

Facet Joint Injections for Spinal Pain

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[Instructions for Use](#)

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Related Commercial Policies
<ul style="list-style-type: none"> Ablative Treatment for Spinal Pain Anesthesia Policy, Professional Epidural Steroid Injections for Spinal Pain Occipital Neuralgia and Headache Treatment Office Based Procedures – Site of Service
Community Plan Policy
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Medicare Advantage Coverage Summary
<ul style="list-style-type: none"> Pain Management and Pain Rehabilitation

Coverage Rationale

Note: This policy addresses Medial Branch Block and intraarticular Facet Joint Injections of the cervical, thoracic and lumbar spines.

The following are proven and medically necessary:

- An initial diagnostic Facet Joint Injection/Medial Branch Block to determine facet joint origin when all of the following criteria are met:
 - Pain is exacerbated by facet loading maneuvers on physical examination (e.g., hyperextension, rotation); and
 - Clinically significant improvement has not occurred (the pain remains at a 3 or more on a 1-10 pain scale) after a minimum of four weeks of conservative care (including but not limited to pharmacotherapy, exercise, or physical therapy)
 - Clinical findings and imaging studies suggest no other cause of the pain (e.g., spinal stenosis with neurogenic claudication, disc herniation with radicular pain, infection, tumor, fracture, pain related to prior surgery); and
 - The spinal motion segment is not fused; and
 - A radiofrequency joint denervation/ablation procedure is being considered
- A second Facet Joint Injection/Medial Branch Block performed to confirm the validity of the clinical response to the initial Facet Joint Injection, when all of the following criteria are met:
 - Administered at the same level and side as the initial block
 - The initial diagnostic Facet Joint Injection produced a positive response as demonstrated when all the following criteria are met:
 - For at least the expected minimum duration of the effect of the local anesthetic; and
 - Functional improvement that is specific to the individual with demonstrable improvement in the physical functions previously limited by the facetogenic pain; and
 - A radiofrequency joint denervation/ablation procedure is being considered

Facet joint injections/Medial Branch Blocks are unproven and not medically necessary due to insufficient evidence of efficacy:

- If radiofrequency ablation procedure not considered as treatment option at the requested level(s)
- For treating spinal pain, after diagnostic injections have been completed
- After two Facet Injections/Medial Branch Blocks at the same level and same side (this is considered therapeutic rather than diagnostic)
- Therapeutic Facet Joint Injections and/or Facet Nerve Block (i.e., Medial Branch Block) for treating chronic spinal pain
- For a second Facet Joint Injection/Medial Branch Block if the initial injection did not confirm the joint as the source of pain
- In the presence of untreated Radiculopathy at the same level as the intended diagnostic injection (with the exception of Radiculopathy caused by a facet joint synovial cyst)
- If injection of volume of local anesthetics exceeds 0.5ml for Medial Branch Blocks
- When performed under ultrasound guidance

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: See [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 the member specific benefit plan document 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)

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Diagnosis Code	Description
G89.18	Other acute postprocedural pain
G89.28	Other chronic postprocedural pain
G97.82	Other postprocedural complications and disorders of nervous system
M41.20	Other idiopathic scoliosis, site unspecified
M41.22	Other idiopathic scoliosis, cervical region

Diagnosis Code	Description
M41.23	Other idiopathic scoliosis, cervicothoracic region
M41.24	Other idiopathic scoliosis, thoracic region
M41.25	Other idiopathic scoliosis, thoracolumbar region
M41.26	Other idiopathic scoliosis, lumbar region
M41.27	Other idiopathic scoliosis, lumbosacral region
M43.00	Spondylolysis, site unspecified
M43.01	Spondylolysis, occipito-atlanto-axial region
M43.02	Spondylolysis, cervical region
M43.03	Spondylolysis, cervicothoracic region
M43.04	Spondylolysis, thoracic region
M43.05	Spondylolysis, thoracolumbar region
M43.06	Spondylolysis, lumbar region
M43.07	Spondylolysis, lumbosacral region
M43.08	Spondylolysis, sacral and sacrococcygeal region
M43.09	Spondylolysis, multiple sites in spine
M43.10	Spondylolisthesis, site unspecified
M43.11	Spondylolisthesis, occipito-atlanto-axial region
M43.12	Spondylolisthesis, cervical region
M43.13	Spondylolisthesis, cervicothoracic region
M43.14	Spondylolisthesis, thoracic region
M43.15	Spondylolisthesis, thoracolumbar region
M43.16	Spondylolisthesis, lumbar region
M43.17	Spondylolisthesis, lumbosacral region
M43.18	Spondylolisthesis, sacral and sacrococcygeal region
M43.19	Spondylolisthesis, multiple sites in spine
M46.90	Unspecified inflammatory spondylopathy, site unspecified
M46.91	Unspecified inflammatory spondylopathy, occipito-atlanto-axial region
M46.92	Unspecified inflammatory spondylopathy, cervical region
M46.93	Unspecified inflammatory spondylopathy, cervicothoracic region
M46.94	Unspecified inflammatory spondylopathy, thoracic region
M46.95	Unspecified inflammatory spondylopathy, thoracolumbar region
M46.96	Unspecified inflammatory spondylopathy, lumbar region
M46.97	Unspecified inflammatory spondylopathy, lumbosacral region
M46.98	Unspecified inflammatory spondylopathy, sacral and sacrococcygeal region
M46.99	Unspecified inflammatory spondylopathy, multiple sites in spine
M47.011	Anterior spinal artery compression syndromes, occipito-atlanto-axial region
M47.012	Anterior spinal artery compression syndromes, cervical region
M47.013	Anterior spinal artery compression syndromes, cervicothoracic region
M47.014	Anterior spinal artery compression syndromes, thoracic region
M47.015	Anterior spinal artery compression syndromes, thoracolumbar region
M47.016	Anterior spinal artery compression syndromes, lumbar region
M47.019	Anterior spinal artery compression syndromes, site unspecified

