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# **MEDICAL POLICY**



| Medical Policy Title   | Sacroiliac Joint Fusion or Stabilization |  |
|------------------------|--|--|
| Policy Number          | 7.01.93                                  |  |
| Current Effective Date | October 15, 2025                         |  |
| Next Review Date       | June 2026                                |  |

Our medical policies are based on the assessment of evidence based, peer-reviewed literature, and professional guidelines. Eligibility for reimbursement is based upon the benefits set forth in the member's subscriber contract. (Link to <u>Product Disclaimer</u>)

### **POLICY STATEMENT(S)**

#### Minimally Invasive Sacroiliac Join (SIJ) Fusion

- I. Minimally invasive sacroiliac joint (SIJ) fusion and stabilization is considered **medically appropriate**, when **ALL** the following criteria have been met:
  - A. Performed for the treatment of lumbopelvic pain originating from the SIJ;
  - B. Performed using structural devices/implants that traverse and transfix the sacroiliac joint (with the intention to fuse the SIJ);
  - C. Individual has non-radiating lumbopelvic pain caudal to L5, buttock, hip, or groin pain;
  - D. SIJ pain interfering with activities of daily living
  - E. Patient localizes posterior pain to the posterior superior iliac spine (Fortin's point);
  - F. Individual has localized tenderness to palpation over the sacral sulcus and posterior SIJ;
  - G. Typical pain is elicited on **THREE (3) OR MORE** of the following provocative physical examination maneuvers/tests that stress the SIJ:
    - 1. thigh thrust test;
    - 2. compression test;
    - 3. Gaenslen's maneuver;
    - 4. distraction test;
    - 5. FABER/Patrick's sign; or
    - 6. posterior provocation test;
  - H. Absence of localized tenderness to palpation of similar severity to palpation of the sacral sulcus and posterior SIJ over the greater trochanter, lumbar spine, and coccyx;
  - I. The SIJ has been diagnostically confirmed to be a pain generator, in that the reduction in pain is 75% or greater for the duration of the local anesthetic agent used during two (2) separate contrast-enhanced fluoroscopically or CT-guided intra-articular SIJ blocks;
  - J. Individual received conservative, non-surgical treatment that includes **ALL** the following, unless contraindicated:

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- 1. A trial of at least one (1) therapeutic intra-articular SIJ injection;
- 2. **ALL** the following non-invasive treatments for a minimum of a consecutive six (6) months:
  - a. non-steroidal anti-inflammatory drugs (NSAIDs);
  - b. prescription medication optimization;
  - c. activity modification; and
  - d. Physician supervised/prescribed active physical therapy (including home exercise program) targeting lumbopelvic (core) area.

\*Note: Chiropractic adjustments may be performed as an additional treatment option, but chiropractic adjustments are NOT required and are NOT considered a substitute for physical therapy.

- K. Individual has no generalized pain behavior (e.g., somatoform disorder) or generalized pain disorders (e.g., fibromyalgia);
- L. Patient's medical record documents nicotine-free status, meaning **EITHER**:
  - 1. Individual is a never-smoker; or
  - 2. Individual has refrained from smoking, the use of smokeless tobacco, or nicotine replacement therapy for at least six (6) weeks prior to planned surgery, as evidenced by cotinine lab results of less than or equal to 10ng/mL;
- M. Individual has no unmanaged, significant mental or behavioral health disorders (e.g., major depressive disorder, chronic pain syndrome, secondary gain, opioid use or alcohol use disorders);
- N. Imaging studies include **ALL** the following:
  - 1. Plain X-rays or cross-sectional imaging (CT or MRI) that excludes the presence of destructive lesions (e.g., tumor, infection) or acute traumatic fracture or instability of the SIJ;
  - 2. Plain X-rays of the pelvis, including the ipsilateral hip, to evaluate potential concomitant hip pathology as a potential more likely source for the individual's pain; **and**
  - 3. Cross-sectional imaging (e.g., CT or MRI) of the lumbar spine, to evaluate potential concomitant neural compression or other degenerative conditions as a potential more likely source for the individual's pain;
- O. Diagnostic testing has been performed to exclude the presence of systemic inflammatory arthropathy (e.g., ankylosing spondylitis, psoriatic arthritis, rheumatoid arthritis); **and**
- P. Absence of alternative diagnoses that are a more likely cause of the individual's ongoing pain or disability.
- II. Minimally invasive or percutaneous SIJ fusion or stabilization using titanium triangular implants is

