American Society of Interventional Pain Physicians®

"The Voice of Interventional Pain Management"

81 Lakeview Drive, Paducah, KY 42001 Phone: (270) 554-9412 - Fax: (270) 554-5394

www.asipp.org

April 6, 2018

Alice Petersen, RN, MSN, CCRA Senior Manager, Guideline Development Clinical Knowledge apetersen@evicore.com

RE: Comment on Evicore interventional pain management guidelines

Dear Ms Petersen:

On behalf of the American Society of Interventional Pain Physicians (ASIPP) and 51 state societies of interventional pain physicians, we would like to thank Evicore for requesting us to provide input in the development of pain management guidelines.

We would like to provide some background on interventional pain as a specialty and ASIPP as follows.

ASIPP is a not-for-profit professional organization founded in 1998, now comprising over 4,500 interventional pain physicians and other practitioners who are dedicated to ensuring safe, appropriate and equal access to essential pain management services for patients across the country suffering with chronic and acute pain. There are approximately 8,500 appropriately trained and qualified physicians practicing interventional pain management in the United States.

Interventional pain management is defined as the discipline of medicine devoted to the diagnosis and treatment of pain related disorders principally with the application of interventional techniques in managing sub acute, chronic, persistent, and intractable pain, independently or in conjunction with other modalities of treatment (1).

Interventional pain management techniques are minimally invasive procedures, including percutaneous precision needle placement, with placement of drugs in targeted areas or ablation of targeted nerves; and some surgical techniques such as laser or endoscopic diskectomy, intrathecal infusion pumps and spinal cord stimulators, for the diagnosis and management of chronic, persistent or intractable pain (2).

Interventional pain management (09) also has been provided a mandatory membership to Carrier Advisory Committees (CACs) in each state in the United States (3).

Our comments are specific to the various procedures you requested commentary on.

Our comments are based on appropriate evidence synthesis without bias or conflicts of interest to provide appropriate care, reduce utilization and healthcare costs, and control the current opioid epidemic. As you are well aware, the opioid epidemic continues to escalate. Despite the evidence that this opioid epidemic is

based on illicit fentanyl and heroin, it is also imperative to accept that the gateway drugs have been prescription opioids since 2010, replacing traditional marijuana. Despite the reducing prevalence of opioid prescriptions, opioid deaths continue to increase (Figs. 1-3) (4-6). While Congress and the Administration are looking into various aspects of the opioid epidemic, a multitude of organizations, including the National Academies of Sciences, Engineering and Medicine (7) and 32 states attorney generals have recommended the utilization of nonopioid techniques including interventional techniques. A recent analysis of utilization of various techniques, showed that there has been significant reduction in epidural injections and lumbar facet joint nerve blocks while there was minimal increase in transforaminal epidural injections and a significant increase in radiofrequency neurotomy (Figs. 4 and 5). Further, significant decreases are seen for adhesiolysis as shown in Fig. 6 (9). These factors must be taken into consideration in guideline development and policymaking, not only to control the opioid epidemic, but also to provide appropriate patient care and to increase their ability to receive access to this care. This leads to the development of guidelines which cover all procedures based on real evidence rather than biased or inappropriately performed evidence synthesis (8-10).

Opioid deaths surge in 2016

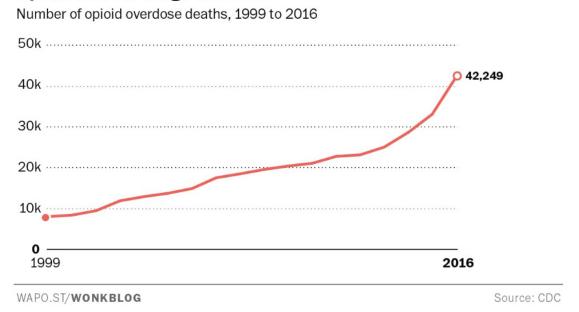


Fig. 1. Opioid deaths surge in 2016. Number of opioid overdose deaths by category, 1999 to 2016.

Source: Ingraham C. CDC releases grim new opioid overdose figures: 'We're talking about more than an exponential increase.' *The Washington Post*, December 21, 2017.

 $\frac{https://www.washingtonpost.com/news/wonk/wp/2017/12/21/cdc-releases-grim-new-opioid-overdose-figures-were-talking-about-more-than-an-exponential-increase/?utm_term=.f3f893febb8b~(4)$

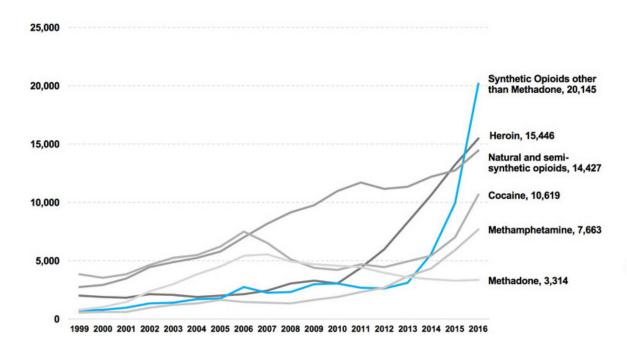


Fig. 2. Opioid deaths surge in 2016. Number of opioid overdose deaths by category, 1999 to 2016.

