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## CLINICAL APPROPRIATENESS GUIDELINES

# MUSCULOSKELETAL PROGRAM

Appropriate Use Criteria: Sacroiliac Joint Fusion

### Proprietary

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## Description and Application of the Guidelines

The AIM Clinical Appropriateness Guidelines (hereinafter “the AIM Clinical Appropriateness Guidelines” or the “Guidelines”) are designed to assist providers in making the most appropriate treatment decision for a specific clinical condition for an individual. As used by AIM, the Guidelines establish objective and evidence-based criteria for medical necessity determinations where possible. In the process, multiple functions are accomplished:

- To establish criteria for when services are medically necessary
- To assist the practitioner as an educational tool
- To encourage standardization of medical practice patterns
- To curtail the performance of inappropriate and/or duplicate services
- To advocate for patient safety concerns
- To enhance the quality of health care
- To promote the most efficient and cost-effective use of services

The AIM guideline development process complies with applicable accreditation standards, including the requirement that the Guidelines be developed with involvement from appropriate providers with current clinical expertise relevant to the Guidelines under review and be based on the most up-to-date clinical principles and best practices. Relevant citations are included in the References section attached to each Guideline. AIM reviews all of its Guidelines at least annually.

AIM makes its Guidelines publicly available on its website twenty-four hours a day, seven days a week. Copies of the AIM Clinical Appropriateness Guidelines are also available upon oral or written request. Although the Guidelines are publicly-available, AIM considers the Guidelines to be important, proprietary information of AIM, which cannot be sold, assigned, leased, licensed, reproduced or distributed without the written consent of AIM.

AIM applies objective and evidence-based criteria, and takes individual circumstances and the local delivery system into account when determining the medical appropriateness of health care services. The AIM Guidelines are just guidelines for the provision of specialty health services. These criteria are designed to guide both providers and reviewers to the most appropriate services based on a patient's unique circumstances. In all cases, clinical judgment consistent with the standards of good medical practice should be used when applying the Guidelines. Guideline determinations are made based on the information provided at the time of the request. It is expected that medical necessity decisions may change as new information is provided or based on unique aspects of the patient's condition. The treating clinician has final authority and responsibility for treatment decisions regarding the care of the patient and for justifying and demonstrating the existence of medical necessity for the requested service. The Guidelines are not a substitute for the experience and judgment of a physician or other health care professionals. Any clinician seeking to apply or consult the Guidelines is expected to use independent medical judgment in the context of individual clinical circumstances to determine any patient's care or treatment.

The Guidelines do not address coverage, benefit or other plan specific issues. Applicable federal and state coverage mandates take precedence over these clinical guidelines. If requested by a health plan, AIM will review requests based on health plan medical policy/guidelines in lieu of the AIM Guidelines.

The Guidelines may also be used by the health plan or by AIM for purposes of provider education, or to review the medical necessity of services by any provider who has been notified of the need for medical necessity review, due to billing practices or claims that are not consistent with other providers in terms of frequency or some other manner.

## General Clinical Guideline

### Clinical Appropriateness Framework

Critical to any finding of clinical appropriateness under the guidelines for a specific diagnostic or therapeutic intervention are the following elements:

- Prior to any intervention, it is essential that the clinician confirm the diagnosis or establish its pretest likelihood based on a complete evaluation of the patient. This includes a history and physical examination and, where applicable, a review of relevant laboratory studies, diagnostic testing, and response to prior therapeutic intervention.
- The anticipated benefit of the recommended intervention should outweigh any potential harms that may result (net benefit).
- Current literature and/or standards of medical practice should support that the recommended intervention offers the greatest net benefit among competing alternatives.
- Based on the clinical evaluation, current literature, and standards of medical practice, there exists a reasonable likelihood that the intervention will change management and/or lead to an improved outcome for the patient.

If these elements are not established with respect to a given request, the determination of appropriateness will most likely require a peer-to-peer conversation to understand the individual and unique facts that would supersede the requirements set forth above. During the peer-to-peer conversation, factors such as patient acuity and setting of service may also be taken into account.