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considered **not medically appropriate** for **ANY** of the following indications:

- A. Any case that does not fulfill **ALL** of the above criteria;
- B. Any condition that would prevent insertion of the implants; or
- C. Bilateral procedures on the same date of service.
- III. Minimally invasive or percutaneous SI joint fusion and stabilization performed without the intention of fusing the SI joint (i.e., joint distraction) is considered **not medically necessary**.
- IV. Minimally invasive or percutaneous SIJ\_fusion and stabilization using products/implants that do NOT traverse and transfix the sacroiliac joint (e.g., allograft wedge between the sacrum and ilium, non-metallic implants) are considered **investigational**.
- V. Minimally invasive SIJ fusion or stabilization using titanium triangular implants is considered **investigational** under circumstances that include, but are not limited to, the following:
  - A. Systemic arthropathy (e.g., ankylosing spondylitis, psoriatic arthritis, rheumatoid arthritis);
  - B. Presence of infection, tumor, or fracture;
  - C. Acute traumatic instability of the SIJ;
  - D. Presence of neural compression, as seen on an MRI or CT, which correlates with the patient's symptoms or other more likely source for the patient's pain.

### Open SIJ Fusion

- VI. Open SIJ fusion is considered **medically appropriate**, when **ALL** the following criteria have been met:
  - A. Plain X-rays or cross-sectional imaging (CT or MRI) demonstrate localized SIJ pathology concordant with the individual's history and physical exam;
  - B. Patient's medical record documents nicotine-free status, meaning that EITHER:
    - 1. Individual is a never-smoker; or
    - 2. Individual has refrained from smoking, the use of smokeless tobacco, and/or nicotine replacement therapy for at least six (6) weeks prior to planned surgery, as evidenced by cotinine lab results of less than or equal to 10ng/mL; **and**
  - C. At least **ONE** of the following applies:
    - 1. Individual has post-traumatic injury of the SIJ (e.g., following pelvic ring fracture);
    - 2. The procedure is to be performed as an adjunctive treatment for SIJ infection;
    - 3. The procedure is to be performed for management of a sacral tumor (e.g., partial sacrectomy);
    - 4. The procedure is to be performed as part of a multi-segmental long fusion construct for the correction of spinal deformity (e.g., idiopathic scoliosis, neuromuscular scoliosis); **or**
    - 5. Prior percutaneous (minimally invasive) SIJ fusion has failed.

- VII. Open sacroiliac joint (SIJ) fusion performed without meeting **ALL** the above criteria is considered **not medically appropriate**.
- VIII. Open SIJ fusion is considered **investigational** for **ALL** the following indications:
  - A. Mechanical low back pain;
  - B. Sacroiliac joint syndrome;
  - C. Degenerative sacroiliac joint;
  - D. Radicular pain syndrome.

### **RELATED POLICIES**

### Corporate Medical Policy

11.01.03 Experimental and Investigational Services

### **POLICY GUIDELINE(S)**

I. Minimum documentation requirements needed to complete a spinal surgery prior authorization request include **ALL** the following:

- A. CPT codes, ICD-10 codes, and disc levels or motion segments involved for planned surgery;
- B. Detailed documentation of the type, duration, and frequency of provider-directed nonsurgical treatment (e.g., interventional pain management, medication management, physical therapy, chiropractic care, provider-directed active exercise program, etc.) and the response to each treatment including:
  - 1. Detailed documentation explaining why a sufficient trial of non-surgical treatment was contraindicated (if applicable);
  - 2. Detailed documentation of less than clinically meaningful improvement for each treatment.