Diagnosis Code	Description
M47.021	Vertebral artery compression syndromes, occipito-atlanto-axial region
M47.022	Vertebral artery compression syndromes, cervical region
M47.029	Vertebral artery compression syndromes, site unspecified
M47.11	Other spondylosis with myelopathy, occipito-atlanto-axial region
M47.12	Other spondylosis with myelopathy, cervical region
M47.13	Other spondylosis with myelopathy, cervicothoracic region
M47.14	Other spondylosis with myelopathy, thoracic region
M47.15	Other spondylosis with myelopathy, thoracolumbar region
M47.16	Other spondylosis with myelopathy, lumbar region
M47.20	Other spondylosis with radiculopathy, site unspecified
M47.21	Other spondylosis with radiculopathy, occipito-atlanto-axial region
M47.22	Other spondylosis with radiculopathy, cervical region
M47.23	Other spondylosis with radiculopathy, cervicothoracic region
M47.24	Other spondylosis with radiculopathy, thoracic region
M47.25	Other spondylosis with radiculopathy, thoracolumbar region
M47.26	Other spondylosis with radiculopathy, lumbar region
M47.27	Other spondylosis with radiculopathy, lumbosacral region
M47.28	Other spondylosis with radiculopathy, sacral and sacrococcygeal region
M47.811	Spondylosis without myelopathy or radiculopathy, occipito-atlanto-axial region
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
M47.818	Spondylosis without myelopathy or radiculopathy, sacral and sacrococcygeal region
M47.819	Spondylosis without myelopathy or radiculopathy, site unspecified
M47.891	Other spondylosis, occipito-atlanto-axial region
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
M47.897	Other spondylosis, lumbosacral region
M47.898	Other spondylosis, sacral and sacrococcygeal region
M47.899	Other spondylosis, site unspecified
M47.9	Spondylosis, unspecified
M48.50XA	Collapsed vertebra, not elsewhere classified, site unspecified, initial encounter for fracture
M48.51XA	Collapsed vertebra, not elsewhere classified, occipito-atlanto-axial region, initial encounter for fracture
M48.52XA	Collapsed vertebra, not elsewhere classified, cervical region, initial encounter for fracture
M48.53XA	Collapsed vertebra, not elsewhere classified, cervicothoracic region, initial encounter for fracture
M48.54XA	Collapsed vertebra, not elsewhere classified, thoracic region, initial encounter for fracture

Diagnosis Code	Description
M48.55XA	Collapsed vertebra, not elsewhere classified, thoracolumbar region, initial encounter for fracture
M48.56XA	Collapsed vertebra, not elsewhere classified, lumbar region, initial encounter for fracture
M48.57XA	Collapsed vertebra, not elsewhere classified, lumbosacral region, initial encounter for fracture
M48.58XA	Collapsed vertebra, not elsewhere classified, sacral and sacrococcygeal region, initial encounter for fracture
M51.14	Intervertebral disc disorders with radiculopathy, thoracic region
M51.15	Intervertebral disc disorders with radiculopathy, thoracolumbar region
M51.16	Intervertebral disc disorders with radiculopathy, lumbar region
M51.17	Intervertebral disc disorders with radiculopathy, lumbosacral region
M51.26	Other intervertebral disc displacement, lumbar region
M51.27	Other intervertebral disc displacement, lumbosacral region
M80.0AXA	Age-related osteoporosis with current pathological fracture, other site, initial encounter for fracture
M80.08XA	Age-related osteoporosis with current pathological fracture, vertebra(e), initial encounter for fracture
M80.8AXA	Other osteoporosis with current pathological fracture, other site, initial encounter for fracture
M80.88XA	Other osteoporosis with current pathological fracture, vertebra(e), initial encounter for fracture
M84.48XA	Pathological fracture, other site, initial encounter for fracture
M84.58XA	Pathological fracture in neoplastic disease, other specified site, initial encounter for fracture
M84.68XA	Pathological fracture in other disease, other site, initial encounter for fracture
M96.1	Postlaminectomy syndrome, not elsewhere classified
S12.000A	Unspecified displaced fracture of first cervical vertebra, initial encounter for closed fracture
S12.001A	Unspecified nondisplaced fracture of first cervical vertebra, initial encounter for closed fracture
S12.01XA	Stable burst fracture of first cervical vertebra, initial encounter for closed fracture
S12.02XA	Unstable burst fracture of first cervical vertebra, initial encounter for closed fracture
S12.030A	Displaced posterior arch fracture of first cervical vertebra, initial encounter for closed fracture
S12.031A	Nondisplaced posterior arch fracture of first cervical vertebra, initial encounter for closed fracture
S12.040A	Displaced lateral mass fracture of first cervical vertebra, initial encounter for closed fracture
S12.041A	Nondisplaced lateral mass fracture of first cervical vertebra, initial encounter for closed fracture
S12.090A	Other displaced fracture of first cervical vertebra, initial encounter for closed fracture
S12.091A	Other nondisplaced fracture of first cervical vertebra, initial encounter for closed fracture
S12.100A	Unspecified displaced fracture of second cervical vertebra, initial encounter for closed fracture
S12.101A	Unspecified nondisplaced fracture of second cervical vertebra, initial encounter for closed fracture
S12.110A	Anterior displaced Type II dens fracture, initial encounter for closed fracture
S12.111A	Posterior displaced Type II dens fracture, initial encounter for closed fracture
S12.112A	Nondisplaced Type II dens fracture, initial encounter for closed fracture
S12.120A	Other displaced dens fracture, initial encounter for closed fracture
S12.121A	Other nondisplaced dens fracture, initial encounter for closed fracture
S12.130A	Unspecified traumatic displaced spondylolisthesis of second cervical vertebra, initial encounter for closed fracture
S12.131A	Unspecified traumatic nondisplaced spondylolisthesis of second cervical vertebra, initial encounter for closed fracture
S12.14XA	Type III traumatic spondylolisthesis of second cervical vertebra, initial encounter for closed fracture
S12.150A	Other traumatic displaced spondylolisthesis of second cervical vertebra, initial encounter for closed fracture

