NIPM-QCDR
National Interventional Pain Management
Qualified Clinical Data Registry

NIPM-QCDR
2017 ASIPP Non-MIPS
Measure Detail

PRELIMINARY

Certain details (e.g., Measure numbers) being finalized by CMS

July 25, 2017

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NIPM 1: AVOIDING EXCESSIVE USE OF EPIDURAL INJECTIONS IN MANAGING CHRONIC PAIN ORIGINATING IN THE LUMBOSACRAL SPINE

Measurement Period:

January 1, 2017 to December 31, 2017

Measure Developer:

American Society of Interventional Pain Physicians

Description:

Measurement of percentage of patients aged 18 years and older receiving therapeutic lumbosacral epidural injections that do not receive an excessive number of injections during the measurement period. ***Note: This measure must be tracked over an entire year.***

Disclaimer:

These performance measures are not standards and do not establish a standard of medical care.

NQS Domain:

Efficiency and Cost Reduction

Measure Type:

Process

Stratification:

None

Risk Adjustment Variable:

None

Risk Adjustment Algorithms

None

Rate Aggregation:

None

Definition(s) of Outcomes:

1. The percentage of patients receiving lumbosacral epidural injections to treat pain originating in the lumbosacral spine who receive lumbosacral epidural injections on 5 or less separate encounters during the first 12 months following initial diagnosis.
2. The percentage of patients receiving lumbosacral epidural injections to treat pain originating in the lumbosacral spine who receive lumbosacral epidural injections on 4 or less separate encounters during any 12 month period not within the first year of diagnosis.

Population:

All patients aged 18 years and older before the start of the measurement period with at least one lumbosacral epidural injection during the measurement period.

Denominator:

Total patients who have received lumbosacral epidural injections during the reporting period.

ANY of the following CPT Codes: 62322, 62323, 64483, 64484

Denominator Exclusions:

None

Numerator:

Patients with at least 1 but less than 6 encounters in which a lumbosacral epidural injection was performed during the first 12 months following initiation of treatment. Or patients with at least 1 but less than 5 encounters in which a lumbosacral epidural injection was performed during subsequent 12 month periods.

ANY of the following CPT Codes: 62322, 62323, 64483, 64484

Numerator Exclusions:

NA

Denominator Exceptions:

Not applicable

Rationale:

Reports describing the state of health and burden of pain in the United States from 1990 through 2010 stated that low back pain is the number one condition and neck pain the number 4 condition leading to disability (US Burden of Disease Collaborators. The state of US health, 1999-2010: Burden of diseases, injuries, and risk factors. *JAMA* 2013; 310:591-608; Hoy D, et al. The global burden of low back pain: estimates from the Global Burden of Disease 2010 study. *Ann Rheum Dis* 2014; 73:968-974; Hoy D, et al. The global burden of neck pain: Estimates from the global burden of disease 2010 study. *Ann Rheum Dis* 2014; 73:1309-1315).

Martin et al, in assessing the effect of chronic spinal pain on the US economy, found that costs were close to $86 billion. From 1997 through 2005 costs increased 65%; patients seeking spine-related care increased 49%. Freburger et al (Freburger JK, et al. The rising prevalence of chronic low back pain. *Arch Intern Med* 2009; 169:251-258) in a survey conducted in 1992 and repeated in 2006 in North Carolina, showed a rapid overall increase of 162% for low back pain, ranging from 3.9% in 1992 to 10.2% in 2005. These findings were echoed by multiple authors reporting variable prevalence. Studies assessing the prevalence and impact in the general population of low back and neck pain have shown that a significant proportion of patients report having chronic low back pain with lower extremity pain, or neck pain with upper extremity pain and disability (US Burden of Disease Collaborators. The state of US health, 1999-2010: Burden of diseases, injuries, and risk factors. *JAMA* 2013; 310:591-608; Hoy D, et al. The global burden of low back pain: estimates from the Global Burden of Disease 2010 study. *Ann Rheum Dis* 2014; 73:968-974; Hoy D,

et al. The global burden of neck pain: Estimates from the global burden of disease 2010 study. *Ann Rheum Dis* 2014; 73:1309-1315).

Among various modalities applied in managing painful conditions of the spine, epidural injections are one of the most commonly utilized nonsurgical interventions. Epidural injections are administered utilizing caudal, interlaminar, and transforaminal approaches (Manchikanti L, et al. Utilization of interventional techniques in managing chronic pain in Medicare population from 2000 to 2014: An analysis of patterns of utilization. *Pain Physician* 2016; 19:E531-E546; Manchikanti L, et al. A retrospective cohort study of utilization patterns of epidural injections for spinal pain in the U.S. fee-for-service Medicare population from 2000 to 2014. *BMJ Open* 2016; 6:e013042; Kaye AD, et al. Efficacy of epidural injections in managing chronic spinal pain: A best evidence synthesis. *Pain Physician* 2015; 18:E939-E1004).

Epidural injections have been studied in managing disc herniation, spinal stenosis, post surgery syndrome, and axial or discogenic pain without facet joint pain or radiculitis in the cervical, thoracic, and lumbar regions. The debate continues regarding the efficacy of epidural steroid injections via the various approaches in the 3 regions because of the varying opinions rendered in multiple systematic reviews and guidelines (Kaye AD, et al. Efficacy of epidural injections in managing chronic spinal pain: A best evidence synthesis. *Pain Physician* 2015; 18:E939-E1004).

Kaye et al (Kaye AD, et al. Efficacy of epidural injections in managing chronic spinal pain: A best evidence synthesis. *Pain Physician* 2015; 18:E939-E1004) concluded in a systematic review that there is Level II evidence for long-term management of cervical disc herniation. The evidence is Level II for long-term management of cervical disc herniation with interlaminar epidural injections. The evidence is Level II to III in managing thoracic disc herniation with an interlaminar approach. The evidence is Level II for caudal and lumbar interlaminar epidural injections with Level III evidence for lumbar transforaminal epidural injections for lumbar spinal stenosis. The evidence is Level II for cervical spinal stenosis management with an interlaminar approach. The evidence is Level II for axial or discogenic pain without facet arthropathy or disc herniation treated with caudal or lumbar interlaminar injections in the lumbar region; whereas it is Level II in the cervical region treated with cervical interlaminar epidural injections. The evidence for post lumbar surgery syndrome is Level II with caudal epidural injections and for post cervical surgery syndrome it is Level II with cervical interlaminar epidural injections.

Multiple guidelines and regulations have recommended and systematic reviews have demonstrated the appropriate frequency of epidural injections of 2 procedures initially in the diagnostic phase and thereafter 4 procedures per year with appropriate response of 2½ to 3 months in the therapeutic phase, which starts after the diagnostic phase ends. The guidance is the same for all procedures and all indications.

Clinical Recommendation Statement:

ASIPP guidelines and multiple carriers recommend epidural injections may be performed only when patients meet appropriate criteria with documentation of medical necessity and indications. Providers also document appropriate pain relief with improvement in physical and functional status with 2 procedures in the diagnostic phase followed by 4 therapeutic procedures per year, not to exceed 5 total procedures during the first year of treatment, followed by 4 therapeutic procedures per year thereafter following initiation of treatment, based on appropriate pain relief with or without improvement.

Improvement Notation:

Higher compliance score indicates better quality.

References:

US Burden of Disease Collaborators. The state of US health, 1999-2010: Burden of diseases, injuries, and risk factors. *JAMA* 2013; 310:591-608.

Hoy D, et al. The global burden of low back pain: estimates from the Global Burden of Disease 2010 study. *Ann Rheum Dis* 2014; 73:968-974.

Hoy D, et al. The global burden of neck pain: Estimates from the global burden of disease 2010 study. *Ann Rheum Dis* 2014; 73:1309-1315.

Institute of Medicine (IOM). *Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research*. The National Academies Press, Washington, DC, June 29, 2011.

Gaskin DJ, Richard P. The economic costs of pain in the United States. *J Pain* 2012; 13:715-724.

Martin BI, et al. Trends in health care expenditures, utilization, and health status among US adults with spine problems, 1997-2006. *Spine (Phila Pa 1976)* 2009; 34:2077-2084.

Freburger JK, et al. The rising prevalence of chronic low back pain. *Arch Intern Med* 2009; 169:251-258.

Manchikanti L, Falco FJE, Singh V, Benyamin RM, Racz GB, Helm II S, Caraway DL, Calodney AK, Snook LT, Smith HS, Gupta S, Ward SP, Grider JS, Hirsch JA. An update of comprehensive evidence-based guidelines for interventional techniques of chronic spinal pain. Part I: Introduction and general considerations. *Pain Physician* 2013; 16:S1-S48.

Manchikanti L, 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:S49-S283.

Kaye AD, et al. Efficacy of epidural injections in managing chronic spinal pain: A best evidence synthesis. *Pain Physician* 2015; 18:E939-E1004.

Manchikanti L, et al. Utilization of interventional techniques in managing chronic pain in Medicare population from 2000 to 2014: An analysis of patterns of utilization. *Pain Physician* 2016; 19:E531-E546;

Manchikanti L, et al. A retrospective cohort study of utilization patterns of epidural injections for spinal pain in the U.S. fee-for-service Medicare population from 2000 to 2014. *BMJ Open* 2016; 6:e013042.

NIPM 2: RATE OF CAUDAL AND INTERLAMINAR EPIDURAL INJECTIONS WITHOUT DURAL PUNCTURE

Measurement Period:

January 1, 2017 to December 31, 2017

Measure Developer:

American Society of Interventional Pain Physicians

Description

Measurement of percentage of patients aged 18 years and older undergoing epidural injections with a caudal approach or lumbar, thoracic or cervical interlaminar approach during the reporting period who have not experienced dural puncture during the procedure.

Disclaimer:

These performance measures are not standards and do not establish a standard of medical care.

NQS Domain:

Effective Clinical Care

Measure Type:

Outcome

Stratification:

None

Risk Adjustment Variable:

None

Risk Adjustment Algorithms:

None

Rate Aggregation:

None

Definition(s) of Outcomes:

1. Percentage of patients undergoing epidural injections with a caudal approach or lumbar, thoracic or cervical interlaminar approach without a dural puncture

Population:

All patients undergoing epidural injections utilizing a caudal approach or an interlaminar approach in lumbar, thoracic or cervical regions.

Denominator:

All patient encounters in which an epidural injection was performed with an interlaminar or caudal approach.

ANY of the following CPT Codes: 62320, 62321, 62322, 62323

Denominator Exclusions:

None

Numerator:

Total number of lumbar, thoracic or cervical interlaminar or caudal epidural injections without an accidental dural puncture.

Numerator Options:

Performance Met: Quality Code: IPM13 (epidural injection without a dural puncture)

Or

Performance Not Met: ICD-10: G97.41 (accidental puncture or laceration of dura during a procedure)

Numerator Exclusions:

Not applicable

Denominator Exceptions:

Not applicable

Rationale:

Epidural injections are one of the most commonly performed treatments in managing chronic spinal pain. Their use has increased rapidly (Manchikanti L, et al. Utilization of interventional techniques in managing chronic pain in Medicare population from 2000 to 2014: An analysis of patterns of utilization. *Pain Physician* 2016; 19:E531-E546; Manchikanti L, et al. A retrospective cohort study of utilization patterns of epidural injections for spinal pain in the U.S. fee-for-service Medicare population from 2000 to 2014. *BMJ Open* 2016; 6:e013042). However, the increase of interlaminar epidural injections has been significantly lower than transforaminal epidural injections. Lumbar interlaminar and caudal epidural injections decreased 2% per 100,000 Medicare beneficiaries from 2000 to 2014, whereas cervical and thoracic interlaminar epidural injections increased 104% per 100,000 Medicare beneficiaries in fee-for-service Medicare population. In contrast, lumbar transforaminal epidural injections have increased 609% per 100,000 Medicare beneficiaries, whereas cervical/thoracic transforaminal increased 93% per 100,000 Medicare beneficiaries. The effectiveness of epidural injections has been well established, despite discordant opinions and conclusions (Manchikanti L, et al. Epidural injections for lumbar radiculopathy and spinal stenosis: A comparative systematic review and meta-analysis. *Pain Physician* 2016; E365-E410; Kaye AD, et al. Efficacy of epidural injections in managing chronic spinal pain: A best evidence synthesis. *Pain Physician* 2015; 18:E939-E1004; Manchikanti L, et al. Do epidural injections provide short- and long-term relief for lumbar disc herniation? A systematic review. *Clin Orthop Relat Res* 2015; 473:1940-1956; Manchikanti L, et al. Comparison of the efficacy of saline, local anesthetics, and steroids in epidural and

facet joint injections for the management of spinal pain: A systematic review of randomized controlled trials. *Surg Neurol Int* 2015; 6:S194-S235; Chou R, et al. Pain Management Injection Therapies for Low Back Pain. Technology Assessment Report ESIB0813. [Prepared by the Pacific Northwest Evidence-based Practice Center under Contract No. HHSA 290-2012-00014-I.] Rockville, MD: Agency for Healthcare Research and Quality; July 10, 2015).

