

Mechanical Stretching Devices

Last Review Date: October 8, 2021

Number: MG.MM.DM.14dC2

Medical Guideline Disclaimer

Property of EmblemHealth. All rights reserved. The treating physician or primary care provider must submit to EmblemHealth the clinical evidence that the patient meets the criteria for the treatment or surgical procedure. Without this documentation and information, EmblemHealth will not be able to properly review the request for prior authorization. The clinical review criteria expressed below reflects how EmblemHealth determines whether certain services or supplies are medically necessary. EmblemHealth established the clinical review criteria based upon a review of currently available clinical information (including clinical outcome studies in the peer-reviewed published medical literature, regulatory status of the technology, evidence-based guidelines of public health and health research agencies, evidence-based guidelines and positions of leading national health professional organizations, views of physicians practicing in relevant clinical areas, and other relevant factors). EmblemHealth expressly reserves the right to revise these conclusions as clinical information changes, and welcomes further relevant information. Each benefit program defines which services are covered. The conclusion that a particular service or supply is medically necessary does not constitute a representation or warranty that this service or supply is covered and/or paid for by EmblemHealth, as some programs exclude coverage for services or supplies that EmblemHealth considers medically necessary. If there is a discrepancy between this guideline and a member's benefits program, the benefits program will govern. In addition, coverage may be mandated by applicable legal requirements of a state, the Federal Government or the Centers for Medicare & Medicaid Services (CMS) for Medicare and Medicaid members. All coding and web site links are accurate at time of publication. EmblemHealth Services Company LLC, ("EmblemHealth") has adopted the herein policy in providing management, administrative and other services to Health Insurance Plan of Greater New York and Group Health Incorporated, related to health benefit plans offered by these entities. All of the aforementioned entities are affiliated companies under common control of EmblemHealth Inc.

Definitions

Dynamic splinting devices	A bilateral spring-loaded tensioning device that helps to increase joint range of motion by applying a low-load prolonged-duration stretch. When used in combination with traditional physical therapy, the dynamic splint can reduce recovery time and maximize the overall range of motion for a joint. These may also be referred to as (low-load prolonged-duration stretch [LLPS]) devices.
Static progressive stretching (SPS) devices (aka bi-directional static progressive stretch)	The incremental, periodic application of stress relaxation (SR) loading. In SR loading, tissue is stretched and held at a constant length and the amount of force is reduced over time.
Patient-actuated serial stretch (PASS) devices (aka extensionators or flexionators)	Custom-fitted devices that supply a low–high level load to the joint using pneumatic or hydraulic systems that can be adjusted by the patient.

Guideline

Members with the DME benefit are eligible for coverage of mechanical stretching devices for the ankle, finger, knee, toe, wrist, forearm, elbow, and adhesive capsulitis of the shoulder.

Splinting must be applied within the adaptive phase of wound healing or within 100 days from the date of injury or trauma.

Application is most appropriate under any of the following circumstances:

1. Adjunct to physical therapy when persistent joint stiffness is present; either:
 - a. Post-operative phase
 - b. Sub-acute injury phase

(Initiation must be ≥ 3 weeks post the event, but not ≥ 4 months after the event)

2. Acute post-operative period when surgery is performed to enhance range of motion in a previously affected joint.

For members unable to benefit and/or perform physical therapy (improvement must be evident within 4 months; see Limitations/Exclusions below).

Limitations/Exclusions

Mechanical stretching devices are not considered medically necessary for any indication other than those listed above or when any of the following are applicable:

1. ≥ 100 days post initial injury or trauma.
2. Pediatric use.
3. Prophylactic use for any of the following conditions (except in cases when the device is for post-surgical use of a chronic condition and whereby the appropriateness criteria put forth in the Guideline section are met):
 - a. Chronic contractures
 - b. Joint stiffness secondary to any of the following:
 - i. Burns
 - ii. Cerebral palsy
 - iii. Fractures
 - iv. Head and spinal cord injuries
 - v. Multiple sclerosis
 - vi. Muscular dystrophy
 - vii. Rheumatoid arthritis
 - viii. Trauma

Revision History

Oct. 11, 2019 — added adhesive capsulitis of the shoulder as covered indication eff. Jan. 11, 2020.

Oct. 12, 2018 — updated to reflect positive coverage uniformity of all members for the ankle (previously Medicare only), elbow, finger, forearm, knee (previously Medicare only), toe, and wrist.

Applicable Procedure Codes

E1800	Dynamic adjustable elbow extension/flexion device, includes soft interface material
E1801	Static progressive stretch elbow device, extension and/or flexion, with or without range of motion adjustment, includes all components and accessories
E1802	Dynamic adjustable forearm pronation/supination device, includes soft interface material
E1805	Dynamic adjustable wrist extension/flexion device, includes soft interface material
E1806	Static progressive stretch wrist device, flexion and/or extension, with or without range of motion adjustment, includes all components and accessories
E1810	Dynamic adjustable knee extension/flexion device, includes soft interface material
E1811	Static progressive stretch knee device, extension and/or flexion, with or without range of motion adjustment, includes all components and accessories
E1812	Dynamic knee, extension/flexion device with active resistance control
E1816	Static progressive stretch ankle device, flexion and/or extension, with or without range of motion adjustment, includes all components and accessories
E1815	Dynamic adjustable ankle extension/flexion device, includes soft interface material
E1818	Static progressive stretch forearm pronation/supination device, with or without range of motion adjustment, includes all components and accessor
E1820	Replacement soft interface material, dynamic adjustable extension/flexion device

