BSC_NIA_CG_308	Thoracic Spine Surgery		
Original Policy Date:	January 1, 2017	**Effective Date:**	July 1, 2024
Section:	7.0 Surgery	**Page:**	Page 1 of 6

Policy Statement

All requests for thoracic spine surgery will be reviewed on a **case-by-case** basis. The following criteria must be met for consideration.

Decompression Surgery Only

- Positive clinical findings of myelopathy with evidence of progressive neurologic deficits consistent with worsening spinal cord compression – immediate surgical evaluation is indicated.[1, 2] Symptoms may include **any** of the following:
  - Lower extremity weakness
  - Unsteady gait related to myelopathy/balance or generalized lower extremity weakness
  - Disturbance with coordination
  - Hyperreflexia
  - Positive Babinski sign
  - Clonus; **OR**

- Progressive neurological deficit (motor deficit, bowel or bladder dysfunction) or lower extremity weakness or paralysis with corresponding evidence of spinal cord compression on a magnetic resonance imaging (MRI) or computed tomography (CT) scan images – immediate surgical evaluation is indicated; **OR**

- When **All** of the following criteria are met:
  - Persistent or recurrent symptoms/pain with functional limitations that are unresponsive to at least 6 consecutive weeks in the last 6 months of documented, physician-directed appropriate conservative treatment to include at least 2 of the following:
    - Analgesics, steroids, and/or NSAIDs
    - Structured program of physical therapy
    - Structured home exercise program prescribed by a physical therapist, chiropractic provider or physician
    - Epidural steroid injections and/or selective nerve root block; **AND**
  - Imaging studies confirm the presence of spinal cord or spinal nerve root compression at the level corresponding with the clinical findings (MRI or CT)

Thoracic Decompression With Fusion Surgery

- Deformity cases – please refer to our Deformity Spine Surgery (Adult) Guideline; **OR**

- For myelopathy or radiculopathy secondary to cord or root compression (see criteria described above) satisfying the indications for decompressive surgery requiring extensive decompression that results in destabilization of the thoracic spine[1, 2]

NOTE: There is no current evidence base to support fusion in the thoracic spine for degenerative disease without significant neurological compression or significant deformity as outlined above.

Relative Contraindications For Spine Surgery

- **Medical contraindications to surgery**, e.g., severe osteoporosis; infection of soft tissue adjacent to the spine, whether or not it has spread to the spine; severe cardiopulmonary disease; anemia; malnutrition and systemic infection[3, 4]
- **Psychosocial risk factors**. It is imperative to rule out non-physiologic modifiers of pain

presentation or non-operative conditions mimicking radiculopathy or instability (e.g., peripheral neuropathy, piriformis syndrome, myofascial pain, sympathetically mediated pain syndromes, sacroiliac dysfunction, psychological conditions, etc.) prior to consideration of elective surgical intervention[5]

- **Active nicotine use prior to fusion surgery**. Individuals must refrain from nicotine use for at least six weeks prior to surgery and during the period of fusion healing[6-9]
- **Morbid obesity**. Contraindication to surgery in cases where there is significant risk and concern for improper post-operative healing, post-operative complications related to morbid obesity, and/or an inability to participate in post-operative rehabilitation [10]

NOTE: Cases of severe myelopathy and progressive neurological dysfunction may require surgery despite these general contraindications.

Policy Guidelines

General Information

It is an expectation that all patients receive care/services from a licensed clinician. All appropriate supporting documentation, including recent pertinent office visit notes, laboratory data, and results of any special testing must be provided. If applicable: All prior relevant imaging results and the reason that alternative imaging cannot be performed must be included in the documentation submitted.

CPT Codes:

Thoracic Spine Surgery: 22532, 22534, 22556, 22585, 22610, 22614, 22830, 63003, 63016, 63046, 63048, 63055, 63057, 63064, 63066, 63077, 63078

Coding

See the Codes table for details.

Description

Thoracic Decompression with or without Fusion

Thoracic disc herniation with or without nerve root compression is usually treated conservatively (non-surgically). A back brace may be worn to provide support and limit back motion. Injection of local anesthetic and steroids around the spinal nerve (spinal nerve blocks) may be effective in relieving radicular pain. As symptoms subside, activity is gradually increased. This may include physical therapy and/or a home exercise program. Preventive and maintenance measures (e.g., exercise, proper body mechanics) should be continued indefinitely. Job modification may be necessary to avoid aggravating activities.

Simple laminectomy is rarely used in the treatment of thoracic disc herniation because of the high risk of neurologic deterioration and paralysis. Excision of the disc (discectomy) may be performed via several different surgical approaches –anteriorly, laterally, or transpedicular. Fusion should be performed only if surgery causes instability in the spinal column. Many newer techniques do not usually destabilize the thoracic spine.