Source: Singer JA. Stop calling it an opioid crisis – it's a heroin and fentanyl crisis. *Cato Institute*, January 9, 2018. https://www.cato.org/blog/stop-calling-it-opioid-crisis-its-heroin-fentanyl-crisis (5).

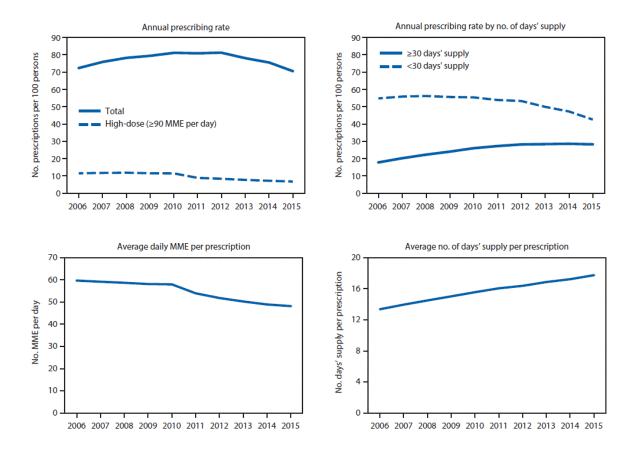


Fig. 3. Annual opioid prescribing rates, by number of days' supply, average daily morphine milligram equivalent (MME) per prescription, and average number of days' supply per prescription — United States, 2006–2015.

Source: Guy Jr GP, et al. Vital Signs: Changes in opioid prescribing in the United States, 2006-2015. *MMWR Morb Mortal Wkly Rep* 2017; 66:697-704 (6).

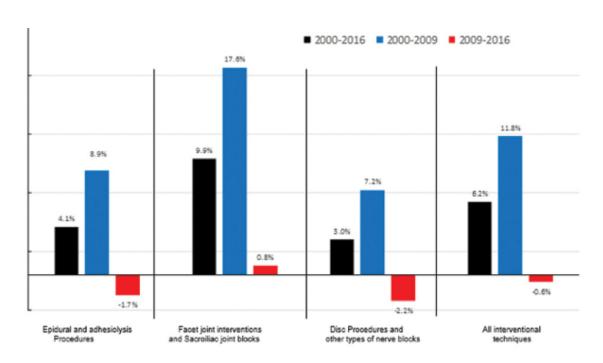


Fig 4. Comparative analysis of epidural and adhesiolysis procedures, facet joint interventions and sacroiliac joint blocks, disc procedures and other types of nerve blocks, and all interventional techniques.

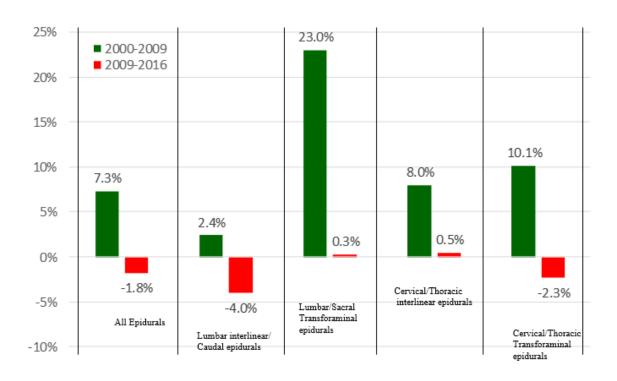


Fig 5. Frequency of utilization of epidural injections episodes from 2000 to 2009 and 2009 to 2016, in Medicare recipients.

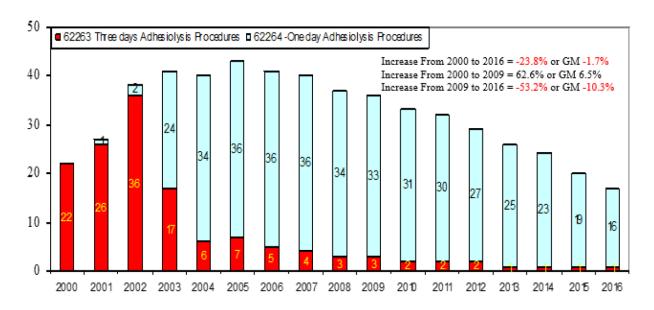


Fig 6. Frequency of utilization of 3-day and 1-day adhesiolysis procedures from 2000 to 2016, in Medicare recipients.

Source: Manchikanti L, Pampati V, Benyamin RM, Hirsch JA. Declining utilization of percutaneous epidural adhesiolysis in Medicare population: Evidence-based or over-regulated? *IPM Reports* 2018; 2:9-18 (9).