E1821	Replacement soft interface material/cuffs for bi-directional static progressive stretch device
E1825	Dynamic adjustable finger extension/flexion device, includes soft interface material
E1830	Dynamic adjustable toe extension/flexion device, includes soft interface material
E1831	Static progressive stretch toe device, extension and/or flexion, with or without range of motion adjustment, includes all components and accessories
E1840	Dynamic adjustable shoulder flexion/abduction/rotation device, includes soft interface material
E1399	Durable medical equipment, miscellaneous
29126	Application of short arm splint (forearm to hand); dynamic
29131	Application of finger splint; dynamic
29260	Strapping; elbow, wrist
29280	Strapping; hand, finger

Applicable ICD-10 Diagnosis Codes

M24.59	Contracture, other specified joint
M24.521	Contracture, right elbow
M24.522	Contracture, left elbow
M24.529	Contracture, unspecified elbow
M24.531	Contracture, right wrist
M24.532	Contracture, left wrist
M24.539	Contracture, unspecified wrist
M24.541	Contracture, right hand
M24.542	Contracture, left hand
M24.549	Contracture, unspecified hand
M24.561	Contracture, right knee
M24.562	Contracture, left knee
M24.569	Contracture, unspecified knee
M24.571	Contracture, right ankle
M24.572	Contracture, left ankle
M24.573	Contracture, unspecified ankle
M24.574	Contracture, right foot
M24.575	Contracture, left foot
M24.576	Contracture, unspecified foot
M25.69	Stiffness of other specified joint, not elsewhere classified
M25.621	Stiffness of right elbow, not elsewhere classified
M25.622	Stiffness of left elbow, not elsewhere classified
M25.629	Stiffness of unspecified elbow, not elsewhere classified
M25.631	Stiffness of right wrist, not elsewhere classified
M25.632	Stiffness of left wrist, not elsewhere classified
M25.639	Stiffness of unspecified wrist, not elsewhere classified
M25.641	Stiffness of right hand, not elsewhere classified
M25.642	Stiffness of left hand, not elsewhere classified
M25.649	Stiffness of unspecified hand, not elsewhere classified
M25.661	Stiffness of right knee, not elsewhere classified
M25.662	Stiffness of left knee, not elsewhere classified
M25.669	Stiffness of unspecified knee, not elsewhere classified
M25.671	Stiffness of right ankle, not elsewhere classified
M25.672	Stiffness of left ankle, not elsewhere classified
M25.673	Stiffness of unspecified ankle, not elsewhere classified

M25.674	Stiffness of right foot, not elsewhere classified
M25.675	Stiffness of left foot, not elsewhere classified
M25.676	Stiffness of unspecified foot, not elsewhere classified
M75.00	Adhesive capsulitis of unspecified shoulder
M75.01	Adhesive capsulitis of right shoulder
M75.02	Adhesive capsulitis of left shoulder

References

Blair WF, Steyers CM. Extensor tendon injuries. *Orthop Clin North Am.* 1992; 23(1):141-148.

Bonutti PM, Windau JE, Ables BA, et al. Static progressive stretch to reestablish elbow range of motion. *Clin Orthop.* 1994; 303: 128-134.

Brown EZ, Ribik CA. Early dynamic splinting for extensor tendon injuries. *J Hand Surg.* 1989; 14A:72-76.

Chester DL, Beale 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 Tendons. *J Hand Surg.* 2002; 27(3):283-8.

Chow JA, Dovel S, Thomes LJ, et al. A comparison of results of extensor tendon repair followed by early controlled mobilization versus static immobilization. *J Hand Surg.* 1989; 14B:18-20.

Chow JA, Thomes LJ, Dovel S, et al. Controlled motion rehabilitation after flexor tendon repair and grafting. *J Bone Joint Surg.* 1988; 70-B (4):591-595.

Dynasplint Systems, Inc. Products. <http://www.dynasplint.com/products/>. 2020. Accessed October 8, 2021.

ERMI Inc. <http://getmotion.com/products-and-services>. Accessed October 8, 2021.

Farmer SE, Woollam PJ, Patrick JH, et al. Dynamic orthoses in the management of joint contracture. *J Bone Joint Surg Br.* 2005;87(3):291-5.

Harvy L, Herbert R, Crosbie J. Does Stretching Induce Lasting Increases in Joint ROM? A Systematic Review. *Physiother Res Int.* 2002; 7(1):1-13.

Hepburn GR, Crivelli KJ. Use of elbow Dynasplint for reduction of elbow flexion contractures: A case study. *J Orthop Sports Phys Ther.* 1984; 5(5):269-274.

Hepburn GR. Case Studies: Contracture and Stiff Joint Management with Dynasplint. *J of Orthopedic and Sports Physical Therapy* 1987: 498-504.

Hung LK, Chan A, Chang J, et al. Early controlled active mobilization with dynamic splintage for treatment of extensor tendon injuries. *J Hand Surg.* 1990; 15A (2):251-257. .

Joint Active Systems, Inc. <http://www.jointactivesystems.com/>. 2020. Accessed October 8, 2021.

Kerr CD, Burczak JR. Dynamic traction after extensor tendon repair in zone 6, 7, and 8: A retrospective study. *J Hand Surg.* 1989; 14B:21-25.

Michlovitz, SL, Harris BA, Watkins MP. Therapy Interventions for Improving Joint Range of Motion: A Systematic Review. *J Hand Ther.*, 2004; 17(2):118-31.

Specialty-matched clinical peer review.