Complications of transforaminal epidural injections have been described with disastrous consequences, but complications of interlaminar epidural injections have been considered as very infrequent in their prevalence, as well as their intensity compared to complications from cervicothoracic or lumbosacral transforaminal epidural injections (Manchikanti L, et al. Do the gaps in the ligamentum flavum in the cervical spine translate into dural punctures? An analysis of 4,396 fluoroscopic interlaminar epidural injections. *Pain Physician* 2015; 18:259-266; Manchikanti L, et al. A prospective evaluation of complications of 10,000 fluoroscopically directed epidural injections. *Pain Physician* 2012; 15:131-140).

One of the common complications of interlaminar and caudal epidural injections is dural puncture, experienced in as low as 1% of patients and occasionally as high as 10%. Dural puncture can lead to multiple complications including post lumbar puncture headache, infection, and other complications and may require further treatment.

Consequently, avoiding subarachnoid puncture with appropriate technique and precautions is crucial.

Clinical Recommendation Statement:

ASIPP guidelines, Medicare guidance, and guidance from multiple insurers provides performance criteria of epidural injections under fluoroscopic guidance with use of loss of resistance technique.

Improvement Notation:

A higher score indicates better quality and appropriate procedural performance with fewer patients experiencing dural puncture.

References:

Manchikanti L, et al. An update of comprehensive evidence-based guidelines for interventional techniques of chronic spinal pain. Part I: Introduction and general considerations. *Pain Physician* 2013; 16:S1-S48.

Manchikanti L, 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:S49-S283.

Manchikanti L, et al. A retrospective cohort study of utilization patterns of epidural injections for spinal pain in the U.S. fee-for-service Medicare population from 2000 to 2014. *BMJ Open* 2016; 6**:**e013042.

Manchikanti L, et al. Utilization of interventional techniques in managing chronic pain in Medicare population from 2000 to 2014: An analysis of patterns of utilization. *Pain Physician* 2016; 19:E531-E546;

Manchikanti L, et al. Epidural injections for lumbar radiculopathy and spinal stenosis: A comparative systematic review and meta-analysis. *Pain Physician* 2016; E365-E410.

Manchikanti L, et al. Do epidural injections provide short- and long-term relief for lumbar disc herniation? A systematic review. *Clin Orthop Relat Res* 2015; 473:1940-1956.

Manchikanti L, et al. Comparison of the efficacy of saline, local anesthetics, and steroids in epidural and facet joint injections for the management of spinal pain: A systematic review of randomized controlled trials. *Surg Neurol Int* 2015; 6:S194-S235.

Chou R, et al. Pain Management Injection Therapies for Low Back Pain. Technology Assessment Report ESIB0813. [Prepared by the Pacific Northwest Evidence-based Practice Center under Contract No. HHSA 290-2012-00014-I.] Rockville, MD: Agency for Healthcare Research and Quality; July 10, 2015.

Manchikanti L, et al. Do the gaps in the ligamentum flavum in the cervical spine translate into dural punctures? An analysis of 4,396 fluoroscopic interlaminar epidural injections. *Pain Physician* 2015; 18:259-266.

Kaye AD, et al. Efficacy of epidural injections in managing chronic spinal pain: A best evidence synthesis. *Pain Physician* 2015; 18:E939-E1004.

Manchikanti L, et alB. A prospective evaluation of complications of 10,000 fluoroscopically directed epidural injections. *Pain Physician* 2012; 15:131-140.

Manchikanti L, et al. Utilization of interventional techniques in managing chronic pain in Medicare population from 2000 to 2014: An analysis of patterns of utilization. *Pain Physician* 2016; 19:E531-E546.

NIPM 3: AVOIDING EXCESSIVE USE OF THERAPEUTIC FACET JOINT INTERVENTIONS IN MANAGING CHRONIC LUMBAR SPINAL PAIN

Measurement Period:

January 1, 2017 to December 31, 2017

Measure Developer:

American Society of Interventional Pain Physicians

Description:

Measurement of percentage of patients aged 18 years and older receiving lumbar facet joint interventions that do not receive an excessive number of procedures during the measurement period, based on the recommendations of the American Society of Interventional Pain Physicians, multiple Medicare carriers, or private insurers. ***Note: This measure must be tracked over an entire year.***

Disclaimer:

These performance measures are not standards and do not establish a standard of medical care.

NQS Domain:

Efficiency and Cost Reduction

Measure Type:

Process

Measure Type:

Clinical process

Effectiveness

Stratification:

None

Risk Adjustment Variable:

None

Risk Adjustment Algorithms:

None

Rate Aggregation:

None

Definition(s) of Outcomes:

1. Percentage of patients undergoing therapeutic lumbar facet joint injections who receive 4 or less treatments per year, with treatment defined as single level or multiple levels, either unilaterally or bilaterally.
2. Percentage of patients undergoing therapeutic lumbar facet joint denervation who receive 2 or less denervation treatments per year, with treatment defined as single level or multiple levels, either unilaterally or bilaterally.

Population:

Initial population, all patients undergoing therapeutic lumbar facet joint interventions with at least one eligible encounter during the measurement period.

Denominator:

All patients undergoing therapeutic lumbar facet joint interventions.

ANY of the following CPT Codes: 64635, 64636

Or

ANY of the following CPT Codes: 64493, 64494, 64495 with Quality Code IPM03 to indicate therapeutic intent as opposed to diagnostic intent

Denominator Exclusions:

Encounters in which diagnostic lumbar facet joint procedures are performed.

Numerator:

Patients who underwent at least 1 but less than 5 therapeutic lumbar facet joint treatments during the measurement year (CPT Codes: 64493, 64494, 64495 with Quality Code IPM03 to indicate therapeutic intent as opposed to diagnostic intent). Or patients with at least 1 but less than 3 therapeutic lumbar facet joint denervation treatments during the measurement year (CPT Codes: 64635, 64636). Bilateral treatments that are performed unilaterally on separate days within 14 calendar days are considered a single treatment.

ANY of the following CPT Codes: 64635, 64636

Or

ANY of the following CPT Codes: 64493, 64494, 64495 with Quality Code IPM03 to indicate therapeutic intent as opposed to diagnostic intent

Numerator Exclusions:

Encounters in which diagnostic lumbar facet joint procedures are performed.

Denominator Exceptions:

Not applicable

Rationale:

The therapeutic spinal facet joint interventions generally used for the treatment of axial spinal pain of facet joint origin are intraarticular facet joint injections, facet joint nerve blocks, and radiofrequency neurotomy. Despite interventional procedures being common as treatment strategies for facet joint pathology, there is a paucity of literature investigating these therapeutic approaches. Systematic reviews assessing the effectiveness of various therapeutic facet joint interventions have shown there to be variable evidence based on the region and the modality of treatment utilized. Overall, the evidence ranges from limited to moderate. Facet joint interventions have been performed extensively in the United States. (Manchikanti L, et al. Utilization of interventional techniques in managing chronic pain in Medicare population from 2000 to 2014: An analysis of patterns of utilization. *Pain Physician* 2016; 19:E531-E546; Manchikanti L, et al. Utilization of facet joint and sacroiliac joint interventions in Medicare population from 2000 to 2014: Explosive growth continues! *Curr Pain Headache Rep* 2016; 20:58; Manchikanti L, et al. A systematic review and best evidence synthesis of the effectiveness of therapeutic facet joint interventions in managing chronic spinal pain. *Pain Physician* 2015; 18:E535-E582.)

Based on the systematic reviews and best evidence synthesis of their effectiveness for the management of spinal facet joint pain, the evidence for long-term improvement is Level II for lumbar and cervical radiofrequency neurotomy, and therapeutic facet joint nerve blocks in the cervical, thoracic, and lumbar spine; Level III for lumbar intraarticular injections; and Level IV for cervical intraarticular injections and thoracic radiofrequency neurotomy (Manchikanti L, et al. A systematic review and best evidence synthesis of the effectiveness of therapeutic facet joint interventions in managing chronic spinal pain. *Pain Physician* 2015; 18:E535-E582).

Various guidelines exist for performing these procedures with ASIPP guidelines and some Medicare carriers and others describing 4 facet joint injections, either intraarticular injection or facet joint nerve block, per year, per region, or 2 radiofrequency neurotomies in the therapeutic phase, with documentation of 2½ to 3 months of pain relief for facet joint injections and facet joint nerve blocks, and 4 to 6 months of relief with radiofrequency neurotomy.

Clinical Recommendation Statement:

ASIPP guidelines and other guidelines, Medicare guidance, and guidance from multiple insurers provide utilization criteria.

Improvement Notation:

A higher score indicates better quality and appropriate utilization of procedures (Manchikanti L, et al. A systematic review and best evidence synthesis of the effectiveness of therapeutic facet joint interventions in managing chronic spinal pain. *Pain Physician* 2015; 18:E535-E582).

References:

Manchikanti L, et al. An update of comprehensive evidence-based guidelines for interventional techniques of chronic spinal pain. Part I: Introduction and general considerations. *Pain Physician* 2013; 16:S1-S48.

Manchikanti L, 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:S49-S283.

Boswell MV, 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.

Manchikanti L, et al. A systematic review and best evidence synthesis of the effectiveness of therapeutic facet joint interventions in managing chronic spinal pain. *Pain Physician* 2015; 18:E535-E582.

Manchikanti L, et al. Utilization of interventional techniques in managing chronic pain in Medicare population from 2000 to 2014: An analysis of patterns of utilization. *Pain Physician* 2016; 19:E531-E546.

Manchikanti L, et al. Utilization of facet joint and sacroiliac joint interventions in Medicare population from 2000 to 2014: Explosive growth continues! *Curr Pain Headache Rep* 2016; 20:58.

NIPM 4: APPROPRIATE PATIENT SELECTION FOR DIAGNOSTIC FACET JOINT PROCEDURES

Measurement Period:

January 1, 2017 to December 31, 2017

Measure Developer:

American Society of Interventional Pain Physicians

Description:

Measurement of proportion of patients aged 18 years or older meeting appropriate patient selection criteria for diagnostic facet joint procedures.

Disclaimer:

These performance measures are not standards and do not establish a standard of medical care.

NQS Domain:

Effective Clinical Care

Measure Type:

Process

Stratification:

None

Risk Adjustment Variable:

None

Risk Adjustment Algorithms:

None

Rate Aggregation:

None

Definition(s) of Outcomes:

The percentage of patients undergoing diagnostic facet joint nerve blocks meeting appropriate patient selection criteria defined as:

- At least 3 months of moderate to severe pain with functional impairment inadequately responsive to conservative care such as NSAIDs, acetaminophen, physical therapy (if tolerated).
- Predominant axial pain that is not associated with radiculopathy or neurogenic claudication.
- Absence of non-facet pathology that could explain the source of the patient's pain, such as fracture, tumor, infection, or significant deformity.
- Clinical assessment that implicates the facet joint as the putative source of pain.

To be considered adherent to patient selection criteria, all 4 indications must be met.

Population:

All patients aged 18 years and older before the start of the measurement period with at least one eligible encounter during the measurement period.

Denominator:

Total number of encounters in which a patient receives a diagnostic facet joint procedure.

