### **DURABLE MEDICAL EQUIPMENT CLINICAL CRITERIA**

**NOTICE:** Kaiser Foundation Health Plan of Hawaii (Kaiser Permanente) provide these Clinical Review Criteria for internal use by their members and health care providers. The Clinical Review Criteria only apply to Kaiser Foundation Health Plan of Hawaii. Use of the Clinical Review Criteria or any Kaiser Permanente entity name, logo, trade name, trademark, or service mark for marketing or publicity purposes, including on any website or in any press release or promotional material, is strictly prohibited.

Kaiser Permanente Clinical Review Criteria are developed to assist in administering plan benefits. These Criteria neither offer medical advice nor guarantee coverage. Kaiser Permanente reserves the exclusive right to modify, revoke, suspend or change any or all of these Clinical Review Criteria, at Kaiser Permanente's sole discretion, at any time, with or without notice. Member contracts differ in health plan benefits. Always consult the patient's Evidence of Coverage or call Kaiser Permanente Member Services at 1-800-464-4000 (TTY 711), to determine coverage for a specific medical service.

## 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.
- 11. Chester DL, Beales S, Beveridge L, et al. A prospective, controlled, randomized trial comparing early active extension with passive extension using a dynamic splint in the rehabilitation of repaired extensor tendon. J Hand Surg (Br). 2002; 27N(3):283-288
- 12. Chow JA, Dovelle S, Thomas TJ, et al. A comparison of results of extensor tendon repair followed by early controlled mobilization versus static immobilization. J Hand Srug. 1989;70(4):591-595.
- 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.
- 32. Mcgrath MS, Bonutti PM, Marker DR, et al. Static progressive splinting for restoration of roational motion of the forearm. J Hand Ther. 2009;22(1);3-9.
- 33. Merolla G, Bianchi P, Porcellini G. Efficacy, usability and tolerability of a dynamic elbow orthosis after collateral ligament reconstruction: a prospective randomized study. Musculoskelet Surg. 2014 Dec;98(3):209-16.
- 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.
- 36. Moulodi N, Kamyab M, Farzadi M. A comparison of the hallx valgus angle, range of motion, and patient satisfaction after use of dynamic and static orthoses. Foot (Edinb). 2019 Dec:41:6-11.
- 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:**

- E2001 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 stimlation (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.