fluoroscopy or US should be used for cervical medial branch blocks (MBB).
- For cervical MBB, volumes should be  $\leq 0.3\text{mL}$  (slightly higher volumes may be considered if contrast spread fails to capture the most frequent patterns of medial branch innervation).
- For cervical IA facet joint injection, a total volume not to exceed 1mL including contrast injection (to prevent capsular rupture and/or aberrant injectate spread and enhance the specificity of the block).
- Recommend against the routine use of IA injections, while acknowledging that for patients at risk of adverse events such as young athletes, individuals on anticoagulants, or who have an implantable cardiac device, and/or those with limited access to cervical medial branch RFA it may be reasonable to consider these injections with non-particulate steroid at C2-3.
- The routine use of steroids with cervical MBB should be avoided.

## North American Spine Society (NASS)

A 2016, NASS coverage policy makes the following recommendations for facet joint interventions:

### *Diagnostic Medial Branch Blocks*

- Dual blocks, performed in the same location(s) on two separate occasions, are necessary to confirm the diagnosis due to the unacceptably high false positive rate of single diagnostic anesthetic injections in the spine.
- A second confirmatory injection is indicated only if the first injections produces  $\geq 80\%$  relief of the primary (index) pain and the onset and minimum duration of relief is consistent with the agent employed. This confirmatory block confirms the tested joint as the source if the index pain is reduced by  $> 80\%$ .
- A second injection may also be performed at a different or additional level if the pain is believed to be arising from a different joint (and the pain relief from the initial block was  $< 80\%$ ).

## Therapeutic Medial Branch Blocks

Therapeutic MBBs are performed in the same manner as diagnostic MBBs, and are intended to achieve long term pain management. Current evidence does not support their use as a therapeutic intervention.

The NASS also states that there is no published literature addressing the use of intra-articular injections for thoracic pain and the studies regarding medial branch blocks are limited to retrospective studies and case series. They recommend clinicians weigh the risks and benefits of these interventions compared to other palliative care for patients with thoracic spine pain who appear to have limited remaining treatment outcomes.

In the 2020 Evidence-Based Clinical Guidelines for Multidisciplinary Spine Care: Diagnosis & Treatment of Low Back Pain, the NASS states there is insufficient evidence to make a recommendation for or against the use of the following for facet joint and medial branch block injections:

- Patient-reported reproduction of pain during a zygapophyseal joint injection as a predictor of response to dual diagnostic blocks. Grade of Recommendation: I
- In patients selected for facet joint procedures using diagnostic criteria of physical exam and a response to a single diagnostic intra-articular injection with 50% relief, it is suggested that intra-articular injection of steroids provides no clinically meaningful improvement at 6 months. Grade of Recommendation: B
- In patients selected for facet joint procedures using diagnostic criteria of physical exam and a response to a single diagnostic intra-articular injection with 50% relief, there is insufficient evidence to make a recommendation for or against the use of radiofrequency neurotomy or periarticular phenol injections. Grade of Recommendation: I
- The use of steroid injections into the zygapophyseal joint in patients with chronic back pain and a physical exam suggestive of facet-mediated pain. Grade of Recommendation: I
- The use of uncontrolled medial branch blocks vs. pericapsular blocks for the diagnosis of zygapophyseal joint pain based on the outcomes of medial branch nerves cryoablation. Grade of Recommendation: I
- The use of a 50% reduction in pain following medial branch blockade for the diagnosis of zygapophyseal joint pain. Grade of Recommendation: I

## World Federation of Neurosurgical Societies (WFNS)

In 2020, the WFNS published the Spine Committee Recommendations on Conservative Treatment and Percutaneous Pain Relief in Patients with Lumbar Spinal Stenosis (Fornari et al. 2020). They state that facet joint injections provide a useful diagnostic tool for low back pain.

## U.S. Food and Drug Administration (FDA)

This section is to be used for informational purposes only. FDA approval alone is not a basis for coverage.

Facet joint and medial branch block injections are procedures and therefore not subject to FDA regulation. However devices, drugs, and tests used as part of this procedure may be regulated. Additional information may be obtained from the U.S. Food and Drug Administration - Center for Drug Evaluation and Research (CDER) at:

<https://www.fda.gov/about-fda/fda-organization/center-drug-evaluation-and-research-cder> (Accessed February 10, 2022)

## References

American College of Occupational and Environmental Medicine (ACOEM) Guidelines. Invasive Treatments for Low Back Disorders. 2021.

