National Imaging Associates, Inc.*

2022
Magellan Clinical Guidelines For Medical Necessity Review

INTERVENTIONAL PAIN MANAGEMENT (IPM) GUIDELINES - HMSA

Effective January 1 – December 31, 2022

*National Imaging Associates, Inc. (NIA) is a subsidiary of Magellan Healthcare, Inc.

Magellan HAWAI'I

Guidelines for Clinical Review Determination

Preamble

Magellan is committed to the philosophy of supporting safe and effective treatment for patients. The medical necessity criteria that follow are guidelines for the provision of diagnostic imaging. These criteria are designed to guide both providers and reviewers to the most appropriate diagnostic tests based on a patient's unique circumstances. In all cases, clinical judgment consistent with the standards of good medical practice will be used when applying the guidelines. Determinations are made based on both the guideline and clinical information provided at the time of the request. It is expected that medical necessity decisions may change as new evidence-based information is provided or based on unique aspects of the patient's condition. The treating clinician has final authority and responsibility for treatment decisions regarding the care of the patient.

Guideline Development Process

These medical necessity criteria were developed by Magellan Healthcare for the purpose of making clinical review determinations for requests for therapies and diagnostic procedures. The developers of the criteria sets included representatives from the disciplines of radiology, internal medicine, nursing, cardiology, and other specialty groups. Magellan's guidelines are reviewed yearly and modified when necessary following a literature search of pertinent and established clinical guidelines and accepted diagnostic imaging practices.

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Table of contents

INTERVENTIONAL PAIN MANAGEMENT (IPM) GUIDELINES

EPIDURAL SPINE INJECTIONS

CPT Codes:
Cervical Thoracic Region: 62320, 62321, 64479 (+64480)
Lumbar Sacral Region: 62322, 62323, 64483 (+64484)

INDICATIONS:

EPIDURAL INJECTIONS OR SELECTIVE NERVE BLOCKS (caudal, interlaminar, and transforaminal)
(Injection of local anesthetics with corticosteroids)

- Pain causing functional disability or average pain levels of ≥ 6 on a scale of 0 – 10 (Manchikanti, 2013, 2011; NASS, 2013, 2012; Summers, 2013); **AND**
    - Diagnostic transforaminal injection to identify the pain generator for surgical planning (Manchikanti, 2013)**; OR**
    - Conservative therapy
        - Acute pain or exacerbation of chronic radicular pain with the following clinical timeframes:
            - Neck or back pain with acute radicular pain (Summers, 2013):
            - After 2 weeks or more of acute radicular pain that has failed to respond or poorly responded to conservative management unless the medical reason this conservative treatment cannot be done is clearly documented, (active components not required) (Manchikanti, 2013; Summers, 2013); **OR**
        - Failed back surgery syndrome or epidural fibrosis causing radicular pain (Manchikanti, 2013):
            - Typically not done immediately post-surgery. Documentation requires a medical reason that clearly indicates why an injection is needed (Manchikanti, 2013).
            - Patient must engage in some form of other active conservative treatment* for a minimum of 6 weeks in the last 6 months ; OR details of engagement in other forms of active conservative non-operative treatment, if the patient had any prior spinal injections prior to epidural injections, unless the medical reason this conservative treatment cannot be done is clearly documented (Manchikanti, 2013; Summers, 2013); **OR**
        - Spinal stenosis (foraminal, central or disc disease) causing axial or radicular pain (Lee, 2009; Manchikanti, 2013):
            - Patient must engage in some form of other active conservative treatment* for a minimum of 6 weeks in the last 6 months; **OR** details of engagement in other forms of active conservative non-operative treatment, if the patient had any prior spinal

injections prior to epidural injections, unless the medical reason this conservative treatment cannot be done is clearly documented; (Manchikanti, 2013; Summers, 2013);

FREQUENCY OF REPEAT THERAPEUTIC INJECTIONS:

Epidural injections may be repeated only as medically necessary. **Each** epidural injection requires an authorization and the following criteria must be met for repeat injections:

- Documented proof that the prior injection had a positive response by significantly decreasing the patient's pain (at least 30% reduction in pain after initial injections **or** significant documented functional improvement) (NASS, 2013). Or a second injection may be performed at a different spinal level or with a different epidural technique, if there is documentation of a question about the pain generator or there is evidence of multilevel pathology (ODG, 2017); **AND**
- No more than 3 procedures in a 12-week period of time per region, with at least 14 days between injections in the initial phase. At least 50% or more pain relief obtained for a minimum of 6 weeks after initial injections (Manchikanti, 2013); **AND**
- The patient continues to have documented functional disability or pain level ≥ 6 on a scale of 0 to 10 (Manchikanti, 2013, 2011; NASS, 2013; Summers, 2013); **AND**
- The patient is actively engaged in other forms of active conservative non-operative treatment, unless pain prevents the patient from participating in conservative therapy* (Qassem, 2017; Summers, 2013); **AND**
- In the first year of treatment, which may include an initial series of 3 injections in the initial therapeutic phase and additional injections in the maintenance phase, a total of 6 epidural injections, per region, may be performed (Manchikanti, 2013).
- Repeat injections after the initial therapeutic phase should be done at intervals of at least 2 months, provided that previous injections resulted in at least 50% relief or functional improvement for at least 2 months, and are limited to a maximum total of 4 therapeutic procedures per region per 12 months (Manchikanti, 2013; NASS, 2013). If special circumstances are documented (e.g., elderly patient with severe spinal stenosis and not an operative candidate) then repeat injections are limited to a maximum of 6 procedures in 12 months (NASS, 2013).

  NOTE: Each epidural injection requires an authorization.

NOTE: See Background section

EXCLUSIONS

These requests are excluded from consideration under this guideline:

- Implantation of intrathecal catheters or ports for chemotherapy

- Intrathecal injections for muscular dystrophy
- Post-operative pain control

CONTRAINDICATIONS FOR EPIDURAL INJECTIONS

- Bleeding diathesis and full anticoagulation (risk of epidural hematoma);
- Severe spinal stenosis resulting in intraspinal obstruction;
- Local infection at injection site;
- Predominantly psychogenic pain;
- Sepsis;
- Hypovolemia;
- Uncontrolled diabetes;
- Uncontrolled glaucoma;
- High concentrations of local anesthetics in patients with multiple sclerosis;
- For diagnosis or treatment of facet mediated pain;
- Known or suspected allergic reaction to steroid medications; OR
- Spinal infection

BACKGROUND:

Therapeutic Spinal Epidural Injections or Select Nerve Root Blocks (Transforaminal) are types of interventional pain management procedures. The therapeutic use of epidural injections is for short-term pain relief associated with acute back pain or exacerbation of chronic back pain. With therapeutic injections a corticosteroid is injected close to the target area with the goal of pain reduction. Epidural injections should be used in combination with other active conservative treatment* modalities and not as stand alone treatment for long-term back pain relief. There are different approaches used when administering spinal epidural injections:

- **Interlaminar** epidural injections, with steroids, access the epidural space between two vertebrae (Interlaminar) to treat cervical, lumbar or thoracic pain with radicular pain. These procedures should be performed using fluoroscopic guidance (AHRQ, 2013). Interlaminar epidural injections are the most common type of epidural injection.
- **Transforaminal** epidural injections (also called selective nerve root blocks) access the epidural space via the intervertebral foramen where the spinal nerves exit (cervical, lumbar/sacral or thoracic region). It is used both diagnostically and therapeutically. Some studies report lack of evidence and risks of transforaminal epidural injections. These procedures are always aided with fluoroscopic guidance (AHRQ, 2013).
- **Caudal** epidural injections, with steroids, are used to treat back and lower extremity pain, accessing the epidural space through the sacral hiatus, providing access to the lower nerve roots of the spine.

These procedures should be performed using fluoroscopic guidance (AHRQ, 2013). Failed back surgery syndrome is the most common reason for the caudal approach.

- **Intraspinal Drug Trial** in anticipation of implanted infusion pump for spinal drug administration.

NOTE: There is a separate Clinical Guideline for Implanted Infusion Pumps, see: NIA_CG_310. Because the CPT code for the intraspinal drug trial is the same CPT Code as other intraspinal injections covered by this clinical guideline, this guideline is used for the intraspinal drug trial. It is advised that the Clinical Guideline for Implanted Infusion Pumps be consulted prior to performing the intraspinal drug trial. If the patient is unlikely to meet the other requirements for an implanted infusion pump, an intraspinal drug trial should not be done.

The rationale for the use of spinal epidural injections is that the sources of spinal pain, e.g., discs and joints, are accessible and amendable to neural blockade.

Medical necessity management for epidural injections includes an initial evaluation including history and physical examination and a psychosocial and functional assessment. The following must be determined: nature of the suspected organic problem; non-responsiveness to active conservative treatment*; level of pain and functional disability; conditions which may be contraindications to epidural injections; and responsiveness to prior interventions.

Interventional pain management specialists do not agree on how to diagnose and manage spinal pain; there is a lack of consensus with regards to the type and frequency of spinal interventional techniques for treatment of spinal pain. The American Society of Interventional Pain Physicians (ASIPP) guidelines and International Spine Intervention Society (SIS) guidelines provide an algorithmic approach which provides a step-by-step procedure for managing chronic spinal pain based upon evidence-based guidelines. It is based on the structural basis of spinal pain and incorporates acceptable evidence of diagnostic and therapeutic interventional techniques available in managing chronic spinal pain.

The guidelines and algorithmic approach referred to above include the evaluation of evidence for diagnostic and therapeutic procedures in managing chronic spinal pain and recommendations for managing spinal pain. The Indications and Contraindications presented within this document are based on the guidelines and algorithmic approach. Prior to performing this procedure, shared decision-making between patient and physician must occur, and patient must understand the procedure and its potential risks and results (moderate short-term benefits, and lack of long-term benefits).

Overview:

***Conservative Therapy:** (Spine) should include a multimodality approach consisting of a combination of active and inactive components. Inactive components, such as rest, ice, heat, modified activities, medical devices, acupuncture or stimulators, medications, injections (including trigger point), and diathermy can be utilized. Active modalities consist of physical therapy, a physician supervised home exercise program**, or chiropractic care (Qassem, 2017; Summers, 2013).

****Home Exercise Program** - (HEP) – the following two elements are required to meet guidelines for completion of conservative therapy:

- Documentation provided of an exercise prescription/plan (Qassem, 2017; Sculco, 2001); **AND**
    - Follow up with member with documentation provided regarding completion of HEP, (after suitable 6 week period) or inability to complete HEP due to physical reason- i.e., increased pain, inability to physically perform exercises. (Closure of medical offices, closure of therapy offices, patient inconvenience or noncompliance without explanation does not constitute "inability to complete" HEP) (Qassem, 2017; Summers, 2013).

Terminology: Interlaminar Epidural; Selective Nerve Root Injection (transforaminal only); Transforaminal Injection; Injections of Spinal Canal

Hip-spine syndrome - Hip-spine syndrome is a condition that includes both debilitating hip osteoarthritis and low back pain. Abnormal spinal sagittal alignment and difficulty in maintaining proper balance, as well as a wobbling gait, may be caused by severe osteoarthritis of the hip joint. Epidural injections are used to determine a primary pain generator in this condition.

Spondylolisthesis and nerve root irritation - Degenerative lumbar spondylolisthesis is the displacement of a vertebra in the lower part of the spine; one lumbar vertebra slips forward on another with an intact neural arch and begins to press on nerves. The most common cause, in adults, is degenerative disease although it may also result from bone diseases and fractures. Degenerative spondylolisthesis is not always symptomatic. Epidural injections may be used to determine a previously undocumented nerve root irritation as a result of spondylolisthesis.

Lumbar spinal stenosis with radiculitis - Spinal stenosis is narrowing of the spinal column or of the neural foramina where spinal nerves leave the spinal column, causing pressure on the spinal cord. The most common cause is degenerative changes in the lumbar spine. Neurogenic claudication is the most common symptom, referring to "leg symptoms encompassing the buttock, groin and anterior thigh, as well as radiation down the posterior part of the leg to the feet." In addition to pain, leg symptoms can include fatigue, heaviness, weakness or paresthesia. Some patients may also suffer from accompanying back pain. Symptoms are worse when standing or walking and are relieved by sitting. Lumbar spinal stenosis is often a disabling condition, and it is the most common reason for lumbar spinal surgery in adults over 65 years. The most common levels of stenosis are L3 through L5, but it may occur at multilevels in some patients. Radiculitis is the inflammation of a spinal nerve root that causes pain to radiate along the nerve paths. Epidural injections help to ascertain the level of the pain generator in this condition.

Postoperative epidural fibrosis - Epidural fibrosis is a common cause of failed back surgery syndrome. With the removal of a disc, the mechanical reason for pain may be removed, but an inflammatory condition may continue after the surgery and may cause pain. Epidural corticosteroids, with their anti-inflammatory properties, are used to treat postoperative fibrosis and may be used along with oral Gabapentin to reduce pain.

Lumbar herniated disc - Epidural steroid injections have been proven to be effective at reducing symptoms of lumbar herniated discs. Evidence shows that they can be successful in 42% to 56% of patients who do not improve after 6 weeks of conservative treatment. Observation and epidural steroid injection are effective nonsurgical treatments for this condition.

Failed back surgery syndrome - Failed back surgery syndrome (FBSS) is characterized by persistent or recurring low back pain, with or without sciatica, following lumbar surgery. The most common cause of FBSS is epidural fibrosis which be triggered by a surgical procedure such as discectomy. The inflammation resulting from the surgical procedure may start the process of fibrosis and cause pain. Epidural steroid injections are administered to reduce pain.

POLICY HISTORY SUMMARIES:

November 2018

- Epidural injections or selective nerve blocks: Added language "active components are not required" to indication: 'After 2 weeks or more of acute radicular pain…'
- Added text to specify that the time limitation on multiple ESIs is 'per region'. See indication: "In the first year of treatment, which may include an initial series of 3 injections in the initial diagnostic phase and additional injections in the treatment phase, a total of 6 epidural injections, per region, may be performed"
- Frequency of repeat therapeutic injections: Changed 'an injection of opioid' to an 'intraspinal injection of opioid' to clarify
- Background section: Added content "Intraspinal Drug Trial in anticipation of implanted infusion pump for spinal drug administration"; Added content on Intraspinal Drug Trials
- Overview section: removed examples for 'Home Exercise Program', including 'Yoga, Tai Chi, Aerobic Exercise'
- Added and updated references

October 2019

- Added 'axial' to specify radicular pain for spinal stenosis
- Added section on Exclusions
- For 'frequency of repeat therapeutic injections'
  - Changed diagnostic to therapeutic
  - Removed: ongoing pain or documented functional disability or pain level ≥6 on a scale of 0 to 10

November 2020

- Removed CPT codes 0228T; 0229T; 0230T; 0231T

October 2020

- Updated background information

November 2021

- Removed:
  - If the neural blockade is applied for different regions, injections may be administered at intervals of no sooner than 7 days for most types of procedures (Manchikanti, 2013).
  - Injecting multiple regions or performing multiple procedures during the same visit may be deemed medically **unnecessary** unless documentation is provided outlining an unusual situation (ODG, 2017).