ANY of the following CPT Codes: 64490, 64491, 64492, 64493, 64494, 64495 with Quality Code IPM04 to indicate diagnostic intent as opposed to therapeutic intent

Denominator Exclusions:

None

Numerator:

Total number of encounters in which a patient receives a diagnostic facet joint procedure with documentation within the preceding 30 days of appropriate patient selection criteria having been met.

Numerator Options:

Performance Met: Quality Code IPM05 (appropriate patient selection criteria met for diagnostic facet joint procedures)

Or

Denominator Exception: Quality Code IPM05-1P (appropriate patient selection criteria not met for diagnostic facet joint procedures for valid medical reasons)

Or

Performance Not Met: Quality Code IPM05-8P (appropriate patient selection criteria not met for diagnostic facet joint procedures for reason not specified)

Numerator Exclusions:

Encounters in which a patient undergoes therapeutic, and not diagnostic, facet joint procedures.

Lumbar Rationale:

Low back pain is a common health problem with increasing prevalence, health challenges, and economic impact (Manchikanti L, et al. Management of lumbar zygapophysial [facet] joint pain. *World J Orthop* 2016; 7:315-337; Murray CJ, et al. S. Burden of Disease Collaborators. The state of US health, 1990-2010: Burden of diseases, injuries, and risk factors. *JAMA* 2013; 310:591-608). Studies indicate that low back pain is the number one cause contributing to most years lived with disability in 2010 in the United States and globally.

The global burden of low back pain has a point prevalence of 9.4% of the population with severe chronic low back pain but a lack of lower extremity pain accounting for 17% of cases, and of low back pain with leg pain of 25.8% (Hoy D, et al. The global burden of low back pain: estimates from the Global Burden of Disease 2010 study. *Ann Rheum Dis* 2014; 73:968-974). Treatment of chronic low back pain has yielded mixed results and the substantial economic and health impact has raised concerns among the public-at-large, policy-makers, and physicians (Manchikanti L, 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:S49-S283; Manchikanti L, et al. Epidemiology of low back pain in adults. *Neuromodulation* 2014; 17:3-10; Manchikanti L, et al. Utilization of facet joint and sacroiliac joint interventions in Medicare population from 2000 to 2014: Explosive growth continues! *Curr Pain Headache Rep* 2016; 20:58; Manchikanti L, et al. A systematic review and best evidence synthesis of the effectiveness of therapeutic facet joint interventions in managing chronic spinal pain. *Pain Physician* 2015; 18:E535-E582). The large increase in treatment types and rapid escalation in health care costs may be attributed to multiple factors, including the lack of an accurate diagnosis and various treatments that do not have appropriate evidence of effectiveness.

Numerous structures in the lower back may be responsible for low back and/or lower extremity pain, including lumbar intervertebral discs, facet joints, sacroiliac joints, and nerve root dura, and may be amenable to diagnostic measures such as imaging and controlled diagnostic blocks (Manchikanti L, et al. Management of lumbar zygapophysial [facet] joint pain. *World J Orthop* 2016; 7:315-337; Boswell MV, 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). Other structures also capable of transmitting pain, including ligaments, fascia, and muscles, may not be diagnosed with accuracy with any diagnostic techniques. Disc-related pathology with disc herniation, spinal stenosis, and radiculitis are diagnosed with reasonable ease and accuracy leading to definitive treatments (Manchikanti L, et al. Management of lumbar zygapophysial [facet] joint pain. *World J Orthop* 2016; 7:315-337; Manchikanti L, 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:S49-S283). However, low back pain from discs (without disc herniation), lumbar facet joints, and sacroiliac joints is difficult to diagnose accurately by noninvasive measures including imaging. Consequently, no gold standard is generally acknowledged for diagnosing low back pain, irrespective of the source being facet joint(s), intervertebral disc(s), or sacroiliac joint(s), despite the fact that lumbar facet joints, the paired joints that stabilize and guide motion in the spine, have been frequently implicated.

Based on neuroanatomy, neurophysiologic, biomechanical studies, and controlled diagnostic facet joint nerve blocks, lumbar facet joints have been recognized as a potential cause of low back pain as well as referred lower extremity pain in patients who have chronic low back pain (Boswell MV, 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; Manchikanti L, et al. Management of lumbar zygapophysial [facet] joint pain. *World J Orthop* 2016; 7:315-337). Lumbar facet joints are well innervated by the medial branches of the dorsal rami, with presence of free and encapsulated nerve

endings as well as nerves containing substance P and calcitonin gene-related peptide (CGRP) (Boswell MV, 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; Manchikanti L, et al. Management of lumbar zygapophysial [facet] joint pain. *World J Orthop* 2016; 7:315-337). While there are many causes for pain in the facet joints, mechanical injury and inflammation of the facet joints have produced persistent pain in experimental settings. Further, the high prevalence of facet joint osteoarthritis has been illustrated in numerous studies (Boswell MV, 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). Nonetheless, attempts to make the diagnosis of lumbar facet joint pain by history, identification of pain patterns, physical examination, and imaging techniques have shown low accuracy and utility. It has been proposed that controlled diagnostic blocks may be the only means to diagnose lumbar facet joint pain with reasonable accuracy, although controversy continues regarding the diagnostic accuracy of controlled local anesthetic blocks (Manchikanti L, et al. Management of lumbar zygapophysial [facet] joint pain. *World J Orthop* 2016; 7:315-337; Manchikanti L, 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:S49-S283; Boswell MV, 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).

With appropriate diagnosis, accurate and evidence-based treatments may be expected to achieve reasonable outcomes; however, the disadvantages of controlled local anesthetic blocks, apart from discussions on their accuracy, include invasiveness, expenses, and difficulty in interpretation, occasionally making them problematic in routine clinical practice as a primary diagnostic modality. Various systematic reviews have assessed the value and validity of various diagnostic maneuvers including diagnostic facet joint nerve blocks (Manchikanti L, et al. Management of lumbar zygapophysial [facet] joint pain. *World J Orthop* 2016; 7:315-337; Manchikanti L, 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:S49-S283; Boswell MV, 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).

The available evidence is Level I for lumbar facet joint nerve blocks with inclusion of a total of 17 studies with dual diagnostic blocks, with a prevalence of 16% to 41% and false-positive rates of 25% to 44%.

Consequently, it is crucial that appropriate selection criteria are utilized prior to facet joint nerve blocks. Multiple guidelines, systematic reviews, and Medicare policies have described appropriateness criteria and indications as follows:

- At least 3 months of moderate to severe pain with functional impairment inadequately responsive to conservative care such as NSAIDs, acetaminophen, physical therapy (if tolerated).

- Predominant axial pain that is not associated with radiculopathy or neurogenic claudication.
- Absence of non-facet pathology that could explain the source of the patient's pain, such as fracture, tumor, infection, or significant deformity.
- Clinical assessment that implicates the facet joint as the putative source of pain.

To be considered adherent to patient selection criteria, all 4 indications must be met.

Improvement Notation:

Higher compliance score indicates better quality.

References:

Manchikanti L, et al. Management of lumbar zygapophysial (facet) joint pain. *World J Orthop* 2016; 7:315-337.

Murray CJ, et al. S. Burden of Disease Collaborators. The state of US health, 1990-2010: Burden of diseases, injuries, and risk factors. *JAMA* 2013; 310:591-608.

Hoy D, et al. The global burden of low back pain: estimates from the Global Burden of Disease 2010 study. *Ann Rheum Dis* 2014; 73:968-974.

Manchikanti L, et al. Epidemiology of low back pain in adults. *Neuromodulation* 2014; 17:3-10.

Manchikanti L, et al. Utilization of facet joint and sacroiliac joint interventions in Medicare population from 2000 to 2014: Explosive growth continues! *Curr Pain Headache Rep* 2016; 20:58.

Manchikanti L, et al. Utilization of interventional techniques in managing chronic pain in Medicare population from 2000 to 2014: An analysis of patterns of utilization. *Pain Physician* 2016; 19:E531-E546.

Manchikanti L, 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:S49-S283.

Boswell MV, 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.

Manchikanti L, et al. A systematic review and best evidence synthesis of the effectiveness of therapeutic facet joint interventions in managing chronic spinal pain. *Pain Physician* 2015; 18:E535-E582.

CGS Administrators, LLC. Local Coverage Determination (LCD). Facet Joint Injections, Medial Branch Blocks, and Facet Joint Radiofrequency Neurotomy (L34832). Effective Date: 10/01/2016.

National Government Services, Inc. Local Coverage Determination (LCD). Facet Joint Injections, Medial Branch Blocks, and Facet Joint Radiofrequency Neurotomy (L35936). Effective Date: 10/01/2015.

Noridian Healthcare Solutions, LLC. Local Coverage Determination (LCD). Facet Joint Injections, Medial Branch Blocks, and Facet Joint Radiofrequency Neurotomy (L33842). Effective Date: 11/02/2016.

Thoracic Rationale:

Despite the exponential growth of treatments, disability secondary to spinal pain continues to escalate resulting from multiple factors, including the inherent difficulty in obtaining an accurate diagnosis (Boswell MV, 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). An inaccurate or incomplete diagnosis may lead not only to treatment failure and unnecessary testing, but also may increase disease prevalence falsely, resulting in fiscal waste and the diversion of health care resources. The tests used to make a diagnosis are fundamental to an accurate diagnosis. Mid back pain without radiculitis is a common complaint in primary and tertiary care and coming up with a definitive diagnosis can be challenging (Boswell MV, 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; Manchikanti L, 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:S49-S283).

Based on the literature, intervertebral discs, facet joints and nerve root dura have been shown as potential sources of thoracic pain and chest wall pain. Controlled studies have established intervertebral discs and facet joints as sources of thoracic pain. Despite recent advances and multiple publications, apparently thoracic facet joint pain may not be diagnosed accurately utilizing conventional clinical and radiological techniques. Consequently, controlled diagnostic blocks have been utilized.

Recent systematic reviews have shown the accuracy for thoracic diagnostic facet joint nerve blocks with controlled diagnostic blocks to have a prevalence of 40% in the thoracic spine with a false-positive rate of 42%, with Level II evidence (Boswell MV, 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).

Thus, it is crucial that appropriate selection criteria are utilized prior to facet joint nerve blocks. Multiple guidelines, systematic reviews, and Medicare policies have described appropriateness criteria and indications as follows:

- At least 3 months of moderate to severe pain with functional impairment inadequately responsive to conservative care such as NSAIDs, acetaminophen, physical therapy (if tolerated).
- Predominant axial pain that is not associated with radiculopathy.
- Absence of non-facet pathology that could explain the source of the patient's pain, such as fracture, tumor, infection, or significant deformity.
- Clinical assessment that implicates the facet joint as the putative source of pain.

To be considered adherence to criteria, all 4 indications must be met.

Improvement Notation:

Higher compliance score indicates better quality.

References:

Boswell MV, 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.

Manchikanti L, 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:S49-S283.

Manchikanti L, et al. A systematic review and best evidence synthesis of the effectiveness of therapeutic facet joint interventions in managing chronic spinal pain. *Pain Physician* 2015; 18:E535-E582.

Manchikanti L, et al. Utilization of facet joint and sacroiliac joint interventions in Medicare population from 2000 to 2014: Explosive growth continues! *Curr Pain Headache Rep* 2016; 20:58.

Manchikanti L, et al. Utilization of interventional techniques in managing chronic pain in Medicare population from 2000 to 2014: An analysis of patterns of utilization. *Pain Physician* 2016; 19:E531-E546.

CGS Administrators, LLC. Local Coverage Determination (LCD). Facet Joint Injections, Medial Branch Blocks, and Facet Joint Radiofrequency Neurotomy (L34832). Effective Date: 10/01/2016.

National Government Services, Inc. Local Coverage Determination (LCD). Facet Joint Injections, Medial Branch Blocks, and Facet Joint Radiofrequency Neurotomy (L35936). Effective Date: 10/01/2015.

Noridian Healthcare Solutions, LLC. Local Coverage Determination (LCD). Facet Joint Injections, Medial Branch Blocks, and Facet Joint Radiofrequency Neurotomy (L33842). Effective Date: 11/02/2016.

