

Static and Dynamic Mechanical Stretching Devices

Table of Content

[Purpose](#)
[Description & Definitions](#)
[Criteria](#)
[Coding](#)
[Document History](#)
[References](#)
[Special Notes](#)
[Keywords](#)

<u>Effective Date</u>	10/2008
<u>Next Review Date</u>	01/2024
<u>Coverage Policy</u>	DME 31
<u>Version</u>	4

Member specific benefits take precedence over medical policy. Coverage varies across plans. Coverage varies across plans. Refer to the individual's benefit plan for coverage details*.

Purpose:

This policy addresses Static and Dynamic Mechanical Stretching Devices.

Description & Definitions:

Dynamic joint extension and flexion devices (also known as low-load, prolonged-duration stretch (LLPS) devices or dynamic stretch devices) are spring-loaded or rubber band-loaded adjustable-tension splints that provide constant stretching to an affected joint while a patient is at rest.

Static joint extension and flexion devices, also known as static progressive splints (SPS), hold an affected joint in a fixed position near the end range of motion and apply a constant low level of tension on the joint; patient can adjust the device and increase the joint displacement, thereby stretching and relaxing the joint to attempt to increase the range of motion.

The Plan will rent for a 3-month trial, then convert to purchase if the therapy is effective.

Replacement soft interface material/cuffs for bi-directional static progressive stretch device are approved if initial criteria was met.

Criteria:

Mechanical stretching devices are considered medically necessary for **1 or more** of the following:

- Dynamic low-load prolonged-duration stretch (LLPS) devices for **All** of the following:
 - Device to be used on **1 or more** of the following:
 - Ankle
 - Elbow
 - Finger
 - Knee

- Toe
 - Wrist
- Criteria including **1 or more** of the following:
 - Individual in the subacute injury or post-operative period (≥ 3 weeks but ≤ 3 months after injury or operation) with **1 or more** of the following:
 - Device as adjunct to physical therapy in individuals with persistent joint stiffness or contracture
 - Individual's limited range of motion poses significant functional limitation, and has not responded to other therapy (including physical therapy)
 - Individual in the acute post-operative period who has undergone additional surgery to improve the range of motion of a previously affected joint
 - Individual unable to benefit from standard physical therapy modalities because of an inability to exercise
- Device to be used for an initial period of up to 3 months and can continue after the initial period if the individual can continue to demonstrate improvement
- Static joint extension and flexion devices may be indicated with the presence of **ALL** of the following are present:
 - Limited range of motion or joint stiffness in **1 or more** of the following:
 - Ankle
 - Elbow
 - Hand
 - Knee
 - Shoulder
 - Toe
 - Wrist
 - Clinical situation is **1 or more** of the following:
 - Acute postoperative period, and patient has documented history of stiffness and/or motion loss in joint in which surgery was performed to restore function
 - Subacute injury (at least 3 weeks since injury), and patient is not responding to conventional treatment (ie, physical therapy, standard splinting, NSAIDs)
 - Subacute postoperative period (at least 3 weeks since surgery), and patient is not responding to conventional treatment (ie, physical therapy, standard splinting, NSAIDs)
 - Static joint extension and flexion device used as an adjunct to physical therapy

The following mechanical stretching devices **do not meet the definition of medical necessity**, to include but not limited to:

- Patient Actuated Serial Stretch (PASS) Devices
- Static Progressive (SP) Stretch Devices such as 1 or more of the following:
 - ERMI Extensionater Device
 - Joint Active Systems (JAS) Devices
 - Range of Motion (ROM) Therapy Devices

Coding:

Medically necessary with criteria:

Coding	Description
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
E1815	Dynamic adjustable ankle extension/flexion, 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
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
E1841	Static progressive stretch shoulder device, with or without range of motion adjustment, includes all components and accessories

Considered Not Medically Necessary:

Coding	Description
	None

Document History:

Revised Dates:

- 2022: January
- 2021: February
- 2020: January
- 2019: November
- 2016: February
- 2014: July
- 2011: November
- 2010: November

Reviewed Dates:

- 2023: January
- 2018: August
- 2017: November
- 2016: January
- 2015: January, August
- 2013: February
- 2012: October
- 2010: December
- 2009: December

Effective Date:

- November 2008

References:

Including but not limited to: Specialty Association Guidelines; Government Regulations; Winifred S. Hayes, Inc; UpToDate; Literature Review; Specialty Advisors; National Coverage Determination (NCD); Local Coverage Determination (LCD).

(2022). Retrieved Nov 15, 2022, from UpToDate:

https://www.uptodate.com/contents/search?search=Static%20and%20Dynamic%20Mechanical%20Stretching%20Device&sp=0&searchType=PLAIN_TEXT&source=USER_INPUT&searchControl=TOP_PULLDOWN&searchOffset=1&autoComplete=false&language=&max=0&index=&autoCompleteTerm=&ra

(2022, Aug 18). Retrieved Nov 15, 2022, from MCG: <https://careweb.careguidelines.com/ed26/index.html>

(2022). Retrieved Nov 15, 2022, from Centers for Medicare and Medicaid Services: <https://www.cms.gov/medicare-coverage-database/search-results.aspx?keyword=stretch+device&keywordType=starts&areald=s53&docType=NCA,CAL,NCD,MEDCAC,TA,MCD,6,3,5,1,F,P&contractOption=all>

(2022). Retrieved Nov 15, 2022, from Department of Medical Assistance Services: <https://vamedicaid.dmas.virginia.gov/global-search?keys=stretching+device>