REFERENCES

- 1. The National Uniform Claims Committee. Specialty Designation for Interventional Pain Management- 09. http://www.cms.hhs.gov/transmittals/Downloads/r1779b3.pdf
- 2. Medicare Payment Advisory Commission. 2001. Report to the Congress: Paying for interventional pain services in ambulatory settings. Washington, DC: MedPAC. December. 2001. http://www.medpac.gov/publications/congressional_reports/dec2001PainManagement.pdf
- 3. US Department of Health and Human Services. Centers for Medicare and Medicaid Services (CMS) Manual System. Pub. 100-08 Medicare Program Integrity. Inclusion of Interventional Pain Management Specialists on Carrier Advisory Committee (CAC) Membership. Change request 3721. March 4, 2005. www.cms.hhs.gov/transmittals/downloads/R106PI.pdf
- 4. Ingraham C. CDC releases grim new opioid overdose figures: 'We're talking about more than an exponential increase.' *The Washington Post*, December 21, 2017. <a href="https://www.washingtonpost.com/news/wonk/wp/2017/12/21/cdc-releases-grim-new-opioid-overdose-figures-were-talking-about-more-than-an-exponential-increase/?utm term=.f3f893febb8b
- 5. Singer JA. Stop calling it an opioid crisis it's a heroin and fentanyl crisis. *Cato Institute*, January 9, 2018. https://www.cato.org/blog/stop-calling-it-opioid-crisis-its-heroin-fentanyl-crisis
- 6. Guy Jr GP, et al. Vital Signs: Changes in opioid prescribing in the United States, 2006-2015. MMWR Morb Mortal Wkly Rep 2017; 66:697-704.
- 7. National Academies of Sciences, Engineering, and Medicine. 2017. *Pain management and the opioid epidemic: Balancing societal and individual benefits and risks of prescription opioid use.* Washington, DC: The National Academies Press. doi: https://doi.org/10.17226/24781.

- 8. Manchikanti L, Soin A, Mann DP, Bakshi S, Pampati V, Hirsch JA. Reversal of growth of utilization of interventional techniques in managing chronic pain in Medicare population post Affordable Care Act. *Pain Physician* 2017; 20:551-567.
- 9. Manchikanti L, Pampati V, Benyamin RM, Hirsch JA. Declining utilization of percutaneous epidural adhesiolysis in Medicare population: Evidence-based or over-regulated? *IPM Reports* 2018; 2:9-18.
- 10. Manchikanti L, Soin A, Mann DP, Bakshi S, Pampati V, Hirsch JA. Comparative analysis of utilization of epidural procedures in managing chronic pain in the Medicare population: Pre and the post Affordable Care Act. 2018; submitted.

Our comments are related to, as per your request, for various procedures.

CMM-201 FACET JOINT INJECTIONS/MEDIAL BRANCH BLOCKS

CMM-201.1: Definitions

The guidelines appropriately define facet joint injections/medial branch blocks.

CMM-201.2: General Guidelines

The description here allows for neck pain or low back pain in the absence of an untreated radiculopathy. This seems to exclude thoracic diagnostic facet joint nerve blocks. It is only appropriate to include thoracic facet joint nerve blocks based on the CPT coding process, as well as the available literature. As you are aware, CPT codes are the same for facet joint nerve blocks or intraarticular injections (CPT 64490-64495).

Thoracic diagnostic facet joint nerve blocks have been evaluated in 3 appropriately performed prevalence studies with dual diagnostic blocks (1-3). Consequently, it is requested that diagnostic facet joint nerve blocks be allowed. Further, appropriately performed systematic reviews with best evidence synthesis have shown moderate or Level II evidence (4,5). Consequently, it is requested that thoracic facet joint nerve blocks be allowed and clearly described to avoid confusion and further refusals of care.

In reference to therapeutic intraarticular injections or medial branch blocks, the document says that there is a paucity of published scientific evidence supporting the use of therapeutic facet joint injections/medial branch blocks. The document also describes the evidence as anecdotal evidence supporting facet joint injections/medial branch blocks as alternative treatment to radiofrequency ablation/neurotomy for a subset of individuals. The document describes that facet joint injections are only allowed if the initial facet joint injections/medial branch blocks have resulted in a significant pain relief for at least 12 weeks following the facet joint injection/medial branch block and the individual is not a candidate for a radiofrequency joint denervation/ablation procedure. Further, the guideline also permits a repeat facet joint injection may be considered appropriate, although no sooner than 6 months from when the prior diagnostic injection was performed.

Therapeutic medial branch blocks or L5 dorsal ramus blocks have been performed with increasing frequency. Essentially, based on CPT coding, therapeutic medial branch blocks are interchangeable with intraarticular injections. However, there is a wide variation in their effectiveness with medial branch or dorsal ramus blocks showing superior effectiveness. In fact, the evidence for therapeutic medial branch blocks or L5 dorsal ramus blocks is equivalent or often even better than radiofrequency neurotomy as illustrated in multiple systematic reviews, derived from multiple randomized controlled trials (4,6-16).

Based on the comprehensive best evidence synthesis (classified at 5 levels from Level I to Level V) assessment of effectiveness of therapeutic facet joint interventions in managing chronic spinal pain (13),

with inclusion of 21 randomized controlled trials (since this review, a new RCT [12] was published) and 5 observational studies, the following evidence was presented:

- In the lumbar spine, there is Level II evidence for radiofrequency neurotomy and lumbar facet joint nerve blocks, whereas the evidence is Level III for lumbosacral intraarticular injections.
- In the cervical spine, there is Level II evidence for cervical radiofrequency neurotomy and cervical facet joint nerve blocks, and Level IV evidence for cervical intraarticular injections.
- In the thoracic spine, there is Level II evidence for thoracic facet joint nerve blocks and Level IV evidence for radiofrequency neurotomy.