Cervical Rationale:

Despite the exponential growth of treatments and disability, spinal pain continues to escalate resulting from multiple factors, including the inherent difficulty in obtaining an accurate diagnosis (US Burden of Disease Collaborators. The state of US health, 1999-2010: Burden of diseases, injuries, and risk factors. *JAMA* 2013; 310:591-608; Hoy D, et al. The global burden of neck pain: Estimates from the global burden of disease 2010 study. *Ann Rheum Dis* 2014; 73:1309-1315; Boswell MV, 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). An inaccurate or incomplete diagnosis may lead not only to treatment failure and unnecessary testing, but also may increase disease prevalence falsely, resulting in fiscal waste and the diversion of health care resources. The tests used to make a diagnosis are fundamental to an accurate diagnosis. Neck pain without radiculitis is a common complaint in primary and tertiary care and coming up with a definitive diagnosis can be challenging (Boswell MV, 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; Manchikanti L, 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:S49-S283; Manchikanti L, Hirsch JA, Kaye AD, Boswell MV. Cervical zygapophysial [facet] joint pain: Effectiveness of interventional management strategies. *Postgrad Med* 2016; 128:54-68).

Based on the literature, intervertebral discs, facet joints and nerve root dura have been shown as potential sources of neck pain, headache, and extremity pain. Controlled studies have established intervertebral discs and facet joints as sources of neck pain. Despite recent advances and multiple publications,

apparently cervical facet joint pain is not being diagnosed accurately utilizing conventional clinical and radiological techniques (Boswell MV, 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). Consequently, controlled diagnostic blocks have been utilized.

Cervical facet joints also have been shown to be richly innervated by the medial branches of the dorsal rami (Boswell MV, 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). In addition to this innervation, neuroanatomic, neurophysiologic, and biomechanical studies have shown that cervical facet joints have both free and encapsulated nerve endings and that they also have nerves that contain substance P as well as calcitonin gene-related peptide (CGRP) (Boswell MV, 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; Manchikanti L, 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:S49-S283; Manchikanti L, Hirsch JA, Kaye AD, Boswell MV. Cervical zygapophysial [facet] joint pain: Effectiveness of interventional management strategies. *Postgrad Med* 2016; 128:54-68).

Consequently, controlled local anesthetic blocks of cervical spinal facet joints or medial branch blocks are employed to diagnose facet joint pain.

Recent systematic reviews have shown the accuracy for diagnostic facet joint nerve blocks with controlled diagnostic blocks to have a prevalence of 36% to 60% with a false-positive rate of 27% to 63% for cervical facet joint pain, with Level I-II evidence (Boswell MV, 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; Manchikanti L, 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:S49-S283; Manchikanti L, Hirsch JA, Kaye AD, Boswell MV. Cervical zygapophysial [facet] joint pain: Effectiveness of interventional management strategies. *Postgrad Med* 2016; 128:54-68).

Consequently, it is crucial that appropriate selection criteria are utilized prior to facet joint nerve blocks. Multiple guidelines, systematic reviews, and Medicare policies have described appropriateness criteria and indications as follows:

- At least 3 months of moderate to severe pain with functional impairment inadequately responsive to conservative care such as NSAIDs, acetaminophen, physical therapy (if tolerated).
- Predominant axial pain that is not associated with radiculopathy.

- Absence of non-facet pathology that could explain the source of the patient's pain, such as fracture, tumor, infection, or significant deformity.
- Clinical assessment that implicates the facet joint as the putative source of pain.

To be considered adherence to criteria, all 4 indications must be met.

Improvement Notation:

Higher compliance score indicates better quality.

References:

Boswell MV, 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.

Manchikanti L, 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:S49-S283.

Manchikanti L, Hirsch JA, Kaye AD, Boswell MV. Cervical zygapophysial (facet) joint pain: Effectiveness of interventional management strategies. *Postgrad Med* 2016; 128:54-68.

US Burden of Disease Collaborators. The state of US health, 1999-2010: Burden of diseases, injuries, and risk factors. *JAMA* 2013; 310:591-608.

Hoy D, et al. The global burden of neck pain: Estimates from the global burden of disease 2010 study. *Ann Rheum Dis* 2014; 73:1309-1315.

Manchikanti L, et al. Utilization of facet joint and sacroiliac joint interventions in Medicare population from 2000 to 2014: Explosive growth continues! *Curr Pain Headache Rep* 2016; 20:58.

Manchikanti L, Pampati V, Hirsch JA. Utilization of interventional techniques in managing chronic pain in Medicare population from 2000 to 2014: An analysis of patterns of utilization. *Pain Physician* 2016; 19:E531-E546.

Manchikanti L, et al. A systematic review and best evidence synthesis of the effectiveness of therapeutic facet joint interventions in managing chronic spinal pain. *Pain Physician* 2015; 18:E535-E582.

CGS Administrators, LLC. Local Coverage Determination (LCD). Facet Joint Injections, Medial Branch Blocks, and Facet Joint Radiofrequency Neurotomy (L34832). Effective Date: 10/01/2016.

National Government Services, Inc. Local Coverage Determination (LCD). Facet Joint Injections, Medial Branch Blocks, and Facet Joint Radiofrequency Neurotomy (L35936). Effective Date: 10/01/2015.

Noridian Healthcare Solutions, LLC. Local Coverage Determination (LCD). Facet Joint Injections, Medial Branch Blocks, and Facet Joint Radiofrequency Neurotomy (L33842). Effective Date: 11/02/2016.

NIPM 5: APPROPRIATE PATIENT SELECTION FOR TRIAL SPINAL CORD STIMULATION

Measurement Period:

January 1, 2017 to December 31, 2017

Measure Developer:

American Society of Interventional Pain Physicians

Description:

Measurement of proportion of patients aged 18 years or older meeting appropriate patient selection criteria for trial spinal cord stimulation.

Disclaimer:

These performance measures are not standards and do not establish a standard of medical care.

NQS Domain:

Effective Clinical Care

Measure Type:

Process

Stratification:

None

Risk Adjustment Variable:

None

Risk Adjustment Algorithms:

None

Rate Aggregation:

None

Definition(s) of Outcomes:

The percentage of patients undergoing trial spinal cord simulation meeting appropriate patient selection criteria defined as:

- SCS may be tried after more conservative attempts such as medications, physical therapy, psychological therapy or other modalities have been tried.
- Patients being selected for a trial must not have active substance abuse issues.
- Patients being selected for a trial must undergo proper patient education, discussion, and disclosure including an extensive discussion of the risks and benefits of this therapy.
- Patients being selected for a trial must undergo appropriate psychological screening.

To be considered adherent to patient selection criteria, all 4 indications must be met.

Population:

All patients aged 18 years and older before the start of the measurement period with at least one eligible encounter during the measurement period.

Denominator:

Total number of encounters in which a patient undergoes trial spinal cord stimulation

CPT Code: 63650

Denominator Exclusions:

None

Numerator:

Total number of encounters in which a patient receives trial spinal cord stimulation with documentation within the preceding 30 days of appropriate patient selection criteria having been met

Numerator Options:

Performance Met: Quality Code IPM06 (appropriate patient selection criteria met for trial spinal cord stimulation)

Or

Denominator Exception: Quality Code IPM06-1P (appropriate patient selection criteria not met for trial spinal cord stimulation for valid medical reasons)

Or

Performance Not Met: Quality Code IPM06-8P (appropriate patient selection criteria not met for trial spinal cord stimulation for reason not specified)

Numerator Exclusions:

None

Rationale:

Since its introduction in the late 1960s, epidural electrical stimulation of the dorsal columns of the spinal cord, commonly referred to as spinal cord stimulation (SCS), has been used frequently for the treatment of chronic pain (Grider JS, et al. Effectiveness of spinal cord stimulation in chronic spinal pain: A systematic

review. *Pain Physician* 2016; 19:E33-E54). The first systematic review of the scientific evidence by Turner et al in 1995 suggested a role for SCS in the treatment of neuropathic pain. Since then, multiple systematic reviews and effectiveness studies have been published (Grider JS, et al. Effectiveness of spinal cord stimulation in chronic spinal pain: A systematic review. *Pain Physician* 2016; 19:E33-E54).

A 2006 systematic review and meta-analysis concluded that SCS improves analgesia, decreases analgesics consumption, improves quality of life, and has a favorable cost profile (Taylor RS, et al. Spinal cord stimulation for complex regional pain syndrome: A systematic review of the clinical and cost-effectiveness literature and assessment of prognostic factors. *Eur J Pain* 2006; 10:91-101). The evidence was given a grade of B for failed back surgery syndrome (FBSS) and Complex Regional Pain Syndrome (CRPS). The cost effectiveness of SCS was subsequently confirmed by Bala et al (Bala MM, et al. Systematic review of the [cost-] effectiveness of spinal cord stimulation for people with failed back surgery syndrome. *Clin J Pain* 2008; 24:757-758) and others (Taylor RS. Spinal cord stimulation in complex regional pain syndrome and refractory neuropathic back and leg pain/ FBSS: Results of a systematic review and meta-analysis. *J Pain Symptom Manage* 2006; 31:S13-S19) with SCS given an evidence recommendation level of A for FBSS. In a systematic review of the literature with inclusion of 2 RCTs and 10 observational studies, Frey et al (Frey ME, et al. Spinal cord stimulation for patients with failed back surgery syndrome: A systematic review. *Pain Physician* 2009; 12:379-397) indicated there is an evidence level of II-1 or II-2 for long-term relief in managing patients with FBSS, showing evidence obtained from multiple well-designed controlled trials without randomization or small RCTs.

In a systematic review of 6 efficacy trials and 2 cost effectiveness studies (Level I to II) evidence of the efficacy of spinal cord stimulation in lumbar failed back surgery syndrome was shown (Grider JS, et al. Effectiveness of spinal cord stimulation in chronic spinal pain: A systematic review. *Pain Physician* 2016; 19:E33-E54).

Medicare policies describe that the implantation of spinal cord stimulators may be covered as therapies for the relief of chronic intractable pain. SCS is best suited for neuropathic pain but may have some limited value in other types of severe nociceptive intractable pain. Therapy consists of a short trial with a percutaneous implantation of neurostimulator electrode(s) in the epidural space for assessing a patient's suitability for ongoing treatment with a permanent surgically implanted nerve stimulator. Performance and documentation of an effective trial is a prerequisite for permanent nerve stimulation. In situations where the spinal cord stimulator has been working well but is in need of replacement for a battery change, malfunction or end of stimulator life, a new trial is not needed to replace the stimulator (Noridian Healthcare Solutions, LLC. Local Coverage Determination [LCD]. Spinal Cord Stimulators for Chronic Pain [L35136]. Effective Date: 10/01/2016).

Selection of patients for implantation of spinal cord stimulators is critical to success of this therapy. SCS therapy should be considered as a late option.

- SCS may be tried after more conservative attempts such as medications, physical therapy, psychological therapy or other modalities have been tried.
- Patients being selected for a trial must not have active substance abuse issues.
- Patients being selected for a trial must undergo proper patient education, discussion, and disclosure including an extensive discussion of the risks and benefits of this therapy.
- Patients being selected for a trial must undergo appropriate psychological screening.

Clinical Recommendation Statement:

Adherence to appropriate application of criteria prior to trial stimulation is essential.

Improvement Notation:

Higher compliance score indicates better quality.

References:

Grider JS, et al. Effectiveness of spinal cord stimulation in chronic spinal pain: A systematic review. *Pain Physician* 2016; 19:E33-E54.

Manchikanti L, 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:S49-S283.

Taylor RS, et al. Spinal cord stimulation for complex regional pain syndrome: A systematic review of the clinical and cost-effectiveness literature and assessment of prognostic factors. *Eur J Pain* 2006; 10:91-101.

Bala MM, et al. Systematic review of the (cost-) effectiveness of spinal cord stimulation for people with failed back surgery syndrome. *Clin J Pain* 2008; 24:757-758.

Taylor RS. Spinal cord stimulation in complex regional pain syndrome and refractory neuropathic back and leg pain/ FBSS: Results of a systematic review and meta-analysis. *J Pain Symptom Manage* 2006; 31:S13-S19.