- No more than 2 levels of transforaminal blocks should be done in one day (Singh, 2017).
- An intraspinal injection* of opioid or other substance for the purpose of completing a trial for an implantable infusion pump is approvable using NIA_CG_310.

- Updated Background information

REFERENCES:

Agency for Healthcare and Research Quality (AHRQ) National Guideline Clearinghouse. Low Back Pain Medical Treatment Guidelines. 2013.

Genevay S, Atlas SJ. Lumbar spinal stenosis. *Best Pract Res Clin Rheumatol*. 2010; 24(2):253-265.

Institute for Clinical Systems Improvement (ICSI). *Adult Acute and Subacute Low Back Pain Fifteenth Edition*. www.icsi.org. January 2012.

Lee JH, An JH, Lee SH. Comparison of the effectiveness of interlaminar and bilateral transforaminal epidural steroid injections in treatment of patients with lumbosacral disc herniation and spinal stenosis. *Clin J Pain*. 2009 Mar-Apr; 25(3):206-10.

Lee JH, Shin KH, Bahk SJ. Comparison of clinical efficacy of transforaminal and caudal epidural steroid injection in lumbar and lumbosacral disc herniation: A systematic review and meta-analysis. *Spine J*. 2018 Dec; 18(12):2343-53.

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; 12:699-802.

Manchikanti L, Abdi S, Atluri S, et al. An update of comprehensive evidence-based guidelines for interventional techniques in the management of chronic spinal pain. Part II, Guidance and recommendations. *Pain Physician*. 2013; 16:S49-S283.

Manchikanti L, Singh V, Cash KA, et al. Management of pain of post lumbar surgery syndrome: one-year results of a randomized, double-blind, active controlled trial of fluoroscopic caudal epidural injections. *Pain Physician.* 2010; 13:509-521.

North American Spine Society (NASS). *Clinical Guidelines for Diagnosis and Treatment of Lumbar Disc Herniation with Radiculopathy*. 2012.

North American Spine Society (NASS). *Evidence-Based Clinical Guidelines for Multidisciplinary Spine Care: Diagnosis and Treatment of Degenerative Lumbar Spinal Stenosis*. www.spine.org. Revised 2011.

North American Spine Society (NASS). *Lumbar Transforaminal Epidural Steroid Injections: Review and Recommendation Statement*. January 2013.

Parr AT, Diwan S, Abdi S. Lumbar interlaminar epidural injections in managing chronic low back and lower extremity pain: A systematic review. *Pain Physician.* 2009; 12:163-188.

Qassem A, Wilt TJ, McLean RM, et al. Noninvasive treatments for acute, subacute and chronic low back pain: A clinical practice guideline from the American College of Physicians. *Ann Intern Med*. April 4, 2017; 166(7):514-530.

Sculco AD, Paup DC, Fernhall B, et al. Effects of aerobic exercise on low back pain patients in treatment. *Spine J.* 2001 Mar-Apr; 1(2):95-101.

Singh JR, Cardozo E, Christolias GC. The clinical efficacy for two-level transforaminal epidural steroid injections. *PM R*. 2017 Apr; 9(4):377-82.

Summers J. *International Spine Intervention Society Recommendations for treatment of Cervical and Lumbar Spine Pain*. November 14, 2013.

TABLE OF CONTENTS

PARAVERTEBRAL FACET JOINT INJECTIONS OR BLOCKS (no U/S)

CPT Codes:

Cervical Thoracic Region: 64490 (+ 64491, +64492) 0213T, +0214T, +0215T

Lumbar Region: 64493 (+64494, +64495) 0216T, +0217T, +0218T

INDICATIONS FOR FACET JOINT INJECTIONS OR MEDIAL BRANCH NERVE BLOCKS (Cervical, Thoracic, Lumbar):

To confirm disabling non-radicular low back (lumbar), mid back (thoracic) or neck (cervical) pain*, suggestive of facet joint origin as documented in the medical record based upon **ALL** of the following:

- History, consisting of mainly axial or non-radicular pain unless stenosis is caused by synovial cyst (Khan, 2006; Manchikanti, 2013, 2009); **AND**
- Lack of evidence, either for discogenic or sacroiliac joint pain as the main pain generators (Manchikanti, 2013, 2009); **AND**
- Lack of disc herniation or evidence of radiculitis as the main pain generators unless stenosis is caused by synovial cyst (Khan, 2006; Manchikanti, 2013, 2009); **AND**
- Pain causing functional disability or pain levels of ≥ 6 on a scale of 0 to 10 (Manchikanti, 2013, 2009; Summers, 2013); **AND**
- Duration of pain of at least **3 months** (Manchikanti, 2013, 2009); **AND**
- Failure to respond to conservative non-operative therapy management* for a minimum of 6 weeks in the last 6 months prior to facet injections, or details of active engagement in other forms of active conservative non-operative treatment, if the patient had prior spinal injections, unless the medical reason this treatment cannot be done is clearly documented (Manchikanti, 2013; Summers, 2014); **AND**
- All procedures must be performed using fluoroscopic or CT guidance (Amrhein, 2016; Weininger, 2013).

NOTE: Ultrasound guidance is not a covered benefit and a procedure performed using ultrasound guidance is not reimbursable.

FREQUENCY OF FACET BLOCK:

- There must be **a minimum of 14 days** between injections or **7 days** if the most recent injection was diagnostic facet nerve blocks with local anesthetic only (Manchikanti, 2013).
- The patient continues to have ongoing pain or documented functional disability;

  - Pain causing functional disability or pain level ≥ 6 on a scale of 0 to 10 (Manchikanti, 2013, 2009; Summers, 2013).
  - Must have a positive response of ≥ 50% pain relief or improved ability to function or a change in technique, for example from an initial intraarticular facet block to a medial branch nerve block to be considered.
  - Repeat therapeutic injections should be performed at a frequency of 2 months or longer provided at least 50% relief is obtained for a minimum of 2 months after the previous injection (Manchikanti, 2013).

- Conservative therapy
  - For a diagnostic injection more than one month from the prior diagnostic injection, the patient is actively engaged in other forms of active conservative non-operative treatment, unless pain or another medical reason prevents the patient from participating in conservative therapy*
  - For therapeutic injections, the patient is actively engaged in other forms of active conservative non-operative treatment, unless pain or another medical reason prevents the patient from participating in conservative therapy* (Qassem, 2017; Summers, 2013).
- **In the diagnostic phase a maximum of 2 procedures may be performed. In the therapeutic phase a maximum of 4 procedures per region every 12 months except under unusual circumstances such as a recurrent injury.** (NOTE: Unilateral facet blocks performed at the same level on the right vs. left within 2 weeks of each other would be considered as one procedure) (Manchikanti, 2013).
- If the procedures are applied for different regions, they may be performed at one week intervals for most types of procedures (Manchikanti, 2013).
- **Radiofrequency** neurolysis procedures should be considered in patients with **at least 70% pain** relief or improved ability to **function, from medial branch nerve blocks, but with insufficient sustained** relief (less than 2-3 months improvement) (Manchikanti, 2013; Summers, 2013).

