Clinical Policy: Sacroiliac Joint Fusion

Reference Number: CP.MP.126 [Coding Implications](#Coding_Implications)

Last Review Date: 06/19

[Revision Log](#Revision_Log)

**See** [Important Reminder](#Important_Reminder) **at the end of this policy for important regulatory and legal information.**

## Description

Sacroiliac joint fusion, or arthrodesis, is a surgical technique that fuses the iliac bone to the sacrum for stabilization. This procedure may be performed in a minimally invasive manner or as an open surgical procedure requiring a larger incision and subsequent increased recovery time.

## Policy/Criteria

1. It is the policy of health plans affiliated with Centene Corporation® that sacroiliac joint fusion is **medically necessary** for any of the following indications:
   1. Stabilization of a traumatic, severe disruption, or fracture of the pelvic ring; or
   2. As an adjunct to sacrectomy or partial sacrectomy for the treatment of sacral tumors; or
   3. As an adjunct to the medical treatment of sacroiliac joint infection or sepsis (e.g., osteomyelitis, pyogenic sacroiliitis); or
   4. During multisegment spinal constructs (e.g., correction of deformity in scoliosis or kyphosis surgery, extending to the ilium).
2. It is the policy of health plans affiliated with Centene Corporation that sacroiliac joint fusion procedures, either open or minimally invasive (e.g., iFuse), are investigational for treating mechanical low back pain due to sacroiliac joint syndrome, radicular pain syndromes, degenerative sacroiliac joint, sacral insufficiency fractures, and pelvic girdle pain, because long-term safety and effectiveness has not been established.

## Background

Low back pain may become chronic and disabling for about 5-10% of the adults in the United States. When the sacroiliac joint is the source of this pain, and all appropriate conservative measures fail to relieve symptoms of trauma associated with fracture, infection/sepsis, tumors involving the sacrum, cancer, or spinal instability, options may include fusion of this joint or implantation of devices that stabilize this joint with minimally invasive surgery. To stabilize the sacroiliac joint, the iliac crest bone and the sacrum are held together by plates and/or screws or an interbody fusion cage, until the two bones fuse.

There are a number of FDA-approved implants that have been proposed for sacroiliac joint disorders, but the majority of clinical trials and studies have been done on the iFuse implant system. This was initially called the SI Joint Fusion and received the original 510(k) clearance from the Food and Drug Administration in November 2008, for fracture fixation of long bones, large bone fragments of the pelvis and for conditions including sacroiliac joint disruptions and degenerative sacroiliitis. Additional FDA clearances were given on April 21, 2011 and on April 17, 2015. The iFuse system involves the fluoroscopically guided insertion of titanium implants across the sacroiliac joint. Under general anesthesia, a 2 to 3 centimeter incision is created, and after determining the appropriate size of the implant, a cannulated delivery system is used to insert the implants into the proper position. While the number varies, most patients receive 3 implants to stabilize the joint.13 14

Wang and Polly completed two randomized controlled trials with a six month and one year follow up, respectively, on sacroiliac joint fusion using iFuse verses non-surgical management. The iFuse led to better outcomes and similar safety compared with nonsurgical management, and to better operative outcomes and at least comparable efficacy compared with open surgery. However, uncertainty remains due to the lack of longer-term efficacy and safety follow-up with radiologic confirmation, and to the lack of comparisons with other minimally invasive approaches. 15, 10

The sacroiliac joint remains a controversial source of primary low back pain, and surgery is rarely performed for sacroiliac joint dysfunction. Although there are ongoing published peer-reviewed studies, there is a paucity of long-term, scientific literature to support sacroiliac joint fusion for low back pain. Additional randomized, controlled trials or comparison studies are needed to compare sacroiliac joint fusion for low back pain to non-surgical treatments to determine the impact on health outcomes and long-term efficacy and safety. 17

*State of Colorado, Department of Labor and Employment, Division of Workers’ Compensation*, recommends: sacroiliac (SI) joint fusion may be indicated for stabilization of a traumatic severe disruption of the pelvic ring. This procedure has limited use in minor trauma and would be considered only on an individual, case-by-case basis. In patients with typical, mechanical low back pain, this procedure is considered to be investigational. Until the efficacy of this procedure for mechanical low back pain is determined by an independent, valid, prospective outcome study, this procedure is not recommended for mechanical low back pain. 12