American Society of Anesthesiologists (ASA). Committee on Pain Medicine. Statement on Anesthetic Care During Interventional Pain Procedures for Adults. October 2005; Amended October 2021. <https://www.asahq.org/standards-and-guidelines/statement-on-anesthetic-care-during-interventional-pain-procedures-for-adults>. Accessed March 1, 2022.

Cohen SP, Bhaskar A, Bhatia A, et al. Consensus practice guidelines on interventions for lumbar facet joint pain from a multispecialty, international working group. Reg Anesth Pain Med. 2020 Jun;45(6):424-467.

Fornari M, Robertson SC, Pereira P, et al. Conservative treatment and percutaneous pain relief techniques in patients with lumbar spinal stenosis: WFNS Spine Committee Recommendations. World Neurosurg X. 2020 Jun 23;7:100079.



Funicello, R. Facet Joint Injections and Medial Branch Blocks [Internet]. Deerfield, IL: Veritas Health. Spine-health; 2019 June 6. Available from: <https://www.spine-health.com/treatment/injections/facet-joint-injections-and-medial-branch-blocks>. Accessed February 22, 2022.

Goertz M, Thorson D, Bonsell J, et al. Institute for Clinical Systems Improvement. Adult acute and subacute low back pain. Updated November 2012.

Hayes, Inc. Health Technology Assessment. Intra-articular Facet Joint Injections for the Treatment of Chronic Nonmalignant Spinal Pain of Facet Joint Origin. Lansdale, PA: April 2018. Updated June 2021.

Hayes, Inc. Medical Technology Directory. Medial Branch Nerve Block Injections for the Treatment of Chronic Nonmalignant Spinal Pain of Facet Joint Origin. Lansdale, PA: January 2018.

Hurley RW, Adams MCB, Barad M, et al. Consensus practice guidelines on interventions for cervical spine (facet) joint pain from a multispecialty international working group. *Regional Anesthesia & Pain Medicine* 2022;47:3-59.

Lenahan et al. Current Guidelines for Management of Low Back Pain. *Clinical Advisor*. 2018.

Manchikanti L, Kaye AD, Sooin A, et al. Comprehensive Evidence-Based Guidelines for Facet Joint Interventions in the Management of Chronic Spinal Pain: American Society of Interventional Pain Physicians (ASIPP) Guidelines Facet Joint Interventions 2020 Guidelines. *Pain Physician*. May 2020; 23(3S): S1-S127.

Manchikanti L, Boswell MV, Singh V, et al. Comprehensive evidence-based guidelines for interventional techniques in the management of chronic spinal pain. *Pain Physician*. 2009.

Manchikanti L, Manchikanti KN, Manchukonda R, et al. Evaluation of lumbar facet joint nerve blocks in the management of chronic low back pain: preliminary report of a randomized, double-blind controlled trial. *Pain Physician*. 2007.

Manchikanti L, Singh V, Falco FJ, et al. Evaluation of lumbar facet joint nerve blocks in managing chronic low back pain: a randomized, double-blind, controlled trial with a 2-year follow-up. *Int J Med Sci*. 2010a.

North American Spine Society (NASS). Evidence Based Clinical Guidelines for Multidisciplinary Spine Care: Diagnosis and Treatment of Low Back Pain. 2020.

North American Spine Society (NASS). Coverage policy recommendations. Facet joint interventions. 2016.

Qassem, Amir, et al. Noninvasive Treatments for Acute, Subacute and Chronic Low Back pain: A Clinical Practice Guideline from the American College of Physicians. *Annals of Internal Medicine*. April 2017.

Resnick, D K., Choudhri, T F., Dailey, A T., et al. Guidelines for the performance of fusion procedures for degenerative disease of the lumbar spine. Part 13: injection therapies, low-back pain, and lumbar fusion. *J Neurosurg Spine*. 2005.

Summers, Jeffrey. International Spine Intervention Society Recommendations for Treatment of Cervical and Lumbar Spine Pain. 2013.

