

MEDICAL POLICY

MEDICAL POLICY DETAILS	
Medical Policy Title	Continuous Passive Motion Device in the Home Setting
Policy Number	1.01.02
Category	Contract Clarification
Original Effective Date	10/18/01
Committee Approval Date	10/18/01, 11/21/02, 09/18/03, 06/17/04, 04/21/05, 06/22/06, 08/23/07, 10/23/08, 08/27/09, 08/26/10, 08/25/11, 10/25/12, 08/22/13, 08/28/14, 08/27/15, 10/27/16, 10/26/17
Current Effective Date	10/19/23
Archived Date	08/23/18
Archive Review Date	08/22/19, 8/20/20, 10/28/21, 10/20/22, 10/19/23
Product Disclaimer	<ul style="list-style-type: none"> • If a product excludes coverage for a service, it is not covered, and medical policy criteria do not apply. • If a commercial product (including an Essential Plan or Child Health Plus product), medical policy criteria apply to the benefit. • If a Medicaid product covers a specific service, and there are no New York State Medicaid guidelines (eMedNY) criteria, medical policy criteria apply to the benefit. • If a Medicare product (including Medicare HMO-Dual Special Needs Program (DSNP) product) covers a specific service, and there is no national or local Medicare coverage decision for the service, medical policy criteria apply to the benefit. • If a Medicare HMO-Dual Special Needs Program (DSNP) product DOES NOT cover a specific service, please refer to the Medicaid Product coverage line.

POLICY STATEMENT

- I. Based upon our criteria and assessment of peer-reviewed literature, a Continuous Passive Motion (CPM) device is **medically appropriate** in the home setting following surgery under conditions of low postoperative mobility, or inability to comply with rehabilitation exercises, or during the non-weight bearing rehabilitation period for the following:
 - A. Total knee arthroplasty (TKA) or equivalent open knee surgery;
 - B. Anterior cruciate ligament (ACL) reconstruction;
 - C. Open reduction and internal fixation (ORIF) of tibial plateau or distal femur fractures involving the knee joint; or
 - D. Surgical release of arthrofibrosis/adhesive capsulitis or manipulation under anesthesia of the knee until the member is participating in an active physical therapy (PT) program.
- II. Use of the CPM device beyond 21 days post-operatively or 21 days after manipulation under anesthesia is not supported by the medical literature, as it does not improve patient outcomes, and is considered **not medically necessary**.
- III. CPM as an adjunct to conventional physical therapy for any other indication (e.g., rotator cuff, metacarpophalangeal or temporomandibular joint) has not been medically proven to be effective and is considered **not medically necessary**.
- IV. CPM using stationary cycling (e.g., ROMTech PortableConnect Adaptive Telemed Technology) as an adjunct to conventional physical therapy has not been medically proven to be effective and is considered **not medically necessary**.

POLICY GUIDELINES

- I. Contractual coverage of durable medical equipment is required.

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II. The CPM device is only allowable for up to 21 days if the patient is compliant with the regimen.

DESCRIPTION

The restoration of joint ROM following surgery or trauma is dependent upon rehabilitation. Delay in rehabilitation may subsequently result in poor joint function or immobility. Passive motion, a treatment component of joint rehabilitation, may be performed by a physical therapist or accomplished with a CPM device. The device moves the joint (e.g., flexion, extension) without patient assistance, continuously. The device is held in place across the affected joint by Velcro straps. An electrical power unit is used to set the variable ROM and speed.

To some extent, CPM devices and physical therapists are interchangeable means of delivering passive motion. The preference for one or the other mode of delivery may be determined by considerations related to the organization of services or resource allocation (e.g., staffing, timing of discharge, patient access to physical therapy). Such use of a CPM device as a substitute for a physical therapist for delivering passive motion should be distinguished from use of the device as an adjunct to physical therapy, in which the objective is to increase the duration and intensity of passive motion in order to achieve outcomes superior to that achieved by conventional physical therapy programs.

Stationary cycling devices allow for therapeutic movement to begin within one day of surgery. Treatment plans utilizing these devices include three (3) to five (5) home therapy sessions per day for three (3) to six (6) weeks. The telemedicine capabilities of the device allow for monitoring of the patient’s progress by the physician during rehabilitation after knee surgery.

A variety of CPM devices are available.