### Urgent/Emergent Conditions

- II. All individuals being evaluated for spine surgery should be screened for the presence of urgent/emergent indications/conditions that warrant definitive surgical treatment. Confirmatory imaging studies are required. The following criteria are **NOT** required for confirmed urgent/emergent conditions:
  - A. Provider-directed non-surgical management;
  - B. Proof of smoking cessation;
  - C. Absence of unmanaged significant mental or behavioral health disorders (e.g., major depressive disorder, chronic pain syndrome, secondary gain, opioid and alcohol use disorders);
  - D. Time frame for repeat procedure.

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- III. An urgent/emergent request is based on the 2019 NCQA standards for utilization management and include **ANY** of the following:
  - A. A request for medical care or services where application of the time frame for making routine or non-life-threatening care determinations:
    - 1. Could seriously jeopardize the life or health of the individual or the individual's ability to regain maximum function, based on a prudent layperson's judgement;
    - 2. Could seriously jeopardize the life, health, or safety of the individual or others, due to the individual's psychological state; or
    - 3. In the opinion of a practitioner with knowledge or the individual's medical or behavioral condition, would subject the individual to adverse health consequences without the care or treatment that is the subject of the request.

### DESCRIPTION

The sacroiliac joints, or SI joints (SIJs), are large, L-shaped synovial joints on both sides of the pelvis that connect the sacrum and the ilium of the pelvis. These joints are strong and weight-bearing, and they are supposed to move together as single unit. SIJ pain is often from dysfunction of one of the two joints. When one joint does not move properly, pain may be felt as one-sided, low back pain or midline "tailbone" pain. The joints can move too much (hypermobility) or too little (hypomobility) and can feel "locked-up." Pain can be dull or very sharp. When SIJ dysfunction is severe, pain can be referred to the hip, lower back, groin, buttocks, and even down the back of the thigh. The majority of patients can be treated non-operatively through anti-inflammatory medications, physical therapy, or SIJ injections. However, when conservative therapies have failed to improve symptoms, surgical intervention may be proposed. Within the past few years, as treatment options for SIJ dysfunction have advanced, there has been a resurgence in the recognition of the SI J as a potential source of low back pain.

Open sacroiliac (SI) joint fusion was an early technique used to stabilize the SIJ. However, the open procedure had been associated with long intraoperative times, intraoperative bleeding, and long rehabilitative times. Therefore, minimally invasive SIJ fusion techniques have been investigated. Minimally invasive fusion aims to permanently stabilize the SIJ but avoid the morbidity of the open procedure. Minimally invasive fusion of the SIJ has been performed with several types of implants, including triangular, porous, titanium-coated implants, hollow modular screws, titanium cages, and allograft dowels. Two surgical approaches are commonly used for minimally invasive SIJ fusion: a lateral transarticular approach, in which devices are placed across the SIJ from lateral to medial; and a posterior approach, in which devices are placed into the ligamentous portion of the joint via dissection of the multifidus muscle and removal of ligaments covering the outer posterior surface of the joint. In the posterior approach, a portion of the interosseous SIJ ligament is sometimes removed.

Risks of minimally invasive sacroiliac (SI) joint fusion include, but are not limited to, the following: infection; neurovascular injury; persistent or incomplete relief of symptoms; possible need for more surgery; non-union; fracture; hemorrhage; hematoma; deep vein thrombosis; pulmonary embolus;

and death. Issues related to the implant (e.g., migration, loosening, breakage, malposition) are also possible. Complication rates for minimally invasive SI joint fusion have been reported in the literature to be as high as 16.4%. Given the potential possibility for significant complications, proper surgical candidacy selection is critical to minimize the risk benefit ratio.