Diagnosis Code	Description
S12.151A	Other traumatic nondisplaced spondylolisthesis of second cervical vertebra, initial encounter for closed fracture
S12.190A	Other displaced fracture of second cervical vertebra, initial encounter for closed fracture
S12.191A	Other nondisplaced fracture of second cervical vertebra, initial encounter for closed fracture
S12.200A	Unspecified displaced fracture of third cervical vertebra, initial encounter for closed fracture
S12.201A	Unspecified nondisplaced fracture of third cervical vertebra, initial encounter for closed fracture
S12.230A	Unspecified traumatic displaced spondylolisthesis of third cervical vertebra, initial encounter for closed fracture
S12.231A	Unspecified traumatic nondisplaced spondylolisthesis of third cervical vertebra, initial encounter for closed fracture
S12.24XA	Type III traumatic spondylolisthesis of third cervical vertebra, initial encounter for closed fracture
S12.250A	Other traumatic displaced spondylolisthesis of third cervical vertebra, initial encounter for closed fracture
S12.251A	Other traumatic nondisplaced spondylolisthesis of third cervical vertebra, initial encounter for closed fracture
S12.290A	Other displaced fracture of third cervical vertebra, initial encounter for closed fracture
S12.291A	Other nondisplaced fracture of third cervical vertebra, initial encounter for closed fracture
S12.300A	Unspecified displaced fracture of fourth cervical vertebra, initial encounter for closed fracture
S12.301A	Unspecified nondisplaced fracture of fourth cervical vertebra, initial encounter for closed fracture
S12.330A	Unspecified traumatic displaced spondylolisthesis of fourth cervical vertebra, initial encounter for closed fracture
S12.331A	Unspecified traumatic nondisplaced spondylolisthesis of fourth cervical vertebra, initial encounter for closed fracture
S12.34XA	Type III traumatic spondylolisthesis of fourth cervical vertebra, initial encounter for closed fracture
S12.350A	Other traumatic displaced spondylolisthesis of fourth cervical vertebra, initial encounter for closed fracture
S12.351A	Other traumatic nondisplaced spondylolisthesis of fourth cervical vertebra, initial encounter for closed fracture
S12.390A	Other displaced fracture of fourth cervical vertebra, initial encounter for closed fracture
S12.391A	Other nondisplaced fracture of fourth cervical vertebra, initial encounter for closed fracture
S12.400A	Unspecified displaced fracture of fifth cervical vertebra, initial encounter for closed fracture
S12.401A	Unspecified nondisplaced fracture of fifth cervical vertebra, initial encounter for closed fracture
S12.430A	Unspecified traumatic displaced spondylolisthesis of fifth cervical vertebra, initial encounter for closed fracture
S12.431A	Unspecified traumatic nondisplaced spondylolisthesis of fifth cervical vertebra, initial encounter for closed fracture
S12.44XA	Type III traumatic spondylolisthesis of fifth cervical vertebra, initial encounter for closed fracture
S12.450A	Other traumatic displaced spondylolisthesis of fifth cervical vertebra, initial encounter for closed fracture
S12.451A	Other traumatic nondisplaced spondylolisthesis of fifth cervical vertebra, initial encounter for closed fracture
S12.490A	Other displaced fracture of fifth cervical vertebra, initial encounter for closed fracture
S12.491A	Other nondisplaced fracture of fifth cervical vertebra, initial encounter for closed fracture
S12.500A	Unspecified displaced fracture of sixth cervical vertebra, initial encounter for closed fracture
S12.501A	Unspecified nondisplaced fracture of sixth cervical vertebra, initial encounter for closed fracture

