**Lumbar Spine Fusion (Arthrodesis): Documenting Medical Necessity**

### Background
Effective January 1, 2011, Blue Cross Blue Shield of North Carolina (BCBSNC) provides coverage for lumbar spinal fusion when it is determined to be medically necessary according to specified medical criteria and guidelines. The purpose of this quick reference is to help physicians understand the coverage criteria, sufficiently document medical necessity in the medical record, and avoid claim denials for performing this surgery.

### Procedure
Arthrodesis of the lower spine involves surgical fusion procedures to join two or more lumbar vertebrae together into a single solid structure. Its purpose may be to treat spine instability; cord compression due to severe degenerative disc disease; fractures from tumor or trauma and spinal deformity. Surgeons utilize both anterior and posterior approaches to spinal fusion. If stenosis is present the surgeon will perform a decompression to relieve pressure on the nerve roots and/or spinal cord. This is accomplished by doing a laminectomy to relieve pressure on the spinal cord or foraminotomy, to widen the opening where the nerve roots exit the spinal canal. The surgeon will place bone graft in between the vertebral bodies (interbody fusion) and/or along the facet joints and transverse processes (posterior lateral fusion) which will heal and fuse into a single structure. The vertebrae and bone grafts may be temporarily stabilized during healing with metal fixation devices such as screws, rods or plates.

### General Principles of Medical Necessity
The following principles of documentation are applicable to medical necessity documentation for spinal surgery, for both physician and hospital settings:

1. Body mass index (BMI)
2. Functional limitation resulting in diminished quality of life and impaired age-appropriate activities of daily living
3. Failure of non-surgical management, such as medications (analgesics, anti-inflammatory, muscle relaxant), injections, physical therapy (exercise, manual manipulation therapy)
4. Radiologic findings
5. Behavior modification (weight loss, exercise)
6. Severity of symptoms, i.e., continued disabling-unremitting pain for 6 months.

### Additional Medical Necessity Considerations
There is evidence in medical literature that back surgery with and without fusion results in similar improvement in symptoms over time for conditions such as degenerative disc disease and spinal stenosis. For such conditions, decompression surgery alone is often just as effective as decompression with arthrodesis. The BCBSNC coverage policy does not address decompression, only fusion of the lumbar spine and the circumstances when it may be considered medically necessary.

For some conditions, lumbar fusion is not regarded as medically necessary unless preceded by unsuccessful conservative nonsurgical therapy (see documentation and coverage guidelines below).

Other important determining elements for some conditions include **significant functional impairment or loss of function** (see documentation and coverage guidelines below) and **persistent debilitating pain** (see documentation and coverage guidelines below).

### Conditions for Which Lumbar Spinal Fusion IS Covered
BCBSNC identifies 10 conditions for which it covers lumbar spinal fusion procedures. Any one of these 10 must be sufficiently documented in the medical record:

- Spinal fracture with instability or neural compression
- Spinal repair surgery for dislocation, abscess or tumor
- Spinal tuberculosis
- Spinal stenosis with **ALL** of the following:
  a. Associated spondylolisthesis demonstrated on plain x-rays; **and**
  b. **Any one** of the following:
     - Neurogenic claudication or radicular pain that results in **significant functional impairment** (see below) in a patient who has failed **at least 3 months of conservative care** (see below) and has documentation of central/lateral recess or foraminal stenosis on MRI or other imaging or
     - Severe or rapidly progressive symptoms of neurogenic claudication or cauda equina syndrome.
- Severe, progressive idiopathic scoliosis (i.e., lumbar or thoracolumbar) with Cobb angle > 40 degrees.
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- Severe degenerative scoliosis with any one of the following:
  - Documented progression of deformity with persistent axial (non-radiating) pain and impairment or loss of function (see below) unresponsive to at least 3 months of conservative therapy (see below) or
  - Persistent and significant neurogenic symptoms (claudication or radicular pain) with impairment or loss of function (see below), unresponsive to at least 3 months of conservative care (see below).

- Spondylolisthesis, isthmic (type II), with documented progression of slippage, and with persistent back pain (with or without neurogenic symptoms), with impairment or loss of function (see below), unresponsive to at least 6 months of conservative nonsurgical care (see below).

- Recurrent, same level, disk herniation, at least 6 months after previous disk surgery, with recurrent neurogenic symptoms (radicular pain or claudication), with impairment or loss of function (see below), unresponsive to at least 3 months of conservative nonsurgical care (see below), and with neural structure compression documented by appropriate imaging, and in a patient who had experienced significant interval relief of prior symptoms.

- Adjacent segment degeneration, at least 6 months after previous fusion, with recurrent neurogenic symptoms (radicular pain or claudication), with impairment or loss of function (see below), unresponsive to at least 3 months of conservative nonsurgical care (see below), and with neural structure compression documented by appropriate imaging, and in a patient who had experienced significant interval relief of prior symptoms.

- Pseudarthrosis, documented radiographically, no less than 6 months after initial fusion, with persistent axial back pain, with or without neurogenic symptoms, with impairment or loss of function (see below), in a patient who had experienced significant interval relief of prior symptoms.

**Documentation and Coverage Guidelines**

**Conservative Nonsurgical Therapy**
Conservative nonsurgical therapy for the durations specified above must include all of the following:
- Use of prescription strength analgesics (including anti-inflammatory medications if not contraindicated), and
- Participation in physical therapy (including active exercise), and
- Evaluation and appropriate management of associated cognitive, behavioral or addiction issues when present.

**Significant Functional Impairment**
Significant functional impairment or loss of function may include documentation of the following:
- Inability or significantly decreased ability to perform normal daily activities of work, school, or home duties.

**Persistent Debilitating Pain**
Persistent debilitating pain is defined as:
- Significant level of pain on a daily basis defined on a Visual Analog Scale (VAS) as greater than 4; and
- Pain on a daily basis that has a documented impact on activities of daily living in spite of optimal conservative non-surgical therapy as outlined above and appropriate for the patient.

**Conditions for Which Lumbar Spinal Fusion IS NOT Covered**
BCBSNC does not provide coverage for lumbar spine arthrodesis (fusion) surgery when it is considered not medically necessary.
1. Lumbar spine arthrodesis (fusion) surgery is considered not medically necessary unless one of the above conditions is met.
2. Lumbar spinal fusion is also considered not medically necessary if the sole indication is any one or more of the following conditions:
   - Disk herniation
   - Degenerative disk disease
   - Initial diskectomy/laminectomy for neural structure decompression
   - Facet syndrome