(2022). Retrieved Nov 15, 2022, from PubMed:

<https://pubmed.ncbi.nlm.nih.gov/?term=Static+progressive+stretch+or+patient-actuated+serial+stretch&filter=simsearch1.fha&filter=simsearch2.ffrt&filter=years.2022-2022>

(2022). Retrieved Nov 16, 2022, from Google, Inc:

https://www.google.com/search?q=Professional+association+recommendations+or+guidelines+for+static+or+dynamic+stretching+devices&rlz=1C1GCEA_enUS982US982&oq=Professional+association+recommendations+or+guidelines+for+static+or+dynamic+stretching+devices&aqs

DME Manual - Appendix D. (2022, Jan). Retrieved May 25, 2022, from DMAS DME:

<https://vamedicaid.dmas.virginia.gov/sites/default/files/2022-10/Appendix-D%20Service%20Authorization%20Information%20%28DME%29.pdf>

Guidance Document for the Preparation of Premarket Notification [510(K)] Applications for Exercise Equipment. (2018, Mar 23). Retrieved Nov 16, 2022, from Food and Drug Administration: <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/guidance-document-preparation-premarket-notification-510k-applications-exercise-equipment>
Mechanical Stretching Devices For The Treatment Of Joint Contractures Of The Extremities. (2022, May 09). Retrieved Nov 15, 2022, from Hayes, Inc: <https://evidence.hayesinc.com/report/dir.mechanical745>

NCD: DURABLE Medical Equipment Reference List - 280.1. (2005, May 5). Retrieved May 25, 2022, from CMS NCD: <https://www.cms.gov/medicare-coverage-database/view/ncd.aspx?ncdid=364&ncdver=1&keyword=Lung%20cancer%25>

(2021). Retrieved Dec 21, 2021, from Centers for Medicare & Medicaid Services: <https://www.cms.gov/medicare-coverage-database/search->

results.aspx?keyword=Dynamic%20extension&keywordType=starts&areald=s53&docType=NCA,CAL,NCD,MEDCAC,TA,MCD,6,3,5,1,F,P&contractOption=all&sortBy=relevance

(2021). Retrieved Dec 21, 2021, from AIM Specialty Health:

https://aimguidelines.wpengine.com/?s=stretching+devices&et_pb_searchform_submit=et_search_proccess&et_pb_search_cat=11%2C1%2C96&et_pb_include_posts=yes

(2021). Retrieved Dec 21, 2021, from National Comprehensive Cancer Network: <https://www.nccn.org/search-result?indexCatalogue=nccn-search-index&searchQuery=Stretching%20Devices&wordsMode=AllWords>

(2021, Jun 07). Retrieved Dec 21, 2021, from MCG: <https://careweb.careguidelines.com/ed25/index.html>

(2021). Retrieved Dec 21, 2021, from DynaMed: <https://www.dynamedex.com/results?q=mechanical+stretch&lang=en>

Durable Medical Equipment - Appendix B. (2021, Jul). Retrieved Dec 21, 2021, from Department of Medical Assistance Services: <https://www.dmas.virginia.gov/for-providers/long-term-care/services/durable-medical-equipment/>

Liu, S., Fang, Z., Liu, J., Tang, K., Luo, J., Yi, J., . . . Wang, Z. (2021, Mar 25). A Compact Soft Robotic Wrist Brace with Origami Actuators. Retrieved Dec 21, 2021, from PubMed: <https://pubmed.ncbi.nlm.nih.gov/33842555/>

Mechanical Stretching Devices For The Treatment Of Joint Contractures Of The Extremities. (2021, Jun 24). Retrieved Dec 21, 2021, from Hayes, Inc.: <https://evidence.hayesinc.com/report/dir.mechanical745>

Physical Therapist Management of Total Knee Arthroplasty. (2020, Sep). Retrieved Dec 21, 2021, from American Physical Therapy Association: <https://academic.oup.com/ptj/article/100/9/1603/5857258>

Special Notes: *

This medical policy express Sentara Health Plan's determination of medically necessity of services, and they are based upon a review of currently available clinical information. These policies are used when no specific guidelines for coverage are provided by the Center for Medicare and Medicaid Services (CMS). Medical Policies may be superseded by National or Local Coverage Determination (Medicare) guidelines. Medical policies are not a substitute for clinical judgment or for any prior authorization requirements of the health plan. These policies are not an explanation of benefits.

Medical policies can be highly technical and complex and are provided here for informational purposes. These medical policies are intended for use by health care professionals. The medical policies do not constitute medical advice or medical care. Treating health care professionals are solely responsible for diagnosis, treatment and medical advice. Sentara Health Plan members should discuss the information in the medical policies with their treating health care professionals. Medical technology is constantly evolving and these medical policies are subject to change without notice, although Sentara Health Plan will notify providers as required in advance of changes that could have a negative impact on benefits.

The term DME is defined as equipment which, according to 42 CFR §414.202:

- Can withstand repeated use; i.e., could normally be rented and used by successive patients;
- Effective with respect to items classified as DME after January 1, 2012, has an expected life of at least 3 years;
- Is primarily and customarily used to serve a medical purpose;
- Generally, is not useful to a person in the absence of illness or injury; and,
- Is appropriate for use in a patient's home.

<https://www.cms.gov/medicare-coverage-database/view/ncd.aspx?NCDId=190>

Keywords:

SHP Static and Dynamic Mechanical Stretching Devices, SHP Durable Medical Equipment 31, subacute injury, post-operative period, physical therapy, joint stiffness, limited range of motion poses significant functional limitation