Diagnosis Code	Description
S12.530A	Unspecified traumatic displaced spondylolisthesis of sixth cervical vertebra, initial encounter for closed fracture
S12.531A	Unspecified traumatic nondisplaced spondylolisthesis of sixth cervical vertebra, initial encounter for closed fracture
S12.54XA	Type III traumatic spondylolisthesis of sixth cervical vertebra, initial encounter for closed fracture
S12.550A	Other traumatic displaced spondylolisthesis of sixth cervical vertebra, initial encounter for closed fracture
S12.551A	Other traumatic nondisplaced spondylolisthesis of sixth cervical vertebra, initial encounter for closed fracture
S12.590A	Other displaced fracture of sixth cervical vertebra, initial encounter for closed fracture
S12.591A	Other nondisplaced fracture of sixth cervical vertebra, initial encounter for closed fracture
S12.600A	Unspecified displaced fracture of seventh cervical vertebra, initial encounter for closed fracture
S12.601A	Unspecified nondisplaced fracture of seventh cervical vertebra, initial encounter for closed fracture
S12.630A	Unspecified traumatic displaced spondylolisthesis of seventh cervical vertebra, initial encounter for closed fracture
S12.631A	Unspecified traumatic nondisplaced spondylolisthesis of seventh cervical vertebra, initial encounter for closed fracture
S12.64XA	Type III traumatic spondylolisthesis of seventh cervical vertebra, initial encounter for closed fracture
S12.650A	Other traumatic displaced spondylolisthesis of seventh cervical vertebra, initial encounter for closed fracture
S12.651A	Other traumatic nondisplaced spondylolisthesis of seventh cervical vertebra, initial encounter for closed fracture
S12.690A	Other displaced fracture of seventh cervical vertebra, initial encounter for closed fracture
S12.691A	Other nondisplaced fracture of seventh cervical vertebra, initial encounter for closed fracture
S12.9XXA	Fracture of neck, unspecified, initial encounter
S22.000A	Wedge compression fracture of unspecified thoracic vertebra, initial encounter for closed fracture
S22.001A	Stable burst fracture of unspecified thoracic vertebra, initial encounter for closed fracture
S22.002A	Unstable burst fracture of unspecified thoracic vertebra, initial encounter for closed fracture
S22.008A	Other fracture of unspecified thoracic vertebra, initial encounter for closed fracture
S22.009A	Unspecified fracture of unspecified thoracic vertebra, initial encounter for closed fracture
S22.010A	Wedge compression fracture of first thoracic vertebra, initial encounter for closed fracture
S22.011A	Stable burst fracture of first thoracic vertebra, initial encounter for closed fracture
S22.012A	Unstable burst fracture of first thoracic vertebra, initial encounter for closed fracture
S22.018A	Other fracture of first thoracic vertebra, initial encounter for closed fracture
S22.019A	Unspecified fracture of first thoracic vertebra, initial encounter for closed fracture
S22.020A	Wedge compression fracture of second thoracic vertebra, initial encounter for closed fracture
S22.021A	Stable burst fracture of second thoracic vertebra, initial encounter for closed fracture
S22.022A	Unstable burst fracture of second thoracic vertebra, initial encounter for closed fracture
S22.028A	Other fracture of second thoracic vertebra, initial encounter for closed fracture
S22.029A	Unspecified fracture of second thoracic vertebra, initial encounter for closed fracture
S22.030A	Wedge compression fracture of third thoracic vertebra, initial encounter for closed fracture
S22.031A	Stable burst fracture of third thoracic vertebra, initial encounter for closed fracture
S22.032A	Unstable burst fracture of third thoracic vertebra, initial encounter for closed fracture
S22.038A	Other fracture of third thoracic vertebra, initial encounter for closed fracture

Diagnosis Code	Description
S22.039A	Unspecified fracture of third thoracic vertebra, initial encounter for closed fracture
S22.040A	Wedge compression fracture of fourth thoracic vertebra, initial encounter for closed fracture
S22.041A	Stable burst fracture of fourth thoracic vertebra, initial encounter for closed fracture
S22.042A	Unstable burst fracture of fourth thoracic vertebra, initial encounter for closed fracture
S22.048A	Other fracture of fourth thoracic vertebra, initial encounter for closed fracture
S22.049A	Unspecified fracture of fourth thoracic vertebra, initial encounter for closed fracture
S22.050A	Wedge compression fracture of T5-T6 vertebra, initial encounter for closed fracture
S22.051A	Stable burst fracture of T5-T6 vertebra, initial encounter for closed fracture
S22.052A	Unstable burst fracture of T5-T6 vertebra, initial encounter for closed fracture
S22.058A	Other fracture of T5-T6 vertebra, initial encounter for closed fracture
S22.059A	Unspecified fracture of T5-T6 vertebra, initial encounter for closed fracture
S22.060A	Wedge compression fracture of T7-T8 vertebra, initial encounter for closed fracture
S22.061A	Stable burst fracture of T7-T8 vertebra, initial encounter for closed fracture
S22.062A	Unstable burst fracture of T7-T8 vertebra, initial encounter for closed fracture
S22.068A	Other fracture of T7-T8 thoracic vertebra, initial encounter for closed fracture
S22.069A	Unspecified fracture of T7-T8 vertebra, initial encounter for closed fracture
S22.070A	Wedge compression fracture of T9-T10 vertebra, initial encounter for closed fracture
S22.071A	Stable burst fracture of T9-T10 vertebra, initial encounter for closed fracture
S22.072A	Unstable burst fracture of T9-T10 vertebra, initial encounter for closed fracture
S22.078A	Other fracture of T9-T10 vertebra, initial encounter for closed fracture
S22.079A	Unspecified fracture of T9-T10 vertebra, initial encounter for closed fracture
S22.080A	Wedge compression fracture of T11-T12 vertebra, initial encounter for closed fracture
S22.081A	Stable burst fracture of T11-T12 vertebra, initial encounter for closed fracture
S22.082A	Unstable burst fracture of T11-T12 vertebra, initial encounter for closed fracture
S22.088A	Other fracture of T11-T12 vertebra, initial encounter for closed fracture
S22.089A	Unspecified fracture of T11-T12 vertebra, initial encounter for closed fracture
S32.000A	Wedge compression fracture of unspecified lumbar vertebra, initial encounter for closed fracture
S32.001A	Stable burst fracture of unspecified lumbar vertebra, initial encounter for closed fracture
S32.002A	Unstable burst fracture of unspecified lumbar vertebra, initial encounter for closed fracture
S32.008A	Other fracture of unspecified lumbar vertebra, initial encounter for closed fracture
S32.009A	Unspecified fracture of unspecified lumbar vertebra, initial encounter for closed fracture
S32.010A	Wedge compression fracture of first lumbar vertebra, initial encounter for closed fracture
S32.011A	Stable burst fracture of first lumbar vertebra, initial encounter for closed fracture
S32.012A	Unstable burst fracture of first lumbar vertebra, initial encounter for closed fracture
S32.018A	Other fracture of first lumbar vertebra, initial encounter for closed fracture
S32.019A	Unspecified fracture of first lumbar vertebra, initial encounter for closed fracture
S32.020A	Wedge compression fracture of second lumbar vertebra, initial encounter for closed fracture
S32.021A	Stable burst fracture of second lumbar vertebra, initial encounter for closed fracture
S32.022A	Unstable burst fracture of second lumbar vertebra, initial encounter for closed fracture
S32.028A	Other fracture of second lumbar vertebra, initial encounter for closed fracture
S32.029A	Unspecified fracture of second lumbar vertebra, initial encounter for closed fracture
S32.030A	Wedge compression fracture of third lumbar vertebra, initial encounter for closed fracture

