



SERVICE: Interspinous Process
Decompression System

Policy Number: 056

Effective Date: 01/01/2023

Last Review: 12/01/2022

Next Review Date: 12/01/2023

#### Important note:

Unless otherwise indicated, this policy will apply to all lines of business.

Even though this policy may indicate that a particular service or supply may be considered medically necessary and thus covered, this conclusion is not based upon the terms of your particular benefit plan. Each benefit plan contains its own specific provisions for coverage and exclusions. Not all benefits that are determined to be medically necessary will be covered benefits under the terms of your benefit plan. You need to consult the Evidence of Coverage (EOC) or Summary Plan Description (SPD) to determine if there are any exclusions or other benefit limitations applicable to this service or supply. If there is a discrepancy between this policy and your plan of benefits, the provisions of your benefits plan will govern. However, applicable state mandates will take precedence with respect to fully insured plans and self-funded non-ERISA (e.g., government, school boards, church) plans. Unless otherwise specifically excluded, Federal mandates will apply to all plans. With respect to Medicare-linked plan members, this policy will apply unless there are Medicare policies that provide differing coverage rules, in which case Medicare coverage rules supersede guidelines in this policy. Medicare-linked plan policies will only apply to benefits paid for under Medicare rules, and not to any other health benefit plan benefits. CMS's Coverage Issues Manual can be found on the CMS website. Similarly, for Medicaid-linked plans, the Texas Medicaid Provider Procedures Manual (TMPPM) supersedes coverage guidelines in this policy where applicable.

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PRIOR AUTHORIZATION: Not applicable.

**POLICY:** BSWHP considers interspinous process spacer devices and interspinous/interlaminar stabilization/distraction devices such as X-Stop®, Coflex®, etc., experimental, investigational and unproven because there is insufficient evidence in the published medical literature to demonstrate the safety, efficacy, durability, and long-term outcome of these devices, or to determine how the use of these devices compares to alternative medical, interventional, or surgical treatment.

**OVERVIEW:** An interspinous process spacer device is an implant designed to preserve motion and provide symptomatic relief of pain associated with degenerative disc disease or spinal stenosis, with or without degenerative spondylolisthesis. Spinal stenosis is a narrowing of the vertebral canal that may lead to compression of the spinal nerves or nerve roots, especially in the lumbar vertebrae. Lumbar stenosis is commonly seen in an aging or degenerative spine. Bony overgrowth and ligament enlargement into the spinal canal, intervertebral disc herniation, or vertebral slippage (i.e., spondylolisthesis) may cause nerve compression resulting in low back pain, leg fatigue and pain, and reduced capacity for physical activity. Neurogenic claudication is a combination of low back and leg pain, with numbness and motor weakness when standing or walking that is relieved by sitting or lying. Treatment for back pain may include pharmacological therapy (e.g., non-steroidal antiinflammatory drugs (NSAIDs), analgesics, muscle relaxants), exercise, spinal manipulation. acupuncture, cognitive-behavioral therapy, and physical therapy. Various interventional and surgical procedures may be considered if these measures are unsuccessful. Surgical options include decompressive procedures (e.g., laminectomy) alone, or decompression and fusion. Fusion is frequently performed with rigid implant fixation systems, including pedicle screws and interbody cages. The use of interspinous process spacer devices has been proposed as a less invasive dynamic stabilization alternative.

The X-STOP® System is a titanium implant with two components: a spacer assembly consisting of a tissue expander, an oval spacer and a fixed wing; and a wing assembly consisting of an adjustable wing and locking screw. The X-STOP® procedure is performed under general or local anesthesia. A midline incision is made over the appropriate spinal level to display the spinous processes and their interspinous ligaments. The X-STOP® device is positioned in the space between the flexed spinous





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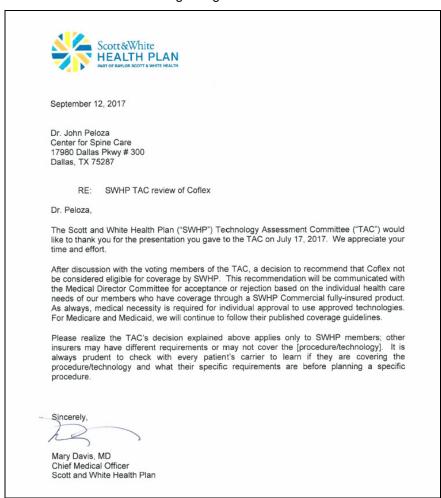
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processes to act as a physical block in order to prevent extension at the stenotic level and increase the dimensions of the spinal canal and intervertebral foramina. The procedure is designed to prevent extension when standing or walking, relieving pressure on the nerves.