## Policy History/Revision Information

Date	Summary of Changes
08/01/2022	<p><b>Title Change</b></p> <ul style="list-style-type: none"> <li>Previously titled <i>Facet Joint Injections for Spinal Pain</i></li> </ul> <p><b>Coverage Rationale</b></p> <ul style="list-style-type: none"> <li>Revised language to indicate:               <ul style="list-style-type: none"> <li>Diagnostic Facet Joint/Medial Branch Block injections of the cervical, thoracic, and lumbar levels of the spine are proven and medically necessary in certain circumstances; for medical necessity clinical coverage criteria, refer to the InterQual® CP: Procedures, Facet Joint Injection</li> <li>Therapeutic Facet Joint/Medial Branch Block Injections at the cervical, thoracic, and lumbar levels of the spine are unproven and not medically necessary due to insufficient evidence of efficacy and safety</li> </ul> </li> </ul> <p><b>Applicable Codes</b></p> <ul style="list-style-type: none"> <li>Removed ICD-10 diagnosis codes G89.18, G89.28, G97.82, M41.20, M41.22, M41.23, M41.24, M41.25, M41.26, M41.27, M43.00, M43.01, M43.02, M43.03, M43.04, M43.05, M43.06, M43.07, M43.08, M43.09, M43.10, M43.11, M43.12, M43.13, M43.14, M43.15, M43.16, M43.17, M43.18,</li> </ul>

Date	Summary of Changes
	<p>M43.19, M46.90, M46.91, M46.92, M46.93, M46.94, M46.95, M46.96, M46.97, M46.98, M46.99, M47.011, M47.012, M47.013, M47.014, M47.015, M47.016, M47.019, M47.021, M47.022, M47.029, M47.11, M47.12, M47.13, M47.14, M47.15, M47.16, M47.20, M47.21, M47.22, M47.23, M47.24, M47.25, M47.26, M47.27, M47.28, M47.811, M47.818, M47.891, M47.898, M48.50XA, M48.51XA, M48.52XA, M48.53XA, M48.54XA, M48.55XA, M48.56XA, M48.57XA, M48.58XA, M51.14, M51.15, M51.16, M51.17, M51.26, M51.27, M80.0AXA, M80.08XA, M80.8AXA, M80.88XA, M84.48XA, M84.58XA, M84.68XA, M96.1, S12.000A, S12.001A, S12.01XA, S12.02XA, S12.030A, S12.031A, S12.040A, S12.041A, S12.090A, S12.091A, S12.100A, S12.101A, S12.110A, S12.111A, S12.112A, S12.120A, S12.121A, S12.130A, S12.131A, S12.14XA, S12.150A, S12.151A, S12.190A, S12.191A, S12.200A, S12.201A, S12.230A, S12.231A, S12.24XA, S12.250A, S12.251A, S12.290A, S12.291A, S12.300A, S12.301A, S12.330A, S12.331A, S12.34XA, S12.350A, S12.351A, S12.390A, S12.391A, S12.400A, S12.401A, S12.430A, S12.431A, S12.44XA, S12.450A, S12.451A, S12.490A, S12.491A, S12.500A, S12.501A, S12.530A, S12.531A, S12.54XA, S12.550A, S12.551A, S12.590A, S12.591A, S12.600A, S12.601A, S12.630A, S12.631A, S12.64XA, S12.650A, S12.651A, S12.690A, S12.691A, S12.9XXA, S22.000A, S22.001A, S22.002A, S22.008A, S22.009A, S22.010A, S22.011A, S22.012A, S22.018A, S22.019A, S22.020A, S22.021A, S22.022A, S22.028A, S22.029A, S22.030A, S22.031A, S22.032A, S22.038A, S22.039A, S22.040A, S22.041A, S22.042A, S22.048A, S22.049A, S22.050A, S22.051A, S22.052A, S22.058A, S22.059A, S22.060A, S22.061A, S22.062A, S22.068A, S22.069A, S22.070A, S22.071A, S22.072A, S22.078A, S22.079A, S22.080A, S22.081A, S22.082A, S22.088A, S22.089A, S32.000A, S32.001A, S32.002A, S32.008A, S32.009A, S32.010A, S32.011A, S32.012A, S32.018A, S32.019A, S32.020A, S32.021A, S32.022A, S32.028A, S32.029A, S32.030A, S32.031A, S32.032A, S32.038A, S32.039A, S32.040A, S32.041A, S32.042A, S32.048A, S32.049A, S32.050A, S32.051A, S32.052A, S32.058A, S32.059A, S32.10XA, S32.110A, S32.111A, S32.112A, S32.119A, S32.120A, S32.121A, S32.122A, S32.129A, S32.130A, S32.131A, S32.132A, S32.139A, S32.14XA, S32.15XA, S32.16XA, S32.17XA, S32.19XA, and S32.2XXA</p> <p><b>Supporting Information</b></p> <ul style="list-style-type: none"> <li>Updated <i>Description of Services</i>, <i>Clinical Evidence</i>, <i>FDA</i>, and <i>References</i> sections to reflect the most current information</li> <li>Archived previous policy version CS178.B</li> </ul>