Frey ME, et al. Spinal cord stimulation for patients with failed back surgery syndrome: A systematic review. *Pain Physician* 2009; 12:379-397.

Noridian Healthcare Solutions, LLC. Local Coverage Determination (LCD). Spinal Cord Stimulators for Chronic Pain (L35136). Effective Date: 10/01/2016.

NIPM 6: APPROPRIATE PATIENT SELECTION FOR USE OF EPIDURAL INJECTIONS IN MANAGING PAIN ORIGINATING IN THE SACRAL, LUMBAR, THORACIC OR CERVICAL SPINE

Measurement Period:

January 1, 2017 to December 31, 2017

Measure Developer:

American Society of Interventional Pain Physicians

Description:

Measurement of proportion of patients aged 18 years and older meeting appropriate patient selection criteria for therapeutic epidural injections.

Disclaimer:

These performance measures are not standards and do not establish a standard of medical care.

NQS Domain:

Effective Clinical Care

Measure Type:

Process

Stratification:

None

Risk Adjustment Variable:

None

Risk Adjustment Algorithms

None

Rate Aggregation:

None

Definition(s) of Outcomes:

To be compliant with Quality Code IPM07, all of the following criteria must be met for lumbosacral or cervical/thoracic epidural injections.

1) The percentage of patients undergoing lumbar/sacral therapeutic epidural injections meeting appropriate patient selection criteria defined as:

1. Suspected radicular pain and/or
2. Neurogenic claudication and/or
3. Low back pain with one of the following: substantial imaging abnormalities such as a central disc herniation, severe degenerative disc disease or central spinal stenosis. For a patient with low back pain only, a simple disc bulge or annular tear/ fissure is insufficient to justify performance of a lumbar ESI, unless other indications in this section are present; and/or
4. Discogenic pain, after ruling out facet joint and sacroiliac joint pain
5. Moderate to severe pain with functional impairment in activities of daily living (ADLs).
6. Failure of four weeks of non-surgical, non-injection care. All appropriate non-surgical, non-injection treatments should be considered along with a rationale for interventional treatment. Exceptions to the 4 week wait, beginning at the onset of pain, before receiving a lumbar ESI exist, but should be documented. These would include, but are not limited to:
    a. At least moderate pain with significant functional loss at work and/or home.
    b. Severe pain unresponsive to outpatient medical management.
    c. Inability to tolerate non-surgical, non-injection care due to co-existing medical condition(s)
    d. Prior successful lumbar ESI for same specific condition.
7. Minimum plain films to rule out red flag condition should be obtained

2) The percentage of patients undergoing cervical/thoracic therapeutic epidural injections meeting appropriate patient selection criteria defined as:

1. Suspected radicular pain and/or
2. Neck, upper back, and mid back pain with one of the following: substantial imaging abnormalities such as a central disc herniation, severe degenerative disc disease or spinal stenosis, post surgery syndrome, axial or discogenic pain without facet joint pain.
3. For a patient with moderate to severe function- limiting neck pain only, a simple disc bulge or annular tear/ fissure without elimination of facet joints as a source of pain is insufficient to justify performance of an epidural injection, unless other indications in this section are present.
4. Discogenic pain, after ruling out facet joint pain
5. Moderate to severe pain with functional impairment in activities of daily living (ADLs).
6. Failure of four weeks of non-surgical, non-injection care. All appropriate non-surgical, non-injection treatments should be considered along with a rationale for interventional treatment. Exceptions to the 4 week wait, beginning at the onset of pain, before receiving an epidural injection exist, but should be documented. These would include, but are not limited to:
    a. At least moderate pain with significant functional loss at work and/or home.
    b. Severe pain unresponsive to outpatient medical management.
    c. Inability to tolerate non-surgical, non-injection care due to co-existing medical condition(s)
    d. Prior successful epidural injections for same specific condition.
7. Minimum plain films to rule out red flag condition should be obtained.

Population:

All patients aged 18 years and older before the start of the measurement period with at least one eligible encounter during the measurement period.

Denominator:

Total number of encounters in which a patient receives an epidural injection

ANY of the following CPT Codes: 62320, 62321, 62322, 62323, 64479, 64480, 64483, 64484

Denominator Exclusions:

None

Numerator:

Total number of encounters in which a patient receives an epidural injection with documentation within the preceding 30 days of appropriate patient selection criteria having been met.

Numerator Options:

Performance Met: Quality Code IPM07 (appropriate patient selection criteria met for epidural injections)

Or

Denominator Exception: Quality Code IPM07-1P (appropriate patient selection criteria not met for epidural injections for valid medical reasons)

Or

Performance Not Met: Quality Code IPM07-8P (appropriate patient selection criteria not met for epidural injections for reason not specified)

Numerator Exclusions:

None

Lumbar/Sacral Rationale:

Reports describing the state of health and burden of pain in the United States from 1990 through 2010 stated that low back pain is the number one condition and neck pain the number 4 condition leading to disability (US Burden of Disease Collaborators. The state of US health, 1999-2010: Burden of diseases, injuries, and risk factors. *JAMA* 2013; 310:591-608; Hoy D, et al. The global burden of low back pain: estimates from the Global Burden of Disease 2010 study. *Ann Rheum Dis* 2014; 73:968-974; Dieleman JL, et al. US spending on personal health care and public health, 1996-2013. *JAMA* 2016; 316:2627-2646).

Martin et al, in assessing the effect of chronic spinal pain on the US economy, found that costs were close to $86 billion. From 1997 through 2005 costs increased 65%; patients seeking spine-related care increased 49%. Freburger et al (Freburger JK, et al. The rising prevalence of chronic low back pain. *Arch Intern Med* 2009; 169:251-258) in a survey conducted in 1992 and repeated in 2006 in North Carolina, showed a rapid overall increase of 162% for low back pain, ranging from 3.9% in 1992 to 10.2% in 2005. These findings were echoed by multiple authors reporting variable prevalence. Studies assessing the prevalence and impact in the general population of low back have shown that a significant proportion of patients report having chronic low back pain with lower extremity pain and disability (US Burden of Disease Collaborators. The state of US health, 1999-2010: Burden of diseases, injuries, and risk factors. *JAMA* 2013; 310:591-608; Hoy D, et al. The global burden of low back pain: estimates from the Global Burden of Disease 2010 study. *Ann Rheum Dis* 2014; 73:968-974).

Among various modalities applied in managing painful conditions of the spine, epidural injections are one of the most commonly utilized nonsurgical interventions. Epidural injections are administered utilizing caudal, interlaminar, and transforaminal approaches (Manchikanti L, et al. Utilization of interventional techniques in managing chronic pain in Medicare population from 2000 to 2014: An analysis of patterns of utilization. *Pain Physician* 2016; 19:E531-E546; Manchikanti L, et al. A retrospective cohort study of utilization patterns of epidural injections for spinal pain in the U.S. fee-for-service Medicare population from 2000 to 2014. *BMJ Open* 2016; **6:**e013042; Kaye AD, et al. Efficacy of epidural injections in managing chronic spinal pain: A best evidence synthesis. *Pain Physician* 2015; 18:E939-E1004).

Epidural injections have been studied in managing disc herniation, spinal stenosis, post surgery syndrome, and axial or discogenic pain without facet joint pain or radiculitis. The debate continues regarding the efficacy of epidural steroid injections because of the varying opinions rendered in multiple systematic reviews and guidelines (Kaye AD, et al. Efficacy of epidural injections in managing chronic spinal pain: A best evidence synthesis. *Pain Physician* 2015; 18:E939-E1004).

Multiple systematic reviews assessing the effectiveness of epidural injections in managing chronic low back and lower extremity pain (Kaye AD, et al. Efficacy of epidural injections in managing chronic spinal pain: A best evidence synthesis. *Pain Physician* 2015; 18:E939-E1004; Manchikanti L, Benyamin RM, Falco FJ, Kaye AD, Hirsch JA. Do epidural injections provide short- and long-term relief for lumbar disc herniation? A systematic review. *Clin Orthop Relat Res* 2015; 473:1940-1956; Manchikanti L, et al. Comparison of the efficacy of saline, local anesthetics, and steroids in epidural and facet joint injections for the management of spinal pain: A systematic review of randomized controlled trials. *Surg Neurol Int* 2015; 6:S194-S235; Manchikanti L, et al. Epidural injections for lumbar radiculopathy and spinal stenosis: A comparative systematic review and meta-analysis. *Pain Physician* 2016; E365-E410) have shown signification evidence for epidural injections in managing lumbar disc herniation (Level I), lumbar spinal stenosis (Level II), lumbar axial discogenic pain (Level II), and lumbar post surgery syndrome (Level II).

Multiple guidelines recommend appropriate indications and medical necessity for lumbar epidural injections as follows:

1. Suspected radicular pain and/or
2. Neurogenic claudication and/or
3. Low back pain with one of the following: substantial imaging abnormalities such as a central disc herniation, severe degenerative disc disease or central spinal stenosis. For a patient with low back pain only, a simple disc bulge or annular tear/ fissure is insufficient to justify performance of a lumbar ESI, unless other indications in this section are present; and/or
4. Discogenic pain, after ruling out facet joint and sacroiliac joint pain
5. Moderate to severe pain with functional impairment in activities of daily living (ADLs).
6. Failure of four weeks of non-surgical, non-injection care. All appropriate non-surgical, non-injection treatments should be considered along with a rationale for interventional treatment. Exceptions to the 4 week wait, beginning at the onset of pain, before receiving a lumbar ESI exist, but should be documented. These would include, but are not limited to:
    a. At least moderate pain with significant functional loss at work and/or home.
    b. Severe pain unresponsive to outpatient medical management.
    c. Inability to tolerate non-surgical, non-injection care due to co-existing medical condition(s)
    d. Prior successful lumbar ESI for same specific condition.
7. Minimum plain films to rule out red flag condition should be obtained.

Clinical Recommendation Statement:

The evidence-based recommendations require that all patients undergoing lumbosacral epidural injections must meet appropriate patient selection criteria.

Improvement Notation:

Higher compliance score indicates better quality.

References:

US Burden of Disease Collaborators. The state of US health, 1999-2010: Burden of diseases, injuries, and risk factors. *JAMA* 2013; 310:591-608.

Hoy D, et al. The global burden of low back pain: estimates from the Global Burden of Disease 2010 study. *Ann Rheum Dis* 2014; 73:968-974.

Manchikanti L, et al. Do epidural injections provide short- and long-term relief for lumbar disc herniation? A systematic review. *Clin Orthop Relat Res* 2015; 473:1940-1956

Manchikanti L, et al. Comparison of the efficacy of saline, local anesthetics, and steroids in epidural and facet joint injections for the management of spinal pain: A systematic review of randomized controlled trials. *Surg Neurol Int* 2015; 6:S194-S235.

Manchikanti L, et al. Epidural injections for lumbar radiculopathy and spinal stenosis: A comparative systematic review and meta-analysis. *Pain Physician* 2016; E365-E410.

Institute of Medicine (IOM). *Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research*. The National Academies Press, Washington, DC, June 29, 2011.

Gaskin DJ, Richard P. The economic costs of pain in the United States. *J Pain* 2012; 13:715-724.

Martin BI, et al. Trends in health care expenditures, utilization, and health status among US adults with spine problems, 1997-2006. *Spine (Phila Pa 1976)* 2009; 34:2077-2084.

Freburger JK, et al. The rising prevalence of chronic low back pain. *Arch Intern Med* 2009; 169:251-258.

Manchikanti L, et al. An update of comprehensive evidence-based guidelines for interventional techniques of chronic spinal pain. Part I: Introduction and general considerations. *Pain Physician* 2013; 16:S1-S48.

Manchikanti L, 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:S49-S283.

Kaye AD, et al. Efficacy of epidural injections in managing chronic spinal pain: A best evidence synthesis. *Pain Physician* 2015; 18:E939-E1004.