CONTRAINDICATIONS FOR FACET JOINT INJECTIONS:

- History of allergy to contrast administration, local anesthetics, steroids, or other drugs potentially utilized;
- Hypovolemia;
- Infection over puncture site;
- History of allergy to medications to be administered;
- Inability to obtain percutaneous access to the target facet joint;
- Progressive neurological disorder which may be masked by the procedure;
- Pregnancy;
- Spinal infection; OR

- Acute fracture

BACKGROUND:

Facet joints (also called zygapophysial joints or z-joints), posterior to the vertebral bodies in the spinal column and connecting the vertebral bodies to each other, are located at the junction of the inferior articular process of a more cephalad vertebra and the superior articular process of a more caudal vertebra. These joints provide stability and enable movement, allowing the spine to bend, twist, and extend in different directions. They also restrict hyperextension and hyperflexion.

Facet joints are clinically important spinal pain generators in patients with chronic spinal pain. In patients with chronic low back pain, facet joints have been implicated as a cause of the pain in 15% to 45% of patients. Facet joints are considered as the cause of chronic spinal pain in 48% of patients with thoracic pain and 54% to 67% of patients with chronic neck pain. Facet joints may refer pain to adjacent structures, making the underlying diagnosis difficult as referred pain may assume a pseudoradicular pattern. Lumbar facet joints may refer pain to the back, buttocks, and lower extremities while cervical facet joints may refer pain to the head, neck, and shoulders.

Imaging findings are of little value in determining the source and location of 'facet joint syndrome', a term originally used by Ghormley and referring to back pain caused by pathology at the facet joints. Imaging studies may detect changes in facet joint architecture, but correlation between radiologic findings and symptoms is unreliable. Although clinical signs are also unsuitable for diagnosing facet joint-mediated pain, they may be of value in selecting patients for controlled local anesthetic blocks of either the medial branches or the facet joint itself.

Medical necessity management for paravertebral facet injections includes an initial evaluation including history and physical examination and a psychosocial and functional assessment. The following must be determined: nature of the suspected organic problem; non-responsiveness to conservative treatment*; level of pain and functional disability; conditions which may be contraindications to paravertebral facet injections; and responsiveness to prior interventions.

The most common source of chronic pain is the spine and about two-thirds of the U.S. population suffers from spinal pain sometime during their life span. Facet joint interventions are used in the treatment of pain in certain patients with a confirmed diagnosis of facet joint pain. Interventions include intraarticular injections and medial branch nerve blocks in the lumbar, cervical, and thoracic spine. Prior to performing this procedure, shared decision-making between patient and physician must occur, and patient must understand the procedure and its potential risks and results. Facet joint injections or medial branch nerve blocks require guidance imaging.

Overview:

***Conservative Therapy:** (Spine) should include a multimodality approach consisting of a combination of active and inactive components. Inactive components, such as rest, ice, heat, modified activities,

medical devices, acupuncture or stimulators, medications, injections (including trigger point), and diathermy can be utilized. Active modalities consist of physical therapy, a physician supervised home exercise program**, or chiropractic care (Qassem, 2017; Summers, 2013).

****Home Exercise Program** (HEP) – the following two elements are required to meet guidelines for completion of conservative therapy:

- Documentation provided of an exercise prescription/plan (Qassem, 2017; Sculco, 2001); **AND**
- Follow up with member with documentation provided regarding completion of HEP, (after suitable 6 week period) or inability to complete HEP due to physical reason- i.e. increased pain, inability to physically perform exercises. Closure of medical offices, closure of therapy offices, patient inconvenience, or noncompliance without explanation, does not constitute "inability to complete" HEP.

Terminology: Facet Injections; Facet Joint Blocks; Paravertebral Facet Injections; Paravertebral Facet Joint Injections; Paravertebral Facet Joint Nerve Injections; Zygapophyseal injections; Lumbar Facet Blockade; Medial Branch blocks

POLICY HISTORY SUMMARIES:

November 2018

- Indications title – Added: 'cervical, thoracic, lumbar'
- Frequency of Facet Block: changed example from 'facet joint nerve' to 'medial branch nerve' in the following: 'There must be a positive response of ≥ 50% pain relief or improved ability to function or a change in technique, for example, from an initial intraarticular facet block to a medial branch nerve block.
- Frequency of Facet Block: Added: 'There must be a minimum of 14 days between injections *or 7 days if the most recent injection was diagnostic facet nerve block(s) with local anesthetic only*'
- Background section: Removed examples of yoga, Tai Chi, aerobic exercise from HEP
- Added and updated references

October 2019

- Removed 'positive facet blocks' and added 'medial branch nerve blocks': *Radiofrequency neurolysis procedures should be considered in patients with at least 70% pain relief or improved ability to function, from medial branch nerve blocks, but with insufficient sustained relief (less than 2-3 months improvement)*
- Added details to conservative therapy section

October 2020

- Removed: *Facet blocks should not be performed at same levels as previous surgical fusion*
- Removed: Pain causing functional disability or average pain levels of ≥ 6 on a scale of 0 to 10 (Manchikanti, 2013, 2009; Summers, 2013);

- Updated Home Exercise Program section to include: *Closure of medical offices, closure of therapy offices*, patient inconvenience, or noncompliance without explanation, does not constitute "inability to complete" HEP.

November 2021

- Removed Contraindication: Bleeding disorders or coagulopathy

REFERENCES:

Agency for Healthcare and Research Quality (AHRQ) National Guideline Clearinghouse. Low Back Pain Medical Treatment Guidelines 2013.

Amrhein TJ, Joshi AB, Kranz PG. Technique for CT fluoroscopy-guided lumbar medial branch blocks and radiofrequency ablation. *AJR Am J Roentgenol*. 2016 Sep; 207(3):631-4.

Bykowski JL, Wong WHW. Role of facet joints in spine pain and image-guided treatment: A review. *AJNR Am J Neuroradiol*. 2012 Sept; 33:1419-26.

Datta S, Lee M, Falco FJE, et al. Systematic assessment of diagnostic accuracy and therapeutic utility of lumbar facet joint interventions. *Pain Physician.* 2009; 12(2):437-460. http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0027734.

Falco FJE, Erhart S, Wargo BW, et al. Systematic review of diagnostic utility and therapeutic effectiveness of cervical facet joint interventions. *Pain Physician*. 2009; 12(2):323-344.

Ghormley RK. Low-back pain with special reference to the articular facets, with presentation of an operative procedure. *JAMA*. 1933; 101:1773-7.

Khan A, Girardi F. Spinal lumbar synovial cysts. Diagnosis and management challenge. *Eur Spine J.* 2006; 15(8):1176-1182.

Manchikanti L, Abdi S, Atluri S, et al. An update of comprehensive evidence-based guidelines for interventional techniques of chronic spinal pain: Part II: Guidance and recommendations. *Pain Physician.* 2013; 16(2 suppl): S49-S283.

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; 12(4): 699-802.

Manchikanti L, Singh V, Falco FJE, 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 Science.* 2010; 7(3):124-135. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2880841.

Manchikanti L, Pampati V, Singh V, et al. Explosive growth of facet joint interventions in the medicare population in the United States: A comparative evaluation of 1997, 2002, and 2006 data. *BMC Health Serv Research*. 2010; 10:84. doi: 10.1186/1472-6963-10-84.

