**Medical Coverage Policy** | Diagnosis and Treatment of Sacroiliac Joint Pain



**EFFECTIVE DATE:** 02|01|2024 **POLICY LAST REVIEWED:** 04/02/2025

# **OVERVIEW**

Sacroiliac joint (SIJ) arthrography using fluoroscopic guidance with an injection of an anesthetic has been explored as a diagnostic test for SIJ pain. Duplication of the patient's pain pattern with the injection of contrast medium suggests a sacroiliac etiology, as does relief of chronic back pain with an injection of local anesthetic. Treatment of SIJ pain with corticosteroids, radiofrequency ablation (RFA), stabilization, or minimally invasive SIJ fusion has also been explored.

This policy addresses the following services:

- Minimally invasive surgical fusion
- Injection of anesthetic for diagnosing pain
- Injection of corticosteroid for the treatment of pain
- Radiofrequency denervation

## **MEDICAL CRITERIA**

## **Commercial Products**

Minimally invasive fixation/fusion of the SIJ using transiliac placement of a titanium triangular implant (eg, iFuse) may be considered **medically necessary** when ALL of the following criteria have been met:

- Pain is at least 5 on a 0 to 10 rating scale that impacts quality of life or limits activities of daily living; and
- There is an absence of generalized pain behavior (eg, somatoform disorder) or generalized pain disorders (eg, fibromyalgia); and
- Individuals have undergone and failed a minimum 6 months of intensive nonoperative treatment that must include medication optimization, activity modification, bracing, and active therapeutic exercise targeted at the lumbar spine, pelvis, SIJ, and hip, including a home exercise program; and
- Pain is caudal to the lumbar spine (L5 vertebra), localized over the posterior SIJ, and consistent with SIJ pain; and
- A thorough physical examination demonstrates localized tenderness with palpation over the sacral sulcus (Fortin's point) in the absence of tenderness of similar severity elsewhere; and
- There is a positive response to a cluster of 3 provocative tests (eg, thigh thrust test, compression test, Gaenslen sign, distraction test, Patrick test, posterior provocation test); and
- Diagnostic imaging studies include ALL of the following:
  - Imaging (plain radiographs and computed tomography or magnetic resonance imaging) of the SIJ excludes the presence of destructive lesions (eg, tumor, infection) or inflammatory arthropathy of the SIJ; and
  - Imaging of the pelvis (anteroposterior plain radiograph) rules out concomitant hip pathology; and
  - Imaging of the lumbar spine (computed tomography or magnetic resonance imaging) is performed to rule out neural compression or other degenerative conditions that can be causing low back or buttock pain; and
  - o Imaging of the SIJ indicates evidence of injury and/or degeneration; and
- There is at least a 75% reduction in pain for the expected duration of the anesthetic used following an image-guided, contrast-enhanced intra-articular SIJ injection on 2 separate occasions; and
- A trial of a therapeutic SIJ injection (ie, corticosteroid injection) has been performed at least once.

### **PRIOR AUTHORIZATION**

Prior authorization is recommended for Commercial Products for minimally invasive surgical fusion of the sacroiliac joint. For Medicare Advantage Plans, please refer to the Related Policies section.

# **POLICY STATEMENT**

## Medicare Advantage Plans

Please refer to the Related Policies section for minimally-invasive surgical (MIS) fusion of the sacroiliac (SI) joint.

Injection of anesthetic for diagnosing sacroiliac joint pain and injection of corticosteroid for the treatment of sacroiliac joint pain is covered.

Radiofrequency denervation of the sacroiliac joint is not covered as the evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

#### **Commercial Products**

Minimally-invasive surgical (MIS) fusion of the sacroiliac (SI) joint is considered medically necessary when the medical criteria above has been met.

Injection of anesthetic for diagnosing sacroiliac joint pain and injection of corticosteroid for the treatment of sacroiliac joint pain is covered.

Radiofrequency denervation of the sacroiliac joint is not medically necessary as the evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Fixation/fusion of the sacroiliac (SI) joint for the treatment of back pain presumed to originate from the sacroiliac (SI) joint is considered not medically necessary under all other conditions and with any other devices not listed above.

#### COVERAGE

Benefits may vary between groups and contracts. Please refer to the appropriate section of the Benefit Booklet, Evidence of Coverage, or Subscriber Agreement for applicable surgery and not medically necessary/not covered benefits/coverage.