Related Policies

- N/A

Benefit Application

Benefit determinations should be based in all cases on the applicable contract language. To the extent there are any conflicts between these guidelines and the contract language, the contract language will control. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

Some state or federal mandates (e.g., Federal Employee Program [FEP]) prohibits plans from denying Food and Drug Administration (FDA)-approved technologies as investigational. In these instances, plans may have to consider the coverage eligibility of FDA-approved technologies on the basis of medical necessity alone.

Regulatory Status

- N/A

Rationale

- N/A

References

1. Frymoyer JW, Wiesel SW. The Adult and Pediatric Spine. Lippincott Williams & Wilkins; 2004.
2. Garfin SR, Eismont FJ, Bell GR, Bono CM, Fischgrund J. Rothman-Simeone The Spine E-Book. Elsevier Health Sciences; 2017.
3. Puvanesarajah V, Shen FH, Cancienne JM, et al. Risk factors for revision surgery following primary adult spinal deformity surgery in patients 65 years and older. J Neurosurg Spine. Oct 2016;25(4):486-493. doi:10.3171/2016.2.Spine151345
4. Alvarez Reyes A, Jack AS, Hurlbert RJ, Ramey WL. Complications in the Elderly Population Undergoing Spinal Deformity Surgery: A Systematic Review and Meta-Analysis. Global Spine J. Oct 2022;12(8):1934-1942. doi:10.1177/21925682221078251
5. Kreiner DS, Shaffer WO, Baisden JL, et al. An evidence-based clinical guideline for the diagnosis and treatment of degenerative lumbar spinal stenosis (update). Spine J. Jul 2013;13(7):734-43. doi:10.1016/j.spinee.2012.11.059
6. Andersen T, Christensen FB, Laursen M, Høy K, Hansen ES, Bünger C. Smoking as a predictor of negative outcome in lumbar spinal fusion. Spine (Phila Pa 1976). Dec 1 2001;26(23):2623-8. doi:10.1097/00007632-200112010-00018
7. Glassman SD, Anagnost SC, Parker A, Burke D, Johnson JR, Dimar JR. The effect of cigarette smoking and smoking cessation on spinal fusion. Spine (Phila Pa 1976). Oct 15 2000;25(20):2608-15. doi:10.1097/00007632-200010150-00011
8. Patel RA, Wilson RF, Patel PA, Palmer RM. The effect of smoking on bone healing: A systematic review. Bone Joint Res. 2013;2(6):102-11. doi:10.1302/2046-3758.26.2000142
9. Khalid SI, Thomson KB, Chilakapati S, et al. The Impact of Smoking Cessation Therapy on Lumbar Fusion Outcomes. World Neurosurg. Aug 2022;164:e119-e126. doi:10.1016/j.wneu.2022.04.031
10. Alsoof D, Johnson K, McDonald CL, Daniels AH, Cohen EM. Body Mass Index and Risk of Complications After Posterior Lumbar Spine Fusion: A Matched Cohort Analysis Investigating Underweight and Obese Patients. J Am Acad Orthop Surg. Apr 1 2023;31(7):e394-e402. doi:10.5435/jaaos-d-22-00667

Documentation for Clinical Review

Please provide the following documentation:

- History and physical and/or consultation notes including:
  - Reason for procedure
  - Clinical findings
  - Conservative treatments and duration
  - Activity limitations
  - Duration of back pain
  - Comorbidities
- Radiology report(s) (i.e., MRI, CT, discogram)

Post Service (in addition to the above, please include the following):

- Procedure report(s)

Coding

This Policy relates only to the services or supplies described herein. Benefits may vary according to product design; therefore, contract language should be reviewed before applying the terms of the Policy.

The following codes are included below for informational purposes. Inclusion or exclusion of a code(s) does not constitute or imply member coverage or provider reimbursement policy. Policy Statements are intended to provide member coverage information and may include the use of some codes for clarity. The Policy Guidelines section may also provide additional information for how to interpret the Policy Statements and to provide coding guidance in some cases.

Type	Code	Description
CPT®	22532	Arthrodesis, lateral extracavitary technique, including minimal discectomy to prepare interspace (other than for decompression); thoracic
	22534	Arthrodesis, lateral extracavitary technique, including minimal discectomy to prepare interspace (other than for decompression); thoracic or lumbar, each additional vertebral segment (List separately in addition to code for primary procedure)
	22556	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); thoracic
	22585	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); each additional interspace (List separately in addition to code for primary procedure)
	22610	Arthrodesis, posterior or posterolateral technique, single level; thoracic (with lateral transverse technique, when performed)
	22614	Arthrodesis, posterior or posterolateral technique, single interspace; each additional interspace (List separately in addition to code for primary procedure)
	22830	Exploration of spinal fusion
	63003	Laminectomy with exploration and/or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (e.g., spinal stenosis), 1 or 2 vertebral segments; thoracic
	63016	Laminectomy with exploration and/or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or