Diagnosis Code	Description
S32.031A	Stable burst fracture of third lumbar vertebra, initial encounter for closed fracture
S32.032A	Unstable burst fracture of third lumbar vertebra, initial encounter for closed fracture
S32.038A	Other fracture of third lumbar vertebra, initial encounter for closed fracture
S32.039A	Unspecified fracture of third lumbar vertebra, initial encounter for closed fracture
S32.040A	Wedge compression fracture of fourth lumbar vertebra, initial encounter for closed fracture
S32.041A	Stable burst fracture of fourth lumbar vertebra, initial encounter for closed fracture
S32.042A	Unstable burst fracture of fourth lumbar vertebra, initial encounter for closed fracture
S32.048A	Other fracture of fourth lumbar vertebra, initial encounter for closed fracture
S32.049A	Unspecified fracture of fourth lumbar vertebra, initial encounter for closed fracture
S32.050A	Wedge compression fracture of fifth lumbar vertebra, initial encounter for closed fracture
S32.051A	Stable burst fracture of fifth lumbar vertebra, initial encounter for closed fracture
S32.052A	Unstable burst fracture of fifth lumbar vertebra, initial encounter for closed fracture
S32.058A	Other fracture of fifth lumbar vertebra, initial encounter for closed fracture
S32.059A	Unspecified fracture of fifth lumbar vertebra, initial encounter for closed fracture
S32.10XA	Unspecified fracture of sacrum, initial encounter for closed fracture
S32.110A	Nondisplaced Zone I fracture of sacrum, initial encounter for closed fracture
S32.111A	Minimally displaced Zone I fracture of sacrum, initial encounter for closed fracture
S32.112A	Severely displaced Zone I fracture of sacrum, initial encounter for closed fracture
S32.119A	Unspecified Zone I fracture of sacrum, initial encounter for closed fracture
S32.120A	Nondisplaced Zone II fracture of sacrum, initial encounter for closed fracture
S32.121A	Minimally displaced Zone II fracture of sacrum, initial encounter for closed fracture
S32.122A	Severely displaced Zone II fracture of sacrum, initial encounter for closed fracture
S32.129A	Unspecified Zone II fracture of sacrum, initial encounter for closed fracture
S32.130A	Nondisplaced Zone III fracture of sacrum, initial encounter for closed fracture
S32.131A	Minimally displaced Zone III fracture of sacrum, initial encounter for closed fracture
S32.132A	Severely displaced Zone III fracture of sacrum, initial encounter for closed fracture
S32.139A	Unspecified Zone III fracture of sacrum, initial encounter for closed fracture
S32.14XA	Type 1 fracture of sacrum, initial encounter for closed fracture
S32.15XA	Type 2 fracture of sacrum, initial encounter for closed fracture
S32.16XA	Type 3 fracture of sacrum, initial encounter for closed fracture
S32.17XA	Type 4 fracture of sacrum, initial encounter for closed fracture
S32.19XA	Other fracture of sacrum, initial encounter for closed fracture
S32.2XXA	Fracture of coccyx, initial encounter for closed fracture

Description of Services

Spine pain, in particular, pain in the lower back is a common concern, affecting up to 90% of Americans at some point in their lifetime. The vast majority of episodes are mild and self-limited (Chronic nonmalignant back pain is defined as pain lasting 3-6 months or more that is not due to cancer). Up to 50% of affected persons will have more than one episode. Low back pain is not a specific disease; rather it is a symptom that may occur from a variety of different processes, including but not limited to spinal stenosis, disc herniation or degenerative changes in the vertebrae. Management of back pain that is persistent and disabling despite the use of recommended conservative treatment is challenging. Epidural steroid injections, and facet joint injections and blocks are among the treatments that have been employed as an alternative to more invasive interventions. (Hayes, 2018)

Facet blocks have been used as diagnostic or therapeutic procedure. Facet blocks using short-acting local anesthetics can be used to diagnose facet (zygapophyseal) joint syndrome as the cause of chronic back pain. Facet blocks utilizing long acting local anesthetics, anti-inflammatory agents such as corticosteroids, or nerve ablating techniques such as radiofrequency lesioning have been investigated for treatment of chronic back pain attributed to facet joint syndrome. (Hayes, 2018)

Clinical Evidence

Ultrasound Guidance

There is no evidence in the peer-reviewed literature demonstrating the overall health benefit of the use of ultrasonic guidance during spinal injections over the use of fluoroscopy or CT-guidance. Furthermore, clinical guidelines do not recommend the use of ultrasound-guided facet joint injections. Well-designed randomized controlled trials (RCTs) that compare ultrasound guidance to fluoroscopy or computed tomography guided facet joint injections are needed to demonstrate improved net health outcomes with ultrasound guided injections.