# BACKGROUND

#### Sacroiliac Joint Pain

Similar to other structures in the spine, it is assumed the sacroiliac joint (SIJ) may be a source of low back pain. In fact, before 1928, the SIJ was thought to be the most common cause of sciatica. In 1928, the role of the intervertebral disc was elucidated, and from that point forward, the SIJ received less research attention.

#### Diagnosis

Research into SIJ pain has been plagued by lack of a criterion standard to measure its prevalence and against which various clinical examinations can be validated. For example, SIJ pain is typically without any consistent, demonstrable radiographic or laboratory features and most commonly exists in the setting of morphologically normal joints. Clinical tests for SIJ pain may include various movement tests, palpation to detect tenderness, and pain descriptions by the patient. Further confounding study of the SIJ is that multiple structures, (eg, posterior facet joints, lumbar discs) may refer pain to the area surrounding the SIJ.

Because of inconsistent information obtained from history and physical examination, some have proposed the use of image-guided anesthetic injection into the SIJ for the diagnosis of SIJ pain. Treatments being investigated for SIJ pain include prolotherapy, corticosteroid injection, radiofrequency ablation, stabilization, and arthrodesis. Some procedures have been referred to as SIJ fusion but may be more appropriately called fixation due to little to no bridging bone on radiographs. Devices for SIJ fixation/fusion that promote bone ingrowth to fixate the implants include a triangular implant (iFuse Implant System) and cylindrical threaded

devices (Rialto, SImmetry, Silex, SambaScrew, SI-LOK). Some devices also have a slot in the middle where autologous or allogeneic bone can be inserted. This added bone is intended to promote fusion of the SIJ.

A number of radiofrequency generators and probes have been cleared for marketing by the U.S. Food and Drug Administration (FDA) through the 510(k) process. In 2005, the SInergy® (Halyard; formerly Kimberly-Clark), a water-cooled single-use probe, was cleared by the FDA, listing the Baylis Pain Management Probe as a predicate device. The intended use is in conjunction with a radiofrequency generator to create radiofrequency lesions in nervous tissue.

For individuals who have SIJ pain who receive therapeutic corticosteroid injections, the evidence includes a systematic review, small randomized controlled trials (RCTs), and case series. Relevant outcomes are symptoms, functional outcomes, QOL, medication use, and treatment-related morbidity. In general, the literature on injection therapy of joints in the back is of poor quality. Results from 2 small RCTs showed that therapeutic SIJ steroid injections were not as effective as other active treatments. Larger trials, preferably using sham injections, are needed to determine the degree of benefit of corticosteroid injections over placebo. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have SIJ pain who receive RFA, the evidence includes 5 RCTs using different radiofrequency applications and case series. Relevant outcomes are symptoms, functional outcomes, QOL, medication use, and treatment-related morbidity. Meta-analysis of available sham-controlled RCTs suggests that there may be a small effect of RFA on SIJ pain at short-term (1 to 3 months) follow-up. However, the RCTs of RFA have methodologic limitations, and there is limited data on the duration of the treatment effect. The single RCT with 6 and 12-month follow-up showed no significant benefit of RFA compared to an exercise control group at these time points. In addition, heterogeneity of RFA treatment techniques precludes generalizing results across different studies. For RFA with a cooled probe, 2 small RCTs reported short-term benefits, but these are insufficient to determine the overall effect on health outcomes. An RCT on palisade RFA of the SIJ did not include a sham control. Another sham-controlled RCT showed no benefit from RFA. Further high-quality controlled trials are needed to compare this procedure in defined populations with sham control and alternative treatments. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have SIJ pain who receive SIJ fixation/fusion with a transiliac triangular implant, the evidence includes 1 meta-analysis, 1 blinded sham controlled trial, 2 nonblinded RCTs of minimally invasive fusion, prospective cohorts with more than 85% follow-up, and case series. Relevant outcomes are symptoms, functional outcomes, QOL, medication use, and treatment-related morbidity. The sham-controlled RCT found no significant difference in the primary outcome of pain reduction or in any secondary outcomes through 6 months of follow-up. Both nonblinded RCTs have reported outcomes past 6 months, after which crossover was allowed. Both studies reported significantly greater reductions in visual analog scale (VAS) pain scores and Oswestry Disability Index (ODI) scores in SIJ fusion patients than in control groups. The reductions in pain and disability observed in the SIJ fusion group at 6 months were maintained out to 1 year compared with controls who had not crossed over. The RCTs were nonblinded without a placebo or an active control group. Prospective cohorts and case series with sample sizes ranging from 45 to 149 patients and low dropout rates (<15%) also showed reductions in pain and disability out to 5 years. The cohort studies and case series are consistent with the durability of treatment benefit. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome. The meta-analysis pooled data from 3 RCTs and found that SIJ fusion with triangular titanium implants resulted in statistically significant improvements in pain, disability, quality of life, and opioid use compared to nonsurgical management for SIJ dysfunction, with similar adverse event rates between groups, though long-term data beyond 12 months was limited to a single trial.