## Instructions for Use

This Medical Policy provides assistance in interpreting UnitedHealthcare standard benefit plans. When deciding coverage, the federal, state, or contractual requirements for benefit plan coverage must be referenced as the terms of the federal, state, or contractual requirements for benefit plan coverage may differ from the standard benefit plan. In the event of a conflict, the federal, state, or contractual requirements for benefit plan coverage govern. Before using this policy, please check the federal, state, or contractual requirements for benefit plan coverage. UnitedHealthcare reserves the right to modify its Policies and Guidelines as necessary. This Medical Policy is provided for informational purposes. It does not constitute medical advice.

UnitedHealthcare may also use tools developed by third parties, such as the InterQual® criteria, to assist us in administering health benefits. The UnitedHealthcare Medical Policies are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice.

## Archived Policy Versions

Effective Date	Policy Number	Policy Title
06/01/2021 – 07/31/2022	CS178.B	<a href="#">Facet Joint Injections for Spinal Pain</a>
05/01/2021 – 05/31/2021	CS178.A	<a href="#">Facet Joint Injections for Spinal Pain</a>
01/01/2021 – 04/30/2021	CS039.Q	<a href="#">Epidural Steroid and Facet Injections for Spinal Pain</a>
10/01/2020 – 12/31/2020	CS039.P	<a href="#">Epidural Steroid and Facet Injections for Spinal Pain</a>

Effective Date	Policy Number	Policy Title
06/01/2020 – 09/30/2020	CS039.O	<a href="#">Epidural Steroid and Facet Injections for Spinal Pain</a>
12/01/2019 – 05/31/2020	CS039.N	<a href="#">Epidural Steroid and Facet Injections for Spinal Pain</a>
05/01/2019 – 11/30/2019	CS039.M	<a href="#">Epidural Steroid and Facet Injections for Spinal Pain</a>
11/01/2018 – 04/30/2019	CS039.L	<a href="#">Epidural Steroid and Facet Injections for Spinal Pain</a>
04/01/2018 – 10/31/2018	CS039.K	<a href="#">Epidural Steroid and Facet Injections for Spinal Pain</a>
10/01/2017 – 03/31/2018	CS039.J	<a href="#">Epidural Steroid and Facet Injections for Spinal Pain</a>
04/01/2017 – 09/30/2017	CS039.I	<a href="#">Epidural Steroid and Facet Injections for Spinal Pain</a>
01/01/2017 – 03/31/2017	CS039.H	<a href="#">Epidural Steroid and Facet Injections for Spinal Pain</a>
10/01/2016 – 12/31/2016	CS039.G	<a href="#">Epidural Steroid and Facet Injections for Spinal Pain</a>
05/01/2016 – 09/30/2016	CS039.F	<a href="#">Epidural Steroid and Facet Injections for Spinal Pain</a>
12/01/2015 – 04/30/2016	CS039.E	<a href="#">Epidural Steroid and Facet Injections for Spinal Pain</a>
10/01/2015 – 11/30/2015	CS039.D	<a href="#">Epidural Steroid and Facet Injections for Spinal Pain</a>
07/01/2015 – 09/30/2015	CS039.C	<a href="#">Epidural Steroid and Facet Injections for Spinal Pain</a>
07/01/2014 – 06/30/2015	CS039.B	<a href="#">Epidural Steroid and Facet Injections for Spinal Pain</a>
11/01/2013 – 06/31/2014	CS039.A	<a href="#">Epidural Steroid and Facet Injections for Spinal Pain</a>