RATIONALE

There is inconsistency in the published studies on the use of the CPM device. While some studies demonstrate no benefit beyond that of conventional physical therapy, others find that use of CPM is effective. There is evidence in the published studies that CPM as an adjunct to standard physical therapy used immediately following total knee arthroplasty (TKA), anterior cruciate ligament (ACL) reconstruction, and open reduction and internal fixation (ORIF) of tibial plateau or distal femur fracture involving the knee joint does improve net health outcomes beyond the benefit of physical therapy alone. Studies of postoperative use of CPM for other procedures (e.g., rotator cuff repair, metacarpophalangeal joint arthroplasty) and for stroke rehabilitation do not permit conclusions that the CPM device is effective.

CODES

- *Eligibility for reimbursement is based upon the benefits set forth in the member’s subscriber contract.*
- ***CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY.***
- *Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than policy updates.*
- *Code Key: Experimental/Investigational = (E/I), Not medically necessary/appropriate = (NMN).*

CPT Codes

Code	Description
No specific code(s)	

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HCPCS Codes

Code	Description
E0935	Continuous passive motion exercise device for use on the knee only

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Code	Description
E0936 (NMN)	Continuous passive motion exercise device for use other than knee

ICD10 Codes

Code	Description
M17.0-M17.9	Osteoarthritis of knee (code range)
M23.50	Chronic instability of knee, unspecified knee

REFERENCES

Bram JT et al. Use of continuous passive motion reduces rates of arthrofibrosis after anterior cruciate ligament reconstruction in a pediatric population. Orthopedics 2019;42(1):e81-e85.

*Chaudry H, and Bhandari M. Cochrane in CORR (@): Continuous passive motion following total knee arthroplasty in people with arthritis (Review). Clin Orthop Relat Res 2015 Nov;473(11):3348-54.

*De Roo PJ, et al. Passive mobilization after arthroscopic rotator cuff repair is not detrimental in the early postoperative period. Acta Orthop Belg 2015 Sep;81(3):485-92.

*Du Plessis M, et al. The effectiveness of continuous passive motion on range of motion, pain and muscle strength following rotator cuff repair: a systematic review. Clin Rehabil 2011 Apr;25(4):291-302.

*Garafalo R, et al. Effects of one month continuous passive motion after arthroscopic rotator cuff repair: results at one year follow-up of a prospective randomized study. Musculoskel Surg 2010;94(Suppl 1):S79-83.

*He ML, et al. Continuous passive motion for preventing venous thromboembolism after total knee arthroplasty. Cochrane Database Syst Rev 2014;7:CD008207.

*Herbold JA, et al. Randomized controlled trial of the effectiveness of continuous passive motion after total knee replacement. Arch Phys Med Rehabil 2014 Jul;95(7):1240-5.

*Herbold JA, et al. Effectiveness of continuous passive motion in an inpatient rehabilitation hospital after total knee replacement: a matched cohort study. PMR 2012 Oct;4(10):719-25.

Hummer E, et al. Knee joint biomechanics of patients with unilateral total knee arthroplasty during stationary cycling. J Biomech 2021 Jan 22;115:110111.

*Koulalis D, et al. Autologous chondrocyte transplantation for osteochondritis dissecans of the talus. Clin Orthop 2002 Feb;(395):186-92.

*Lenssen AF, et al. Continuous passive motion following primary total knee arthroplasty: short-and long-term effects on range of motion. Phys Ther Rev 2003;8:113-21.

*Maloney GE, et al. Effect of a passive jaw motion device on pain and range of motion in TMD patients not responding to flat plane intraoral appliances. Cranio 2002 Jan;20(1):55-66.

*Milne S, et al. Continuous passive motion following total knee arthroplasty. Cochrane Database of Syst Rev 2003;(2):CD004260.

*Nuyens G, et al. Reduction of spastic hypertonia during repeated passive knee movements in stroke patients. Arch Phys Med Rehabil 2002 Jul;83(7):930-5.

Sattler, LN, et al. Pedaling-based protocol superior to a 10-exercise, non-pedaling protocol for postoperative rehabilitation after total knee replacement: a randomized controlled trial. J Bone Joint Surg Am 2019 Apr 17;101(8):688-695.

*Key Article

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KEY WORDS

Continuous passive motion, CPM, knee.

CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS

There is currently no National Coverage Determination (NCD) or Local Coverage Determination (LCD) for Continuous Passive Motion Devices. Please refer to NCD# 280.1 for the Durable Medical Equipment Reference List website for Medicare Members: [[http://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=190&ncdver=2&NCAId=8&ver=7&NcaName=Augmentative+and+Alternative+Communication+\(AAC\)+Devices+for+Speech+Impairment&bc=ACAAAAAIAAA&](http://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=190&ncdver=2&NCAId=8&ver=7&NcaName=Augmentative+and+Alternative+Communication+(AAC)+Devices+for+Speech+Impairment&bc=ACAAAAAIAAA&)] accessed 09/05/23.