For individuals who have SIJ pain who receive SIJ fusion/fixation with an implant other than a transiliac triangular implant, the evidence includes 3 6 prospective cohort studies and retrospective case series. Relevant outcomes are symptoms, functional outcomes, QOL, medication use, and treatment-related morbidity. Three prospective cohort studies were conducted with transiliac screws and the 3 with a device inserted through a posterior approach. One cohort study compared SIJ fusion with the Torpedo device to iFuse (transiliac

triangular implant) and found no differences in pain or function outcomes at 12 months between the two groups. No other controlled studies were identified. Meta-analyses of the available prospective and retrospective studies indicate improvement in subjective outcomes from before surgery to follow-up, but with a possible difference in outcomes between the more well studied triangular transiliac implant and other implant designs and approaches. There is uncertainty in the health benefit of SIJ fusion/fixation with these implant designs. Therefore, controlled studies with a larger number of patients and longer follow-up are needed to evaluate these devices. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

# CODING

# Medicare Advantage Plans and Commercial Products

The following CPT code(s) are covered and authorization is <u>not</u> required:

- **27096** Injection procedure for sacroiliac joint, anesthetic/steroid, with image guidance (fluoroscopy or CT) including arthrography when performed
- 64451 Injection anesthetic agent, nerves innervating the sacroiliac joint with image guidance
- **G0260** Injection procedure for sacroiliac joint; provision of anesthetic, steroid and/or other therapeutic agent, with or without arthrography

The following CPT code(s) is not covered for Medicare Advantage Plans and not medically necessary for Commercial Products:

64625 Radiofrequency ablation, nerves innervating the sacroiliac joint, with image guidance (ie, fluoroscopy or computed tomography)

The following CPT code(s) may be medically necessary for Medicare Advantage Plans according to The Prior Authorization of Spinal Procedures Policy and is not medically necessary for Commercial Products:

27278 Arthrodesis, sacroiliac joint, percutaneous, with image guidance, including placement of intra-articular implant(s) (eg, bone allograft[s], synthetic device[s]), without placement of transfixation device (New code effective 1/01/2024)

# **Commercial Products**

The following CPT code(s) is considered medically necessary when the criteria above has been met:

**27279** Arthrodesis, sacroiliac joint, percutaneous or minimally invasive (indirect visualization), with image guidance, includes obtaining bone graft when performed, and placement of transfixing device

For Medicare Advantage Plans and CPT code 27279 please refer to the Related Policies section below.

## **RELATED POLICIES**

Prior Authorization of Spinal Procedures

## PUBLISHED

Provider Update, June, 2025 Provider Update, February 2024 Provider Update, December 2023 Provider Update, May/December 2022 Provider Update, June 2021

### REFERENCES

- Himstead AS, Brown NJ, Shahrestani S, et al. Trends in Diagnosis and Treatment of Sacroiliac Joint Pathology Over the Past 10 Years: Review of Scientific Evidence for New Devices for Sacroiliac Joint Fusion. Cureus. Jun 2021; 13(6): e15415. PMID 34249562
- Dreyfuss P, Michaelsen M, Pauza K, et al. The value of medical history and physical examination in diagnosing sacroiliac joint pain. Spine (Phila Pa 1976). Nov 15 1996; 21(22): 2594-602. PMID 8961447

- Simopoulos TT, Manchikanti L, Gupta S, et al. Systematic Review of the Diagnostic Accuracy and Therapeutic Effectiveness of Sacroiliac Joint Interventions. Pain Physician. 2015; 18(5): E713-56. PMID 26431129
- Manchikanti L, Abdi S, Atluri S, et al. An update of comprehensive evidence-based guidelines for interventional techniques in chronic spinal pain. Part II: guidance and recommendations. Pain Physician. Apr 2013; 16(2 Suppl): S49-283. PMID 23615883
- Manchikanti L, Datta S, Derby R, et al. A critical review of the American Pain Society clinical practice guidelines for interventional techniques: part 1. Diagnostic interventions. Pain Physician. 2010; 13(3): E141-74. PMID 20495596
- Manchikanti L, Datta S, Gupta S, et al. A critical review of the American Pain Society clinical practice guidelines for interventional techniques: part 2. Therapeutic interventions. Pain Physician. 2010; 13(4): E215-64. PMID 20648212
- 7. Rupert MP, Lee M, Manchikanti L, et al. Evaluation of sacroiliac joint interventions: a systematic appraisal of the literature. Pain Physician. 2009; 12(2): 399-418. PMID 19305487
- Chou R, Atlas SJ, Stanos SP, et al. Nonsurgical interventional therapies for low back pain: a review of the evidence for an American Pain Society clinical practice guideline. Spine (Phila Pa 1976). May 01 2009; 34(10): 1078-93. PMID 19363456
- Chou R, Loeser JD, Owens DK, et al. Interventional therapies, surgery, and interdisciplinary rehabilitation for low back pain: an evidence-based clinical practice guideline from the American Pain Society. Spine (Phila Pa 1976). May 01 2009; 34(10): 1066-77. PMID 19363457
- 10. Hansen H, Manchikanti L, Simopoulos TT, et al. A systematic evaluation of the therapeutic effectiveness of sacroiliac joint interventions. Pain Physician. 2012; 15(3): E247-78. PMID 22622913
- 11. Patel A, Kumar D, Singh S, et al. Effect of Fluoroscopic-Guided Corticosteroid Injection in Patients With Sacroiliac Joint Dysfunction. Cureus. Mar 2023; 15(3): e36406. PMID 37090293
- 12. Visser LH, Woudenberg NP, de Bont J, et al. Treatment of the sacroiliac joint in patients with leg pain: a randomized-controlled trial. Eur Spine J. Oct 2013; 22(10): 2310-7. PMID 23720124
- Kim WM, Lee HG, Jeong CW, et al. A randomized controlled trial of intra-articular prolotherapy versus steroid injection for sacroiliac joint pain. J Altern Complement Med. Dec 2010; 16(12): 1285-90. PMID 21138388
- Kennedy DJ, Engel A, Kreiner DS, et al. Fluoroscopically Guided Diagnostic and Therapeutic Intra-Articular Sacroiliac Joint Injections: A Systematic Review. Pain Med. Aug 2015; 16(8): 1500-18. PMID 26178855
- Ab Aziz SNF, Zakaria Mohamad Z, Karupiah RK, et al. Efficacy of Sacroiliac Joint Injection With Anesthetic and Corticosteroid: A Prospective Observational Study. Cureus. Apr 2022; 14(4): e24039. PMID 35547453
- Al Khayyat SG, Fogliame G, Barbagli S, et al. Ultrasound guided corticosteroids sacroiliac joint injections (SIJIs) in the management of active sacroiliitis: a real-life prospective experience. J Ultrasound. Jun 2023; 26(2): 479-486. PMID 36229757
- Chandrupatla RS, Shahidi B, Bruno K, et al. A Retrospective Study on Patient-Specific Predictors for Non-Response to Sacroiliac Joint Injections. Int J Environ Res Public Health. Nov 23 2022; 19(23). PMID 36497595
- Janapala RN, Knezevic E, Knezevic NN, et al. Systematic Review and Meta-Analysis of the Effectiveness of Radiofrequency Ablation of the Sacroiliac Joint. Curr Pain Headache Rep. May 2024; 28(5): 335-372. PMID 38472618
- 19. Chou R, Fu R, Dana T, Pappas M, Hart E, Mauer KM. Interventional Treatments for Acute and Chronic Pain: Systematic Review. Comparative Effectiveness Review No. 247. (Prepared by the Pacific Northwest Evidence-based Practice Center under Contract No. 75Q80120D00006.) AHRQ