As it can be challenging to identify the sacroiliac (SI) joint (SIJ) as the source of pain, the following are required: supportive subjective symptoms and physical exam findings; imaging findings to rule out other sources of pain; and positive results of diagnostic injections. As multiple etiologies for low back pain exist, pain should be non-radicular and localized to the posterior superior iliac spine (Fortin's point). Multiple articles have indicated that three or more of six provocation SI joint tests have the best predictive power when looking at physical exam findings.

### SUPPORTIVE LITERATURE

Although open SIJ fusion has been used since the 1920s, and case reports of outcomes exist, the open procedure is rarely performed and, hence, clinical trials do not exist. For individuals with SIJ pain who receive SIJ fusion, the evidence includes two randomized, controlled trials (RCTs) of minimally invasive fusion and a number of case series. Relevant outcomes are symptoms, functional outcomes, quality of life, medication use, and treatment-related morbidity. Both non-blinded RCTs reported superior short-term results for fusion, but there is potential for bias because these trials lacked sham controls and used subjective outcome measures. Two case series of reasonable size and good follow-up showed that benefits obtained at six months persist to two years. One small case series showed good outcomes persist to five years. The case series are consistent with durability of treatment benefit, but only if there is a true benefit of treatment.

In March of 2015, Whang et al. reported the six-month follow-up of an industry-sponsored, nonblinded RCT of the iFuse Implant System in 148 patients. The 12-month follow-up was reported by Polly and colleagues in November of 2015. Trial inclusion was based on the determination of the SIJ as a pain generator from a combination of a history of SIJ-localized pain, positive provocative testing on at least three of five established physical tests, and at least a 50% decrease in SIJ pain after image-guided local anesthetic injection into the joint. The duration of pain before enrollment averaged 6.4 years (range, 0.47-40.7 years). Patients were assigned 2:1 to minimally invasive SIJ fusion (n=102) or to nonsurgical management (n=46). Nonsurgical management included a stepwise progression, depending on individual patient need for pain medications, physical therapy (97.8%), intra-articular steroid injections (73.9%), and RFA of sacral nerve roots (45.7%). The primary outcome measure was a six-month success rate, defined as the proportion of treated subjects with a 20-mm improvement in SIJ pain in the absence of severe device-related or neurologic adverse events or surgical revision. Patients in the control arm could cross over to surgery after six months. Baseline scores indicated that the patients were severely disabled, with VAS pain scores averaging 82.3 out of 100 and Oswestry Disability Index (ODI) scores averaging 61.9. At six months, success rates were 23.9% in the control group versus 81.4% in the surgical group (posterior probability of superiority >0.999). A clinically important (≥15-point) improvement in ODI score was found in 27.3% of controls, compared with 75.0% of fusion patients. Measures of quality of life (36-Item Short-Form Health Survey, EuroQol-5D) also improved to a greater extent in the surgery group. Of the 44 nonsurgical management patients still participating at six months, 35 (79.5%) crossed over to fusion.

Opioid use remained high in both groups at six months (70.5% for controls versus 58.0% for fusion; p=0.082) and at 12 months (55% versus 52%, respectively, p=0.61). Although these results generally favored fusion and had high methodologic quality, the trial had a high potential for bias (non-blinded study, subjective outcome measures).

In 2016, Sturesson and colleagues reported another industry-sponsored, non-blinded RCT of the iFuse Implant System in 103 patients. Inclusion was based on similar criteria as the Whang trial, including at least 50% pain reduction on SIJ block. Mean pain duration was 4.5 years. Nonsurgical management included physical therapy and exercises at least twice per week; interventional procedures (e.g., steroid injections, RFA) were not allowed. The primary outcome was change in VAS pain score at six months. Of 109 randomized subjects, six withdrew before any treatment. All patient assigned to iFuse underwent the procedure, and follow-up at six months included 49 of 51 patients in the control group and all 52 patients in the iFuse group. At six months, VAS pain scores improved by 43.3 points in the iFuse group and by 5.7 in the control group (p<0.001). ODI scores improved by 5.8 points in the control group and by 25.5 points in the iFuse group (p<0.001, between groups). Quality of life outcomes showed a greater improvement in the iFuse group than in the control group. Although these results favored fusion, with magnitudes of effect in a range similar to the RCT by Whang, this trial was also not blinded and lacked a sham control. Outcomes were only assessed to six months.

