

Mechanical Stretching Devices

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Dates Reviewed: 03/2008, 03/2009, 02/2011, 02/2012, 12/2012, 11/2013, 11/2014, 12/2015, 11/2016, 10/2017, 04/2019, 04/2020, 04/2021

Developed By: Medical Necessity Criteria Committee

I. Description

Mechanical stretching devices for the treatment of joint stiffness due to immobilization or limited range of motion are intended to elongate the connective tissue surrounding the joint. Joint stiffness or contracture may occur following trauma, illness, or surgery. These devices are patient controlled and are often used as an adjunct to therapy.

There are several types of mechanical stretching devices available:

Dynamic splints: also known as low-load prolonged-duration stretch (LLPS) devices, allow active and passive motion within a restricted range. They are spring loaded and designed to apply constant low intensity stretch force. They are used continuously for 6-12 hours per session. An example of a dynamic splint is the Dynasplint®.

Static progressive (SP) stretch devices: increase the angle of stretch slowly. The patient sets the device angle at the beginning of the session and every several minutes the angle is increased. Sessions usually last for 30 minutes and are completed several times a day. An example of a SP stretch device is the Joint Active System (JAS).

Flexionaters/extensionaters: also known as patient-actuated serial stretch (PASS) devices use a serial stretch load application and quick release mechanism. These devices allow resisted active and passive motion within a limited range. They are typically used in 15 minute increments, 4-8 times per day. Examples of a PASS device are the ERMI Flexionater® and Extensionater®. The PASS device is considered experimental and investigational. There is a lack of clinical evidence to support the use of PASS in improving long-term patient outcomes.

II. Criteria: CWQI HCS-0050

- A. Moda Health will allow coverage of a **mechanical stretching device** for 4 months for the finger, wrist, elbow or knee up to plan limitations when **1 or more** of the following criteria is met:
 - a. Patient has joint stiffness that is not responding to conventional methods for restoring joint motion (i.e. physical therapy) during the sub-acute injury or post-operative period (≥ 3 weeks but ≤ 4 months after injury/surgery); **OR**

- b. During the acute post-operative period for patients following surgery to improve range of motion of a previously affected joint; **OR**
 - c. Patient is unable to participate in a formal rehabilitative program because of an inability to exercise; **OR**
 - d. Healing soft tissue around joints that can benefit from constant low-intensity tension
- B. Mechanical stretching devices are **NOT** covered for **ALL** of the following:
- a. Prophylactic use of mechanical stretching devices is considered experimental and investigational in the management of chronic contractures or chronic joint stiffness.
 - b. Use of dynamic splinting is considered experimental and investigational in the treatment of joint injuries of the ankle, toe, back and neck, and shoulder. Carpal tunnel syndrome, cerebral palsy, foot drop associated with neuromuscular diseases, head and spinal cord injuries, multiple sclerosis, muscular dystrophy, plantar fasciitis, rheumatoid arthritis, stroke, and trismus and for all other indications due to lack of scientific evidence regarding its effectiveness for these indications.
 - c. Mechanical stretching devices are not covered beyond 4 months of use.
 - d. Static Progressive Stretch and Patient-actuated serial stretch (PASS) devices such as the ERMI Extensionator and Flexionator are not covered and are considered experimental/investigational.
 - e. Jaw dynamic splinting for the treatment of TMJ or trismus
- C. This Medical Necessity Criteria does **NOT** apply to standard mechanical traction devices (i.e. Buck's traction).

III. Information Submitted with the Prior Authorization Request:

1. Medical records from the treating physician documenting the following:
 - a. Length of time of joint stiffness/contracture
 - b. Previous injury/surgery
 - c. Previous or current physical therapy regimen
2. Diagnostic study reports if applicable

IV. CPT or HCPC codes covered:

Codes	Description
E1800	Dynamic adjustable elbow extension/flexion device, includes soft interface material
E1802	Dynamic adjustable forearm pronation/supination device, includes soft interface material
E1805	Dynamic adjustable wrist extension/flexion device, includes soft interface material
E1810	Dynamic adjustable knee extension/flexion device, includes soft interface material
E1812	Dynamic knee, extension/flexion device with active resistance control
E1825	Dynamic adjustable finger extension/flexion device, includes soft interface material