Publication No. 21-EHC030. Rockville, MD: Agency for Healthcare Research and Quality; September 2021. PMID: 34524764

- 20. Chappell ME, Lakshman R, Trotter P, et al. Radiofrequency denervation for chronic back pain: a systematic review and meta-analysis. BMJ Open. Jul 21 2020; 10(7): e035540. PMID 32699129
- Juch JNS, Maas ET, Ostelo RWJG, et al. Effect of Radiofrequency Denervation on Pain Intensity Among Patients With Chronic Low Back Pain: The Mint Randomized Clinical Trials. JAMA. Jul 04 2017; 318(1): 68-81. PMID 28672319
- 22. Chen CH, Weng PW, Wu LC, et al. Radiofrequency neurotomy in chronic lumbar and sacroiliac joint pain: A meta-analysis. Medicine (Baltimore). Jun 2019; 98(26): e16230. PMID 31261580
- Cohen SP, Kapural L, Kohan L, et al. Cooled radiofrequency ablation versus standard medical management for chronic sacroiliac joint pain: a multicenter, randomized comparative effectiveness study. Reg Anesth Pain Med. Mar 04 2024; 49(3): 184-191. PMID 37407279
- 24. Mehta V, Poply K, Husband M, et al. The Effects of Radiofrequency Neurotomy Using a Strip-Lesioning Device on Patients with Sacroiliac Joint Pain: Results from a Single-Center, Randomized, Sham-Controlled Trial. Pain Physician. Nov 2018; 21(6): 607-618. PMID 30508988
- 25. van Tilburg CW, Schuurmans FA, Stronks DL, et al. Randomized Sham-controlled Double-Blind Multicenter Clinical Trial to Ascertain the Effect of Percutaneous Radiofrequency Treatment for Sacroiliac Joint Pain: Three-month Results. Clin J Pain. Nov 2016; 32(11): 921-926. PMID 26889616
- Zheng Y, Gu M, Shi D, et al. Tomography-guided palisade sacroiliac joint radiofrequency neurotomy versus celecoxib for ankylosing spondylitis: a open-label, randomized, and controlled trial. Rheumatol Int. Sep 2014; 34(9): 1195-202. PMID 24518967
- Patel N, Gross A, Brown L, et al. A randomized, placebo-controlled study to assess the efficacy of lateral branch neurotomy for chronic sacroiliac joint pain. Pain Med. Mar 2012; 13(3): 383-98. PMID 22299761
- Patel N. Twelve-Month Follow-Up of a Randomized Trial Assessing Cooled Radiofrequency Denervation as a Treatment for Sacroiliac Region Pain. Pain Pract. Feb 2016; 16(2): 154-67. PMID 25565322
- 29. Ghaddaf AA, Alsharef JF, Alsharef NK, et al. Minimally invasive sacroiliac joint fusion using triangular titanium implants versus nonsurgical management for sacroiliac joint dysfunction: a systematic review and meta-analysis. Can J Surg. 2024; 67(1): E16-E26. PMID 38278549
- Whang P, Cher D, Polly D, et al. Sacroiliac Joint Fusion Using Triangular Titanium Implants vs. Non-Surgical Management: Six-Month Outcomes from a Prospective Randomized Controlled Trial. Int J Spine Surg. 2015; 9: 6. PMID 25785242
- Polly DW, Cher DJ, Wine KD, et al. Randomized Controlled Trial of Minimally Invasive Sacroiliac Joint Fusion Using Triangular Titanium Implants vs Nonsurgical Management for Sacroiliac Joint Dysfunction: 12-Month Outcomes. Neurosurgery. Nov 2015; 77(5): 674-90; discussion 690-1. PMID 26291338
- Polly DW, Swofford J, Whang PG, et al. Two-Year Outcomes from a Randomized Controlled Trial of Minimally Invasive Sacroiliac Joint Fusion vs. Non-Surgical Management for Sacroiliac Joint Dysfunction. Int J Spine Surg. 2016; 10: 28. PMID 27652199
- Darr E, Meyer SC, Whang PG, et al. Long-term prospective outcomes after minimally invasive transiliac sacroiliac joint fusion using triangular titanium implants. Med Devices (Auckl). 2018; 11: 113-121. PMID 29674852
- 34. Sturesson B, Kools D, Pflugmacher R, et al. Six-month outcomes from a randomized controlled trial of minimally invasive SI joint fusion with triangular titanium implants vs conservative management. Eur Spine J. Mar 2017; 26(3): 708-719. PMID 27179664