Last Review:

Although the results of the available studies are promising, the overall quality of the body of evidence is low since most of the studies are uncontrolled and/or retrospective, and most of the existing studies are small or moderate in size. Additional clinical trials are needed to further evaluate the efficacy and safety of the X Stop system and to compare it with standard treatment and other alternatives. Studies with long-term follow-up are needed to ascertain the clinical longevity and durability of any beneficial effects of the X Stop device, and to evaluate safety. Clear patient selection criteria for X Stop therapy have not been established, and it remains unclear whether the efficacy and safety of the X Stop device are sufficient to allow patients to undergo this treatment instead of decompression laminectomy.

Technology Assessment Committee decision regarding Coflex follows:



**MANDATES:** none







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### **CODES:**

#### Important note:

CODES: Due to the wide range of applicable diagnosis codes and potential changes to codes, an inclusive list may not be presented, but the following codes may apply. Inclusion of a code in this section does not guarantee that it will be reimbursed, and patient must meet the criteria set forth in the policy language.

Last Review:

CPT Codes:		
CPT Not Covered:	<ul> <li>22867 - Insertion of interlaminar/interspinous process stabilization/distraction device, without fusion, including image guidance when performed, with open decompression, lumbar, single level</li> <li>22868 - Insertion of interlaminar/interspinous process stabilization/distraction device, without fusion, including image guidance when performed, with open decompression, lumbar, second level</li> <li>22869- Insertion of interlaminar/interspinous process stabilization/distraction device, without open decompression or fusion, including image guidance when performed, lumbar, single level</li> <li>22870 - Insertion of interlaminar/interspinous process stabilization/distraction device, without open decompression or fusion, including image guidance when performed, lumbar, second level</li> </ul>	
ICD-10 codes:	M48.06 - Spinal stenosis, lumbar region	
HCPCS Codes:	C1821- Interspinous process distraction device (implantable)	

CMS: No NCD. Novitas Solutions LCD L32594 was retired 10/31/2013

#### **POLICY HISTORY:**

Status	Date	Action
New	11/24/2010	New policy
Reviewed	12/16/2011	Reviewed.
Reviewed	11/15/2012	Reviewed.
Reviewed	11/14/2013	Revised criteria. Updated CMS information
Reviewed	09/25/2014	Reviewed
Reviewed	10/22/2015	Status changed to E&I - "Not Covered"
Reviewed	10/27/2016	No changes
Reviewed	09/26/2017	References and codes updated
Reviewed	08/07/2018	Updated policy statement to include Coflex device. TAC letter added
Reviewed	10/31/2019	No changes
Reviewed	12/23/2021	No changes
Reviewed	12/01/2022	No changes

### **REFERENCES:**

The following scientific references were utilized in the formulation of this medical policy. BSWHP will continue to review clinical evidence related to this policy and may modify it at a later date based upon the evolution of the published clinical evidence. Should additional scientific studies become available and they are not included in the list, please forward the reference(s) to BSWHP so the information can be reviewed by the Medical Coverage Policy Committee (MCPC) and the Quality Improvement Committee (QIC) to determine if a modification of the policy is in order.





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- 1. 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. 2006 Jun;4(6):463-71.
- 2. Asgarzadie F, Khoo LT. Minimally invasive operative management for lumbar spinal stenosis: overview of early and long-term outcomes. Orthop Clin North Am. 2007 Jul;38(3):387-99; abstract vi-vii.
- 3. Canale and Beaty: Campbell's Operative Orthopaedics, 11th ed. Mosby, an imprint of Elsevier; 2007.
- 4. ECRI Institute. Hotline Response [database online]. Plymouth Meeting (PA): ECRI Institute; 2009 Oct 7. Interspinous Process Decompression to Treat Spinal Stenosis. Available at URL address: http://www.ecri.org
- 5. ECRI Institute. Interspinous process decompression to treat spinal stenosis. [Emerging Technology evidence report]. Plymouth Meeting (PA): ECRI Institute; 2009 Mar 9. Available at URL address: http://www.ecri.org
- 6. Gibson JNA, Waddell G. Surgery for degenerative lumbar spondylosis: updated Cochrane Review. Spine. 2005 Oct 15;30(20):2312-20.
- 7. Hayes brief. X-Stop® Interspinous Process Decompression System (Kyphon, Inc.) for Lumbar Spinal Stenosis. Lansdale, PA: Hayes Inc; ©2007 Winifred S. Hayes, Inc. 2007 Nov 13.
- 8. Hsu KY, Zucherman JF, Hartjen CA, Mehalic TF, Implicito DA, Martin MJ, et al. Quality of life of lumbar stenosis-treated patients in whom the X-STOP® interspinous device was implanted. J Neurosurg Spine. 2006 Dec;5(6):500-7.
- 9. Isaac Z, Katz JN, Mody E. Lumbar spinal stenosis. In: Arthritis and allied conditions. Philadelphia: Lippincott, Williams & Wilkins; 2005.
- 10. Katz Jn, Harris MB. Clinical practice. Lumbar spinal stenosis. N Engl J Med. 2008 Feb 21;358(8):818-25.
- 11. Khoueir P, Kim KA, Wang MY. Classification of posterior dynamic stabilization devices. Neurosurg Focus. 2007 Jan 15;22(1):E3.
- 12. Kim DH, Albert TJ. Interspinous process spacers. J Am Acad Orthop Surg. 2007 Apr;15(4):200-7.
- 13. Kondrashov DG, Hannibal M, Hsu KY, Zucherman JF. Interspinous process decompression with the X-STOP® device for lumbar spinal stenosis: a 4-year follow-up study. J Spinal Disord Tech. 2006 Jul;19(5):323-7.
- 14. Kuchta J, Sobottke R, Eysel P, Simons P. Two-year results of interspinous spacer (X-Stop®) implantation in 175 patients with neurologic intermittent claudication due to lumbar spinal stenosis. Eur Spine J. 2009 Jun;18(6):823-9. Epub 2009 Apr 22.
- 15. National Institute for Health and Clinical Excellence (NICE). Interventional procedure guidance 165. Interspinous distraction procedures for lumbar spinal stenosis. London, UK: NICE; 2010 Mar. Accessed September 25, 2017. Available at URL address: http://www.nice.org.uk/guidance/index.jsp?action=byID&o=11162
- 16. Siddiqui M, Smith FW, Wardlaw D. One-year results of X-Stop® interspinous implant for the treatment of lumbar spinal stenosis. Spine. 2007 May 20;32(12):1345-8.
- 17. Sobottke R, Schlüter-Brust K, Kaulhausen T, Röllinghoff M, Joswig B, Stützer H, et al. Interspinous implants (X Stop®, Wallis, Diam) for the treatment of LSS: is there a correlation between radiological parameters and clinical outcome? Eur Spine J. 2009 Oct;18(10):1494-503. Epub 2009 Jun 27
- 18. U. S. Food and Drug Administration (FDA) Center for Devices and Radiological Health. Premarket approval database. New Device Approval: X-Stop® Interspinous Process Decompression System. P040001. Accessed Mar 21, 2010. Available at URL address: http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMA/pma.cfm
- 19. North American Spine Society (NASS). Diagnosis and treatment of degenerative lumbar spinal stenosis. Burr Ridge, IL: North American Spine Society (NASS); 2007.
- 20. BioMed Research International Volume 2016 (2016), Article ID 3267307, Interspinous Process Decompression: Expanding Treatment Options for Lumbar Spinal Stenosis 5 pages available at http://dx.doi.org/10.1155/2016/3267307 last accessed on 9/25/2017.







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- 21. Gazzeri, R, MD, Galarza M, MD, Neroni M, MD et al. Failure rates and complications of interspinous process decompression devices: a European multicenter study, Neurosurg Focus 39 (4): E14, 2015 pages 1-9. The URL may be accessed at: http://theins.org/doi/pdf/10.3171/2015.7.FOCUS15244 last accessed on 9/25/2017.
- 22. Machado, Gustavo C. et al. "Effectiveness of Surgery for Lumbar Spinal Stenosis: A Systematic Review and Meta-Analysis." Ed. Mohammed Shamji. PLoS ONE 10.3 (2015): e0122800. PMC. Web. 25 Sept. 2017.
- 23. BioMed Research International Volume 2014 (2014), Article ID 975052, 15 pages http://dx.doi.org/10.1155/2014/975052 Controversies about Interspionous Process Devices in the Treatment of Degenerative Lumbar Spine Disesaes: Past, Present, and Future.

Note: Health Maintenance Organization (HMO) products are offered through Scott and White Health Plan dba Baylor Scott & White Health Plan, and Scott & White Care Plans dba Baylor Scott & White Care Plan. Insured PPO and EPO products are offered through Baylor Scott & White Insurance Company. Scott and White Health Plan dba Baylor Scott & White Health Plan serves as a third-party administrator for self-funded employer-sponsored plans. Baylor Scott & White Care Plan and Baylor Scott & White Insurance Company are wholly owned subsidiaries of Scott and White Health Plan. These companies are referred to collectively in this document as Baylor Scott & White Health Plans.

RightCare STAR Medicaid plans are offered through Scott and White Health Plan in the Central Managed Care Service Area (MRSA) and STAR and CHIP plans are offered through SHA LLC dba FirstCare Health Plans (FirstCare) in the Lubbock and West MRSAs. Individual HMO plans are offered through FirstCare in West Texas.