Ultrasound-guided spine injection therapy is a comparatively new technique in the management of axial and radicular pain from degenerative lumbar spinal conditions and may be a reasonable alternative to conventional methods of injection guidance. In 2020, Tay et al. completed a retrospective clinical audit of 42 patients who underwent ultrasound-guided lumbar spinal injection at a single institution for chronic axial and radicular pain in an acute public hospital sports medicine center between June 1, 2018 and June 1, 2019. 27 patients (64.3%) receiving facet joint injections and 18 patients (42.9%) receiving nerve root injections. The majority (90.5%) of patients experienced an improvement of >30% in pain intensity at 3 months post-injection, using the Numerical Rating Scale pain score ($p < 0.001$); with 40 patients (95.2%) reporting a reduction in Oswestry Disability Index score ($p < 0.001$). No complications were reported. It was concluded that the experience of this institution confirms the safety, feasibility, and effectiveness of ultrasound-guided lumbar spinal injection for the treatment of axial and radicular pain. The authors also note that ultrasound-guided spinal injection remains technically challenging and requires a steep learning phase, as well as careful patient selection, and that the study was not designed to directly compare outcomes for ultrasound-guided injection against the conventional standard of care. A larger dataset is required to confirm the efficacy of ultrasound-guided spine injection and the rate of adverse events, and a prospective study would be useful to determine clinical factors predicting success. This study is also limited by lack of comparison group and a small number of participants standard of care. A larger dataset is required to confirm the efficacy of ultrasound-guided spine injection and the rate of adverse events, and a prospective study would be useful to determine clinical factors predicting success. This study is also limited by lack of comparison group and a small number of participants.

Wu et al (2016) conducted a meta-analysis of controlled trials (randomized and non-randomized) to assess the comparative effectiveness of ultrasound-guided (USG) versus computed tomography (CT)/fluoroscopy-guided lumbar facet joint injections in adults. Of 103 records screened, 3 studies were included, with a total of 202 adults with facet joint pain. The overall quality of these studies was not rated, though the authors noted that the lack of blinding may have resulted in bias. The outcomes assessed included change in pain scores (visual analog scale [VAS]), change in Modified Oswestry Disability scores, and mean duration of the procedure. No statistically significant differences between groups were found for these outcomes. The authors concluded that while USG injection is feasible and minimizes exposure of radiation to patients and practitioners in the lumbar facet joint injection process. This review suggested no significant differences in pain and functional improvement were noted between the USG and CT-/fluoroscopy-guided techniques in facet joint injection. This meta-analysis was limited by the relatively small sample size and the small number of studies included.

Facet Injections

There is insufficient evidence to demonstrate that therapeutic facet joint injections are effective in the treatment of back pain, evidence of the safety and efficacy of therapeutic facet joint injections for back pain is lacking and of low quality. Evidence for the use of facet injection for diagnostic purpose presented in this section support the proven coverage rationale.

Cohen et al (2018) conducted a multi-center randomized controlled trial to evaluate the effectiveness of diagnostic lumbar facet joint or nerve blocks and their predictive value before radiofrequency denervation. A total of 229 participants were randomized in a 2:2:1 ratio to receive intraarticular facet injections with bupivacaine and steroid, medial branch blocks, or saline. Then, participants who had a positive facet joint injection test (a positive test was defined as 50% or more pain relief sustained for at least three hours, to control for concomitant pain generators) and remained symptomatic went on to receive a therapeutic

radiofrequency denervation, while all participants in the saline group who remained symptomatic received therapeutic radiofrequency denervation. This complex study design allowed the authors to test the usefulness of facet joint injection as a guide to decide the indication to a therapeutic radiofrequency denervation. Inclusion criteria were 18 yrs. of age or older, predominantly axial low back pain for 3 months or more, average back pain score more than 3 out of 10 over the last week on a numerical rating scale, failure to respond to more conservative therapy (e.g., physical therapy, integrative therapy, and pharmacotherapy) and paraspinal tenderness. Excluded from participation were patients with a known, specific etiology for low back pain (e.g., significant spinal stenosis or grade II or III spondylolisthesis), focal neurologic signs or symptoms, a positive response to previous spine interventions such as epidural steroids or sacroiliac joint blocks for the current pain episode, previous facet interventions, lumbar spine fusion, untreated coagulopathy, and concomitant medical condition likely to undermine the diagnostic work-up or treatment response. The proportions of positive blocks were higher in the intraarticular (54%) and medial branch (55%) groups than in the placebo group (30%), suggesting that the response to the test injection went above and beyond a placebo effect. At one month, results showed a mean reduction in average numerical rating scale pain score of 0.7 ± 1.6 in the intraarticular group, 0.7 ± 1.8 in the medial branch block group, and 0.7 ± 1.5 in the placebo group, suggesting a lack of therapeutic benefit for facet injections at one month, results showed a mean reduction in average numerical rating scale pain score at 1 month was 0.7 ± 1.6 in the intraarticular group, 0.7 ± 1.8 in the medial branch block group, and 0.7 ± 1.5 in the placebo group, suggesting a lack of therapeutic benefit for facet injections at one month. Radiofrequency ablation was performed on 135 patients (45, 48, and 42 patients from the intraarticular, medial branch, and saline groups, respectively). At 3 months, the proportions of positive responders in the intraarticular, medial branch block, and placebo groups were 51%, 56%, and 24%, respectively. This finding suggests that the use of diagnostic facet joint injection improves patient's outcomes when used to direct the selection of patients who should receive radiofrequency ablation. Limitations included fact that study was designed primarily as a comparative-effectiveness study and therefore utilized liberal selection criteria to enhance generalization, unlike studies designed to show efficacy, which ideally employ rigorous criteria. The authors concluded that the study establishes that facet joint or nerve blocks are not therapeutic and that the higher responder rates in the two facet injection groups suggest that diagnostic facet blocks might provide prognostic value before radiofrequency ablation.

A Hayes technology report (2018) 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) 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. Additional studies are needed to evaluate the long-term efficacy and safety of therapeutic FJIs versus placebo for treatment of chronic lumbar spinal pain, and to assess the comparative effectiveness of this treatment versus definitive alternatives.

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 mo or greater than 6 mo 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 mo), 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). The authors 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.

In 2015, Boswell et al. reported a systematic review to determine the diagnostic accuracy of spinal facet joint nerve blocks in chronic spinal pain. The search strategy emphasized chronic cervical, midback, and low back pain, facet or zygapophysial joint pain. Also included were cervical, thoracic, and lumbar facet injections, and cervical, thoracic, and lumbar facet joint nerve blocks. The available evidence is Level I for lumbar facet joint nerve blocks with the inclusion of a total of 17 studies with dual diagnostic blocks, with at least 75% pain relief with an average prevalence of 16% to 41%. The evidence for diagnosis of cervical facet joint pain with cervical facet joint nerve blocks is Level II based on a total of 11 controlled diagnostic accuracy studies, with significant variability among the prevalence in a heterogeneous population with internal inconsistency. The prevalence rates ranged from 36% to 67% with at least 80% pain relief as the criterion standard and a false-positive rate of 27% to 63%. The level of evidence for the diagnostic accuracy of thoracic facet joint nerve blocks is Level II with 80% or higher pain relief as the criterion standard with a prevalence ranging from 34% to 48% and false-positive rates ranging from 42% to 48%. The reviewers concluded the evidence is Level I for the diagnostic accuracy of lumbar facet joint nerve blocks, Level II for cervical facet joint nerve blocks, and Level II for thoracic facet joint nerve blocks in assessment of chronic spinal pain. The shortcomings of this systematic review include a paucity of literature related to the thoracic spine, continued debate on an appropriate gold standard, appropriateness of diagnostic blocks, and utility.

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 1, 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.

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 4 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 +/- 7.9 weeks in the non-steroid group and 12.5 +/- 3.3 weeks in the steroid group, with no significant differences among the groups. The authors concluded that the 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.

Laslett et al. (2006) conducted a secondary analysis of a prospective blinded study investigating diagnostic accuracy of clinical variables, to seek evidence of variables valuable as predictors of screening zygapophysial joint (ZJ) block outcomes. One hundred and twenty patients completed pain drawings, questionnaires, and a clinical examination before screening lumbar ZJ blocks. History, demographic and clinical variables were evaluated in cross tabulation and regression analyses with diagnostic accuracy values calculated for variables and variable clusters in relation to different pain reduction standards. At the 75% pain reduction standard, 24.5% responded to screening ZJ blocks and 10.8% responded at the 95% standard. The centralization

phenomenon is not associated with pain reduction using any standard. No variables were useful predictors of post-ZJ block pain reduction of less than 90%. Seven clinical findings were associated with 95% pain reduction after blocks. Five useful clinical prediction rules (CPRs) were found for ruling out a 95% pain reduction (100% sensitivity), and one CPR had a likelihood ratio of 9.7, producing a fivefold improvement in posttest probability. The authors concluded that a negative extension rotation test, the centralization phenomenon, and four CPRs effectively rule out pain ablation after screening ZJ block. One CPR generates a fivefold improvement in posttest probability of a negative or positive response to ZJ block.

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)

Evidence-based clinical practice guidelines published in 2008 by the ACOEM considered interventions and practices used in the treatment of low back disorders, including various injection therapies and techniques. The guidelines state that therapeutic facet joint injections for acute, sub-acute, chronic low back pain or radicular pain syndrome are not recommended (Manchikanti et al).

American Society of Interventional Pain Physicians (ASIPP)

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

- Use of facet joint nerve blocks for diagnosis of facet joint pain is recommended for:
 - Lumbar spine (moderate to strong)
 - Cervical spine (moderate)
 - Thoracic spine (moderate)
- Use of facet joint nerve blocks for treatment of:
 - Lumbar spine (moderate)
 - Cervical spine (moderate)
 - Thoracic spine (weak to moderate)

Criterion standard of $\geq 80\%$ pain relief was included for these recommendations.

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:

- We recommend 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.
- We recommend against the routine use of therapeutic facet injections, although we 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.
- This committee recommends that a $> 50\%$ reduction in pain be considered a positive block, although we recognize that studies should be performed to determine whether lower cut-offs may prove to be optimal.

- The committee recommends a single block. We found 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 medical branch blocks
- As diagnostic tools, medical 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

North American Spine Society (NASS)

In 2016, NASS published coverage policy recommendations for facet joint interventions.

- NASS includes pain duration of at least 4 weeks, and/or inability to tolerate or failure to respond to 4 weeks of non-invasive care as a criteria for facet joint interventions.
- NASS concludes that current evidence does not support therapeutic facet joint (medical branch blocks) in the treatment of 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.

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 January 26, 2021)

References

- American College of Occupational and Environmental Medicine (ACOEM). Low back disorders. Occupational medicine practice guidelines: evaluation and management of common health problems and functional recovery in workers. 2007.
- Boswell MV, Manchikanti L, Kaye AD, et al. A best-evidence systematic appraisal of the diagnostic accuracy and utility of facet (zygapophysial) joint injections in chronic spinal pain. *Pain Physician* 2015; 18:E497-E533.
- 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.
- Cohen SP, Doshi TL, Constantinescu OC, et al. Effectiveness of lumbar facet joint blocks and predictive value before radiofrequency denervation. *Anesthesiology*. 2018;129(3):517-535.
- 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. Medical Technology Directory. Intra-articular Facet Joint Injections for the Treatment of Chronic Nonmalignant Spinal Pain of Facet Joint Origin. Lansdale, PA: April 2018.
- 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.
- Laslett M, McDonald B, April CN, et al. Clinical predictors of screening lumbar zygapophysial joint blocks: development of clinical prediction rules. *The Spine Journal* 6 (2006) 370–379.
- Lenahan et al. Current Guidelines for Management of Low Back Pain. *Clinical Advisor*. 2018.
- Manchikanti L, Kaye AD, Soin 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). 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.