*American Association of Neurological Surgeons (AANS)*

At the Current Procedural Terminology (CPT®) Editorial Panel meeting, the American Association of Neurological Surgeons and Congress of Neurological Surgeons presented the following proposal: for a new Category I CPT code for minimally invasive sacroiliac joint fusion. The new code was approved and went into effect on January 1, 2015, replacing the previous Category III code 0334T. CPT code 27280 was revised to clarify that it is for open procedures only. 2

*International Society for the Advancement of Spine Surgery (ISASS)*

ISASS published a policy statement on minimally invasive sacroiliac joint fusion, with criteria for determining a patient’s eligibility regarding minimally invasive SI joint fusion. Several limitations of their recommendations include, but are not limited to: the literature review method, lack of formal assessment of the quality of the evidence, and no clear link between the recommendations for fusion with supporting evidence.8,21

*North American Spine Society (NASS)*

NASS recommends percutaneous sacroiliac joint (SIJ) fusion for the treatment of sacroiliac joint pain for patients with low back/buttock pain who meet specific criteria. 9

**Coding Implications**

This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2019, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

| **CPT® Codes** | **Description** |
| --- | --- |
| 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 |

| **HCPCS Codes** | **Description** |
| --- | --- |
| N/A |  |

**ICD-10-CM Diagnosis Codes that Support Coverage Criteria**

| **ICD-10-CM Code** | **Description** |
| --- | --- |
| C41.4 | Malignant neoplasm of pelvic bones, sacrum and coccyx |
| C79.51 | Secondary malignant neoplasm of bone |
| D16.8 | Benign neoplasm of pelvic bones, sacrum and coccyx |
| D48.0 | Neoplasm of uncertain behavior of bone and articular cartilage |
| D49.2 | Neoplasm of unspecified behavior of bone, soft tissue, and skin |
| M43.27-M43.28 | Fusion of spine, lumbosacral to sacral and sacrococcygeal region |
| M46.1 | Sacroiliitis, not elsewhere classified |
| M46.28 | Osteomyelitis of vertebra, sacral and sacrococcygeal region |
| M46.38 | Infection of intervertebral disc (pyogenic), sacral and sacrococcygeal region |
| M53.2X7-M53.2X8 | Spinal instabilities, lumbar – sacral and sacrococcygeal region |
| M53.3 | Sacrococcygeal disorders, not elsewhere classified |
| S32.810A-S32.811S | Multiple fractures of pelvis with stable disruption of pelvic ring |

| **Reviews, Revisions, and Approvals** | **Date** | **Approval Date** |
| --- | --- | --- |
| New policy developed based off of Health Net policy NMP536 Sacroiliac Joint Fusion. | 09/16 | 09/16 |
| References reviewed and updated. Codes reviewed and updated. | 09/17 | 09/17 |
| References reviewed and updated. | 06/18 | 06/18 |
| References reviewed and updated. Codes reviewed and updated. ICD-10 codes added: C41.4, C79.51, D16.8, D48.0, D49.2, M46.28, M46.38, and S32.810A-S32.811S. Specialty review. | 05/19 | 06/19 |

### References

1. American Association of Neurological Surgeons (AANS), and CNS Support Minimally Invasive Sacroiliac Joint Fusion Code. Vol. 30, April 2014. Available at: <https://www.aans.org/pdf/Legislative/Washington_E-newsletter/Washington_E-news_Vol30_2014.pdf> Accessed 05/21/19.
2. [Chou R](http://www.ncbi.nlm.nih.gov/pubmed/?term=Chou%20R%5BAuthor%5D&cauthor=true&cauthor_uid=19363457), [Loeser JD](http://www.ncbi.nlm.nih.gov/pubmed/?term=Loeser%20JD%5BAuthor%5D&cauthor=true&cauthor_uid=19363457), [Owens DK](http://www.ncbi.nlm.nih.gov/pubmed/?term=Owens%20DK%5BAuthor%5D&cauthor=true&cauthor_uid=19363457), et al. Interventional therapies, surgery, and interdisciplinary rehabilitation for low back pain: an evidence-based clinical practice guideline from the American Pain Society. 2009 May 1;34(10):1066-77. Accessed 05/21/19.
3. Hayes. Health Technology Brief. iFuse Implant System (SI-BONE Inc.) for Sacroiliac Joint Fusion for Treatment of Low Back Pain. Updated December 2016.
4. Hayes. Health Technology Brief. iFuse Implant System (SI-BONE Inc.) for Sacroiliac Joint Fusion for Treatment of Sacroiliac Joint Dysfunction. Published November 2017. Updated December 2018.
5. Hayes. Health Technology Brief. Open Surgery for Sacroiliac Joint Fusion for the Treatment of Low Back Pain. March 3, 2014. Updated January 28, 2016.
6. Ledonio CG, Polly DW Jr, et al. Minimally invasive versus open sacroiliac joint fusion: are they similarly safe and effective? Clin Orthop Relat Res. 2014 Jun;472(6):1831-8. Accessed 05/21/19.
7. Lorio, MP, Rashbaum, R. ISASS policy statement - minimally invasive sacroiliac joint fusion. Netherlands, 2014. Updated July 2016. Accessed 05/21/19.
8. North American Spine Society (NASS). Coverage Policy Recommendations. Percutaneous Sacroiliac Joint Fusion. 6/9/2015.
9. 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. 2015. Epub ahead of print. August 19, 2015. Accessed 05/21/19.
10. SI-BONE, Inc. Announces Medicare Palmetto Removes MIS SI Joint Fusion from Non-Coverage. February 25, 2014. Accessed 05/21/19.
11. State of Colorado. Department of Labor and Employment. Division of Workers’ Compensation. Low Back Pain. Medical Treatment Guidelines. Revised: February 3, 2014.
12. U.S. Food and Drug Administration (FDA) 510(k) Premarket Notification Database. iFuse SI Fusion System. No. K110838. April 21, 2011.
13. U.S. Food and Drug Administration (FDA) 510(k) Premarket Notification Database. SI-BONE iFuse Implant System. No. K150714. April 17, 2015.
14. April

15. 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. Accessed 05/21/19.

16. Wheeler SG, Wipf JE, Staiger TO, et al. Evaluation of low back pain in adults. UpToDate.

April 27, 2016. Updated May 14, 2019. Accessed 05/21/19.

17.Zaidi HA, Montoure AJ, Dickman CA, et al. Surgical and clinical efficacy of sacroiliac joint fusion: a systematic review of the literature. J Neurosurg Spine. 2015 Jul;23 (1):59-66. doi: 10.3171/2014.10.SPINE14516. Epub 2015 Apr 3. Accessed 05/21/19.

1. Hayes Health Technology Brief. Open Sacroiliac Joint Fusion for Unspecified Sacroiliac Joint Dysfunction. June 22, 2017. Accessed 05/21/19.
2. Bornemann R, Roessler PP, Strauss AC, et al. Two-year clinical results of patients with sacroiliac joint syndrome treated by arthrodesis using a triangular implant system. Technol Health Care. 2017;25(2):319-325. Accessed 05/21/19.
3. 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 Aug 23;10:28. Accessed 05/21/19.
4. 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. 2017 Apr 20. Accessed 05/21/19.
5. Lorio MP. ISASS Policy 2016 Update - Minimally Invasive Sacroiliac Joint Fusion. Int J Spine Surg. 2016 Jul 13;10:26. Accessed 05/21/19.

**Important Reminder**

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

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**Note: For Medicaid members**, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

**Note: For Medicare members,** to ensure consistency with the Medicare National Coverage Determinations (NCD) and Local Coverage Determinations (LCD), all applicable NCDs, LCDs, and Medicare Coverage Articles should be reviewed prior to applying the criteria set forth in this clinical policy. Refer to the CMS website at <http://www.cms.gov> for additional information.

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