DURABLE MEDICAL EQUIPMENT CLINICAL CRITERIA

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Bi-Directional and Dynamic Adjustable Splints

Covered items (HCPCS):

- E1811 Bi-Directional Static Progressive Stretch Knee Device with Range of Motion Adjustment, Includes Cuffs
- E1806 Bi-Directional Static Progressive Stretch Wrist Device with Range of Motion Adjustment, Includes Cuffs
- E1815 Dynamic Adjustable Ankle Extension/Flexion Device, Includes Soft Interface Material
- E1800 Dynamic Adjustable Elbow Extension/Flexion Device, Includes Soft Interface Material
- E1825 Dynamic Adjustable Finger Extension/Flexion Device, Includes Soft Interface Material
- E1802 Dynamic Adjustable Forearm Pronation/Supination Device, Includes Soft Interface Material
- E1810 Dynamic Adjustable Knee Extension / Flexion Device, Includes Soft Interface Material
- E1840 Dynamic Adjustable Shoulder Flexion / Abduction / Rotation Device, Includes Soft Interface Material
- E1830 Dynamic Adjustable Toe Extension/Flexion Device, Includes Soft Interface Material

- E1805 Dynamic Adjustable Wrist Extension / Flexion Device, Includes Soft Interface Material
- E1700 Jaw Motion Rehabilitation System
- E1841 Multi-Directional Static Progressive Stretch Shoulder Device, With Range Of Motion Adjustability, Includes Cuffs
- E1701 Replacement Cushions For Jaw Motion Rehabilitation System, Pkg. Of 6
- E1820 Replacement Soft Interface Material, Dynamic Adjustable Extension/Flexion Device
- E1821 Replacement Soft Interface Material/Cuffs For Bi-Directional Static Progressive Stretch Device

Clinical Guidelines: Covered for the treatment of contractures following surgery and/or injury. Not covered in DME if used in lieu of casting.

Clinical review: Orthopedics or Physical Medicine review required.

Usage guidelines: one per affected joint/extremity

The above guideline is based upon the following references:

- 1. Aspinall SK, Bmaber ZA, Hignett SM, et al. Medical stretching devices are effective in the treatment of knee arthrofibrosis: A systematic review. J Orthop Translat. 2021; 27; 119-131.
- 2. Berner SH, Willis FB. Dynamic splinting in wrist extension following distal radius fractures. J Orthop Surg Res 2010:5:53.
- 3. Blair WF, Steyers CM. Extnesor tendon injuries. Orthop Clin North Am. 1992;23(1):141-148
- 4. Bonutti P, Marulanda G, McGrath, et al. Static progressive stretch improves range of motion in arthrofibrosis following total knee arthroplasty. Knee Surg Sports Traumatol Arthrosc. 2010 Feb;18(2):194-9.
- 5. Bonutti PM, Marulanda GA, Ulrich SD, et al. Static progressive stretch improves range of motion in arthrofibrosis following total knee arthroplasty. Knee Surg Sprots Traumatol Arthrosc. 2010;18(2):194-199.
- 6. Bonutti PM, McGrath, MS, Ulrich SD, et al. Static progressive stretch for the treatment of knee stiffness. Knee 2008;15(4):272-276.
- 7. Bonutti PM, Windau JE, Ables BA, et al. Static progressive stretch to reestablish elbow range of motion. Clin Orthop. 1994;303:128-134.
- 8. Branch TP, Karsch RE, Mills TJ, Pamer MT. Mechanical therapy for loss of knee flexion. Am J Orthop. 2003;32(4):195-200.
- 9. Browne Ez jr, Ribik CA. early dynamic splinting for extensor tendon injuries. J Hand Surg[Am].
- 10. Canter-Tellez R, Cuesta-Vargas A, Cuadros-Romero M. Treatment of proximal interphalangeal joint flexion contracture: combined static and dynamic orthotic intervention compared with other

- therapy intervention: a randomized controlled trial. J Hand Surg Am. 2015 May;40(5):951-5. doi: 10.1016/j.jhsa.2015.01.005. Epub 2015 Mar 11.
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- 13. Cohen EJ. Adjunctive therapy devices: restoring ROM outside of the clinic. Phys Ther Magazine. 1995 Mar:10-13.
- 14. Costa C, McElroy M, Johnson A, et al. Use of a static progressive stretch orthosis to treat post-traumatic ankle stiffness. BMC Res Notes. 2012 Jul 4:5:348.
- 15. Costa C, McElroy M, Johnson A, et al. Use of a static progressive stretch orthosis to treat post-traumatic ankle stiffness. BMC Res Notes. 2012 Jul 4:5:348.
- 16. Dempsey AL, Mills T, Karsch RM, Branch Tp. Maximizing total end range time is safe and effective for the conservative treatment of frozen shoulder patients. Am J Phys Med Rehabil. 2011;909(9):738-745.
- 17. Doornberg JM, RingD Jupiter JB. Static progressive splinting for posttraumatic elbow stiffness. J Orthop trauma. 2006;20(6):400-404.
- 18. Evan PJ, Nandi S, Maschke S, et al. Prevention and treatment of elbow stiffness. J Hand Surg Am. 2009;34(4):769-778.
- 19. Farmer SE, Woollam PJ, Patrick JH, et al. Dynamic orthoses in management of joint contracture. J Bone Joint Surg br. 2005;87(3):291-295
- 20. Furia J, Willis F, Shanmuggam R, Curran S. Systematic review of contracture reduction in the lower extremity with dynamic splinting. Adv Ther. 2013 Aug;30(8):763-70.
- 21. Furia JP, Willis FB, Shanmugam R, Curran SA. Systematic review of contracture reduction in the lower extremity with dynamic splinting. Adv Ther. 2013;30(8):763-770.
- 22. Greer MA, Miklos-Essenberg ME. Early mobilization using dynamic splinting with acute triceps tendon avulsion. J Hand Ther. 2005;18:365-371.
- 23. Ibrahim M, Donatelli R, Hellman M, et al. Efficacy of a static progressive stretch device as an adjunct to physical therapy in treating adhesive capsulitis of the shoulder: a prospective, randomized study. Physiotherapy. 2014 Sep;100(3):228-34.
- 24. Ibrahim M, Johnson A, Pivec R, et al. Treatment of adhesive capsulitis of the shoulder with a static progressive stretch device: a prospective, randomized study. J Long Term Eff Med Implants. 2012;22(4):281-91.
- 25. John M, Kalish S, Perns S, et al. Dynamic splinting for postoperative hallux limitus: a randomized, controlled trial. J Am Podiatr Med Assoc. 2011 Jul-Aug;101(4):285-8.
- 26. Johnson A, McKenzie S, Ulrich S, et al. Assessment of static progressive stretch for the treatment of shoulder stiffness: a prospective case series. J Long Term Eff Med Implants. 2012;22(4):293-303.
- 27. Kamstra J, Reinstema H, Roodenburg J, et al. Dynasplint trismus system exercise for trismus secondary to head and neck cancer: a prospective study. Support Care Cancer. 2016 Aug;24(8):3315-23.
- 28. Li Y, Chang W, Chiang T, et al. Mouth-opening device as a treatment modality in trismus patients with head and neck cancer and oral submucous fibrosis: a prospective study. Clin Oral Investig. 2019 Jan;23(1):469-476.

- 29. Lindenhovius A, Doornberg J, Brouwer K, et al. A prospective randomized controlled trial of dynamic versus static progressive elbow splinting for posttraumatic elbow stiffness. J Bone Joint Surg Am. 2012 Apr 18;94(8):694-700.
- 30. Lucado A, Zhonguy L. Static progressive splinting to improve wrist stiffness after distal radius fracture: a prospective case series study. Physiother Theory Pract. 2009 May;25(4):297-309.
- 31. Lucado AM, Li Z. Static progressive splinting to improve wrist stiffness after distal radius fracture: A prospective, case series study. Physiother Theory Pract. 2009;25:297-309.
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- 34. Michlovitz SL, Harris BA, Watkins MP. Therapy interventions for improving joint range of motion: A systematic review. J Hand Ther. 200417(2): 118-131.
- 35. Miller A, Sadoghi P, Lucas R, et al. Effectiveness of bracing in the treatment of nonosseous restriction of elbow mobility: a systematic review and meta-analysis of 13 studies. J Shoulder Elbow Surg. 2013 Aug;22(8):1146-52.
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- 37. Sharma N, London J. Static progressive stretch brace as a treatment of pain and functional limitations associated with plantar fasciitis; a pilot study. Foot Ankle Spec. 2010 Jun;3(3):117-24.
- 38. Sodhi N, Khlopas A, Vaughn M, et al. Manufactured brace modalities for elbow stiffness. Orthopedics. 2018 Jan 1;41(1):e127-e135.
- 39. Suksathien R, Suksathien Y. A new static progressive splint for treatment of knee and elbow flexion contractures. J Med Assoc Thai. 2010 Jul;93(7):799-804.
- 40. Ulrich S, Bonutti P, Seyler T, et al. Restoring range of motion via stress relaxation and static progressive stretch in posttraumatic elbow contractures. J Shoulder Elbow Surg. 2010 Mar;19(2):196-201.
- 41. Van der Heide L, Gelderblom G, de Witte, L. Effects and effectiveness of dynamic arm supports: a technical review. Am J Phys Med Rehabil. 2015 Jan;94(1):44-62
- 42. Veltman E, Doornberg J, Eyegendaal D, et al. Static progressive versus dynamic splinting for posttraumatic elbow stiffness: a systematic review of 232 patients. Arch Orthop Trauma Surg. 2015 May;135(5):613-7.
- 43. Willis F, Fowler B. Longitudinal outcomes following a randomized controlled trial of dynamic splint stretching for carpal tunnel syndrome. Hand (N Y). 2016 Sep;11(3):290-29

External Female Urine Collection Device

Covered Items (HCPCS):

• E2001 Electric Urine Suction Device

- A6590 External Urine Catheters; Disposable, with Wicking Material Device, For use with Suction Pump, Per Month
- A7001 Canister, Non-disposable, Used with Suction Pump
- A7002 Tubing, Used with Suction Pump

Patient must meet criteria 1 to 4:

- 1. Patients must have female genitalia with urinary incontinence AND
- 2. Deemed at risk for indwelling catheterization AND
- 3. Bed confined/immobile, requiring full assist from bed to chair AND
- 4. Must have one of the following:
 - 1. Patient has a history of current or previous decubitus ulcers, skin breakdown or injury in the sacral or gluteal area OR
 - 2. History of catheter associated urinary tract infection.

Contraindications:

- 1. Has a known allergy to one or more components of the device
- 2. Has urinary retention

Clinical Review:

No specialist required.

Usage Guidelines:

- E2100 One at a time
- A6590- External Urine Catheters; Disposable 30 per month. Quantities of 31-90 per month require medical justification
- A7001 None
- A7002- None

Clinical guidelines were based upon the following references:

- 1. Bagley K, Severud L. Preventing catheter- associated urinary tract infections with incontinence management alternatives. Nursing Clin of NA, 2021; 56 (3):413-425.
- 2. McRae A, Kennelly M. Outpatient purewick female external catheter system performance: healthy volunteer study. Continence, 2023, 7 (9): 100712

Non-invasive Vagus Nerve Stimulator

Covered items (HCPCS):

E0735 - Non-invasive Vagus Nerve Stimulator - Components, Accessories and Supplies

Clinical Guidelines:

- Member has a diagnosis of Cluster Headaches and
- Documented non-responsiveness, failure of, or contraindication to use of triptans, CGRP inhibitors and/or Dihydroergotamine -DHE (unless contraindicated).

Not covered:

- Migraine
- Other headache types

Clinical Review:

Neurologist

Usage Guideline:

- One month at a time.
- New order is required for each monthly usage

Clinical guidelines were based upon the following references:

- 1. Barbanti P, Brazzi L, Egeo G, et al. Non-invasive vagus nerve stimulation for acute treatment of high-frequency and chronic migraine: an open-label study. The Journal of Headache and Pain. 2015;16:61.
- 2. Diener HC, Goadsby PJ, Ashina M, et al. Non-invasive vague nerve stimulation (nVNS) for the preventive treatment of episodic migraine: the mulicentre, double-blind, randomised, shamcontrolled PREMIUM trial. Cephalalgia. 2019 Oct:39(12):1475-87.
- 3. Gaul C, Diener HC, Silver N, et al. PREVA Study Group. Non-invasive vagus nerve stimulation for prevention and acute treatment of chronic cluster headache (PREVA): a randomized controlled study. Cephalalgia. 2016May:; 36(6): 534-46.
- 4. Goadsby Pj, de Coo IF, Silver N, et al. ACT2 Study Group. Non-invasive vagus nerve stimulation for the acute treatment of episodic and chronic cluster headache: A randomized, double-blind, sham-controlled ACT2 study. Cephalagia. 2018 April:38(5): 959-69
- 5. Grazzi L, Egeo G, Calhoun AH, et al. Non-invasive vagus nerve stimulation (nVNS) as miniprophylaxis for menstrual/menstrually related migraine: an open-label study. The Journal of Headache and Pain. 2016 Dec; 17(1):91
- 6. Marin J, Giffin, N, Consiglio E, et al. Noninvasive vagus nerve stimulation for treatment of cluster headache early UK clinical experience. The Journal of headache and pain. 2018 Nov 12: 19(1):114.
- 7. Silberstein SD, Calhoun AH, Lipton RB, et al. Chronic migraine headache prevention with noninvasive vagus nerve stimulation: the EVENT study. Neurology. 2016 Aug 2:87(5):529-38.
- 8. Silberstein SD, Mechtler LL, Kudrow DB, et al. ACT1 Study Group. Non-invasive vagus nerve stimulation for the acute treatment of cluster headache: finding from the randomized, double-blind, sham-controlled ACT1 study. Headache. 2016 Sep; 56(8):1317-32.
- 9. Tassorelli C, Grazzi L, d Tommaso M, et al. Noninvasive vagus nerve stimulation as acute therapy of migraine: the randomized PRESTO study. Neurology. 2018 Jul 24;91(4):e364-73.