Qassem A, Wilt TJ, McLean RM, et al. Noninvasive treatments for acute, subacute and chronic low back pain: A clinical practice guideline from the American College of Physicians. *Ann Intern Med*. 2017; 166(7).

Sculco AD, Paup DC, Fernhall B, et al. Effects of aerobic exercise on low back pain patients in treatment. *Spine J.* 2001; 1(2):95-101.

Summers, Jeffrey. International Spine Intervention Society Recommendations for treatment of Cervical and Lumbar Spine Pain, November 14, 2013.

Weininger M, Mills JC, Rumboldt Z, et al. Accuracy of CT guidance of lumbar facet joint block. *AJR Am J Roentgenol*. 2013 Mar; 200(3):673-6.

PARAVERTEBRAL FACET JOINT DENERVATION (RADIOFREQUENCY NEUROLYSIS

CPT Codes:

Cervical Thoracic Region: 64633, +64634

Lumbar Region: 64635, +64636

INDICATIONS FOR PARAVERTEBRAL FACET JOINT DENERVATION/RADIOFREQUENCY NEUROLYSIS:

- Lack of evidence that the primary source of pain being treated is from discogenic pain, sacroiliac joint pain, disc herniation or radiculitis (Manchikanti, 2013, 2009); **AND**
- Pain causing functional disability or a pain level of ≥ 6 on a scale of 0 to 10 prior to each radiofrequency procedure (Manchikanti, 2013, 2009; Summers, 2013); **AND**
- Duration of pain of **at least** 3 months (Manchikanti, 2013; Summers, 2013); **AND**
- One of the following:
    - Positive response to one or two controlled local anesthetic blocks of the facet joint nerves (medial branch blocks), with at least 70% pain relief or improved ability to function for a minimal duration at least equal to that of the local anesthetic, but with insufficient sustained relief (less than 2-3 months relief); **AND** a failure to respond to active conservative non-operative management* for a minimum of 6 weeks in the last 6 months unless the medical reason this treatment cannot be done is clearly documented (Manchikanti, 2013, 2009; Summers, 2013); **OR**
    - Positive response to prior radiofrequency neurolysis procedures with at least 50% pain relief or improved ability to function for at least 4 months, and the patient is actively engaged in other forms of appropriate active conservative non-operative treatment, unless pain prevents the patient from participating in conservative therapy* (Manchikanti, 2013; Qassem, 2017; Sculco, 2001; Summers, 2013).

FREQUENCY:

- Limit to 2 facet neurolysis procedures every 12 months, per region (Manchikanti, 2013).

IMAGING:

- All procedures must be performed using fluoroscopic or CT guidance (Amrhein, 2016; Weininger, 2013)

NOTE: Unilateral radiofrequency denervations performed at the same level on the right vs left within 2 weeks of each other would be considered as one procedure toward the total number of

radiofrequency procedures allowed per 12 months. Every radiofrequency procedure requires pre-authorization. Second side denervation procedures performed within 2 weeks of the first side do not require additional documentation during the interval.

CONTRAINDICATIONS:

- History of allergy to local anesthetics or other drugs potentially utilized;
- Lumbosacral radicular pain (dorsal root ganglion);
- Conditions/diagnosis for which procedure is used are other than those listed in Indications;
- Absence of positive diagnostic blocks; **OR**
- For any nerve other than the medial branch nerve.

BACKGROUND:

Facet joints (also called zygapophysial joints or z-joints), posterior to the vertebral bodies in the spinal column and connecting the vertebral bodies to each other, are located at the junction of the inferior articular process of a more cephalad vertebra and the superior articular process of a more caudal vertebra. These joints provide stability and enable movement, allowing the spine to bend, twist, and extend in different directions. They also restrict hyperextension and hyperflexion.

Facet joints are clinically important spinal pain generators in patients with chronic spinal pain. Pain mediated by the facet joints may be caused by repetitive stress or cumulative low-level trauma resulting in osteoarthritis and inflammation. In patients with chronic low back pain, facet joints have been implicated as a cause of the pain in 15% to 45% of patients. They are considered as the cause of chronic spinal pain in 48% of patients with thoracic pain and 54% to 67% of patients with chronic neck pain. Facet joints may refer pain to adjacent structures, making the underlying diagnosis difficult as referred pain may assume a pseudoradicular pattern. Lumbar facet joints may refer pain to the back, buttocks, and proximal lower extremities while cervical facet joints may refer pain to the head, neck, and shoulders.

Imaging findings are of little value in determining the source and location of 'facet joint syndrome', a term originally used by Ghormley and referring to back pain caused by pathology at the facet joints. Imaging studies may detect changes in facet joint architecture, but correlation between radiologic findings and symptoms is unreliable. Although clinical signs are also unsuitable for diagnosing facet joint-mediated pain, they may be of value in selecting patients for controlled local anesthetic blocks of either the medial branches or the facet joint itself. This is an established tool in diagnosing facet joint syndrome.

Facet joints are known to be a source of pain with definitive innervations. Interventions used in the treatment of patients with a confirmed diagnosis of facet joint pain include: medial branch nerve blocks in the lumbar, cervical and thoracic spine; and radiofrequency neurolysis (*see additional terminology*). The medial branch of the primary dorsal rami of the spinal nerves has been shown to be the primary innervations of facet joints. Substance P, a physiologically potent neuropeptide considered to play a role in the nociceptive transmission of nerve impulses, is found in the nerves within the facet joint.

Radiofrequency neurolysis is a minimally invasive treatment for cervical, thoracic and lumbar facet joint pain. It involves using energy in the radiofrequency range to cause necrosis of specific nerves (medial branches of the dorsal rami), preventing the neural transmission of pain. The objective of radiofrequency neurolysis is to both provide relief of pain and reduce the likelihood of recurrence.

Members of the American Society of Anesthesiologists (ASA) and the American Society of Regional Anesthesia and Pain Medicine (ASRA) have agreed that conventional or thermal radiofrequency ablation of the medial branch nerves to the facet joint should be performed for neck or low back pain. Radiofrequency neurolysis has been employed for over 30 years to treat facet joint pain. Prior to performing this procedure, shared decision-making between patient and physician must occur, and patient must understand the procedure and its potential risks and results.

Overview:

THERAPEUTIC PARAVERTEBRAL FACET JOINT DENERVATION (RADIOFREQUENCY NEUROLYSIS) - local anesthetic block followed by the passage of radiofrequency current to generate heat and coagulate the target medial branch nerve

***Conservative Therapy:** (Spine) should include a multimodality approach consisting of a combination of active and inactive components. Inactive components, such as rest, ice, heat, modified activities, medical devices, acupuncture or stimulators, medications, injections (including trigger point), and diathermy can be utilized. Active modalities consist of physical therapy, a physician supervised home exercise program** or chiropractic care (Qassem, 2017; Summers, 2013).

****Home Exercise Program** (HEP) – the following two elements are required to meet guidelines for completion of conservative therapy:

- Documentation provided of an exercise prescription/plan (Qassem, 2017; Sculco, 2001); **AND**
- Follow up with member with documentation provided regarding completion of HEP, (after suitable 6 week period) or inability to complete HEP due to physical reason- i.e. increased pain, inability to physically perform exercises. Closure of medical offices, closure of therapy offices, patient inconvenience or noncompliance without explanation does not constitute “inability to complete” HEP.