### Simultaneous Ordering of Multiple Diagnostic or Therapeutic Interventions

Requests for multiple diagnostic or therapeutic interventions at the same time will often require a peer-to-peer conversation to understand the individual circumstances that support the medical necessity of performing all interventions simultaneously. This is based on the fact that appropriateness of additional intervention is often dependent on the outcome of the initial intervention.

Additionally, either of the following may apply:

- Current literature and/or standards of medical practice support that one of the requested diagnostic or therapeutic interventions is more appropriate in the clinical situation presented; or
- One of the diagnostic or therapeutic interventions requested is more likely to improve patient outcomes based on current literature and/or standards of medical practice.

### Repeat Diagnostic Intervention

In general, repeated testing of the same anatomic location for the same indication should be limited to evaluation following an intervention, or when there is a change in clinical status such that additional testing is required to determine next steps in management. At times, it may be necessary to repeat a test using different techniques or protocols to clarify a finding or result of the original study.

Repeated testing for the same indication using the same or similar technology may be subject to additional review or require peer-to-peer conversation in the following scenarios:

- Repeated diagnostic testing at the same facility due to technical issues
- Repeated diagnostic testing requested at a different facility due to provider preference or quality concerns
- Repeated diagnostic testing of the same anatomic area based on persistent symptoms with no clinical change, treatment, or intervention since the previous study
- Repeated diagnostic testing of the same anatomic area by different providers for the same member over a short period of time

## Repeat Therapeutic Intervention

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In general, repeated therapeutic intervention in the same anatomic area is considered appropriate when the prior intervention proved effective or beneficial and the expected duration of relief has lapsed. A repeat intervention requested prior to the expected duration of relief is not appropriate unless it can be confirmed that the prior intervention was never administered.

# Sacroiliac Joint Fusion (Percutaneous/Minimally Invasive Techniques)

## Description and Scope

Low back pain is a global health issue and one of the top 3 causes of health degradation in highly developed countries. Goldwaith and Osgood first discussed the possibility that sacroiliac (SI) joint injury could cause low back pain as early as 1905. Since that time there have been numerous studies looking at the prevalence of SI joint syndrome in persons with back pain, and the results vary widely. Recent studies have estimated that 15%-30% of chronic low back pain is of sacroiliac origin.

Identifying the SI joint as the pain generator is challenging due to the multifactorial nature of low back pain. Once confirmed, management may include physical or manual therapy with a focus on core and pelvic stability, external orthotics, periodic intra-articular injections, anti-inflammatory medications, and lifestyle changes including smoking cessation and weight loss.

Sacroiliac joint fusion techniques were developed based on the assumption that movement across the joint was the primary source of pain. These techniques are not new, but their success has been limited by the extensive nature of the open fusion procedure and a lack of consistent outcome data. However, recent advances in minimally invasive techniques have shown some promise and are addressed here.

These guidelines address SI joint fusion when performed as an **elective, non-emergent** procedure and not as part of the care of a congenital condition, acute or traumatic event such as fracture (excluding fracture of implant and periprosthetic fracture), malignancy, or infection.

## Clinical Indications

*The following general requirements apply to all indications except where they differ from the specific requirements. The specific requirements take precedence over any stated general requirement.*

### General Information

The terms in the section provide operational definitions when they are referenced as requirements in the guideline.

Documentation supporting medical necessity should be submitted at the time of the request and must include the following information:

- Symptom duration and severity
- Specific functional limitations related to symptoms
- Type and duration of all therapeutic measures provided. If conservative management is not appropriate, the reason must be clearly documented.

**Conservative management**<sup>1</sup> should include a combination of strategies to reduce inflammation, alleviate pain, and correct underlying dysfunction, including physical therapy **AND** at least one complementary conservative treatment strategy.