Dieleman JL, et al. US spending on personal health care and public health, 1996-2013. *JAMA* 2016; 316:2627-2646

Manchikanti L, et al. Utilization of interventional techniques in managing chronic pain in Medicare population from 2000 to 2014: An analysis of patterns of utilization. *Pain Physician* 2016; 19:E531-E546;

Manchikanti L, et al. A retrospective cohort study of utilization patterns of epidural injections for spinal pain in the U.S. fee-for-service Medicare population from 2000 to 2014. *BMJ Open* 2016; 6:e013042.

Cervical/Thoracic Rationale:

The high prevalence of chronic persistent neck pain not only leads to disability but also has a significant economic, societal, and health impact. Among multiple modalities of treatments prescribed in the management of neck and upper extremity pain, surgical, interventional and conservative modalities have been described. Cervical epidural injections are also common modalities of treatments provided in managing neck and upper extremity pain. They are administered by either an interlaminar approach or transforaminal approach (Manchikanti L, et al. Do cervical epidural injections provide long-term relief in neck and upper extremity pain? A systematic review. *Pain Physician* 2015; 18:39-60; Hoy D, et al. The global burden of neck pain: Estimates from the global burden of disease 2010 study. *Ann Rheum Dis* 2014; 73:1309-1315; Dieleman JL, et al. US spending on personal health care and public health, 1996-2013. *JAMA* 2016; 316:2627-2646; Martin BI, et al. Trends in health care expenditures, utilization, and health status among US adults with spine problems, 1997-2006. *Spine (Phila Pa 1976)* 2009; 34:2077-2084; Manchikanti L, et al. Utilization of interventional techniques in managing chronic pain in Medicare population from 2000 to 2014: An analysis of patterns of utilization. *Pain Physician* 2016; 19:E531-E546; Manchikanti L, et al. A retrospective cohort study of utilization patterns of epidural injections for spinal pain in the U.S. fee-for-service Medicare population from 2000 to 2014. *BMJ Open* 2016; 6:e013042).

The effectiveness of cervical epidural injections continues to be intensely debated, in particular for conditions other than disc herniation and radicular pain. Cervical transforaminal epidural injections or selective nerve root blocks are associated with high complication rates and intense debate (Manchikanti L, et al. Do cervical epidural injections provide long-term relief in neck and upper extremity pain? A systematic review. *Pain Physician* 2015; 18:39-60; Kaye AD, et al. Efficacy of epidural injections in managing chronic spinal pain: A best evidence synthesis. *Pain Physician* 2015; 18:E939-E1004; Manchikanti L, et al. Comparison of the efficacy of saline, local anesthetics, and steroids in epidural and facet joint injections for the management of spinal pain: A systematic review of randomized controlled trials. *Surg Neurol Int* 2015; 6:S194-S235). Complications with interlaminar epidural injections, though reported, are considered much less frequent or fatal compared to cervical transforaminal epidural injections. The important differences between interlaminar and transforaminal epidural injections include that while interlaminar entry delivers the medication close to the assumed site of pathology and the

transforaminal approach is the target-specific modality requiring the smallest volume to reach the primary site of pathology and also leading to the site of pathology ventrally.

Multiple systematic reviews and guidelines performed by various groups of authors have reached different conclusions about the level of evidence for the effectiveness of cervical epidural injections in managing not only disc herniation and radiculitis, but also other conditions (Manchikanti L, et al. Do cervical epidural injections provide long-term relief in neck and upper extremity pain? A systematic review. *Pain Physician* 2015; 18:39-60; Kaye AD, et al. Efficacy of epidural injections in managing chronic spinal pain: A best evidence synthesis. *Pain Physician* 2015; 18:E939-E1004; Manchikanti L, et al. Comparison of the efficacy of saline, local anesthetics, and steroids in epidural and facet joint injections for the management of spinal pain: A systematic review of randomized controlled trials. *Surg Neurol Int* 2015; 6:S194-S235)).

Based on the review of multiple systematic reviews based on randomized controlled trials showed Level II evidence for the efficacy of cervical interlaminar epidural injections with local anesthetic with or without steroids, based on at least one high quality relevant randomized controlled trial in each category for disc herniation, discogenic pain without facet joint pain, central spinal stenosis, and cervical post surgery syndrome.

Multiple systematic reviews, etc., have described the criteria; however, there are not Medicare criteria at present to perform cervical epidural injections. Based on the proposed criteria and the literature, they are as follows:

1. Suspected radicular pain and/or
2. Neck, upper back, and mid back pain with one of the following: substantial imaging abnormalities such as a central disc herniation, severe degenerative disc disease or spinal stenosis, post surgery syndrome, axial or discogenic pain without facet joint pain.
3. For a patient with moderate to severe function- limiting neck pain only, a simple disc bulge or annular tear/ fissure without elimination of facet joints as a source of pain is insufficient to justify performance of an epidural injection, unless other indications in this section are present.
4. Discogenic pain, after ruling out facet joint pain
5. Moderate to severe pain with functional impairment in activities of daily living (ADLs).
6. Failure of four weeks of non-surgical, non-injection care. All appropriate non-surgical, non-injection treatments should be considered along with a rationale for interventional treatment. Exceptions to the 4 week wait, beginning at the onset of pain, before receiving an epidural injection exist, but should be documented. These would include, but are not limited to:

a. At least moderate pain with significant functional loss at work and/or home.
b. Severe pain unresponsive to outpatient medical management.
c. Inability to tolerate non-surgical, non-injection care due to co-existing medical condition(s)
d. Prior successful epidural injections for same specific condition.

7. Minimum plain films to rule out red flag condition should be obtained.

Clinical Recommendation Statement:

The evidence-based recommendations require that all patients undergoing cervical/thoracic epidural injections must meet appropriate patient selection criteria.

Improvement Notation:

Higher compliance score indicates better quality.

References:

Manchikanti L, et al. Do cervical epidural injections provide long-term relief in neck and upper extremity pain? A systematic review. *Pain Physician* 2015; 18:39-60.

US Burden of Disease Collaborators. The state of US health, 1999-2010: Burden of diseases, injuries, and risk factors. *JAMA* 2013; 310:591-608.

Hoy D, et al. The global burden of neck pain: Estimates from the global burden of disease 2010 study. *Ann Rheum Dis* 2014; 73:1309-1315.

Gaskin DJ, Richard P. The economic costs of pain in the United States. *J Pain* 2012; 13:715-724.

Martin BI, et al. Trends in health care expenditures, utilization, and health status among US adults with spine problems, 1997-2006. *Spine (Phila Pa 1976)* 2009; 34:2077-2084.

Manchikanti L, et al. An update of comprehensive evidence-based guidelines for interventional techniques of chronic spinal pain. Part I: Introduction and general considerations. *Pain Physician* 2013; 16:S1-S48.

Manchikanti L, 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:S49-S283.

Dieleman JL, et al. US spending on personal health care and public health, 1996-2013. *JAMA* 2016; 316:2627-2646

Manchikanti L, et al. Comparison of the efficacy of saline, local anesthetics, and steroids in epidural and facet joint injections for the management of spinal pain: A systematic review of randomized controlled trials. *Surg Neurol Int* 2015; 6:S194-S235.

Kaye AD, et al. Efficacy of epidural injections in managing chronic spinal pain: A best evidence synthesis. *Pain Physician* 2015; 18:E939-E1004.

Manchikanti L, et al. Utilization of interventional techniques in managing chronic pain in Medicare population from 2000 to 2014: An analysis of patterns of utilization. *Pain Physician* 2016; 19:E531-E546.

Manchikanti L, et al. A retrospective cohort study of utilization patterns of epidural injections for spinal pain in the U.S. fee-for-service Medicare population from 2000 to 2014. *BMJ Open* 2016; 6:e013042.

NIPM 7: SHARED DECISION MAKING REGARDING ANTICOAGULANT AND ANTITHROMBOTIC USE IN THE SETTING OF CAUDAL OR INTERLAMINAR EPIDURAL INJECTIONS

Measurement Period:

January 1, 2017 to December 31, 2017

Measure Developer:

American Society of Interventional Pain Physicians

Description:

Measurement of percentage of patients aged 18 years and older undergoing caudal or interlaminar epidural injections with documentation of appropriate discussion, risk/benefit analysis, and shared decision making regarding continuation or discontinuation of their anticoagulation or antithrombotic regimen.

Disclaimer:

These performance measures are not standards and do not establish a standard of medical care.

NQS Domain:

Patient Safety

Measure Type:

Process

Stratification:

None

Risk Adjustment Variable:

None

Risk Adjustment Algorithms:

None

Rate Aggregation:

None

Definition(s) of Outcomes:

1. Percentage of patients aged 18 years and older undergoing caudal or interlaminar epidural injections with documentation of appropriate discussion, risk/benefit analysis, and shared decision making regarding continuation or discontinuation of their anticoagulation or antithrombotic regimen.
2. Percentage of patients in whom anticoagulant therapy (Warfarin, Pradaxa, Xarelto, Savaysa, Apixaban, LMWH) was discontinued prior to caudal or interlaminar epidural injections, following appropriate discussion, risk/benefit analysis, and shared decision making.
3. Percentage of patients in whom antithrombotic therapy (Aspirin, Aspirin/Dipyridamole, Anagrelide, Brilinta, Cilostazol, Clopidogrel, Dipyridamole, Effient, Zontivity) was discontinued prior to caudal or interlaminar epidural injections, following appropriate discussion, risk/benefit analysis, and shared decision making.
4. Percentage of patients in whom anticoagulant therapy (Warfarin, Pradaxa, Xarelto, Savaysa, Apixaban, LMWH) was continued prior to caudal or interlaminar epidural injections, following appropriate discussion, risk/benefit analysis, and shared decision making.
5. Percentage of patients in whom antithrombotic therapy (Aspirin, Aspirin/Dipyridamole, Anagrelide, Brilinta, Cilostazol, Clopidogrel, Dipyridamole, Effient, Zontivity) was continued prior to caudal or interlaminar epidural injections, following appropriate discussion, risk/benefit analysis, and shared decision making.

Population:

All patients aged 18 years and older before the start of the measurement period with at least one eligible encounter during the measurement period.

Denominator:

Total patients 18 years or older who are on anticoagulant or antithrombotic therapy who undergo a caudal or interlaminar epidural injection.

ANY of the following ICD-10 codes: Z79.01 [long term current use of anticoagulant medication], or Z79.02 [long term current use of antithrombotic/antiplatelet medication]

AND

ANY of the following CPT codes: 62320, 62321, 62322, 62323

Denominator Exclusions:

None

Numerator:

Total patients 18 years or older who are on anticoagulant or antithrombotic therapy who undergo a caudal or interlaminar epidural injection and have documentation of appropriate discussion, risk/benefit analysis, and shared decision making regarding continuation or discontinuation of their anticoagulation or antithrombotic regimen.