Terminology: Paravertebral Facet Joint Denervation, Radiofrequency Neurolysis, Destruction Paravertebral Facet Joint Nerve, Facet Joint Rhizotomy, Facet Neurolysis, Medial Branch Radiofrequency Neurolysis, Medial Branch Radiofrequency Neurotomy or Radiofrequency Denervation.

POLICY HISTORY SUMMARIES:
November 2018

- Frequency: Changed limit to ‘per region’ instead of ‘per facet joint’

- Overview section: Removed examples of yoga, Tai Chi, aerobic exercise from HEP
- Added and updated references

October 2019

- Added: All procedures must be performed using fluoroscopic or CT guidance

October 2020

- Added to Frequency: *Second side denervation procedures performed within 2 weeks of the first side do not require additional documentation during the interval.*
- Updated Home Exercise Program section to include: *Closure of medical offices, closure of therapy offices*, patient inconvenience, or noncompliance without explanation, does not constitute 'inability to complete' HEP
- Modified: Pain causing functional disability or a pain level of $\geq$ 6 on a scale of 0 to 10 prior to each radiofrequency procedure, including radiofrequency procedures done unilaterally on different days

REFERENCES:

American Society of Anesthesiologists (ASA) Task Force on Chronic Pain Management, American Society of Regional Anesthesia and Pain Medicine. Practice guidelines for chronic pain management: An updated report by the American Society of Anesthesiologist Task Force on Chronic Pain Management and the American Society of Regional Anesthesia and Pain Medicine. *Anesthesiology*. 2010; 112(4):810-33. http://www.asahq.org/Search.aspx?q=facet+radiofrequency&site=All.

Amrhein TJ, Joshi AB, Kranz PG. Technique for CT fluoroscopy-guided lumbar medial branch blocks and radiofrequency ablation. *AJR Am J Roentgenol*. 2016 Sep; 207(3):631-4.

Chou R, Atlas SJ, Stanos SP, et al. Nonsurgical interventional therapies for low back pain: A review of the evidence for an American Pain Society clinical practice guideline. *Spine*. 2009; 34(10):1078-1093. doi: 10.1097/BRS.0b013e3181a103b1.

Datta S, Lee M, Falco FJ, et al. Systematic assessment of diagnostic accuracy and therapeutic utility of lumbar facet joint intervention. *Pain Physician.* 2009; 12(2):37-460. http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0027734/.

Ghormley RK. Low-back pain with special reference to the articular facets, with presentation of an operative procedure. *JAMA*. 1933; 101:1773-7.

Henschke N, Kuijpers T, Rubinstein S. Injection therapy and denervation procedures for chronic low-back pain: A systematic review. *Eur Spine J*. 2010; 19(9):1425-1449. doi: 10.1007/s00586-010-1411-0.

International Spine Intervention Society Proposed Medical Treatment Guidelines for Cervical Spine Injury and Low Back Pain. November 14, 2013.

Manchikanti L, Abdi S, Atluri S, et al. An update of comprehensive evidence-based guidelines for interventional techniques of chronic spinal pain: Part II: Guidance and recommendations. *Pain Physician.* 2013; 16(2 suppl):S49-S283.

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; 12(4):699-802.

Muhlner SB. Review article: Radiofrequency neurotomy for the treatment of sacroiliac joint syndrome. *Curr Rev Musculoskelet Med*. 2009; 2(1):10-14. doi: 10.1007/s12178-008-9038-z.

Qassem A, Wilt T, McLean RM, et al. Noninvasive treatments for acute, subacute and chronic low back pain: A clinical practice guideline from the American College of Physicians. *Ann Intern Med*. April 4, 2017; 166(7):514-530.

Summers J. International Spine Intervention Society Recommendations for treatment of Cervical and Lumbar Spine. *Pain*. November 14, 2013. https://www.spineintervention.org/?page=S3_PG.

Sculco AD, Paup DC, Fernhall B, et al. Effects of aerobic exercise on low back pain patients in treatment. *Spine J*. 2001; 1(2):95-101.

Weininger M, Mills JC, Rumboldt Z, et al. Accuracy of CT guidance of lumbar facet joint block. *AJR Am J Roentgenol*. 2013 Mar; 200(3):673-6.

SACROILIAC JOINT INJECTIONS (with image guidance (fluoroscopy or CT)

CPT Codes: 27096

INDICATIONS FOR SACROILIAC JOINT INJECTIONS (SJI) (Intraarticular or ligamentous injections only)

- **For the treatment of Sacroiliac Joint (SIJ) pain - <u>All</u>** of the following must be met:
  - Low back pain maximal below level of L5 which may radiate to the groin or lower extremity persisting at least 3 months (Manchikanti, 2013a); **AND**
  - Positive exam findings to suggest the diagnosis which include the pelvic distraction test, pelvic compression test, thigh thrust test, FABER (Patrick's test) or Gaenslen's test (MacVicar, 2017; Telli, 2018); **AND**
  - Failure to respond to conservative non-operative therapy management* for a minimum of 6 weeks in the last 6 months, or details of active engagement in other forms of active conservative non-operative treatment, if the patient had prior spinal injections, unless the medical reason this treatment cannot be done is clearly documented (Manchikanti, 2013a; Summers, 2013); **AND**
  - Pain causing functional limitations or pain levels of ≥ 6 on a scale of 0 to 10 (Manchikanti, 2013a, 2009; Summers, 2013); **AND**
  - All procedures must be performed using ultrasound, fluoroscopic or CT guidance (Schneider, 2020)

NOTE: SI joint injections performed at the same time as facet injections will be deemed **<u>not</u>** medically necessary.

- **For the treatment of spondyloarthropathy** (ACR, 2012) - **<u>All</u>** of the following must be met:
  - The patient has experienced ≥ 3 months of low back pain; **AND**
  - Age of onset < 45 years; **AND**
  - Comprehensive pain management program including physical therapy, home exercise, patient education, psychosocial support or oral medication is in place; **AND**
  - Prior history of evidence of sacroiliitis on imaging (i.e., active inflammation on magnetic resonance imaging [MRI] or definite radiographic sacroiliitis grade > 2 bilaterally *or* grade 3-4 unilaterally)*;* **AND**
  - ***1 or more*** spondyloarthropathy features:
    - Inflammatory back pain with **at least 4** of the following criteria present:

- Age at onset < 45 years
- Insidious onset
- Improvement with exercise
- No improvement with rest
- Pain at night (with improvement upon getting up)

- Arthritis
- Enthesitis of the heel (irritability of muscles, tendons, or ligaments where they enter the bone)
- Uveitis (inflammation of the uvea, the middle layer of the eye)
- Dactylitis (inflammation of a finger or toe)
- Psoriasis
- Crohn's/colitis
- Good response to NSAIDs
- Family history of spondyloarthropathy
- Positive testing for HLA-B27
- Elevated C-reactive protein (CRP)

FREQUENCY OF REPEAT THERAPEUTIC INJECTIONS

- SIJ injections may be repeated up to 2 times in the initial treatment phase no sooner than 2 weeks apart provided that at least 50% relief is obtained (Manchikanti, 2013a); **AND**
- SIJ injections may only be repeated after the initial treatment phase if symptoms recur and the patient has had at least a 50% improvement for a minimum of 6 weeks after each therapeutic injection (Manchikanti, 2013a); **AND**
- The patient is actively engaged in other forms of active conservative non-operative treatment, unless pain prevents the patient from participating in conservative therapy (AHRQ, 2013; Qassem, 2017; Summers, 2013); **AND**
- Repeat injections should not be done more frequently than every two months for a total of 4 injections in a 12 month period (Manchikanti, 2013a); **AND**
- Pain causing functional limitations or pain levels of ≥ 6 on a scale of 0 to 10 (AHRQ, 2013; Manchikanti, 2013a, 2009; Summers, 2013).