Type	Code	Description
		discectomy (e.g., spinal stenosis), more than 2 vertebral segments; thoracic
	63046	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [e.g., spinal or lateral recess stenosis]), single vertebral segment; thoracic
	63048	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [e.g., spinal or lateral recess stenosis]), single vertebral segment; each additional segment, cervical, thoracic, or lumbar (List separately in addition to code for primary procedure)
	63055	Transpedicular approach with decompression of spinal cord, equina and/or nerve root(s) (e.g., herniated intervertebral disc), single segment; thoracic
	63057	Transpedicular approach with decompression of spinal cord, equina and/or nerve root(s) (e.g., herniated intervertebral disc), single segment; each additional segment, thoracic or lumbar (List separately in addition to code for primary procedure)
	63064	Costovertebral approach with decompression of spinal cord or nerve root(s) (e.g., herniated intervertebral disc), thoracic; single segment
	63066	Costovertebral approach with decompression of spinal cord or nerve root(s) (e.g., herniated intervertebral disc), thoracic; each additional segment (List separately in addition to code for primary procedure)
	63077	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; thoracic, single interspace
	63078	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; thoracic, each additional interspace (List separately in addition to code for primary procedure)
HCPCS	None	

Policy History

This section provides a chronological history of the activities, updates and changes that have occurred with this Medical Policy.

Effective Date	Action
01/01/2017	Adoption of National Imaging Associates (NIA) Clinical Guidelines
07/01/2018	NIA Clinical Guideline update
07/01/2019	NIA Clinical Guideline update
07/01/2020	Annual NIA clinical guideline update.
03/01/2021	Annual NIA clinical guideline update.
01/01/2022	Annual NIA clinical guideline update.
02/01/2022	Coding update.
01/01/2023	Annual NIA clinical guideline update.
01/01/2024	Annual NIA clinical guideline update.
07/01/2024	Semi-annual NIA clinical guideline update.

Definitions of Decision Determinations

Medically Necessary: Services that are Medically Necessary include only those which have been established as safe and effective, are furnished under generally accepted professional standards to treat illness, injury or medical condition, and which, as determined by Blue Shield, are: (a) consistent

with Blue Shield medical policy; (b) consistent with the symptoms or diagnosis; (c) not furnished primarily for the convenience of the patient, the attending Physician or other provider; (d) furnished at the most appropriate level which can be provided safely and effectively to the patient; and (e) not more costly than an alternative service or sequence of services at least as likely to produce equivalent therapeutic or diagnostic results as to the diagnosis or treatment of the Member's illness, injury, or disease.

Investigational/Experimental: A treatment, procedure, or drug is investigational when it has not been recognized as safe and effective for use in treating the particular condition in accordance with generally accepted professional medical standards. This includes services where approval by the federal or state governmental is required prior to use, but has not yet been granted.

Split Evaluation: Blue Shield of California/Blue Shield of California Life & Health Insurance Company (Blue Shield) policy review can result in a split evaluation, where a treatment, procedure, or drug will be considered to be investigational for certain indications or conditions, but will be deemed safe and effective for other indications or conditions, and therefore potentially medically necessary in those instances.

Prior Authorization Requirements and Feedback (as applicable to your plan)

Within five days before the actual date of service, the provider must confirm with Blue Shield that the member's health plan coverage is still in effect. Blue Shield reserves the right to revoke an authorization prior to services being rendered based on cancellation of the member's eligibility. Final determination of benefits will be made after review of the claim for limitations or exclusions.

Questions regarding the applicability of this policy should be directed to the Prior Authorization Department at (800) 541-6652, or the Transplant Case Management Department at (800) 637-2066 ext. 3507708 or visit the provider portal at www.blueshieldca.com/provider.

We are interested in receiving feedback relative to developing, adopting, and reviewing criteria for medical policy. Any licensed practitioner who is contracted with Blue Shield of California or Blue Shield of California Promise Health Plan is welcome to provide comments, suggestions, or concerns. Our internal policy committees will receive and take your comments into consideration.

For utilization and medical policy feedback, please send comments to: MedPolicy@blueshieldca.com

Disclaimer: This medical policy is a guide in evaluating the medical necessity of a particular service or treatment. Blue Shield of California may consider published peer-reviewed scientific literature, national guidelines, and local standards of practice in developing its medical policy. Federal and state law, as well as contract language, including definitions and specific contract provisions/exclusions, take precedence over medical policy and must be considered first in determining covered services. Member contracts may differ in their benefits. Blue Shield reserves the right to review and update policies as appropriate.