Further, cost utility analysis has been assessed for lumbar and cervical facet joint nerve blocks showing favorable evidence. Based on the similar assessment, the results of cost utility analysis in the cervical spine showed with procedural costs of \$2,552 and overall costs of \$4,261 per one year improvement in QALY (17).

For the lumbar spine, the results of cost utility analysis showed procedural costs of \$2,654.08 and overall costs of \$4,432 per one year of QALY (18).

The cost utility analysis was performed from highly regarded surgical literature from Spine Patient Outcomes Research Trial (SPORT) data (19,20). These analyses provided a basis for estimation of indirect cost including drug therapy. They showed overall cost effectiveness of disc herniation surgery (19) at \$69,403 per quality-adjusted life year (QALY), whereas for spinal stenosis surgery, it was \$77,600 per QALY, and \$115,600 per QALY for degenerative spondylolisthesis (20). More importantly, these studies showed direct costs without medication costs to be 60% for spinal stenosis, 68% for disc herniation, and 71% for degenerative spondylolisthesis with spinal stenosis with total costs of \$26,222 to \$27,341 and \$42,081 respectively. Based on these studies, considering the direct procedural cost lowest at 60% and highest indirect cost of 40%, the cost utility of facet joint injections is estimated to be \$4,261 per one year improvement in QALY in cervical spine with facet joint nerve blocks, and \$4,432 per one year of QALY in lumbar spine with facet joint nerve blocks with multiplication of the procedural cost by 1.67.

In addition to proven clinical and cost effectiveness:

- Therapeutic facet joint nerve blocks are covered by all Medicare carriers, an overwhelming majority of Medicaid carriers, and multiple commercial insurers.
- Facet joint nerve blocks elicit higher acceptance rate from patients with less fear compared to radiofrequency neurotomy, which seems to elicit more fear and the false notion of burning the nerves as promoted by many.
- It is crucial to consider the role of facet joint pain in lumbar and cervical postsurgery syndrome. Studies have shown significant prevalence of pain of facet joint origin in postsurgery patients (21-24). Further, a significant proportion of patients after post-surgery syndrome with hardware or bone fusion are not candidates for radiofrequency neurotomy; however, they can be treated with facet joint nerve blocks.
- Effectiveness of radiofrequency is not observed in all patients. Consequently, if 80% to 85% of the patients respond to radiofrequency neurotomy after appropriate diagnostic blockade, a 15% to 20% population is without response. Thus, without further treatment,

after failure of radiofrequency neurotomy which is approximately 15% to 20% of the patients, these patients will be left without any further options. However, an overwhelming majority of these patients (after failure of radiofrequency neurotomy), seem to respond to facet joint nerve blocks.

- A significant proportion of obese patients also suffer with facet joint related pain. In these patients, radiofrequency neurotomy may be difficult. In these patients, facet joint nerve blocks can be performed with somewhat of an easier technical challenge providing significant improvement with lower risk (2,3,25).
- In patients with a pacemaker, radiofrequency neurotomy is difficult or associated with some risk, despite development of bipolar radiofrequency which is considered to be safe but not foolproof. In these patients, facet joint nerve blocks will be much safer and easier to perform with patient comfort.

These are multiple and additional benefits of medial branch blocks and it will reduce access to patient care once medial branch blocks are removed from armamentarium of treatment modalities.

We believe that your exclusion of therapeutic medial branch blocks is based on inappropriate interpretation of the evidence, with overall diminution in access and finally contributing to increased disability and health care costs rather than reducing these as you seem to believe it would (26-31).

Consequently, as described above, inappropriate guidelines may be contributing to the opioid epidemic. Thus, it is essential to cover these procedures which are safe and also based on the evidence. As shown in the cost utility analysis, there are similar or less expensive than radiofrequency neurotomy in providing improvement in quality of life years.

The remaining guidance related to facet joint injections/medial branch blocks appears to be appropriate. However, the statement in reference to no more than 3 facet joint levels should be injected during the same session-procedure is not appropriate. It may be modified that the insurer should reimburse no more than 3 facet joint levels. Sometimes patients needs more levels. That doesn't mean that insurers have to reimburse for that, but physicians should have ability to provide appropriate care.

CMM-201.3: Indications

The descriptions are appropriate.

CMM-201.4: Non-Indications

Once again, it may be stated that will be reimbursed only for 3 joint levels.

On another point, the guideline states that on the same day of service when performing other injections such as epidural steroid, sacroiliac in the same region is a non-indication. In the diagnostic phase, multiple injections may be performed. However, the insurer can reimburse only for the facet joint injections or epidural injections, whichever is chosen rather than prohibiting the physician from performing these procedures.

Facet joint injections are performed in post surgery patients at fused posterior spinal motion segment in many patients. While radiofrequency may be associated with additional risk, therapeutic medial branch blocks are highly suitable for this situation as described above.

Finally, the second non-indication in reference to the rapeutic facet joint blocks is inappropriate and needs to be eliminated.

The following indication are recommended for the rapeutic facet joint injections/medial branch blocks.

Facet joint injections or medial branch blocks are considered medically necessary for any of the following indications:

- For facet joint pain resulting from disease, injury, or surgery when both of the following criteria are met:
 - Failure of at least 3 months of conservative therapy (e.g. exercise, physical methods including physical therapy, chiropractic care, nonsteroidal anti-inflammatory drugs (NSAID's) and/or analgesics).
 - Two positive diagnostic blocks with 80% pain relief.
- A repeat therapeutic facet joint/medial branch block is considered medically necessary when both of the following criteria are met:
 - If there is documented pain relief of at least 50% which has lasted for a minimum of 10 to 13 weeks:
 - The procedures is performed at a minimum of 3 months following the prior therapeutic facet joint procedure, preferably 4 months after the established diagnosis.

This change will not only improve access to patient care, improve quality of patient care, but also will provide cost savings. You are well aware facet joint radiofrequency neurolysis is reimbursed at 200% of facet joint injections. Consequently, with 3 facet joint injections per year, costing 300 units, whereas 2 radiofrequency neurotomies per year will cost 400 units with savings of 100 units.

REFERENCES

- 1. Manchikanti L, Singh V, Pampati VS, et al. Evaluation of the prevalence of facet joint pain in chronic thoracic pain. *Pain Physician* 2002; 5:354-359.
- 2. Manchikanti L, Boswell MV, Singh V, Pampati V, Damron KS, Beyer CD. Prevalence of facet joint pain in chronic spinal pain of cervical, thoracic, and lumbar regions. *BMC Musculoskelet Disord* 2004; 5:15.
- 3. Manchukonda R, Manchikanti KN, Cash KA, Pampati V, Manchikanti L. Facet joint pain in chronic spinal pain: An evaluation of prevalence and false-positive rate of diagnostic blocks. *J Spinal Disord Tech* 2007; 20:539-545.
- 4. Manchikanti L, Abdi S, Atluri S, et al. An update of comprehensive evidence-based guidelines for interventional techniques of chronic spinal pain: Part II: Guidance and recommendations. *Pain Physician* 2013; 16:S49-S283.
- 5. Boswell MV, Manchikanti L, Kaye AD, et al. A best-evidence systematic appraisal of the diagnostic accuracy and utility of facet (zygapophysial) joint injections in chronic spinal pain. *Pain Physician* 2015; 18:E497-E533.
- 6. Civelek E, Cansever T, Kabatas S, et al. Comparison of effectiveness of facet joint injection and radiofrequency denervation in chronic low back pain. *Turk Neurosurg* 2012; 22:200-206.

- 7. Manchikanti L, Singh V, Falco FJE, Cash KA, Pampati V. Evaluation of lumbar facet joint nerve blocks in managing chronic low back pain: A randomized, double-blind, controlled trial with a 2-year follow-up. *Int J Med Sci* 2010; 7:124-135.
- 8. Manchikanti L, Pampati V, Bakhit CE, Rivera JJ, Beyer CD, Damron KS, Barnhill RC. Effectiveness of lumbar facet joint nerve blocks in chronic low back pain: A randomized clinical trial. *Pain Physician* 2001; 4:101-117.
- 9. Manchikanti L, Singh V, Falco FJE, Cash KA, Fellows B. Comparative outcomes of a 2-year follow-up of cervical medial branch blocks in management of chronic neck pain: A randomized, double-blind controlled trial. *Pain Physician* 2010; 13:437-450.
- 10. Manchikanti L, Manchikanti K, Damron K, Pampati V. Effectiveness of cervical medial branch blocks in chronic neck pain: A prospective outcome study. *Pain Physician* 2004; 7:195-201.
- 11. Manchikanti L, Singh V, Falco FJE, Cash KA, Pampati V, Fellows B. The role of thoracic medial branch blocks in managing chronic mid and upper back pain: A randomized, double-blind, active-control trial with a 2-year follow-up. *Anesthesiol Res Pract* 2012; 2012:585806.
- 12. Lee DG, Ahn SH, Cho YW, et al. Comparison of Intra-articular Thoracic Facet Joint Steroid Injection and Thoracic Medial Branch Block for the Management of Thoracic Facet Joint Pain. *Spine (Phila Pa 1976)* 2018; 43:76-80.
- 13. Manchikanti L, Kaye AD, Boswell MV, 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.
- 14. Joo YC, Park JY, Kim KH. Comparison of alcohol ablation with repeated thermal radiofrequency ablation in medial branch neurotomy for the treatment of recurrent thoracolumbar facet joint pain. *J Anesth* 2013; 27:390-395.
- 15. Manchikanti L, Hirsch JA, Falco FJ, Boswell MV. Management of lumbar zygapophysial (facet) joint pain. *World J Orthop* 2016; 7:315-337.
- 16. Manchikanti L, Hirsch JA, Kaye AD, Boswell MV. Cervical zygapophysial (facet) joint pain: Effectiveness of interventional management strategies. *Postgrad Med* 2016; 128:54-68.
- 17. Manchikanti L, Pampati V, Kaye AD, Hirsch JA. Cost utility analysis of cervical therapeutic medial branch blocks in managing chronic neck pain. *Int J Med Sci* 2017; 14:1307-1316.
- 18. Manchikanti L, Pampati V, Kaye AD, Hirsch JA. Therapeutic lumbar facet joint nerve blocks in the treatment of chronic low back pain: cost utility analysis based on a randomized controlled trial. *Korean J Pain* 2018; 31:27-38.
- 19. Tosteson AN, Skinner JS, Tosteson TD, et al. The cost effectiveness of surgical versus nonoperative treatment for lumbar disc herniation over two years: Evidence from the Spine Patient Outcomes Research Trial (SPORT). *Spine (Phila Pa 1976)* 2008; 33: 2108-15.
- 20. Tosteson AN, Lurie JD, Tosteson TD, et al; SPORT Investigators. Surgical treatment of spinal stenosis with and without degenerative spondylolisthesis: Cost-effectiveness after 2 years. *Ann Intern Med* 2008; 149: 845-53.
- 21. Manchikanti L, Manchukonda R, Pampati V, Damron KS, McManus CD. Prevalence of facet joint pain in chronic low back pain in postsurgical patients by controlled comparative local anesthetic blocks. *Arch Phys Med Rehabil* 2007; 88:449-455.
- 22. Manchikanti L, Manchikanti KN, Pampati V, Brandon DE, Giordano J. The prevalence of facet-joint-related chronic neck pain in postsurgical and non-postsurgical patients: A comparative evaluation. *Pain Pract* 2008; 8:5-10.
- 23. Manchikanti L, Pampati V, Singh V, Beyer CD, Damron KS, Fellows B. Evaluation of the role of facet joints in persistent low back pain in obesity: A controlled, prospective, comparative evaluation. *Pain Physician* 2001; 4:266-272.
- 24. Manchikanti L, Hirsch JA. What can be done about the increasing prevalence of low back pain and associated comorbid factors? *Pain Manag* 2015; 5:149-152.