NOTE: Injecting multiple regions or performing multiple procedures during the same visit may be deemed medically **unnecessary** unless documentation is provided outlining an unusual situation (ODG, 2017).

CONTRAINDICATIONS FOR SACROILIAC JOINT INJECTIONS

- Active systemic infection
- Skin infection at the site of needle puncture

- Uncontrolled high blood pressure
- Uncontrolled diabetes
- Unstable angina
- Congestive heart failure
- Allergies to contrast, anesthetics, or steroids (AAOS, 2009)

BACKGROUND:

This guideline addresses the use of sacroiliac joint injections for the treatment of low back pain that originates in the region of the sacroiliac joint. An injection of anesthetic or steroid may be used for the diagnosis and treatment of sacroiliac joint (SIJ) pain syndrome disorders (such as degenerative joint disease, postsurgical injuries, or traumatic injuries), or for treatment of spondyloarthropathy (inflammatory disorders of the joints and ligaments of the spine).

Sacroiliac joint injections are typically used for the following conditions:

Sacroiliac joint pain syndrome may be caused by various events, including pain secondary to postsurgical or traumatic injury, degeneration (wear and tear), or pregnancy. Physical examination (history and physical, provocative maneuvers) and diagnostic injection help to identify the source of pain as the SIJ.

Diagnostic SIJ injections are used to determine if the SIJ pain originates with the SIJ. Diagnostic blocks can reveal (or fail to reveal) that the source of pain is originating from the SIJ, and then an appropriate treatment plan can be developed (Curatolo, 2010; Manchikanti, 2013a).

Therapeutic SIJ injections may be used to treat SIJ pain once it has been determined that the SIJ is the origin of the pain. A therapeutic injection typically includes a corticosteroid and a local anesthetic that can be injected directly into the joint (intra-articular) or into the tissues surrounding the joint (periarticular).

Spondyloarthropathy (also known as spondyloarthritis) is the name for a family of rheumatic diseases that cause arthritis. Sacroiliitis is a key indicator of spondyloarthritis and is diagnosed with imaging. Patients with spondyloarthropathy are generally managed by rheumatologists and account for only a small percentage of the cases that present in interventional pain management settings.

Overview:

***Conservative Therapy:** (Spine) should include a multimodality approach consisting of a combination of active and inactive components. Inactive components, such as rest, ice, heat, modified activities, medical devices, acupuncture or stimulators, medications, injections (including trigger point), and diathermy can be utilized. Active modalities consist of physical therapy, a physician supervised home exercise program**, or chiropractic care (Qassem, 2017; Summers, 2013).

****Home Exercise Program (HEP)** – the following two elements are required to meet guidelines for completion of conservative therapy:

- Documentation provided of an exercise prescription/plan (Qassem, 2017; Sculco, 2001); **AND**
- Follow up with member with information provided regarding completion of HEP (after suitable 6 week period), or inability to complete HEP due to physical reason- i.e. increased pain, inability to physically perform exercises. (Closure of medical offices, closure of therapy offices, patient inconvenience or noncompliance without explanation does not constitute "inability to complete" HEP).

Low back pain is one of the most common of all spinal pain problems. According to the Centers for Disease Control and Prevention (CDC), the prevalence of low back pain in adults 18 years of age and older is 28.4% and may range as high as 32.1% in adults ≥ 75 years (CDC, 2012). Symptoms of low back pain may arise from multiple sites, including lumbar intervertebral discs, facet joints, sacroiliac joints, ligaments, fascia, muscles, and nerve root dura. The sacroiliac joint has been shown to be a source of pain in 10% to 27% of chronic low back pain (Hansen, 2007; Simopoulos, 2012; Manchikanti, 2013a).

The sacroiliac joint (SIJ) is located between the sacrum (located at the base of the spine) and the pelvis and supports the weight of the upper body in the standing position. There are SIJs in both the right and left side of the lower back. Strong ligaments hold the joints in place. The SIJ is well innervated and has been shown to be capable of being a source of low back pain and referred pain in the lower extremity. Low back pain originating from the SIJ can result from inflammatory conditions such as sacroiliiitis, spondyloarthropathy (ankylosing spondylitis; rheumatoid spondylitis), or from postsurgical or traumatic injury, degeneration (wear and tear), or pregnancy. SIJ pain most often occurs in the buttocks and lower back and may radiate down through the buttocks and the leg. Physical examination and radiographic techniques may confirm a diagnosis related to spondyloarthropathy. Physical examination, including provocative maneuvers to elicit pain response, and controlled SIJ injections can help diagnose noninflammatory pain arising from the SIJ (Hansen, 2007; Medline Plus, 2012; Mayo Clinic, 2013).

In order to confirm correct placement of the injectable medication into the intra-articular space, fluoroscopic or computed tomography (CT) guidance is used. A periarticular injection into the soft tissue may be used if ligamentous or muscular attachments are suspected to be involved. The goal of the therapeutic injection is to reduce inflammation or pain and provide longer pain relief. Long-term relief is generally defined as 6 weeks or longer, but positive responders generally have a much longer duration of response; serial injections may be required in order to maintain therapeutic effectiveness (Hansen, 2007; AAOS, 2009; Hawkins, 2009).

Spinal injections for the treatment of SIJ pain syndrome are typically performed as one part of a comprehensive treatment program, which will nearly always include an exercise program to improve or maintain spinal mobility. Potential candidates for SIJ injections include those with low back pain originating from the SIJ that is unresponsive to conservative treatments.

Treatment for SIJ pain depends upon the signs and symptoms, as well as the underlying cause for the pain. Medications, such as over-the-counter analgesics, a short course of narcotics, muscle relaxants or tumor necrosis factor (TNF) inhibitors, such as etanercept (Enbrel), adalimumab (Humira), or infliximab (Remicade), may be prescribed. Therapy sessions with a physical therapist involving range-of-motion, stretching, and strengthening exercises may be used to maintain joint flexibility and strengthen the muscles. Other interventional procedures used to treat SIJ pain include corticosteroid injections to

reduce inflammation and pain, radiofrequency denervation, electrical stimulation, or in rare cases, joint fusion (Mayo Clinic, 2013).

The indications for coverage for the treatment of spondyloarthropathy have been established through use of the reviewed clinical studies and through criteria developed by the Assessment of SpondyloArthritis International Society (ASAS) for the classification of axial spondyloarthritis (Sieper, 2009). They are in keeping with the benefit guidelines developed by the Centers for Medicare & Medicaid Services (CMS).