- **Physical therapy requirement** includes **ANY** of the following:
  - Physical therapy rendered by a qualified provider of physical therapy services
  - Supervised home treatment program that includes **ALL** of the following:
    - Participation in a patient-specific or tailored program
    - Initial active instruction by MD/DO/PT with redemonstration of patient ability to perform exercises

- Compliance (documented or by clinician attestation on follow-up evaluation)
- Exception to the physical therapy requirement in unusual circumstances (for instance, intractable pain so severe that physical therapy is not possible) when clearly documented in the medical record
- **Complementary conservative treatment requirement** includes **ANY** of the following:
  - Anti-inflammatory medications and analgesics<sup>2</sup>
  - Adjunctive medications such as nerve membrane stabilizers or muscle relaxants<sup>2</sup>
  - Intra-articular corticosteroid injection<sup>2</sup>
  - Sacroiliac support belt or other appropriate bracing
  - Alternative therapies such as acupuncture, chiropractic manipulation, massage therapy, activity modification, and/or a trial period of rest (e.g., from the aggravating/contributing factors), where applicable

<sup>1</sup> Additional condition or procedure-specific requirements may apply and can be found in the respective section of the guideline.

<sup>2</sup> In the absence of contraindications

**Clinical reevaluation.** In most cases, reevaluation should include a physical examination. Direct contact by other methods, such as telephone communication or electronic messaging, may substitute for in-person evaluation when circumstances preclude an office visit.

**Failure of conservative management** requires **ALL** of the following:

- Patient has completed a full course of conservative management (as defined above) for the current episode of care
- Worsening of or no significant improvement in signs and/or symptoms upon clinical reevaluation
- More invasive forms of therapy are being considered

Documentation of compliance with a plan of therapy that includes elements from these areas is required where conservative management is appropriate.

**Reporting of symptom severity.** Severity of pain and its associated impact on activities of daily living (ADLs) and instrumental ADLs (IADLs) are key factors in determining the need for intervention. For purposes of this guideline, significant pain and functional impairment refer to pain that is at least 3 out of 10 in intensity and is associated with inability to perform at least two (2) ADLs and/or IADLs.

## General Recommendations

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**Tobacco Cessation.** Adherence to a tobacco-cessation program resulting in abstinence from tobacco for at least 6 weeks prior to surgery is recommended.

**Diabetes.** It is recommended that a patient with history of diabetes maintain hemoglobin A1C 8% or less prior to any joint replacement surgery.

**Body Mass Index (BMI).** It is recommended that any patient with a BMI equal to or greater than 40 should attempt weight reduction prior to surgery.

## Percutaneous/Minimally Invasive Sacroiliac Joint Fusion

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### Percutaneous/minimally invasive SI joint fusion with structural fixation device\*

\*Limited to the insertion of usually more than one structural device traversing the SI joint intended to fuse to the bone or lead to the fusion of the joint itself

Percutaneous/minimally invasive SI joint fusion\* may be considered medically necessary when **ALL** of the following criteria are met:

- Pain persisting a minimum of 6 months that interferes with functional activities as documented by **BOTH** of the following:
  - Pain score (VAS) of 5 or greater
  - ODI 30 or greater
- Failure of at least 6 months of conservative management that includes a trial of at least one therapeutic intra-articular SI joint injection (i.e., corticosteroid injection)
- Confirmation of the SI joint as a pain generator as demonstrated by **ALL** of the following:
  - Pain pattern consistent with SI joint pain (typically unilateral pain caudal to L5 vertebrae, localized over posterior SI joint)
  - Positive finger Fortin test (localized tenderness with palpation over the sacral sulcus)
  - Absence of tenderness of similar severity elsewhere in the pelvic region (e.g., greater trochanter, lumbar spine, coccyx)
  - Positive response from at least **THREE (3)** of the following provocative tests:
    - Long ligament test
    - Faber's test/Patrick's sign
    - Active straight leg raise
    - Compression test
    - Distraction test
    - Thigh thrust test (not recommended for those who are pregnant or those with connective tissue disorder)
    - Gaenslen's test
  - Other sources of pain have been excluded as an etiology
- Diagnostic imaging studies that include **ALL** of the following:
  - Imaging (plain radiographs and a CT) or MRI of the SI joint that excludes the presence of destructive lesions (e.g., tumor, infection) or inflammatory arthropathy that would not properly be addressed by percutaneous SI joint fusion
  - Imaging of pelvis (AP plain radiograph) to rule out concomitant hip pathology
  - Imaging of lumbar spine (CT or MRI) to rule out neural compression or other degenerative condition that can be causing low back or buttock pain
  - Imaging of SI joint that indicates evidence of injury and/or degeneration
- Diagnostic confirmation of the SI joint as the pain generator demonstrated by at least 75% reduction of pain for the expected duration of the anesthetic used following an image-guided, contrast-enhanced intra-articular SI joint injection on two (2) separate occasions