- 25. Manchikanti L, Cash KA, Damron KS, Manchukonda R, Pampati V, McManus CD. Controlled substance abuse and illicit drug use in chronic pain patients: An evaluation of multiple variables. *Pain Physician* 2006; 9:215-226.
- 26. Dieleman JL, Baral R, Birger M, et al. US spending on personal health care and public health, 1996-2013. *JAMA* 2016: 316:2627-2646.
- 27. Dieleman JL, Squires E, Bui AL, et al. Factors associated with increase in US health care spending, 1996-2013. *JAMA* 2017; 318:1668-1678.
- 28. Conway PH. Editorial: Factors associated with increased US health care spending. Implications for controlling health care costs. *JAMA* 2017; 318:1657-1658.
- 29. US Burden of Disease Collaborators. The state of US health, 1999-2010: Burden of diseases, injuries, and risk factors. *JAMA* 2013; 310:591-608.
- 30. Hoy D, March L, Brooks P, 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.
- 31. Hoy D, March L, Woolf A, et al. The global burden of neck pain: Estimates from the global burden of disease 2010 study. *Ann Rheum Dis* 2014; 73:1309-1315.

CMM-208 RADIOFREQUENCY JOINT ABLATION DENERVATION

CMM-208.1: Definitions

Definitions of radiofrequency joint denervation/ablation is appropriate.

CMM-208.2: General Guidelines

Once again, as commented in facet joint injections and nerve blocks, the limit of 3 levels may not be appropriate at all times. Reimbursement for only 3 levels is appropriate. Wording must be changed to accommodate various conditions, otherwise patients may be brought more than one time going through appeals process or patients will experience only partial relief of pain.

CMM-208.3: Indications

All of the guidelines are appropriate in this section except for the following:

A repeat radiofrequency joint denervation is allowed with documented pain relief of at least 50%, which has lasted for a minimum of 12 weeks. This should be adjusted to as follows:

Minimum of 20 weeks, preferably 23 to 26 weeks.

Minimum of 10 to 13 weeks of relief may be applied for therapeutic medial branch blocks or intraarticular injections as we have described above for CMM-201: Facet Joint Injections/Medial Branch Blocks.

CMM-208.4: Non-Indications

In reference to performing radiofrequency neurotomy in a posteriorly fused spinal motion segment, the policy states that it is a non-indication.

While there is evidence that this can be performed safely, it may still face technical difficulties. Consequently, approval of facet joint injection/nerve blocks in these conditions is crucial and facilitates proper management of these patients.

CMM-203 SACROILIAC JOINT INJECTIONS

CMM-203.1: Definitions

Definitions are appropriate.

CMM-203.2: General Guidelines

To standardize all the treatments with interventional techniques, the positive diagnostic response definition may be increased to 80% pain relief for the duration of the local anesthetic.

Further, double diagnostic blocks may be added in the general guidelines.

CMM-203.4: Non-Indications

In this also the 2 diagnostic blocks must be clarified and changed to 80% relief.

CMM-207 EPIDURAL ADHESIOLYSIS

CMM-207.1: Definitions

Definition is appropriate.

CMM-207.2: General Guidelines

These guidelines are inadequate and improper. There is substantial evidence supporting percutaneous adhesiolysis with a single-day and 3-day treatment. Unfortunately, policies not covering epidural adhesiolysis have only increased the costs of health care leading patients to more expensive treatments and opioid therapy leading to the opioid epidemic. There have been multiple randomized controlled trials specifically in post lumbar surgery syndrome and spinal stenosis (1-3), along with recalcitrant pain with degenerative disc disease (1-8). Overall, significant improvement has been shown in a greater proportion of patients with spinal stenosis, post surgery syndrome, and disc herniation at one and 2-year follow-ups based on pragmatic protocols and administration of the procedures. It should also be considered that these patients have already failed a multitude of interventions including interventional techniques with epidural injection and surgical interventions in many cases.

In addition, cost utility analysis also has been performed, which showed favorable cost utility (9). The cost utility analysis was performed from highly regarded surgical literature of Spine Patient Outcomes Research Trial (SPORT) data (10,11). These analyses provided a basis for estimation of indirect cost including drug therapy. They showed overall cost effectiveness of disc herniation surgery (10) at \$69,403 per quality-adjusted life year (QALY), whereas for spinal stenosis surgery, it was \$77,600 per QALY, and \$115,600 per QALY for degenerative spondylolisthesis (11). More importantly, these studies showed direct costs without medication costs to be 60% for spinal stenosis, 68% for disc herniation, and 71% for degenerative spondylolisthesis with spinal stenosis with total costs of \$26,222 to \$27,341 and \$42,081 respectively. Based on these studies, considering the direct procedural cost lowest at 60% and highest indirect cost of 40%, the cost utility of percutaneous adhesiolysis is estimated to be \$4,425 with multiplication of the procedural cost by 1.67, with significant cost savings overall.

The evidence synthesis utilizing strict criteria of methodologic quality assessment and clinically relevant outcomes shows Level II evidence for percutaneous adhesiolysis after failure of other modalities of treatments.

Based on the above evidence, percutaneous adhesiolysis must be a covered procedure.

REFERENCES

- 1. Manchikanti L, Abdi S, Atluri S, et al. An update of comprehensive evidence-based guidelines for interventional techniques of chronic spinal pain: Part II: Guidance and recommendations. *Pain Physician* 2013; 16:S49-S283.
- 2. Helm II S, Racz GB, Gerdesmeyer L, Justiz L, Hayek SM, Kaplan ED, El Terany MA, Knezevic NN. Percutaneous and endoscopic adhesiolysis in managing low back and lower extremity pain: A systematic review and meta-analysis. *Pain Physician* 2016; 19:E245-E282.
- 3. Manchikanti L, Manchikanti KN, Gharibo CG, Kaye AD. Efficacy of percutaneous adhesiolysis in the treatment of lumbar post surgery syndrome. *Anesth Pain Med* 2016; 6:e26172.
- 4. Manchikanti L, Singh V, Cash KA, Pampati V, Datta S. Assessment of effectiveness of percutaneous adhesiolysis and caudal epidural injections in managing lumbar post surgery syndrome: A 2-year follow-up of randomized, controlled trial. *J Pain Res* 2012; 5:597-608.
- 5. Manchikanti L, Cash KA, McManus CD, Pampati V. Assessment of effectiveness of percutaneous adhesiolysis in managing chronic low back pain secondary to lumbar central spinal canal stenosis. *Int J Med Sci* 2013; 10:50-59.
- 6. Manchikanti L, Cash KA, McManus CD, Pampati V, Singh V, Benyamin RM. The preliminary results of a comparative effectiveness evaluation of adhesiolysis and caudal epidural injections in managing chronic low back pain secondary to spinal stenosis: A randomized, equivalence controlled trial. *Pain Physician* 2009; 12:E341-E354.
- 7. Gerdesmeyer L, Wagenpfeil S, Birkenmaier C, et al. Percutaneous epidural lysis of adhesions in chronic lumbar radicular pain: A randomized double-blind placebo controlled trial. *Pain Physician* 2013: 16:185-196.
- 8. Heavner JE, Racz GB, Raj P. Percutaneous epidural neuroplasty. Prospective evaluation of 0.9% NaCl versus 10% NaCl with or without hyaluronidase. *Reg Anesth Pain Med* 1999; 24:202-207.
- 9. Manchikanti L, Helm II S, Pampati V, Racz GB. Percutaneous adhesiolysis procedures in the Medicare population: Analysis of utilization and growth patterns from 2000 to 2011. *Pain Physician* 2014; 17:E129-E139.
- 10. Tosteson AN, Skinner JS, Tosteson TD, et al. The cost effectiveness of surgical versus nonoperative treatment for lumbar disc herniation over two years: Evidence from the Spine Patient Outcomes Research Trial (SPORT). *Spine (Phila Pa 1976)* 2008; 33: 2108-15.
- 11. Tosteson AN, Lurie JD, Tosteson TD, et al; SPORT Investigators. Surgical treatment of spinal stenosis with and without degenerative spondylolisthesis: Cost-effectiveness after 2 years. *Ann Intern Med* 2008; 149: 845-53.

