

Clinical Policy: Mechanical Stretching Devices for Joint Stiffness and Contracture

Reference Number: CP.MP.144 Effective Date: 04/17 Last Review Date: 04/17

Coding Implications Revision Log

See <u>Important Reminder</u> at the end of this policy for important regulatory and legal information.

Description

Mechanical stretching devices are used for the prevention and treatment of joint contractures of the extremities, with the goal to maintain or restore range of motion (ROM) to the joint. A variety of mechanical stretching devices are available for extension or flexion of the shoulder, elbow, wrist, fingers, knee, ankle, and toes. These devices are generally used as adjunct treatment to physical therapy and/or exercise.

Policy/Criteria

- I. It is the policy of health plans affiliated with Centene Corporation[®] that the low-load prolonged-duration stretch (LLPS) device /dynamic stretch device is **medically necessary** for rehabilitation of extensor tendon injury of the finger.
- **II.** It is the policy of health plans affiliated with Centene Corporation that the LLPS device for any other indication or any other joint is considered not medically necessary.
- **III.** It is the policy of health plans affiliated with Centene Corporation that static progressive (SP) stretch devices and the patient-actuated serial stretch (PASS) device for any indication are considered not medically necessary.

Background

A joint contracture is characterized by a chronically reduced ROM secondary to structural changes in non-bony tissues, including muscle, tendons, ligaments, and skin. Prolonged immobilization of joints following surgery or trauma is the most common cause of joint contractures. A number of different modalities are used to treat or prevent joint contractures.

Mechanical stretching devices have been investigated for the treatment of joint contractures. The use of these devices is based on the theory that passive motion early in the healing process can promote movement of the synovial fluid, and thus promote lubrication of the joint; stimulate the healing of articular tissues; prevent adhesions and joint stiffnes; and reduce edema without interfering with the healing of incisions or wounds over the moving joint.

Several types of devices exist, including low-load prolonged duration stretch devices (also referred to as dynamic splinting), static progressive stretch devices, and patient-actuated serial stretch (PASS) (also known as patient-directed serial stretch) devices. LLPS devices permit resisted active and passive motion (elastic traction) within a limited range. LLPS devices maintain a set level of tension by means of incorporated springs. PASS devices permit resisted active and passive motion within a limited range utilizing pneumatic or hydraulic systems that can be adjusted by the patient. The extensionaters use pneumatic systems while the flexionaters



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use hydraulic systems. These devices require custom fitting. SP stretch devices hold the joint in a set position but allow for manual modification of the joint angle and may allow for active motion without resistance (inelastic traction). This type of device itself does not exert a stress on the tissue unless the joint angle is set at the maximum ROM.

Dynamic splinting is commonly used in the post-operative period for the prevention or treatment of motion stiffness/loss in the knee, elbow, wrist or finger. Peer reviewed studies investigating dynamic splinting are limited. The best evidence is available in studies evaluating LLPS following extensor injury. Results from a small, prospective, randomized trial comparing dynamic splinting to static splinting suggest that dynamic splinting of complex lacerations of the extensor tendons in zones V-VII provides improved functional outcomes at 4 and 12 weeks and 6 months when compared with static splinting.¹ Another small, prospective, randomized, controlled study comparing postoperative dynamic- versus static- splinting outcomes of patients following extensor tendon repair reported dynamic splinting of simple, complete lacerations of the extensor tendons in zones V and VI. Dynamic splinting provided improved functional outcomes at 4, 6, and 8 weeks but not by 6 months when compared with static splinting.²

Limited evidence suggests that LLPS following surgical extensor injury repair may increase range of motion faster than static splinting. However, the treatment benefit is small and the final outcome is similar to that achieved with static splinting.

There is insufficient evidence in the published medical literature to demonstrate the safety. efficacy, and long-term outcomes on the use of static progressive stretch and patient-actuated serial stretch devices, as well as low-load prolonged stretch devices for other joints, including but not limited to, the hand, wrist, elbow, shoulder, toes, and knee.

Coding Implications

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-todate sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

HCPCs Codes considered medically necessary when meeting policy criteria		
HCPCS	Description	
Codes		
E1825	Dynamic adjustable finger extension/flexion device, includes soft interface material	

UCDCS Codes considered medically processory when meeting policy evitoria

ICD-10-CM Diagnosis Codes that Support Coverage Criteria

ICD-10-CM	Description
Code	
M24.541 -	Contracture, hand
M24.549	
M25.641 -	Stiffness of hand, not elsewhere classified
M25.649	
M84.441S	Pathological fracture, right hand, sequela