- 35. Dengler J, Sturesson B, Kools D, et al. Referred leg pain originating from the sacroiliac joint: 6month outcomes from the prospective randomized controlled iMIA trial. Acta Neurochir (Wien). Nov 2016; 158(11): 2219-2224. PMID 27629371
- Dengler JD, Kools D, Pflugmacher R, et al. 1-Year Results of a Randomized Controlled Trial of Conservative Management vs. Minimally Invasive Surgical Treatment for Sacroiliac Joint Pain. Pain Physician. Sep 2017; 20(6): 537-550. PMID 28934785
- Dengler J, Kools D, Pflugmacher R, et al. Randomized Trial of Sacroiliac Joint Arthrodesis Compared with Conservative Management for Chronic Low Back Pain Attributed to the Sacroiliac Joint. J Bone Joint Surg Am. Mar 06 2019; 101(5): 400-411. PMID 30845034
- Randers EM, Gerdhem P, Stuge B, et al. The effect of minimally invasive sacroiliac joint fusion compared to sham operation: a double-blind randomized placebo-controlled trial. EClinicalMedicine. Feb 2024; 68: 102438. PMID 38328752
- Duhon BS, Cher DJ, Wine KD, et al. Triangular Titanium Implants for Minimally Invasive Sacroiliac Joint Fusion: A Prospective Study. Global Spine J. May 2016; 6(3): 257-69. PMID 27099817
- Duhon BS, Bitan F, Lockstadt H, et al. Triangular Titanium Implants for Minimally Invasive Sacroiliac Joint Fusion: 2-Year Follow-Up from a Prospective Multicenter Trial. Int J Spine Surg. 2016; 10: 13. PMID 27162715
- Whang PG, Darr E, Meyer SC, et al. Long-Term Prospective Clinical And Radiographic Outcomes After Minimally Invasive Lateral Transiliac Sacroiliac Joint Fusion Using Triangular Titanium Implants. Med Devices (Auckl). 2019; 12: 411-422. PMID 31576181
- 42. Patel V, Kovalsky D, Meyer SC, et al. Prospective Trial of Sacroiliac Joint Fusion Using 3D-Printed Triangular Titanium Implants. Med Devices (Auckl). 2020; 13: 173-182. PMID 32607011
- 43. Vanaclocha V, Herrera JM, Sáiz-Sapena N, et al. Minimally Invasive Sacroiliac Joint Fusion, Radiofrequency Denervation, and Conservative Management for Sacroiliac Joint Pain: 6-Year Comparative Case Series. Neurosurgery. Jan 01 2018; 82(1): 48-55. PMID 28431026
- Spain K, Holt T. Surgical Revision after Sacroiliac Joint Fixation or Fusion. Int J Spine Surg. 2017; 11(1): 5. PMID 28377863
- 45. Schoell K, Buser Z, Jakoi A, et al. Postoperative complications in patients undergoing minimally invasive sacroiliac fusion. Spine J. Nov 2016; 16(11): 1324-1332. PMID 27349627
- Tran ZV, Ivashchenko A, Brooks L. Sacroiliac Joint Fusion Methodology Minimally Invasive Compared to Screw-Type Surgeries: A Systematic Review and Meta-Analysis. Pain Physician. Jan 2019; 22(1): 29-40. PMID 30700066
- 47. Lorio M, Kube R, Araghi A. International Society for the Advancement of Spine Surgery Policy 2020 Update-Minimally Invasive Surgical Sacroiliac Joint Fusion (for Chronic Sacroiliac Joint Pain): Coverage Indications, Limitations, and Medical Necessity. Int J Spine Surg. Dec 2020; 14(6): 860-895. PMID 33560247
- Rappoport LH, Luna IY, Joshua G. Minimally Invasive Sacroiliac Joint Fusion Using a Novel Hydroxyapatite-Coated Screw: Preliminary 1-Year Clinical and Radiographic Results of a 2-Year Prospective Study. World Neurosurg. May 2017; 101: 493-497. PMID 28216399
- Rappoport LH, Helsper K, Shirk T. Minimally invasive sacroiliac joint fusion using a novel hydroxyapatite-coated screw: final 2-year clinical and radiographic results. J Spine Surg. Jun 2021; 7(2): 155-161. PMID 34296027
- Fuchs V, Ruhl B. Distraction arthrodesis of the sacroiliac joint: 2-year results of a descriptive prospective multi-center cohort study in 171 patients. Eur Spine J. Jan 2018; 27(1): 194-204. PMID 29058134