Numerator Options:

Performance Met: Quality Code IPM09: anticoagulant therapy (Warfarin, Pradaxa, Xarelto, Savaysa, Apixaban, LMWH) was discontinued prior to caudal or interlaminar epidural injections, following appropriate discussion, risk/benefit analysis, and shared decision making

Or

Performance Met: Quality Code IPM10: antithrombotic therapy (Aspirin, Aspirin/Dipyridamole, Anagrelide, Brilinta, Cilostazol, Clopidogrel, Dipyridamole, Effient, Zontivity) was discontinued prior to

caudal or interlaminar epidural injections, following appropriate discussion, risk/benefit analysis, and shared decision making

Or

Performance Met: Quality Code IPM11: anticoagulant therapy (Warfarin, Pradaxa, Xarelto, Savaysa, Apixaban, LMWH) was continued prior to caudal or interlaminar epidural injections, following appropriate discussion, risk/benefit analysis, and shared decision making

Or

Performance Met: Quality Code IPM12: antithrombotic therapy (Aspirin, Aspirin/Dipyridamole, Anagrelide, Brilinta, Cilostazol, Clopidogrel, Dipyridamole, Effient, Zontivity) was continued prior to caudal or interlaminar epidural injections, following appropriate discussion, risk/benefit analysis, and shared decision making

Or

Denominator Exception: Quality Code IPM09-1P or IPM10-1P or IPM11-1P or IPM12-1P: appropriate discussion, risk/benefit analysis, and shared decision making regarding continuation or discontinuation of their anticoagulation or antithrombotic regimen is not documented for valid medical reasons

Or

Performance Not Met: Quality Code IPM09-8P or IPM10-8P or IPM11-8P or IPM12-8P: appropriate discussion, risk/benefit analysis, and shared decision making regarding continuation or discontinuation of their anticoagulation or antithrombotic regimen is not documented for reason not specified

Numerator Exclusions:

None

Rationale:

Interventional pain management is a specialty that utilizes minimally invasive procedures to diagnose and treat chronic pain. Patients undergoing these treatments may be receiving exogenous anticoagulants and antithrombotics. Even though the risk of major bleeding is very small, the consequences can be catastrophic. However, the role of antithrombotic therapy for primary and secondary prevention of cardiovascular disease to decrease the incidence of acute cerebral and cardiovascular events is also crucial. Overall, there is a paucity of literature on the subject of bleeding risk in interventional pain management along with practice patterns and perioperative management of anticoagulant and anti-thrombotic therapy (Manchikanti L, et al. Assessment of practice patterns of perioperative management of antiplatelet and anticoagulant therapy in interventional pain management. *Pain Physician* 2012; 15:E955-E968; Manchikanti L, et al. A prospective evaluation of bleeding risk of interventional techniques in chronic pain. *Pain Physician* 2011; 14:317-329; Manchikanti L, et al. Assessment of bleeding risk of interventional techniques: A best evidence synthesis of practice patterns and perioperative management of anticoagulant and antithrombotic therapy. *Pain Physician* 2013; 16:SE261-SE318; Endres S, et al. The risks of continuing or discontinuing anticoagulants for patients undergoing common interventional pain procedures. *Pain Med*. 2016 Jun 12. [Epub ahead of print]).

There are no accurate data available concerning these events, specifically in relation to epidural injections.

A study of practice patterns of perioperative management of antiplatelet and anticoagulant therapy in interventional pain management by Manchikanti et al showed an overwhelming pattern of discontinuation of warfarin therapy. However, this study also showed that thromboembolism complications may be 3 times more prevalent than epidural hematoma. Endres et al, in a study of risks of continuing or discontinuing anticoagulants for patients undergoing common interventional pain procedures, concluded that lumbar transforaminal injections, lumbar medial branch blocks, trigger point injections, and sacroiliac joint blocks appear to be safe in patients who continue anticoagulants. In patients who discontinue anticoagulants, although low (0.2%), the risk of serious complications is not zero, and must be considered when deciding between continuing and discontinuing anticoagulants. In a comprehensive review assessing the bleeding risk of interventional techniques, Manchikanti et al (Manchikanti L, et al. Assessment of bleeding risk of interventional techniques: A best evidence synthesis of practice patterns and perioperative management of anticoagulant and antithrombotic therapy. *Pain Physician* 2013; 16:SE261-SE318) showed that there was good evidence for the risk of thromboembolic phenomenon in patients who discontinue anticoagulant therapy. There was also fair evidence that excessive bleeding, including epidural hematoma formation, may occur with epidural injections if anticoagulant therapy is continued. However, the risk of a thromboembolic phenomenon was shown to be higher and more significant when anticoagulant therapy was stopped than was the risk of an epidural hematoma when anticoagulant therapy was continued. They recommended that Coumadin (warfarin) and other anticoagulants should be discontinued or the international normalized ratio (INR) be normalized to 1.4 or less for high risk procedures such as cervical and lumbar interlaminar epidural injections. The recommendations in reference to other anticoagulant therapy included that rivaroxaban (Xarelto) may be stopped for one day or longer (evidence-limited) (Manchikanti L, et al. Assessment of bleeding risk of

interventional techniques: A best evidence synthesis of practice patterns and perioperative management of anticoagulant and antithrombotic therapy. *Pain Physician* 2013; 16:SE261-SE318).

It is also recommended that prior to stopping anticoagulant therapy, the physician in charge of anticoagulant therapy should be contacted and the decision should be based on the risk-benefit ratio and the recommendation from the treating physician. In some patients, due to excessive risk, it may be not be feasible to perform the procedures.

Clinical Recommendation Statement:

Considering the patient status and weighing the risk/benefit ratio, antithrombotics may be continued with appropriate discussion and consent of the patient, whereas, INR to be optimal 1.5 or less for cervical epidural injections, 1.5 or less for lumbar interlaminar epidural injections, and discontinuation of rivaroxaban for at least 24 hours and Pradaxa (dabigatran) for at least 24 hours before paravertebral interventional techniques, and 2 to 4 days for epidural interventions in patients with normal renal function and for longer periods of time in patients with renal impairment.

Improvement Notation:

A higher proportion of patients meeting the appropriate criteria results in better performance.

References:

Manchikanti L, et al. An update of comprehensive evidence-based guidelines for interventional techniques of chronic spinal pain. Part I: Introduction and general considerations. *Pain Physician* 2013; 16:S1-S48.

Manchikanti L, 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:S49-S283.

Manchikanti L, et al. Utilization of interventional techniques in managing chronic pain in Medicare population from 2000 to 2014: An analysis of patterns of utilization. *Pain Physician* 2016; 19:E531-E546;

Manchikanti L, et al. A prospective evaluation of bleeding risk of interventional techniques in chronic pain. *Pain Physician* 2011; 14:317-329.

Manchikanti L, et al. Assessment of bleeding risk of interventional techniques: A best evidence synthesis of practice patterns and perioperative management of anticoagulant and antithrombotic therapy. *Pain Physician* 2013; 16:SE261-SE318.

Manchikanti L, et al. Assessment of practice patterns of perioperative management of antiplatelet and anticoagulant therapy in interventional pain management. *Pain Physician* 2012; 15:E955-E968.

Endres S, et al. The risks of continuing or discontinuing anticoagulants for patients undergoing common interventional pain procedures. *Pain Med*. 2016 Jun 12. [Epub ahead of print]

NIPM 8: AVOIDING EXCESSIVE USE OF EPIDURAL INJECTIONS IN MANAGING CHRONIC PAIN ORIGINATING IN THE CERVICAL AND THORACIC SPINE

Measurement Period:

January 1, 2017 to December 31, 2017

Measure Developer:

American Society of Interventional Pain Physicians

Description:

Measurement of percentage of patients aged 18 years and older receiving therapeutic cervical/thoracic epidural injections that do not receive an excessive number of injections during the measurement period.
Note: This measure must be tracked over an entire year.

Disclaimer:

These performance measures are not standards and do not establish a standard of medical care.

NQS Domain:

Efficiency and Cost Reduction

Measure Type:

Process

Stratification:

None

Risk Adjustment Variable:

None

Risk Adjustment Algorithms

None

Rate Aggregation:

None

Definition(s) of Outcomes:

1. The percentage of patients receiving cervical/thoracic epidural injections to treat pain originating in the cervical/thoracic spine who receive cervical/thoracic epidural injections on 5 or less separate encounters during the first 12 months following initial diagnosis.
2. The percentage of patients receiving cervical/thoracic epidural injections to treat pain originating in the cervical/thoracic spine who receive cervical/thoracic epidural injections on 4 or less separate encounters during any 12 month period not within the first year of diagnosis.

Population:

All patients aged 18 years and older before the start of the measurement period with at least one cervical/thoracic epidural injection during the measurement period.

Denominator:

All patients who have received cervical/thoracic epidural injections during the reporting period.

ANY of the following CPT Codes: 62320, 62321, 64479, 64480

Denominator Exclusions:

None

Numerator:

Patients with at least 1 but less than 6 encounters in which a cervical/thoracic epidural injection was performed during the first 12 months following initiation of treatment. Or patients with at least 1 but less than 5 encounters in which a cervical/thoracic epidural injection was performed during subsequent 12 month periods.

ANY of the following CPT Codes: 62320, 62321, 64479, 64480

Numerator Exclusions:

NA

Denominator Exceptions:

Not applicable

Rationale:

Reports describing the state of health and burden of pain in the United States from 1990 through 2010 stated that low back pain is the number one condition and neck pain the number 4 condition leading to disability (US Burden of Disease Collaborators. The state of US health, 1999-2010: Burden of diseases, injuries, and risk factors. *JAMA* 2013; 310:591-608; Hoy D, et al. The global burden of low back pain: estimates from the Global Burden of Disease 2010 study. *Ann Rheum Dis* 2014; 73:968-974; Hoy D, et al. The global burden of neck pain: Estimates from the global burden of disease 2010 study. *Ann Rheum Dis* 2014; 73:1309-1315).

Martin et al, in assessing the effect of chronic spinal pain on the US economy, found that costs were close to $86 billion. From 1997 through 2005 costs increased 65%; patients seeking spine-related care increased 49%. Freburger et al (Freburger JK, et al. The rising prevalence of chronic low back pain. *Arch Intern Med* 2009; 169:251-258) in a survey conducted in 1992 and repeated in 2006 in North Carolina, showed a rapid overall increase of 162% for low back pain, ranging from 3.9% in 1992 to 10.2% in 2005. These findings were echoed by multiple authors reporting variable prevalence. Studies assessing the prevalence and impact in the general population of low back and neck pain have shown that a significant proportion of patients report having chronic low back pain with lower extremity pain, or neck pain with upper extremity pain and disability (US Burden of Disease Collaborators. The state of US health, 1999-2010: Burden of diseases, injuries, and risk factors. *JAMA* 2013; 310:591-608; Hoy D, et al. The global burden of low back pain: estimates from the Global Burden of Disease 2010 study. *Ann Rheum Dis* 2014; 73:968-974; Hoy D,

et al. The global burden of neck pain: Estimates from the global burden of disease 2010 study. *Ann Rheum Dis* 2014; 73:1309-1315).

Among various modalities applied in managing painful conditions of the spine, epidural injections are one of the most commonly utilized nonsurgical interventions. Epidural injections are administered utilizing caudal, interlaminar, and transforaminal approaches (Manchikanti L, et al. Utilization of interventional techniques in managing chronic pain in Medicare population from 2000 to 2014: An analysis of patterns of utilization. *Pain Physician* 2016; 19:E531-E546; Manchikanti L, et al. A retrospective cohort study of utilization patterns of epidural injections for spinal pain in the U.S. fee-for-service Medicare population from 2000 to 2014. *BMJ Open* 2016; 6:e013042; Kaye AD, et al. Efficacy of epidural injections in managing chronic spinal pain: A best evidence synthesis. *Pain Physician* 2015; 18:E939-E1004).

Epidural injections have been studied in managing disc herniation, spinal stenosis, post surgery syndrome, and axial or discogenic pain without facet joint pain or radiculitis in the cervical, thoracic, and lumbar regions. The debate continues regarding the efficacy of epidural steroid injections via the various approaches in the 3 regions because of the varying opinions rendered in multiple systematic reviews and guidelines (Kaye AD, et al. Efficacy of epidural injections in managing chronic spinal pain: A best evidence synthesis. *Pain Physician* 2015; 18:E939-E1004).

Kaye et al (Kaye AD, et al. Efficacy of epidural injections in managing chronic spinal pain: A best evidence synthesis. *Pain Physician* 2015; 18:E939-E1004) concluded in a systematic review that there is Level II evidence for long-term management of cervical disc herniation. The evidence is Level II for long-term management of cervical disc herniation with interlaminar epidural injections. The evidence is Level II to III in managing thoracic disc herniation with an interlaminar approach. The evidence is Level II for caudal and lumbar interlaminar epidural injections with Level III evidence for lumbar transforaminal epidural injections for lumbar spinal stenosis. The evidence is Level II for cervical spinal stenosis management with an interlaminar approach. The evidence is Level II for axial or discogenic pain without facet arthropathy or disc herniation treated with caudal or lumbar interlaminar injections in the lumbar region; whereas it is Level II in the cervical region treated with cervical interlaminar epidural injections. The evidence for post lumbar surgery syndrome is Level II with caudal epidural injections and for post cervical surgery syndrome it is Level II with cervical interlaminar epidural injections.

