Sacroiliac Joint Fusion/Stabilization

Description of Procedure or Service

Sacroiliac joint fusion is a surgical procedure which fuses the iliac bone (pelvis) to the spine (sacrum) for stabilization. It may be performed for a variety of conditions including pain, trauma, infection, cancer, and spinal instability. The initial treatment for sacroiliac joint syndrome is usually non-surgical, however, surgical options may be explored when the patient is refractory to or unable to tolerate more conservative interventions.

The following implants have received the U.S. Food and Drug Administration’s (FDA) 510(k) approval:
- Rialto™ SI Joint Fusion System, Medtronic
- SIJ-Fuse, Spine Frontier
- SambaScrew®, Orthofix
- SImmetry®, Zyga Technologies;
- iFuse Implant System®, SI Bone;
- SI-FIX, Medtronic;
- SI-LOK™ Sacroiliac Joint Fixation System, Globus Medical;
- Silex ™ Sacroiliac Joint Fusion System, XTANT Medical
- SIJF Cannulated screw System, Depuy Spine;
- Pioneer Cannulated Screw System, Pioneer Surgical Technology, Inc.;
- Synthes 6.5mm Cannulated Screws, Synthes USA.

***Note: This Medical Policy is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your physician.

Policy

BCBSNC will provide coverage for sacroiliac joint fusion/stabilization when it is determined to be medically necessary because the medical criteria and guidelines shown below are met.

Benefits Application

This medical policy relates only to the services or supplies described herein. Please refer to the Member's Benefit Booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this medical policy.

When Sacroiliac Joint Fusion/Stabilization is covered
Sacroiliac Joint Fusion/Stabilization

Sacroiliac joint fusion or stabilization procedures may be considered medically necessary for any of the following indications:

1. For the treatment of back pain presumed to originate from the sacroiliac joint, using a minimally invasive, titanium triangular implant, when ALL of the following criteria have been met:

   - The pain is caudal to the lumbar spine (L5 vertebra), localized over the posterior sacroiliac joint, and consistent with sacroiliac joint pain, AND
   - The 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
   - Patient has 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, sacroiliac joint, and hip, including a home exercise program; AND
   - On physical examination there is 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:
     - plain radiographs and computed tomography or magnetic resonance imaging of the sacroiliac joint excludes the presence of destructive lesions (eg, tumor, infection) or inflammatory arthropathy of the sacroiliac joint; AND
     - anteroposterior plain radiograph of the pelvis rules out concomitant hip pathology; AND
     - computed tomography or magnetic resonance imaging of the lumbar spine is performed to rule out neural compression or other degenerative condition that can be causing low back or buttock pain; AND
     - sacroiliac joint imaging indicates evidence of injury and/or degeneration; AND
   - Diagnostic injections performed on 2 separate occasions, using an image-guided, contrast-enhanced, intra-articular sacroiliac joint injection, demonstrate at least a 75% reduction in pain for the expected duration of the anesthetic; AND
   - A trial of a therapeutic sacroiliac joint injection (ie, corticosteroid injection) has been performed at least once; AND
   - The procedure is performed by a physician trained in either neurosurgery or orthopedic spine surgery; AND
   - The provider performing the surgery has either completed procedure-specific training or has been granted hospital privileges to perform minimally invasive sacroiliac joint surgery.

2. as an adjunct to sacrectomy or partial sacrectomy related to tumors involving the sacrum; or

3. as an adjunct to the medical treatment of sacroiliac joint infection/sepsis; or

4. severe traumatic injuries associated with pelvic ring fracture; or

5. when multisegment spinal constructs extend to the sacrum/ilium, as a component of medically necessary lumbar spine fusion procedures (See medical policy, ‘Lumbar Spine Fusion Surgery’).
Sacroiliac Joint Fusion/Stabilization

When Sacroiliac Joint Fusion/Stabilization is not covered

When none of the above indications are present, the procedure is considered not medically necessary, including use of any other device not listed above (e.g., cylindrical threaded implant).

Policy Guidelines

For individuals who have SIJ pain who receive SIJ fusion/fixation with a triangular implant, the evidence includes two nonblinded randomized controlled trials (RCTs) of minimally invasive fusion and two case series with more than 85% follow-up at two to three years. Relevant outcomes are symptoms, functional outcomes, quality of life, medication use, and treatment-related morbidity. Both nonblinded RCTs reported superior short-term results for fusion, however, a preferable design for assessing pain outcomes would be independent, blinded assessment of outcomes or, when feasible, a sham-controlled trial. Longer term follow-up from these RCTs has indicated that the results obtained at six months persist to two years. An additional cohort study and case series, with sample sizes ranging from 45 to 149 patients and low dropout rates (<15%), have also shown reductions in pain and disability at two years. One small case series showed outcomes that persisted to five years. The cohort studies and case series are consistent with durability of treatment benefit. Analysis of an insurance database reported an overall incidence of complications to be 16.4% at six months and cumulative revision rate at four years of 3.54%. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

For individuals who have SIJ pain who receive SIJ fusion/fixation with a cylindrical threaded implant, the evidence includes a prospective cohort. Relevant outcomes are symptoms, functional outcomes, quality of life, medication use, and treatment-related morbidity. The prospective cohort study will follow patients for two years following implantation of slotted screws filled with autologous bone. Results at one year are consistent with findings from the studies using a triangular implant. However, longer follow-up and controlled trials are needed to evaluate this type of implant. The evidence is insufficient to determine the effects of the technology on health outcomes.

Ongoing and Unpublished Clinical Trials

NCT01861899 is a manufacturer-sponsored observational study of SI-LOK® sacroiliac joint fixation. An estimated 55 patients will be recruited. As of April, 2020, the study has passed its completion date and status has not been verified in more than two years.

NCT02270203 is a manufacturer-sponsored extended follow-up study from two ongoing multicenter prospective US clinical trials (INSITE and SIFI). 103 participants are enrolled, all of whom have already undergone SI joint fusion with iFuse Implant System. The study is listed as completed July 2019. No results have been posted.

NCT02074761 is a prospective, non-randomized post market study designed to evaluate fusion and pain reduction following the use of the Slmetry System. This study will be conducted at up to 40 sites and 250 total subjects will be enrolled and followed through 24 months.

Billing/Coding/Physician Documentation Information
Sacroiliac Joint Fusion/Stabilization

This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at www.bcbsnc.com. They are listed in the Category Search on the Medical Policy search page.

Applicable codes: 27279, 27280, 27299

BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

Scientific Background and Reference Sources


Sacroiliac Joint Fusion/Stabilization


For policy renamed Sacroiliac Joint Fusion/Stabilization


Policy Implementation/Update Information

11/27/12  New policy. “Sacroiliac joint fusion procedures may be considered medically necessary for any of the following indications: as an adjunct to sacrectomy or partial sacrectomy related to tumors involving the sacrum; or as an adjunct to the medical treatment of sacroiliac joint infection/sepsis; or severe traumatic injuries associated with pelvic ring fracture; or when multisegment spinal constructs extend to the sacrum/ilia, for covered lumbar spine fusion procedures (See medical policy, ‘Lumbar Spine Fusion Surgery’).” “When none of the above indications are present, the procedure is considered not medically necessary. Sacroiliac joint fusion surgery is considered investigational for the treatment of mechanical low back pain when the sacroiliac joint is the suspected cause.” Senior Medical Director review 10/28/2012. Notification given 11/27/12. Policy effective 2/26/13. (btw)

4/16/13  Added CPT code 27299 to Billing/Coding section. (btw)


8/27/13  Removed CPT code 0334T from Billing/Coding section. Code implementation delayed. (btw)

11/26/13 Added CPT code 0334T to Billing/Coding section, code effective 7/1/2013. (btw)

2/11/14  Revised statement in the When Covered section for clarification. Statement changed from; “when multisegment spinal constructs extend to the sacrum/ilia, for covered lumbar spine fusion procedures (See medical policy, ‘Lumbar Spine Fusion Surgery’).” to “when multisegment spinal constructs extend to the sacrum/ilia, as a component of medically necessary lumbar spine fusion procedures (See medical policy, ‘Lumbar Spine Fusion Surgery’).” Senior Medical Director review 1/30/2014. (btw)

6/10/14 Specialty Matched Consultant Advisory Panel review 5/27/2014. No change to policy intent. (btw)

12/30/14 References added. Policy Guidelines updated. Added code 27279 to Billing/Coding section for effective date 1/1/2015. Deleted code 0334T. No change to Policy statement. (sk)
Sacroiliac Joint Fusion/Stabilization


2/29/16  Reference added. Policy Guidelines updated. (sk)

7/1/16  Specialty Matched Consultant Advisory Panel review 5/25/2016. (sk)


**For policy renamed Sacroiliac Joint Fusion/Stabilization**

9/7/18  Reference added. Specialty Matched Consultant Advisory Panel review 6/2018. SIJ fusion/stabilization with a titanium triangular implant is considered medically necessary when criteria are met. Policy Guidelines updated. Clinical trials information updated. Title changed from Sacroiliac Joint Fusion to Sacroiliac Joint Fusion/Stabilization. Medical Director review. (sk)


Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.