- Calodney A, Azeem N, Buchanan P, et al. Safety, Efficacy, and Durability of Outcomes: Results from SECURE: A Single Arm, Multicenter, Prospective, Clinical Study on a Minimally Invasive Posterior Sacroiliac Fusion Allograft Implant. J Pain Res. 2024; 17: 1209-1222. PMID 38524688
- Kucharzyk D, Colle K, Boone C, et al. Clinical Outcomes Following Minimally Invasive Sacroiliac Joint Fusion With Decortication: The EVoluSIon Clinical Study. Int J Spine Surg. Feb 2022; 16(1): 168-175. PMID 35217586
- 53. Splitt T, Pflugmacher R, Soliman O, et al. Surgical Treatment of Patients with Sacroiliac Joint Syndrome: Comparative Study of Two Implants. Z Orthop Unfall. Nov 22 2023. PMID 37992733
- 54. Davies M, Dreischarf M, Yusufbekov R. Catamaran SI Joint Fusion System (R) MAINSAIL TM Study: a prospective, single-arm, multi-center, post-market study of six-month clinical outcomes and twelve-month radiographic findings. Expert Rev Med Devices. Sep 2024; 21(9): 851-858. PMID 39161110
- 55. North American Spine Society. Diagnosis and Treatment of Adults with Sacroiliac Joint Pain: A Protocol for a Systematic Review and Clinical Guidelines by the North American Spine Society. n.d. https://www.spine.org/Portals/0/assets/downloads/ResearchClinicalCare/Guidelines/SacroiliacJoi ntPain-Protocol.pdf. Accessed October 5, 2024.
- 56. Benzon HT, Connis RT, De Leon-Casasola OA, et al. Practice guidelines for chronic pain management: an updated report by the American Society of Anesthesiologists Task Force on Chronic Pain Management and the American Society of Regional Anesthesia and Pain Medicine. Anesthesiology. Apr 2010; 112(4): 810-33. PMID 20124882
- 57. Lee DW, Pritzlaff S, Jung MJ, et al. Latest Evidence-Based Application for Radiofrequency Neurotomy (LEARN): Best Practice Guidelines from the American Society of Pain and Neuroscience (ASPN). J Pain Res. 2021; 14: 2807-2831. PMID 34526815
- 58. Sayed D, Deer TR, Tieppo Francio V, et al. American Society of Pain and Neuroscience Best Practice (ASPN) Guideline for the Treatment of Sacroiliac Disorders. J Pain Res. 2024; 17: 1601-1638. PMID 38716038
- National Institute for Health and Care Excellence. Minimally invasive sacroiliac joint fusion surgery for chronic sacroiliac pain [IPG578]. 2017; https://www.nice.org.uk/guidance/ipg578. Accessed October 4, 2024.
- National Institute for Health and Care Excellence. iFuse for treating chronic sacroiliac joint pain [MTG39]. 2022; https://www.nice.org.uk/guidance/mtg39. Accessed October 4, 2024.

<sup>-</sup>This medical policy is made available to your for informational purpose **CLICK THE ENVELOPE ICON BELOW TO SUBMIT COMMENTS** judgment in the treatment of your patients. Benefits and eligibility are determined by the medical policy. For information on member-specific benefits, call the provider call center. If you provide services to a member which are determined to not be medically necessary (or in some cases medically necessary services which are non-covered benefits), you may not charge the member for the services unless you have informed the member and they have agreed in writing in advance to continue with the treatment at their own expense. Please refer to your participation agreement(s) for the applicable provisions. This policy is current at the time of publication; however, medical practices, technology, and knowledge are constantly changing. BCBSRI reserves the right to review and revise this policy for any reason and at any time, with or without notice. Blue Cross & Blue Shield of Rhode Island is an independent licensee of the Blue Cross and Blue Shield Association.