CMM-211 SPINAL CORD STIMULATORS

CMM-211.1: Definitions

Definitions are appropriate.

CMM-211.2: Indications

Indications seem to be extensive including angina and chronic critical limb ischemia which are not the conditions usually treated in the United States with spinal cord stimulation, specifically chronic stable angina pectoris.

CMM-211.3: Replacement

Indications are appropriate.

CMM-211.4: Non-Indications

High frequency spinal cord stimulation as well as low frequency spinal cord stimulation are not considered as experimental. These should be covered procedures. Further, peripheral nerve stimulation may be covered under appropriate circumstances with strict utilization criteria.

The effectiveness of high frequency spinal cord stimulation therapy is supported by one high quality randomized controlled trial (1), one prospective multicenter observational study (2), both with 24-month follow-up, and a high quality systematic review (3). ASIPP is currently updating its interventional pain management guidelines in which HF10 therapy will be included as a recommend treatment option, based on systematic review performed by Grider et al (3). As you know, the Senza SCS system, which delivers HF10 therapy, was approved by the FDA on May 8, 2015, through the PMA process. Subsequent trial by Kapural et al (1) and Al-Kaisy et al (2) showed significant improvement from baseline in patients receiving HF10 therapy, along with potential superiority over conventional spinal cord stimulation. Further, the Senza system is capable of and FDA-labeled to provide the same SCS operating frequencies as other recommended spinal cord stimulation devices. It is the only device that is approved to deliver HF10 therapy. The FDA indications for use are similar to previously approved devices with an additional possibility of better results to traditional SCS when configured to deliver paraesthesia-free therapy at 10,000 Hz. Additionally, the Centers for Medicare and Medicaid Services (CMS) has stated that the device met the CMS requirement of "substantial clinical improvement" as compared to traditional SCS, through the transitional pass-through payment process.

Consequently, CMS and FDA have determined that high frequency stimulation is neither experimental, nor investigational, and this procedure meets Medicare criteria with safety and effectiveness and it is as beneficial as an existing and available medically appropriate alternative (4). As you are well aware, a technology is deemed experimental and investigational if there are insufficient outcomes data in the peer reviewed medical literature, or FDA approval has not been obtained, or a relevant and large medical society or regulatory agents deems it experimental based on available evidence. Since none of these issues are applicable to high frequency stimulation, it is our contention that classification of experimental and investigational is inappropriate and not based on evidence.

REFERENCES

- 1. Kapural L, Yu C, Doust MW, et al. Comparison of 10-kHz High-frequency and traditional low-frequency spinal cord stimulation for the treatment of chronic back and leg pain: 24-month results from a multicenter, randomized, controlled pivotal trial. *Neurosurgery* 2016; 79:667-677.
- 2. Al-Kaisy A, Van Buyten JP, Smet I, et al. Sustained effectiveness of 10 kHz high-frequency spinal cord stimulation for patients with chronic, low back pain: 24-month results of a prospective multicenter study. *Pain Med* 2014; 15:347-354.
- 3. Grider JS, Manchikanti L, Carayannopoulos A, et al. Effectiveness of spinal cord stimulation in chronic spinal pain: A systematic review. *Pain Physician* 2016; 19:E33-E54.
- 4. Medicare Program Integrity Manual. Chapter 13 Local Coverage Determinations. Rev. 443, December 14, 2012.

CMM-210 IMPLANTABLE INTRATHECAL DRUG DELIVERY SYSTEMS

CMM-210.1: Definitions Definitions are appropriate.

CMM-210.3: Indications Indications are appropriate.

CMM-210.4: Non-Indications Non-indications are appropriate.

CMM-210.5: Replacement Replacement is appropriate.

CMM-204 PROLOTHERAPY

The guidance is appropriate as a non-covered procedure.

Thank you again for asking for our input. We hope that this has been helpful.

Following the above recommendations will improve patient access and ease the opioid crisis, and finally save insurers money instead of increasing the costs.

Thank you,

Laxmaiah Manchikanti, MD

Chairman of the Board and Chief Executive Officer, ASIPP, SIPMS Medical Director,
Pain Management Center of Paducah
Clinical Professor,
Anesthesiology and Perioperative Medicine
University of Louisville, Kentucky
Professor of Anesthesiology-Research
Department of Anesthesiology, School of Medicine
LSU Health Sciences Center
2831 Lone Oak Road
Paducah, KY 42003
270-554-8373 ext. 101
drm@asipp.org

Hans C. Hansen, MD

President, ASIPP
North Carolina CAC Representative
Medical Director
The Pain Relief Centers, LLC
224 Commerce St
Conover, NC 28613
hhansen@painreliefcenters.com

Sudhir Diwan, MD

President Elect, ASIPP
Executive Director, Manhattan Spine and Pain Medicine, PC
115 East 57th Street
New York, NY 10022
646-434-0551
sudhir.diwan63@gmail.com