Medical Coverage Policy | Interspinous and Interlaminar Stabilization/Distraction Devices (Spacers)

EFFECTIVE DATE: 03|01|2018
POLICY LAST UPDATED: 11|21|2017

OVERVIEW
Interspinous and interlaminar implants (spacers) stabilize or distract the adjacent lamina and/or spinous processes and restrict extension to reduce pain in patients with lumbar spinal stenosis and neurogenic claudication. Interspinous spacers are small devices implanted between the vertebral spinous processes. After implantation, the device is opened or expanded to distract (open) the neural foramen and decompress the nerves. Interlaminar spacers are implanted midline between adjacent lamina and spinous processes to provide dynamic stabilization either following decompressive surgery or as an alternative to decompressive surgery.

MEDICAL CRITERIA
Not applicable

PRIOR AUTHORIZATION
BlueCHiP for Medicare and Commercial Products
Not applicable

POLICY STATEMENT
BlueCHiP for Medicare and Commercial Products
Interspinous distraction devices as a treatment of neurogenic intermittent claudication and use of an interlaminar stabilization device following decompressive surgery are considered **not medically necessary** as the evidence is insufficient to determine the effects of the technology on health outcomes.

Removal for medical reasons (device failure, infection, etc.) is covered for all members. However, insertion of a replacement device after removal is not covered for Commercial members, as the insertion is considered not medically necessary.

COVERAGE
Benefits may vary between groups/contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage or Subscriber Agreement for limitations of benefits/coverage for applicable surgery or when services are not medically necessary.

BACKGROUND
Interspinous spacers are devices implanted between vertebral spinous processes. Interlaminar spacers are implanted between adjacent lamina and have 2 sets of wings placed around the inferior and superior spinous processes. These implants aim to restrict painful motion while otherwise enabling normal motion. The devices (spacers) distract the laminar space and/or spinous processes and restrict extension. This procedure theoretically enlarges the neural foramen and decompresses the cauda equina in patients with spinal stenosis and neurogenic claudication. Other types of dynamic posterior stabilization devices are pedicle screw/rod-based devices and total facet replacement systems; these are not covered in this policy.

One type of interspinous implant is inserted between the spinous processes through a small (4-8 cm) incision and acts as a spacer between the spinous processes, maintaining the flexion of that spinal interspace. The supraspinous ligament is maintained and assists in holding the implant in place. The surgery does not include

any laminotomy, laminectomy, or foraminotomy at the time of insertion, thus reducing the risk of epidural scarring and cerebrospinal fluid leakage. Other interspinous spacers require removal of the interspinous ligament and are secured around the upper and lower spinous processes. Interlaminar implants are inserted between the adjacent lamina and spinous processes. These may be referred to as interlaminar implants or an interspinous U.

The evidence for an interspinous or interlaminar spacer as a stand-alone procedure in individuals who have spinal stenosis and for interlaminar spacers in individuals who have spinal decompression surgery for spinal stenosis is insufficient to determine the effects of the technology on health outcomes. Therefore, the devices are considered not medically necessary.

CODING

BlueCHiP for Medicare and Commercial Products

The following codes are considered not medically necessary:

22867 Insertion of interlaminar/interspinous process stabilization/distraction device, without fusion, including image guidance when performed, with open decompression, lumbar; single level

22868 Insertion of interlaminar/interspinous process stabilization/distraction device, without fusion, including image guidance when performed, with open decompression, lumbar; second level (list separately in addition to code for primary procedure)

22869 Insertion of interlaminar/interspinous process stabilization/distraction device, without open decompression or fusion, including image guidance when performed, lumbar; single level

22870 Insertion of interlaminar/interspinous process stabilization/distraction device, without open decompression or fusion, including image guidance when performed, lumbar; second level (list separately in addition to code for primary procedure)

RELATED POLICIES

Not applicable

PUBLISHED

Provider Update, January 2018
Provider Update, January 2017
Provider Update, June 2015
Provider Update, March 2013
Provider Update, March 2012
Provider Update, February 2010
Provider Update, Feb 2010

REFERENCES

1. Wu AM, Zhou Y, Li QL, et al. Interspinous spacer versus traditional decompressive surgery for lumbar spinal stenosis: a systematic review and meta-analysis. PLoS One. 2014;9(5):e97142. PMID 24809680
2. Hong P, Liu Y, Li H. Comparison of the efficacy and safety between interspinous process distraction device and open decompression surgery in treating lumbar spinal stenosis: a meta analysis. J Invest Surg. Feb 2015;28(1):40-49. PMID 25025237
3. Zucherman JF, Hsu KY, Hartjen CA, et al. A multicenter, prospective, randomized trial evaluating the X STOP interspinous process decompression system for the treatment of neurogenic intermittent claudication: two-year follow-up results. Spine (Phila Pa 1976). Jun 15 2005;30(12):1351-1358. PMID 15959362
4. Anderson PA, Tribus CB, Kitchel SH. Treatment of neurogenic claudication by interspinous decompression: application of the X STOP device in patients with lumbar degenerative spondylolisthesis. J Neurosurg Spine. Jun 2006;4(6):463-471. PMID 16776357

5. Kondrashov DG, Hannibal M, Hsu KY, et al. Interspinous process decompression with the X-STOP device for lumbar spinal stenosis: a 4-year follow-up study. J Spinal Disord Tech. Jul 2006;19(5):323-327. PMID 16826002
6. Hsu KY, Zucherman JF, Hartjen CA, et al. Quality of life of lumbar stenosis-treated patients in whom the X STOP interspinous device was implanted. J Neurosurg Spine. Dec 2006;5(6):500-507. PMID 17176013
7. Puzzilli F, Gazzeri R, Galarza M, et al. Interspinous spacer decompression (X-STOP) for lumbar spinal stenosis and degenerative disk disease: a multicenter study with a minimum 3-year follow-up. Clin Neurol Neurosurg. Sep 2014;124:166-174. PMID 25064150
8. Kuchta J, Sobottke R, Eysel P, et al. Two-year results of interspinous spacer (X-Stop) implantation in 175 patients with neurologic intermittent claudication due to lumbar spinal stenosis. Eur Spine J. Jun 2009;18(6):823-829. PMID 19387698
9. Rolfe KW, Zucherman JF, Kondrashov DG, et al. Scoliosis and interspinous decompression with the X-STOP: prospective minimum 1-year outcomes in lumbar spinal stenosis. Spine J. Nov 2010;10(11):972-978. PMID 20869922
10. Brussee P, Hauth J, Donk RD, et al. Self-rated evaluation of outcome of the implantation of interspinous process distraction (X-Stop) for neurogenic claudication. Eur Spine J. Feb 2008;17(2):200-203. PMID 17972111