Sachs et al. (2016) reported outcomes of 107 patients with a minimum follow-up of three years. The number of potentially eligible patients was not reported, so the follow-up rate is unknown. Pain scores improved from a mean of 7.5 at baseline to 2.5 at a mean follow-up time of 3.7 years. ODI score at follow-up was 28.2, indicating moderate residual disability. Satisfaction rate was 87.9% (67.3% very satisfied, 20.6% somewhat satisfied). Revision surgery was reported in five (4.7%) patients. Without knowing the number of eligible patients, the validity of this study cannot be determined.

In 2016, Schoell and colleagues analyzed post-operative complications tracked in an administrative database of minimally invasive SIJ fusions. Although, at the time of the study, there was no specific CPT code for minimally invasive sacroiliac fusion, CPT codes listed by a policy statement were used. Using the Humana insurance database, patients with complications were identified using ICD-9 codes corresponding to a surgical complication within 90 days or six months if the codes were used for the first time. Of 469 patients, the overall incidence of complications was 13.2% at 90 days and 16.4% at six months. For specific complications, the infection rate was 3.6% at 90 days, and the rate of complications classified as nervous system complications was 4.3%. The authors noted that the infection rate observed was consistent with the infection rates reported by Polly et al., but much higher than those reported for other types of minimally invasive spine procedures.

According to Lorio et al. (2020), bilateral SIJ fusion is generally best performed serially as successful treatment of one side may improve pain/disability to a degree acceptable to the patient. If contralateral SIJ pain continues and disability is significant for the patient, SIJ fusion of the contralateral side may be necessary. It is expected that patients would not require more than one SIJ fusion per side per lifetime unless a revision is required. Provider qualifications include orthopedic or neurologic surgeons who have successfully completed a residency in that specialty and at least one specialized training course in the procedure which includes device placement under the supervision of

a surgeon experienced in the procedure.

In a multicenter, prospective, single-arm study, Calodney et al. (2024) evaluated the safety and efficacy of utilizing a minimally invasive sacroiliac posterior fusion allograft implant (LinQ Implant System) for the management of chronic, low back pain resulting from SIJ dysfunction. Participants aged 21 to 70 years with low back pain for greater than six months despite conservative care, including therapy and medications, were considered for this study if they tested positive for three out of four physical exam maneuvers for SIJ dysfunction. These exams included FABER test, Gaenslen test, Stork/Gilett test, and Yeoman's test. Further, eligible participants with an Oswestry Disability Index (ODI) score of at least 30 and a visual analog scale (VAS) score of at least 50 mm for low back and or buttock pain were selected. The primary endpoint was a composite measure of binary success (responder rate) at six months. Secondary endpoints included mean change from baseline for the following patient-reported outcomes at six months: VAS score for SIJ pain, ODI scores, and PROMIS-29 v2.1 scores. A total of 159 participants were enrolled across 16 investigational sites in the US between January 2020 and March 2022. A total of 122 participants were implanted; however, five participants were found to be ineligible for study participation after implant and their data has been excluded from analyses. Of the 117 participants with available data, 112 completed the one-month visit, 100 completed the three-month visit, 92 completed the six-month visit, and 84 completed the 12-month follow-up visit. At the one-month follow-up, 82 participants satisfied all criteria for the composite responder endpoint, representing 73.2% of the study cohort. These results stayed consistent across the remaining study timepoints with 66.0%, 74.4%, and 73.5% of participants classified as responders at the 3-, 6- and 12-month follow-up visits, respectively. VAS scores were significantly reduced (p < 0.0001) and ODI scores were significantly improved (p < 0.0001). All domains of the PROMIS-29 were also significantly improved (all p's < 0.0001). Only one procedurerelated serious adverse event was reported in the study. There were several limitations to this study, including being industry sponsored. The lack of a control group and the partial cohort in this analysis are limitations to the generalizability of these results. In addition, features of the therapy prohibit blinding, so a traditional randomized-controlled trial was not possible.

# **PROFESSIONAL GUIDELINE(S)**

In 2021, The North American Spine Society (NASS) released coverage policy recommendations for minimally invasive sacroiliac joint fusion. NASS recommends minimally invasive SIJ fusion in patients who meet all of the following criteria:

- 1. Have undergone and failed a minimum six (6) months of intensive nonoperative treatment that must include medication optimization, activity modification, and active therapeutic exercise targeted at the lumbar spine, pelvis, SIJ and hip including a home exercise program.
- 2. Patient's report of nonradicular, typically unilateral, pain that is maximal below the L5 vertebrae, localized over the posterior SIJ, and consistent with SIJ pain.
- 3. A physical examination typically demonstrating localized tenderness with palpation over the sacral sulcus (Fortin's point, i.e., at the insertion of the long dorsal ligament inferior to the posterior superior iliac spine or PSIS) or the absence of tenderness elsewhere

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(e.g., greater trochanter, lumbar spine, coccyx) that would explain the patient's symptoms.

- 4. Positive response to a cluster of at least three (3) provocative tests (Patrick's or FABER, Gaenslen, thigh thrust, sacral thrust, distraction, compression). Note that the thrust tests may not be recommended in pregnant patients or those with connective tissue disorders.
- 5. Absence of generalized pain behavior (e.g., somatoform disorder) or generalized pain disorders (e.g., fibromyalgia).
- 6. At least 75% reduction of pain, documented by pain diary, for the expected duration of the anesthetic used following an image-guided, contrast-enhanced intra-articular SIJ injection on two (2) separate occasions.
- 7. A trial of at least one therapeutic intra-articular SIJ injection (i.e., corticosteroid injection).
- 8. Diagnostic imaging studies that include **ALL** the following:
  - a. Imaging (plain radiographs and a CT or MRI) of the SIJ that excludes the presence of destructive lesions (e.g., tumor, infection) or autoimmune arthropathy that would not be properly addressed by percutaneous SIJ fusion;
  - b. Imaging of the pelvis (AP plain radiograph) to rule out concomitant hip pathology that would better explain the patient's symptoms; and
  - c. Imaging of the lumbar spine (CT or MRI) to rule out neural compression or other degenerative condition that, in combination with the patient's history, physical, and other testing would more likely be the source of their low back or buttock pain.

### **REGULATORY STATUS**

Several percutaneous or minimally invasive fixation/fusion devices have been cleared for marketing by the U.S. Food and Drug Administration (FDA), including the SI-FIX Sacroiliac Joint Fusion System (Medtronic), the iFuse Implant System (SI-BONE), the SImmetry Sacroiliac Joint Fusion System (Zyga Technologies), the Silex Sacroiliac Joint Fusion System (Xtant Medical), and the SI-LOK Sacroiliac Joint Fixation System (Globus Medical).

Refer to the FDA Medical Device website. Available from: https://www.fda.gov/medical-devices [accessed 2025 May 28]

### CODE(S)

- Codes may not be covered under all circumstances.
- Code list may not be all inclusive (AMA and CMS code updates may occur more frequently than policy updates).
- (E/I)=Experimental/Investigational
- (NMN)=Not medically necessary/appropriate

**CPT Codes** 

| Code                                 | Description   |
|--------------------------------------|---|
| 27278 (E/I)<br>Effective<br>01/01/24 | Arthrodesis, sacroiliac joint, percutaneous, with image guidance, including placement of intra-articular implant(s) (e.g., bone allograft[s], synthetic device[s]), without placement of transfixation device (effective 01/01/24) (Replacing code 0775T) |
| 0775T (E/I)<br>Termed<br>12/31/23    | Arthrodesis, sacroiliac joint, percutaneous, with image guidance, includes placement of intra-articular implant(s) (e.g., bone allograft[s], synthetic device[s]  |
| 27279                                | Arthrodesis, sacroiliac joint, percutaneous or minimally invasive (indirect visualization), with image guidance, includes obtaining bone graft when performed, and placement of transfixing device  |
| 27280                                | Arthrodesis, open, sacroiliac joint, including obtaining bone graft, including instrumentation, when performed  |