Tay M, Sian SCSH, Eow CZ, et al. Ultrasound-guided lumbar spine injection for axial and radicular pain: A Single Institution Early Experience. *Asian Spine J*. 2020 Sep 3. Vekaria R, Bhatt R, Ellard DR, et al. Intra-articular facet joint injections for low back pain: a systematic review. *Eur Spine J*. 2016.

Wu T, Zhao WH, Dong Y, et al. Effectiveness of ultrasound-guided versus fluoroscopy or computed tomography scanning guidance in lumbar facet joint injections in adults with facet joint syndrome: a meta-analysis of controlled trials. *Arch Phys Med Rehabil*. 2016.

Policy History/Revision Information

Date	Summary of Changes
05/01/2021	<p>Template Update</p> <ul style="list-style-type: none"> • Reorganized and renamed policy previously titled <i>Epidural Steroid and Facet Injections for Spinal Pain</i>: <ul style="list-style-type: none"> ○ Removed content pertaining to epidural steroid injections; added reference link to the Medical Policy titled <i>Epidural Steroid Injections for Spinal Pain</i> for applicable coverage guidelines • Replaced content sub-heading titled “Professional Societies” with “Clinical Practice Guidelines” in <i>Clinical Evidence</i> section • Removed <i>CMS</i> section • Replaced reference to “MCG™ Care Guidelines” with “InterQual® criteria” in <i>Instructions for Use</i> <p>Coverage Rationale</p> <ul style="list-style-type: none"> • Revised language to indicate: <ul style="list-style-type: none"> ○ This policy addresses Medial Branch Block and intraarticular Facet Joint Injections of the cervical, thoracic, and lumbar spines ○ The following are proven and medically necessary: <ul style="list-style-type: none"> ▪ An initial diagnostic Facet Joint Injection/Medial Branch Block to determine facet joint origin when all of the following criteria are met: <ul style="list-style-type: none"> – Pain is exacerbated by facet loading maneuvers on physical examination (e.g., hyperextension, rotation) – Clinically significant improvement has not occurred (the pain remains at a 3 or more on a 1-10 pain scale) after a minimum of four weeks of conservative care (including but not limited to pharmacotherapy, exercise, or physical therapy) – Clinical findings and imaging studies suggest no other cause of the pain (e.g., spinal stenosis with neurogenic claudication, disc herniation with Radicular Pain, infection, tumor, fracture, pain related to prior surgery) – The spinal motion segment is not fused – A radiofrequency joint denervation/ablation procedure is being considered ▪ A second Facet Joint Injection/Medial Branch Block performed to confirm the validity of the clinical response to the initial Facet Joint Injection, when all of the following criteria are met: <ul style="list-style-type: none"> – Administered at the same level and side as the initial block

Date	Summary of Changes
	<ul style="list-style-type: none"> - The initial diagnostic Facet Joint Injection produced a positive response as demonstrated when all the following criteria are met: <ul style="list-style-type: none"> • For at least the expected minimum duration of the effect of the local anesthetic • Functional improvement that is specific to the individual with demonstrable improvement in the physical functions previously limited by the facetogenic pain • A radiofrequency joint denervation/ablation procedure is being considered ○ Facet joint injections/medial branch blocks are unproven and not medically necessary due to insufficient evidence of efficacy: <ul style="list-style-type: none"> ▪ If radiofrequency ablation procedure not considered as treatment option at the requested level(s) ▪ For treating spinal pain after diagnostic injections have been completed ▪ After two Facet Injections/Medial Branch Blocks at the same level and same side (this is considered therapeutic rather than diagnostic) ▪ Therapeutic Facet Joint Injections and/or Facet Nerve Block (i.e., Medial Branch Block) for treating chronic spinal pain ▪ For a second Facet Joint Injection/Medial Branch Block if the initial injection did not confirm the joint as the source of pain ▪ In the presence of untreated radiculopathy at the same level as the intended diagnostic injection (with the exception of radiculopathy caused by a facet joint synovial cyst) ▪ If injection of volume of local anesthetics exceeds 0.5 ml for Medial Branch Blocks ▪ When performed under ultrasound guidance <p>Definitions</p> <ul style="list-style-type: none"> • Updated definition of: <ul style="list-style-type: none"> ○ Facet Joint Injections (FJIs) ○ Facet Joint Syndrome ○ Facet Nerve Block <p>Applicable Codes</p> <ul style="list-style-type: none"> • Added ICD-10 diagnosis codes G89.18, G89.28, G97.82, M51.14, M51.15, M51.16, and M51.17 • Removed ICD-10 diagnosis codes M12.88, M41.112, M41.113, M41.114, M41.115, M41.116, M41.117, M41.119, M41.122, M41.123, M41.124, M41.125, M41.126, M41.127, and M41.129 <p>Supporting Information</p> <ul style="list-style-type: none"> • Updated <i>Description of Services</i>, <i>Clinical Evidence</i>, and <i>References</i> sections to reflect the most current information • Archived previous policy version 2021T0004JJ

Instructions for Use

This Medical Policy provides assistance in interpreting UnitedHealthcare standard benefit plans. When deciding coverage, the member specific benefit plan document must be referenced as the terms of the member specific benefit plan may differ from the standard plan. In the event of a conflict, the member specific benefit plan document governs. Before using this policy, please check the member specific benefit plan document and any applicable federal or state mandates. 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.

This Medical Policy may also be applied to Medicare Advantage plans in certain instances. In the absence of a Medicare National Coverage Determination (NCD), Local Coverage Determination (LCD), or other Medicare coverage guidance, CMS allows a Medicare Advantage Organization (MAO) to create its own coverage determinations, using objective evidence-based rationale relying on authoritative evidence ([Medicare IOM Pub. No. 100-16, Ch. 4, §90.5](#)).

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