## Revision minimally invasive SI joint fusion

Revision or replacement SI joint fusion may be considered medically necessary when **ANY** of the following conditions are present:

- Symptomatic pseudarthrosis (nonunion)
- Symptomatic malposition (with impingement of foramen)
- Infection



- Implant fracture/breakage/loosening

## Exclusions

Indications other than those addressed in this guideline are considered **not medically necessary** including, but not limited to, the following:

- Presence of infection, tumor, or fracture
- Presence of acute traumatic instability of the SI joint
- Presence of neural compression as seen on imaging that correlates with symptoms or other more likely source of pain
- Presence of generalized pain behavior (e.g., somatoform disorder) or generalized pain disorders (e.g., fibromyalgia)
- Presence of ankylosing spondylitis or rheumatoid arthritis
- Posterior (dorsal) minimally invasive surgical (MIS) SI joint fusion procedures using only bone grafts and no internal fixation device

## Selected References

1. Goldwaith, JH, Osgood, RB. A consideration of the pelvic articulations from an anatomical pathological and clinical standpoint. *Boston Med Surg J.* 1905;152(21):593-601.
2. Lingutla, KK, Pollock, R, Ahuja, S. Sacroiliac joint fusion for low back pain: a systematic review and meta-analysis. *Eur Spine J.* 2016;25(6):1924-31.
3. North American Spine Society, NASS coverage policy recommendations: Minimally Invasive Sacroiliac Joint Fusion (2021).
4. 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. *International journal of spine surgery.* 2016;10:28.
5. Stureson, 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.* 2017;26(3):708-19.
6. Zaidi, HA, Montoure, AJ, Dickman, CA. Surgical and clinical efficacy of sacroiliac joint fusion: a systematic review of the literature. *J Neurosurg Spine.* 2015;23(1):59-66.

## Codes

The following code list is not meant to be all-inclusive. Authorization requirements will vary by health plan. Please consult the applicable health plan for guidance on specific procedure codes.

Specific CPT codes for services should be used when available. Nonspecific or not otherwise classified codes may be subject to additional documentation requirements and review.

### CPT/HCPCS

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

# History

Status	Review Date	Effective Date	Action
Revised	11/11/2021	09/11/2022	Independent Multispecialty Physician Panel (IMPP) review. Added requirement for a trial of at least one therapeutic intra-articular SI joint injection. New criteria for revision minimally invasive SI joint fusion. Added exclusion for posterior (dorsal) minimally invasive SI joint fusion procedures using only bone grafts and no internal fixation device.
Revised	11/11/2021	06/12/2022 for commercial and Medicare; 09/11/2022 for Medicaid	Independent Multispecialty Physician Panel (IMPP) review. Expanded indication for percutaneous/minimally invasive SI joint fusion to include any FDA-approved structural device with fixation. Updated references.
Revised	12/03/2020	09/12/2021	IMPP review. Aligned conservative care definitions across musculoskeletal surgery and extremity/spine imaging guidelines. Added a more rigorous definition of the supervised home PT requirement.
Reaffirmed	02/03/2020	Unchanged	IMPP review. Guideline reaffirmed.
Revised	07/11/2018	03/09/2019	IMPP review. Added the General Clinical Guideline.
Created	12/12/2017	11/19/2018	IMPP review. Original effective date.