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#### **HCPCS Codes**

| Code     | Description |
|----------|-------------|
| No codes |             |

# ICD10 Codes

| Code              | Description  |
|-------------------|--|
| M46.1             | Sacroiliitis, not elsewhere classified                 |
| M47.898           | Other spondylosis, sacral and sacrococcygeal region    |
| M47.899           | Other spondylosis, site unspecified                    |
| M48.08            | Spinal stenosis, sacral and sacrococcygeal region      |
| M53.2X8           | Spinal instabilities, sacral and sacrococcygeal region |
| M53.3             | Sacrococcygeal disorders, not elsewhere classified     |
| M54.18            | Radiculopathy, sacral and sacrococcygeal region        |
| M54.30-<br>M54.32 | Sciatica (code range)                                  |

| Code                  | Description   |
|-----------------------|---|
| M54.40-<br>M54.42     | Lumbago with sciatica (code range)                              |
| M54.5                 | Low back pain   |
| S33.2XXA-<br>S33.2XXS | Dislocation of sacroiliac and sacrococcygeal joint (code range) |
| S33.6XXA-<br>S33.6XXS | Sprain of sacroiliac joint (code range)                         |

### REFERENCES

Ballatori AM, et al. Propensity-matched analysis of 1062 patients following minimally invasive versus open sacroiliac joint fusion. Clin Spine Surg. 2021 Oct 1;34(8):E477-E482.

Calodney, A 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 Mar 20:17:1209-1222.

Claus CF, et al. Minimally invasive sacroiliac joint fusion using triangular titanium versus cylindrical threaded implants: a comparison of patient-reported outcomes. World Neurosurg. 2020 Jan;133:e745-e750.

Guzmán Pavón MJ, et al. Comparative effectiveness of manual therapy interventions on pain and pressure pain threshold in patients with myofascial trigger points. The Clinical Journal of Pain. 2022;38:749-760.

Hermans, Sem, M, et al. Minimally invasive sacroiliac joint fusion vs conservative management in patients with sacroiliac joint dysfunction: a systematic review and meta-analysis. Int J Spine Surg. 2022 Jun;16(3):472-480.

International Society for the Advancement of Spine Surgery. ISASS policy 2016 update- minimally invasive sacroiliac joint fusion [Internet]. [Accessed 2025 May 6]. Available from: <a href="https://www.isass.org/public-policy/isass-policy-statement-minimally-invasive-sacroiliac-joint-fusion-july-2016/">https://www.isass.org/public-policy/isass-policy-statement-minimally-invasive-sacroiliac-joint-fusion-july-2016/</a>

Lee DW, et al. Review of current evidence for minimally invasive posterior sacroiliac joint fusion. Int J Spine Surg. 2021;15(3):514-524.

Lorio M, et al. International Society for the Advancement of Spine Surgery policy 2020 updateminimally invasive surgical sacroiliac joint fusion (for chronic sacroiliac joint pain): coverage indications, limitations, and medical necessity. Int J Spine Surg. 2020 Dec;14(6):860-895.

Martin CT, et al. Minimally invasive sacroiliac joint fusion: the current evidence. Int J Spine Surg. 2020 Feb 10;14(Suppl 1):20-29.

# Page: 12 of 13

National Institute for Health and Care Excellence (NICE). Minimally invasive sacroiliac joint fusion surgery for chronic sacroiliac pain. IPG 578 [Internet]. 2017 April. [Accessed 2025 May 6]. Available from: <u>https://www.nice.org.uk/guidance/ipg578</u>

North American Spine Society. Coverage policy recommendations. Minimally invasive sacroiliac joint fusion [Internet] 2021 Sep [Accessed 2025 May 6]. Available from: <u>https://www.spine.org/coverage</u>

Patel V, et al. Prospective trial of sacroiliac joint fusion using 3D-printed triangular titanium implants. Med Devices (Auckl). 2020 Jun 16;13:173-182.