While evidence supports that SIJ injection is an effective method of determining the source of pain, evidence supporting the efficacy of SIJ in the treatment of SIJ pain syndrome is considerably limited. There are limited controlled or prospective clinical studies to support SIJ injection for therapeutic purposes. Despite the limited quality of the clinical studies supporting SIJ injection for the treatment of SIJ pain, the procedure is recommended by the American Society of Anesthesiologists (ASA) and the American Society of Regional Anesthesia and Pain Management (ASRAPM) Practice Guidelines. The indications for coverage have been established from the 2009 *Comprehensive Evidence-Based Guidelines for Interventional Techniques in the Management of Chronic Spinal Pain* and updated with the 2013 *An Update of Comprehensive Evidence-Based Guidelines for Interventional Techniques in Chronic Spinal Pain. Part II: Guidance and Recommendations.*

POLICY HISTORY SUMMARIES:

November 2018
- Sacroiliac Joint Injection title - Added: 'Intraarticular or ligamentous injections only'
- For the treatment of SIJ pain, added Note: 'SI joint injections performed at the same time as facet injections will be deemed not medically necessary'
- Removed HEP examples of yoga, Tai Chi, aerobic exercises
- Added and updated references

October 2019
- Added: All procedures must be performed using fluoroscopic or CT guidance

October 2020
- Added: "Injecting multiple regions or performing multiple procedures during the same visit may be deemed medically **unnecessary** unless documentation is provided outlining an unusual situation" (ODG, 2017).
- Removed 'average': Pain causing functional limitations or ~~average~~ pain levels of ≥ 6 on a scale of 0 to 10 (Manchikanti, 2013a, 2009; Summers, 2013)

November 2021
- Added: All procedures must be performed using ultrasound, fluoroscopic or CT guidance (Schneider, 2020)
- Deleted: Removed Bleeding disorder or anticoagulation therapy from contraindications section

REFERENCES:

Agency for Healthcare and Research Quality (AHRQ) National Guideline Clearinghouse. Low Back Pain Medical Treatment Guidelines 2013.

American College of Rheumatology (ACR). Spondyloarthritis (Spondyloarthropathy). http://www.rheumatology.org/Practice/Clinical/Patients/Diseases_And_Conditions/Spondylarthritis_(Spondylarthropathy)/. 2012.

American Society of Anesthesiologists Task Force on Chronic Pain Management, American Society of Regional Anesthesia and Pain Medicine (ASA/ASRAPM). Practice guidelines for chronic pain management: An updated report by the American Society of Anesthesiologists Task Force on Chronic Pain Management and the American Society of Regional Anesthesia and Pain Medicine. *Anesthesiol*. 2010; 112(4):810-33. doi: 10.1097/ALN.0b013e3181c43103.

Centers for Disease Control and Prevention (CDC). 2012. Health, United States. http://www.cdc.gov/nchs/data/hus/hus12.pdf.

Chou R, Atlas SJ, Stanos SP, et al. Nonsurgical interventional therapies for low back pain: A review of the evidence for an American Pain Society Clinical Practice Guideline. *Spine*. 2009; 34(10):1078-93. doi: 10.1097/BRS.0b013e3181a103b1.

Curatolo M, Bogduk N. Diagnostic blocks for chronic pain. *Scand J Pain.* 2010; 1(4):186-192. http://www.scandinavianjournalpain.com/issues?issue_key=S1877-8860(10)X0006-4.

Hansen HC, McKenzie-Brown AM, Cohen SP, et al. Sacroiliac joint interventions: a systematic review. *Pain Physician*. 2007; 10:165-184. http://www.painphysicianjournal.com/2007/january/2007;10;165-184.pdf.

Hansen H, Manchikanti L, Simopoulos TT, et al. A systematic evaluation of the therapeutic effectiveness of sacroiliac joint interventions. *Pain Physician*. 2012; 15(3):E247-E278. http://www.painphysicianjournal.com/2012/may/2012;15;E247-E278.pdf.

Kim WM, Lee HG, Jeong CW, et al. A randomized controlled trial of intra-articular prolotherapy versus Steroid injection for sacroiliac joint pain. *J Altern Complement Med.* 2010; 16(12):1285-1290. doi: 10.1089/acm.2010.0031.

Laslett, M. Evidence-based diagnosis and treatment of the painful sacroiliac joint. *J Man Manip Ther*. 2008; 16:142-152.

Lee JH, Lee SH, Song SH. Clinical effectiveness of botulinum toxin a compared to a mixture of steroid and local anesthetics as a treatment for sacroiliac joint pain. *Pain Med*. 2010; 1(5):692-700. doi:10.1111/j.1526-4637.2010.00838.x.

Liliang PC, Kang L, Weng HC, et al. The therapeutic efficacy of sacroiliac joint blocks with Triamcinolone Acetonide in the treatment of sacroiliac joint dysfunction without spondyloarthropathy. *Spine*. 2009; 34(9):896-900. doi: 10.1097/BRS.0b013e31819e2c78.

MacVicar J, Kreiner DS, Duszynski B, et al. Appropriate use criteria for fluoroscopically guided diagnostic and therapeutic sacroiliac interventions: Results from the Spine Intervention Society Convened Multispecialty Collaborative. *Pain Med*. 2017; 18:2081-2095.

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; 12:699-802. http://www.painphysicianjournal.com/2009/july/2009;12;699-802.pdf.

Manchikanti L, Datta S, Gupta S, et al. A critical review of the American pain society clinical practice guidelines for interventional techniques: Part 2. Therapeutic interventions. *Pain Physician*. 2010; 13(4):E215-E264. http://www.painphysicianjournal.com/2010/july/2010;13;E215-E264.pdf.

Manchikanti L, Falco FJ, Singh V, et al. An update of comprehensive evidence-based guidelines for interventional techniques in chronic spinal pain. Part I: Introduction and general considerations. *Pain Physician.* 2013; 16(2):S1-48.

Manchikanti L, Falco FJ, Singh V, et al. An update of comprehensive evidence-based guidelines for interventional techniques in chronic spinal pain. Part II: Guidance and recommendations. *Pain Physician*. 2013a; 16(2 Suppl):S49-283.

Mayo Clinic. Sacroiliitis. 2013. http://www.mayoclinic.com/health/sacroiliitis/DS00726.

Medline Plus. Sacroiliac joint pain – aftercare. 2012. http://www.nlm.nih.gov/medlineplus/ency/patientinstructions/000610.htm.

Plastaras CT, Joshi AB, Garvan C, et al. Adverse events associated with fluoroscopically guided sacroiliac joint injections. *PM R*. 2012; 4(7):473-8. doi: 10.1016/j.pmrj.2012.02.001.

Qassem A, Wilt TJ, McLean RM, et al. Noninvasive treatments for acute, subacute and chronic low back pain: A clinical practice guideline from the American College of Physicians. *Ann Intern Med*. 2017; 166(7).

Schneider B, Patel J, Smith CC. Ultrasound guidance for intra-articular sacroiliac joint injections – Spine Intervention Society. *Pain Med*. 2020 Aug 31. Epub 2020 Jun. https://doi.org/10.1093/pm/pnaa248.

Sculco AD, Paup DC, Fernhall B, et al. Effects of aerobic exercise on low back pain patients in treatment. *Spine J*. 2001; 1(2):95-101.

Sieper, J, Rudwaleit M, Baraliakos X, et al. The assessment of spondyloarthritis international society (ASA) handbook: A guide to assess spondyloarthritis. *Ann Rheum Dis.* 2009; 68:ii1-ii44. http://www.asas-group.org/education/ASAS-handbook.pdf.

Simopoulos TT, Manchikanti L, Singh V, et al. A systematic evaluation of prevalence and diagnostic accuracy of sacroiliac joint interventions. *Pain Physician*. 2012; 15(3):E305-E344. http://www.painphysicianjournal.com/2012/may/2012;15;E305-E344.pdf.

Summers J. International Spine Intervention Society Recommendations for treatment of Cervical and Lumbar Spine Pain. November 14, 2013.

Telli H, Tell S, Topal M. The validity and reliability of provocation tests in the diagnosis of sacroiliac joint dysfunction. Pain Physician. 2018 July; 21(4):E367-376.