Multiple guidelines and regulations have recommended and systematic reviews have demonstrated the appropriate frequency of epidural injections of 2 procedures initially in the diagnostic phase and thereafter 4 procedures per year with appropriate response of 2½ to 3 months in the therapeutic phase, which starts after the diagnostic phase ends. The guidance is the same for all procedures and all indications.

Clinical Recommendation Statement:

ASIPP guidelines and multiple carriers recommend epidural injections may be performed only when patients meet appropriate criteria with documentation of medical necessity and indications. Providers also document appropriate pain relief with improvement in physical and functional status with 2 procedures in the diagnostic phase followed by 4 therapeutic procedures per year, not to exceed 5 total procedures during the first year of treatment, followed by 4 therapeutic procedures per year thereafter following initiation of treatment, based on appropriate pain relief with or without improvement.

Improvement Notation:

Higher compliance score indicates better quality.

References:

US Burden of Disease Collaborators. The state of US health, 1999-2010: Burden of diseases, injuries, and risk factors. *JAMA* 2013; 310:591-608.

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NIMP 9: AVOIDING EXCESSIVE USE OF THERAPEUTIC FACET JOINT INTERVENTIONS IN MANAGING CHRONIC CERVICAL AND THORACIC SPINAL PAIN

Measurement Period:

January 1, 2017 to December 31, 2017

Measure Developer:

American Society of Interventional Pain Physicians

Description:

Measurement of percentage of patients aged 18 years and older receiving cervical/thoracic facet joint interventions that do not receive an excessive number of procedures during the measurement period, based on the recommendations of the American Society of Interventional Pain Physicians, multiple Medicare carriers, or private insurers. ***Note: This measure must be tracked over an entire year.***

Disclaimer:

These performance measures are not standards and do not establish a standard of medical care.

NQS Domain:

Efficiency and Cost Reduction

Measure Type:

Process

Stratification:

None

Risk Adjustment Variable:

None

Risk Adjustment Algorithms:

None

Rate Aggregation:

None

Definition(s) of Outcomes:

1. Percentage of patients undergoing therapeutic cervical/thoracic facet joint injections who receive 4 or less treatments per year, with treatment defined as single level or multiple levels, either unilaterally or bilaterally.
2. Percentage of patients undergoing therapeutic cervical/thoracic facet joint denervation who receive 2 or less denervation treatments per year, with treatment defined as single level or multiple levels, either unilaterally or bilaterally.

Population:

Initial population, all patients undergoing therapeutic cervical/thoracic facet joint interventions with at least one eligible encounter during the measurement period.

Denominator:

All patients undergoing therapeutic cervical/thoracic facet joint interventions.

ANY of the following CPT Codes: 64633, 64634

Or

ANY of the following CPT Codes: 64490, 64491, 64492 with Quality Code IPM03 to indicate therapeutic intent as opposed to diagnostic intent

Denominator Exclusions:

Encounters in which diagnostic cervical/thoracic facet joint procedures are performed.

Numerator:

Patients who underwent at least 1 but less than 5 therapeutic cervical/thoracic facet joint treatments during the measurement year (CPT Codes: 64490, 64491, 64492 with Quality Code IPM03 to indicate therapeutic intent as opposed to diagnostic intent). Or patients with at least 1 but less than 3 therapeutic cervical/thoracic facet joint denervation treatments during the measurement year (CPT Codes: 64633, 64634). Bilateral treatments that are performed unilaterally on separate days within 14 calendar days are considered a single treatment.

ANY of the following CPT Codes: 64633, 64634

Or

ANY of the following CPT Codes: 64490, 64491, 64492 with Quality Code IPM03 to indicate therapeutic intent as opposed to diagnostic intent

Numerator Exclusions:

Encounters in which diagnostic cervical/thoracic facet joint procedures are performed.

Denominator Exceptions:

Not applicable

Rationale:

The therapeutic spinal facet joint interventions generally used for the treatment of axial spinal pain of facet joint origin are intraarticular facet joint injections, facet joint nerve blocks, and radiofrequency neurotomy. Despite interventional procedures being common as treatment strategies for facet joint pathology, there is a paucity of literature investigating these therapeutic approaches. Systematic reviews assessing the effectiveness of various therapeutic facet joint interventions have shown there to be variable evidence based on the region and the modality of treatment utilized. Overall, the evidence ranges

from limited to moderate. Facet joint interventions have been performed extensively in the United States. (Manchikanti L, et al. Utilization of interventional techniques in managing chronic pain in Medicare population from 2000 to 2014: An analysis of patterns of utilization. *Pain Physician* 2016; 19:E531-E546; Manchikanti L, et al. Utilization of facet joint and sacroiliac joint interventions in Medicare population from 2000 to 2014: Explosive growth continues! *Curr Pain Headache Rep* 2016; 20:58; Manchikanti L, et al. A systematic review and best evidence synthesis of the effectiveness of therapeutic facet joint interventions in managing chronic spinal pain. *Pain Physician* 2015; 18:E535-E582.)

Based on the systematic reviews and best evidence synthesis of their effectiveness for the management of spinal facet joint pain, the evidence for long-term improvement is Level II for lumbar and cervical radiofrequency neurotomy, and therapeutic facet joint nerve blocks in the cervical, thoracic, and lumbar spine; Level III for lumbar intraarticular injections; and Level IV for cervical intraarticular injections and thoracic radiofrequency neurotomy (Manchikanti L, et al. A systematic review and best evidence synthesis of the effectiveness of therapeutic facet joint interventions in managing chronic spinal pain. *Pain Physician* 2015; 18:E535-E582).

Various guidelines exist for performing these procedures with ASIPP guidelines and some Medicare carriers and others describing 4 facet joint injections, either intraarticular injection or facet joint nerve block, per year, per region, or 2 radiofrequency neurotomies in the therapeutic phase, with documentation of 2½ to 3 months of pain relief for facet joint injections and facet joint nerve blocks, and 4 to 6 months of relief with radiofrequency neurotomy.

Clinical Recommendation Statement:

ASIPP guidelines and other guidelines, Medicare guidance, and guidance from multiple insurers provide utilization criteria.

Improvement Notation:

A higher score indicates better quality and appropriate utilization of procedures (Manchikanti L, et al. A systematic review and best evidence synthesis of the effectiveness of therapeutic facet joint interventions in managing chronic spinal pain. *Pain Physician* 2015; 18:E535-E582).

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Appendix A: IPM Code Table

Code Set:	Quality Code:	Description:	Applies to Measure:
ASIPP	IPM01	Patient not an eligible candidate for lower extremity and neurological exam measure	MIPS 126
ASIPP	IPM02	Functional deficit affecting the lumbar region	MIPS 220
ASIPP	IPM03	Indicates therapeutic intent (as opposed to diagnostic intent)	NIPM 3
ASIPP	IPM03	Indicates therapeutic intent (as opposed to diagnostic intent)	NIPM 9
ASIPP	IPM04	Indicates diagnostic intent (as opposed to therapeutic intent)	NIPM 4
ASIPP	IPM05	Appropriate patient selection criteria met for diagnostic facet joint procedures	NIPM 4
ASIPP	IPM05-1P	Appropriate patient selection criteria not met for diagnostic facet joint procedures for valid medical reasons	NIPM 4
ASIPP	IPM05-8P	Appropriate patient selection criteria not met for diagnostic facet joint procedures for reason not specified	NIPM 4
ASIPP	IPM06	Appropriate patient selection criteria met for trial spinal cord stimulation	NIPM 5
ASIPP	IPM06-1P	Appropriate patient selection criteria not met for trial spinal cord stimulation for valid medical reasons	NIPM 5
ASIPP	IPM06-8P	Appropriate patient selection criteria not met for trial spinal cord stimulation for reason not specified	NIPM 5
ASIPP	IPM07	Appropriate patient selection criteria met for lumbar/sacral epidural injections	NIPM 6
ASIPP	IPM07-1P	Appropriate patient selection criteria not met for epidural injections for valid medical reasons	NIPM 6
ASIPP	IPM07-8P	Appropriate patient selection criteria not met for epidural injections for reason not specified	NIPM 6
ASIPP	IPM09	Anticoagulant therapy (Warfarin, Pradaxa, Xarelto, Savaysa, Apixaban, LMWH) was discontinued prior to caudal or interlaminar epidural injections, following appropriate discussion, risk/benefit analysis, and shared decision making	NIPM 7
ASIPP	IPM09-1P	Appropriate discussion, risk/benefit analysis, and shared decision making regarding discontinuation of anticoagulant regimen is not documented for valid medical reasons	NIPM 7
ASIPP	IPM09-8P	Appropriate discussion, risk/benefit analysis, and shared decision making regarding discontinuation of anticoagulant regimen is not documented for reason not specified	NIPM 7

ASIPP	IPM10	Antithrombotic therapy (Aspirin, Aspirin/Dipyridamole, Anagrelide, Brilinta, Cilostazol, Clopidogrel, Dipyridamole, Effient, Zontivity) was discontinued prior to caudal or interlaminar epidural injections, following appropriate discussion, risk/benefit analysis, and shared decision making	NIPM 7
ASIPP	IPM10-1P	Appropriate discussion, risk/benefit analysis, and shared decision making regarding discontinuation of antithrombotic regimen is not documented for valid medical reasons	NIPM 7
ASIPP	IPM10-8P	Appropriate discussion, risk/benefit analysis, and shared decision making regarding discontinuation of antithrombotic regimen is not documented for reason not specified	NIPM 7
ASIPP	IPM11	Anticoagulant therapy (Warfarin, Pradaxa, Xarelto, Savaysa, Apixaban, LMWH) was continued prior to caudal or interlaminar epidural injections, following appropriate discussion, risk/benefit analysis, and shared decision making	NIPM 7
ASIPP	IPM11-1P	Appropriate discussion, risk/benefit analysis, and shared decision making regarding continuation of anticoagulant regimen is not documented for valid medical reasons	NIPM 7
ASIPP	IPM11-8P	Appropriate discussion, risk/benefit analysis, and shared decision making regarding continuation of anticoagulant regimen is not documented for reason not specified	NIPM 7
ASIPP	IPM12	Antithrombotic therapy (Aspirin, Aspirin/Dipyridamole, Anagrelide, Brilinta, Cilostazol, Clopidogrel, Dipyridamole, Effient, Zontivity) was continued prior to caudal or interlaminar epidural injections, following appropriate discussion, risk/benefit analysis, and shared decision making	NIPM 7
ASIPP	IPM12-1P	Appropriate discussion, risk/benefit analysis, and shared decision making regarding continuation of antithrombotic regimen is not documented for valid medical reasons	NIPM 7
ASIPP	IPM12-8P	Appropriate discussion, risk/benefit analysis, and shared decision making regarding continuation of antithrombotic regimen is not documented for reason not specified	NIPM 7
ASIPP	IPM13	Epidural injection without a dural puncture	NIPM 2

Appendix B: Relevant HCPCS and ICD-10 Code Table

Code Set:	Quality Code:	Description:	Applies to Measure:
HCPCS	G9562	Patients who had a follow-up evaluation conducted at least every three months during opioid therapy	MIPS 408
HCPCS	G9563	Patients who did not have a follow-up evaluation conducted at least every three months during opioid therapy	MIPS 408
HCPCS	G9578	Documentation of signed opioid treatment agreement at least once during opioid therapy	MIPS 412
HCPCS	G9579	No documentation of signed an opioid treatment agreement at least once during opioid therapy	MIPS 412
HCPCS	G9584	Patient evaluated for risk of misuse of opiates by using a brief validated instrument (e.g., Opioid Risk Tool, SOAPP-R) or patient interviewed at least once during opioid therapy	MIPS 414
HCPCS	G9585	Patient not evaluated for risk of misuse of opiates by using a brief validated instrument (e.g., Opioid Risk Tool, SOAPP-R) or patient not interviewed at least once during opioid therapy	MIPS 414
ICD-10	G97.41	Accidental puncture or laceration of dura during a procedure	NIPM 2
ICD-10	Z79.01	Long term current use of anticoagulant medication	NIPM 7
ICD-10	Z79.02	Long term current use of antithrombotic/antiplatelet medication	NIPM 7