Patel V, et al. Prospective trial of sacroiliac joint fusion using 3D-printed triangular titanium implants: 24-month follow-up. Med Devices (Auckl). 2021 Jun 29;14:211-216.

Polly DW, 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. 2015 Nov;77(5):674-690.

Randers, et al. The effect of minimally invasive sacroiliac joint fusion compared with sham operation: study protocol of a prospective double-blinded multicenter randomized controlled trial. Acta Orthop 2022. Jan 3;93:75-81.

Riberio DC, et al. Mediators of the effects of exercise and manual therapy for people with knee and hip osteoarthritis: A secondary, exploratory analysis of the MOA trial. Osteoarthritis and Cartilage Open. 2024 Jan9;6(1):1-6.

Sachs D, et al. Durable intermediate-to-long-term outcomes after minimally invasive transiliac sacroiliac joint fusion using triangular titanium implants. Med Devices. 2016 July 13;9:213-222.

Sayed D, et al. Posterior intra-articular fixation stabilizes both primary and secondary sacroiliac joints: a cadaveric study and comparison to lateral trans-articular fixation literature. J Orthop Surg Res. 2023;18(1):406.

Sayed D, et al. A multicenter retrospective analysis of the long-term efficacy and safety of a novel posterior sacroiliac fusion device. J Pain Res. 2021;14:3251-3258.

Schoell K, et al. Postoperative complications in patients undergoing minimally invasive sacroiliac fusion. Spine J. 2016 June 24[Epub ahead of print].

Sturesson B, et al. Six-month outcomes from a randomized controlled trial of minimally invasive SI joint fusion with triangular titanium implants vs conservative treatment. Eur Spine J. 2017 March;26(3):708-719.

Whang P, 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 March 5;9:6.

Whang PG, 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 Sep 26;12:411-422.

Whang PG, et al. Minimally invasive SI joint fusion procedures for chronic SI joint pain: systematic

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review and meta-analysis of safety and efficacy. Int J Spine Surg. 2023 Dec 26;17(6):794-808.

### **SEARCH TERMS**

#### Not Applicable

### CENTERS FOR MEDICARE AND MEDICAID SERVICES (CMS)

LCD - Minimally-invasive Surgical (MIS) Fusion of the Sacroiliac (SI) Joint (L36406) [accessed 2025 May 01].

#### **PRODUCT DISCLAIMER**

- Services are contract dependent; if a product does not cover a service, medical policy criteria do not apply.
- If a commercial product (including an Essential Plan or Child Health Plus product) covers a specific service, medical policy criteria apply to the benefit.
- If a Medicaid product covers a specific service, and there are no New York State Medicaid guidelines (eMedNY) criteria, medical policy criteria apply to the benefit.
- If a Medicare product (including Medicare HMO-Dual Special Needs Program (DSNP) product) covers a specific service, and there is no national or local Medicare coverage decision for the service, medical policy criteria apply to the benefit.
- If a Medicare HMO-Dual Special Needs Program (DSNP) product DOES NOT cover a specific service, please refer to the Medicaid Product coverage line.

### **POLICY HISTORY/REVISION**

### **Committee Approval Dates**

06/21/18, 12/20/18, 07/18/19, 01/16/20, 12/17/20, 12/16/21, 12/22/22, 10/17/24, 06/26/25

| Date     | Summary of Changes  |
|----------|---|
| 06/26/25 | • Annual review; Policy title changed to Sacroiliac Joint Fusion or Stabilization.<br>New not medically necessary policy statement added for minimally invasive or<br>percutaneous SI joint fusion and stabilization performed without the intention<br>of fusing the SI joint. |
| 01/01/25 | Summary of changes tracking implemented.  |
| 12/16/16 | Original effective date   |