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ICD-10-CM	Description
Code	
M84.442S	Pathological fracture, left hand
M84.443S	Pathological fracture, unspecified hand, sequela
M84.444S	Pathological fracture, right finger(s), sequela
M84.445S	Pathological fracture, left finger(s), sequela
M84.446S	Pathological fracture, unspecified finger(s), sequela
S61.001A -	Open wound of fingers and hands
S61.459S	
S62.201A -	Fracture of hand
S62.92XS	
S63.101A -	Unspecified subluxation and dislocation of thumb
S63.106S	
S63.111A -	Subluxation and dislocation of metacarpophalangeal joint of thumb
S63.116S	
S63.121A -	Subluxation and dislocation of unspecified interphalangeal joint of
S63.126S	thumb
S63.131A -	Subluxation and dislocation of proximal interphalangeal joint of
<u>\$63.1365</u>	thumb
S63.141A -	Subluxation and dislocation of distal interphalangeal joint of thumb
<u>\$63.1468</u>	
S63.200A-	Unspecified subluxation of other finger
<u>863.2098</u>	
S63.210A -	Subluxation of metacarpophalangeal joint of finger
<u>S63.2198</u>	
S63.220A -	Subluxation of unspecified interphalangeal joint of finger
S03.2295	Subluyation of provincel interphalon goal joint of finger
505.250A -	Subluxation of proximal interphatangeal joint of finger
S63 240 A	Subluxation of distal interphalangeal joint of finger
S63 240A -	Subluxation of distar interpliatangear joint of finger
S63 250A -	Unspecified dislocation of other finger
S63 259S	onspective distocation of other ninger
S63 260A -	Dislocation of metacarpophalangeal joint of finger
S63 269S	Distocution of metacarpopharangear joint of miger
S63 270A -	Dislocation of unspecified interphalangeal joint of finger
S63 279S	Distocution of unspectfied interplatingen joint of imger
S63 280A -	Dislocation of proximal interphalangeal joint of finger
S63.289S	
S63.290A -	Dislocation of distal interphalangeal joint of finger
S63.299S	
S66.011A -	Strain of long flexor muscle, fascia, and tendon of thumb at wrist and
S66.019S	hand level
S66.021A -	Laceration of long flexor muscle, fascia, and tendon of thumb at wrist
S66.029S	and hand level



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ICD-10-CM	Description
Code	
S66.091A -	Other specified injury of long flexor muscle, fascia, and tendon of
S66.099S	thumb at wrist and hand level
S66.110A -	Strain of flexor muscle, fascia, and tendon of other and unspecified
S66.119S	finger at wrist and hand level
S66.120A -	Laceration of flexor muscle, fascia, and tendon of other and
S66.129S	unspecified finger at wrist and hand level
S66.190A -	Other injury of flexor muscle, fascia, and tendon of other and
S66.199S	unspecified finger at wrist and hand level
S66.211A -	Strain of extensor muscle, fascia and tendon of thumb at wrist and
S66.219S	hand level
S66.221A -	Laceration of extensor muscle, fascia and tendon of thumb at wrist
S66.229S	and hand level
S66.291A -	Other specified injury of extensor muscle, fascia and tendon of thumb
S66.299S	at wrist and hand level
S66.300A -	Unspecified injury of extensor muscle, fascia and tendon of other and
S66.309S	unspecified finger at wrist and hand level
S66.310A -	Strain of extensor muscle, fascia and tendon of other and unspecified
S66.319S	finger at wrist and hand level
S66.320A -	Laceration of extensor muscle, fascia and tendon of other and
S66.329S	unspecified finger at wrist and hand level
S66.390A -	Other injury of extensor muscle, fascia and tendon of other and
S66.399S	unspecified finger at wrist and hand level
S66.401A -	Injury of intrinsic muscle, fascia and tendon of thumb at wrist and
S66.499S	hand level
S66.500A -	Injury of intrinsic muscle, fascia and tendon of other and unspecified
S66.599S	finger at wrist and hand level
S67.00XA-	Crushing injury of wrist, hand and fingers
S67.92XS	

HCPCS Codes considered NOT medically necessary per this policy

HCPCS	Description
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



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HCPCS	Description
Codes	
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
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
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
E1841	Static progressive stretch shoulder device, with or without range of motion
	adjustment, includes all components and accessories

Reviews, Revisions, and Approvals		Approval Date
Policy developed	04/17	04/17

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Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. "Health Plan" means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan's affiliates, as applicable.

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Note: For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

Note: For Medicare members, to ensure consistency with the Medicare National Coverage Determinations (NCD) and Local Coverage Determinations (LCD), all applicable NCDs, LCDs, and Medicare Coverage Articles should be reviewed <u>prior to</u> applying the criteria set forth in this clinical policy. Refer to the CMS website at <u>http://www.cms.gov</u> for additional information.

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