V. CPT or HCPC codes NOT covered:

Codes	Description
E1801	Static progressive stretch elbow device, extension and/or flexion, with or without range of motion adjustment, includes all components and accessories
E1806	Static progressive stretch wrist device, flexion and/or extension, with or without range of motion adjustment, includes all components and accessories
E1811	Static progressive stretch knee device, extension and/or flexion, with or without range of motion adjustment, includes all components and accessories
E1815	Dynamic adjustable ankle extension/flexion device, includes soft interface material
E1816	Static progressive stretch ankle device, flexion and/or extension, with or without range of motion adjustment, includes all components and accessories
E1818	Static progressive stretch forearm pronation/supination device, with or without range of motion adjustment, includes all components and accessories
E1821	Replacement soft interface material/cuffs for bi-directional static progressive stretch device
E1830	Dynamic adjustable toe extension/flexion device, includes soft interface material
E1840	Dynamic adjustable shoulder flexion/abduction/rotation device, includes soft interface material
E1841	Static progressive stretch shoulder device, with or without range of motion adjustment, includes all components and accessories

VI. Annual Review History

Review Date	Revisions	Effective Date
12/2012	Annual Review: Added table with review date, revisions, and effective date.	01/01/2013
11/13	Annual Review: No changes	11/27/2013
12/2014	Annual Review: Added back and neck to II.2, added II.5 – criteria does not apply to standard traction (i.e. Buck’s traction)	12/3/2014
12/2015	Annual Review: separated CPT/HCPC codes	12/2/2015
11/2016	Annual Review: clarified static vs dynamic codes covered	11/30/2016
10/2017	Annual Review: No changes	10/25/2017
04/2019	Annual Review: No changes	05/01/2019
04/2020	Annual Review: No changes	05/01/2020
04/2021	Annual Review: No changes	05/01/2021

VII. References

1. Bonutti PM, Windau JE, Ables BA, Miller BG. Static progressive stretch to reestablish elbow range of motion. *Clinical Orthopaedics*. 1994; 303:128-134.
2. Cohen EJ. Adjunctive therapy devices: restoring ROM outside of the clinic. Accessed March 2007. Available at URL address: <http://www.theratechequip.com/article1.htm>
http://www.theratechequip.com/PDFs/Paper_AdjunctiveTherapyDevices.pdf

3. Ebinger T, Erhard N, Kinzl L, Mentzel M. Dynamic treatment of displaced proximal phalangeal fractures. The Journal of Hand Surgery. Nov 1999. 24(6):1254-1262.
4. Jansen CM, Windau JE, Bonutti PM, Brillhart MV. Treatment of a knee contracture using a knee orthosis incorporating stress relaxation techniques. Physical Therapy. 1996; 76:182-186
5. Restoring wrist flexion/extension using principles of stress relaxation/static progressive stretch. Paper presentation – American Academy of Orthopaedic Surgeons. New Orleans, Louisiana, February 2003.
6. Schultz-Johnson K. Static progressive splinting. The journal of Hand Therapy. April 2002. 15(2):163-178.
7. Washington State Department of Labor and Industries (WSDLI), Office of the Medical Director. ERMI Flexionators and Extensionators. Health Technology Assessment Brief. Olympia, WA: Washington State Department of Labor and Industries; updated June 6, 2003. Available at: <http://www.ini.wa.gov/ClaimsIns/Files/OMD/ermi.pdf> Accessed October 24, 2017
8. Dynasplint Systems, Inc. Accessed on February 8, 2011 at: <http://www.dynasplint.com>
9. ERMI, Inc. Accessed on February 8, 2011 at: <http://www.getmotion.com/index.htm>
10. Joint Active Systems, Inc (JAS). Accessed on February 8, 2011 at: <http://www.jointactivesystems.com>
11. Ultraflex Systems, Inc. Accessed on February 8, 2011 at: <http://ultraflexsystems.com>
12. Physician Advisors

Appendix 1 – Applicable Diagnosis Codes:

Codes	Description

Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determination (NCD) and Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. They can be found at: <http://www.cms.gov/medicare-coverage-database/search/advanced-search.aspx>. Additional indications may be covered at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCD):

Jurisdiction(s): 5, 8	NCD/LCD Document (s):

NCD/LCD Document (s):

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	Applicable State/US Territory	Contractor
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC