Continuous Passive Motion (CPM)

Policy # 00020
Original Effective Date: 05/26/1993
Current Effective Date: 12/20/2017

Applies to all products administered or underwritten by Blue Cross and Blue Shield of Louisiana and its subsidiary, HMO Louisiana, Inc.(collectively referred to as the "Company"), unless otherwise provided in the applicable contract. Medical technology is constantly evolving, and we reserve the right to review and update Medical Policy periodically.

Note: Dynamic Range of Motion Devices is addressed in medical policy 00193.

When Services May Be Eligible for Coverage
Coverage for eligible medical treatments or procedures, drugs, devices or biological products may be provided only if:

- *Benefits are available in the member's contract/certificate, and*
- *Medical necessity criteria and guidelines are met.*

Based on review of available data, the Company may consider the use of continuous passive motion (CPM) to be **eligible for coverage**.

Patient Selection Criteria
The use of continuous passive motion (CPM) will be considered for coverage when all of the following criteria are met:

- Continuous passive motion (CPM) is initiated within the first 48 hours following surgery; and
- Continuous passive motion (CPM) is for one of the following clinical indications:
    - Post-operative rehabilitation following major joint reconstruction and/or revision of the hip, shoulder, elbow, wrist or knee; or
    - Treatment of adhesive capsulitis, or to prevent recurrence.

When Services Are Considered Investigational
Coverage is not available for investigational medical treatments or procedures, drugs, devices or biological products.

Based on review of available data, the Company considers continuous passive motion (CPM) when patient selection criteria are not met to be **investigational.***

The use of continuous passive motion (CPM) for primary or adjunct therapeutic applications other than those listed in the patient selection criteria is considered **investigational.*** This includes, but is not limited to, use in the ankle, temporomandibular joint (TMJ), toes, treatment of degenerative joint disease or treatment of chronic contractures.

Continuous passive motion (CPM) is considered to be **investigational*** for use longer than 21 days from the date of first application.

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Background/Overview

CPM devices are utilized to keep a joint in motion without patient assistance. CPM is being evaluated for treatment and postsurgical rehabilitation of the upper and lower limb joints and for a variety of musculoskeletal conditions.

Physical therapy of joints following surgery focuses both on passive motion to restore mobility and active exercises to restore strength. While passive motion can be administered by a therapist, more commonly, CPM devices are used. CPM is thought to improve recovery by stimulating the healing of articular tissues and circulation of synovial fluid, reduce local edema, and prevent adhesions; joint stiffness or contractures; or cartilage degeneration. CPM has been most thoroughly investigated in the knee, particularly after total knee arthroplasty (TKA) or ligamentous repair, but its acceptance in the knee joint has created interest in extrapolating this experience to other weight-bearing joints (i.e., hip, ankle, metatarsals) and non-weight-bearing joints (i.e., shoulder, elbow, metacarpals, and interphalangeal joints). Use of CPM in stroke and burn patients is also being explored.

The device moves the joint (e.g., flexion/extension), without patient assistance, continuously for extended periods of time, i.e., up to 24 hours/day. An electrical power unit is used to set the variable range of motion (ROM) and speed. The initial settings for ROM are based on a patient's level of comfort and other factors that are assessed intra-operatively. The ROM is increased by three to five degrees per day, as tolerated. The speed and ROM can be varied, depending on joint stability. The use of the devices may be initiated in the immediate postoperative period, and then continued at home for a variable period of time.

FDA or Other Governmental Regulatory Approval

U.S. Food and Drug Administration (FDA)
CPM machines are considered Class II devices and are generally approved through the 510(k) process.

Centers for Medicare and Medicaid Services (CMS)
Medicare National Coverage Determinations (NCD)-Durable Medical Equipment Reference List (280.1) Manual 100-3 "Continuous passive motion devices are devices covered for patients who have received a total knee replacement. To qualify for coverage, use of the device must commence within two days following surgery. In addition, coverage is limited to that portion of the three week period following surgery during which the device is used in the patient's home. There is insufficient evidence to justify coverage of these devices for longer periods of time or for other applications."

Rationale/Source

This medical policy was developed through consideration of peer-reviewed medical literature generally recognized by the relevant medical community, U.S. FDA approval status, nationally accepted standards of medical practice and accepted standards of medical practice in this community, Blue Cross and Blue Shield Association technology assessment program (TEC) and other non-affiliated technology evaluation centers, reference to federal regulations, other plan medical policies, and accredited national guidelines.

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References

1. Blue Cross and Blue Shield Association, 1997 TEC Assessment, Tab 20. Continuous Passive Motion as an Adjunct to Physical Therapy for Joint Rehabilitation.
2. Blue Cross and Blue Shield Association, Medical Policy Reference Manual, "Continuous Passive Motion in the Home Setting", 1.01.10, 5:2017.
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Policy History

Original Effective Date: 05/26/1993
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08/16/2001	Medical Policy Committee review
08/27/2001	Managed Care Advisory Council approval
06/24/2002	Format revision. No substance change to policy.
02/20/2003	Medical Policy Committee review
04/14/2003	Managed Care Advisory Council approval
06/01/2004	Medical Director review
06/15/2004	Medical Policy Committee review
06/28/2004	Managed Care Advisory Council approval
03/01/2005	Medical Director review
03/15/2005	Medical Policy Committee review
04/04/2005	Managed Care Advisory Council approval

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04/05/2006	Medical Director review
05/17/2006	Medical Policy Committee approval. Format revision, including addition of FDA and or other governmental regulatory approval and rationale/source. Patient Selection criteria revised to correct redundant criterion. Coverage eligibility unchanged.
05/02/2007	Medical Director review
05/23/2007	Medical Policy Committee approval. Coverage eligibility unchanged. Rationale revised.
06/13/2007	Medical Director review
06/20/2007	Medical Policy Committee approval. Rationale updated. Coverage eligibility unchanged.
10/01/2008	Medical Director review
10/22/2008	Medical Policy Committee approval. No change to coverage eligibility.
10/01/2009	Medical Policy Committee approval
10/14/2009	Medical Policy Implementation Committee approval. No change to coverage eligibility.
10/14/2010	Medical Policy Committee review
10/20/2010	Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
10/06/2011	Medical Policy Committee review
10/19/2011	Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
12/06/2012	Medical Policy Committee review
12/19/2012	Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
12/12/2013	Medical Policy Committee review
12/18/2013	Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
12/04/2014	Medical Policy Committee review
12/17/2014	Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
02/18/2015	Coding update.
12/03/2015	Medical Policy Committee review
12/16/2015	Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
12/01/2016	Medical Policy Committee review
12/21/2016	Medical Policy Implementation Committee approval. Coverage eligibility unchanged.
01/01/2017	Coding update: Removing ICD-9 Diagnosis Codes
12/07/2017	Medical Policy Committee review
12/20/2017	Medical Policy Implementation Committee approval. No change to coverage.

Next Scheduled Review Date: 12/2018

Coding

The five character codes included in the Blue Cross Blue Shield of Louisiana Medical Policy Coverage Guidelines are obtained from Current Procedural Terminology (CPT®)‡, copyright 2016 by the American Medical Association (AMA). CPT is developed by the AMA as a listing of descriptive terms and five character identifying codes and modifiers for reporting medical services and procedures performed by physician.

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Blue Cross Blue Shield of Louisiana Medical Policy Coverage Guidelines should refer to the most current Current Procedural Terminology which contains the complete and most current listing of CPT codes and descriptive terms. Applicable FARS/DFARS apply.

CPT is a registered trademark of the American Medical Association.

Codes used to identify services associated with this policy may include (but may not be limited to) the following:

Code Type	Code			
CPT	No codes			
HCPCS	E0935, E0936			
ICD-10 Diagnosis	M12.561-M12.569	M15.0-M15.9	M16.0-M16.12	M17.0-M17.12
	M17.9	M18.0-M18.12	M19.011-M19.079	M19.111-M19.119
	M19.131-M19.139	M19.211-M19.219	M19.231-M19.239	M19.90-M19.93
	M23.50	M24.10	M24.111-M24.176	M24.30
	M24.311-M24.376	M25.161-M25.169	M25.731-M25.739	M25.741-M25.749
	M25.751-M25.759	M25.761-M26.769	M25.771-M25.776	M25.861-M25.869
	M70.10-M70.12	M70.040-M70.042	M70.50-M70.52	M70.60-M70.62
	M70.70-M70.72	M75.00-M75.02	M76.00-M76.9	M77.20-M77.22
	M77.40-M77.42	M77.8	M93.20	M93.211-M93.29
	S72.401A-S72.401C	S72.402A-S72.402C	S72.409A-S72.409C	S72.411A-S72.411C
	S72.412A-S72.412C	S72.413A-S72.413C	S72.414A-S72.414C	S72.415A-S72.415C
	S72.416A-S72.416C	S72.421A-S72.421C	S72.422A-S72.422C	S72.423A-S72.423C
	S72.424A-S72.424C	S72.425A-S72.425C	S72.426A-S72.426C	S72.431A-S72.431C
	S72.432A-S72.432C	S72.433A-S72.433C	S72.434A-S72.434C	S72.435A-S72.435C
	S72.436A-S72.436C	S72.441A-S72.441C	S72.442A-S72.442C	S72.443A-S72.443C
	S72.444A-S72.444C	S72.445A-S72.445C	S72.446A-S72.446C	S72.451A-S72.451C
	S72.452A-S72.452C	S72.453A-S72.453C	S72.454A-S72.454C	S72.455A-S72.455C
	S72.456A-S72.456C	S72.461A-S72.461C	S72.462A-S72.462C	S72.463A-S72.463C
	S72.464A-S72.464C	S72.465A-S72.465C	S72.466A-S72.466C	S72.471A
	S72.472A	S72.479A	S72.491A-S72.491C	S72.492A-S72.493C
	S72.499A-S72.499C	S79.101A	S79.102A	S79.109A
	S79.111A	S79.112A	S79.119A	S79.121A
	S79.122A	S79.129A	S79.131A	S79.132A
	S79.139A	S79.141A	S79.142A	S79.149A
	S79.191A	S79.192A	S79.199A	S82.001A-S82.001C
	S82.002A-S82.002C	S82.009A-S82.009C	S82.011A-S82.011C	S82.012A-S82.012C
	S82.013A-S82.013C	S82.014A-S82.014C	S82.015A-S82.015C	S82.016A-S82.016C
	S82.021A-S82.021C	S82.022A-S82.022C	S82.023A-S82.023C	S82.024A-S82.024C

	S82.025A-S82.025C	S82.026A-S82.026C	S82.031A-S82.031C	S82.032A-S82.032C
	S82.033A-S82.033C	S82.034A-S82.034C	S82.035A-S82.035C	S82.036A-S82.036C
	S82.041A-S82.041C	S82.042A-S82.042C	S82.043A-S82.043C	S82.044A-S82.044C
	S82.045A-S82.045C	S82.046A-S82.046C	S82.091A-S82.091C	S82.092A-S82.092C
	S82.099A-S82.099C	S82.101A-S82.101C	S82.102A-S82.102C	S82.109A-S82.109C
	S82.111A-S82.111C	S82.112A-S82.112C	S82.113A-S82.113C	S82.114A-S82.114C
	S82.115A-S82.115C	S82.116A-S82.116C	S82.121A-S82.121C	S82.122A-S82.122C
	S82.123A-S82.123C	S82.124A-S82.124C	S82.125A-S82.125C	S82.126A-S82.126C
	S82.131A-S82.131C	S82.132A-S82.132C	S82.133A-S82.133C	S82.134A-S82.134C
	S82.135A-S82.135C	S82.136A-S82.136C	S82.141A-S82.141C	S82.142A-S82.142C
	S82.143A-S82.143C	S82.144A-S82.144C	S82.145A-S82.145C	S82.146A-S82.146C
	S82.151A-S82.151C	S82.152A-S82.152C	S82.153A-S82.153C	S82.154A-S82.154C
	S82.155A-S82.155C	S82.156A-S82.156C	S82.191A-S82.191A	S82.192A-S82.192C
	S82199A-S82.199C	S86.001A	S86.002S	S86.009A
	S86.091A	S86.092A	S86.099A	S86.101A
	S86.102A	S86.109A	S86.191A	S86.192A
	S86.199A	S86.201A	S86.202A	S86.209A
	S86.291A	S86.292A	S86.299A	S86.301A
	S86.302A	S86.309A	S86.391A	S86.392A
	S86.399A	S86.801A	S86.802A	S86.809A
	S86.891A	S86.892A	S86.899A	S86.901A
	S86.902A	S86.909A	S86.991A	S86.992A
	S86.999A	S89.001A	S89.002A	S89.009A
	S89.011A	S89.012A	S89.019A	S89.021A
	S89.022A	S89.029A	S89.031A	S89.032A
	S89.039A	S89.041A	S89.042A	S89.049A
	S89.091A	S89.092A	S89.099A	S89.80XA
	S89.81XA	S89.82XA	S89.90XA	S89.91XA
	S89.92XA	S96.001A	S96.002A	S96.009A
	S96.091A	S96.092A	S96.099A	S96.101A
	S96.102A	S96.109A	S96.191A	S96.192A
	S96.199A	S96.201A	S96.202A	S96.209A
	S96.291A	S96.292A	S96.299A	S96.801A
	S96.802A	S96.809A	S96.891A	S96.892A
	S96.899A	S96.901A	S96.902A	S96.909A
	S96.991A	S96.992A	S96.999A	S99.811A
	S99.812A	S99.819A	S99.821A	S99.822A

	S99.829A	S99.911A	S99.912A	S99.919A
	S99.921A	S99.922A	S99.929A	Z47.1
	Z96.651	Z96.652	Z96.653	Z96.659

*****Investigational – A medical treatment, procedure, drug, device, or biological product is Investigational if the effectiveness has not been clearly tested and it has not been incorporated into standard medical practice. Any determination we make that a medical treatment, procedure, drug, device, or biological product is Investigational will be based on a consideration of the following:

A. Whether the medical treatment, procedure, drug, device, or biological product can be lawfully marketed without approval of the U.S. FDA and whether such approval has been granted at the time the medical treatment, procedure, drug, device, or biological product is sought to be furnished; or
B. Whether the medical treatment, procedure, drug, device, or biological product requires further studies or clinical trials to determine its maximum tolerated dose, toxicity, safety, effectiveness, or effectiveness as compared with the standard means of treatment or diagnosis, must improve health outcomes, according to the consensus of opinion among experts as shown by reliable evidence, including:
    1. Consultation with the Blue Cross and Blue Shield Association technology assessment program (TEC) or other nonaffiliated technology evaluation center(s);
    2. Credible scientific evidence published in peer-reviewed medical literature generally recognized by the relevant medical community; or
    3. Reference to federal regulations.

**Medically Necessary (or “Medical Necessity”) - Health care services, treatment, procedures, equipment, drugs, devices, items or supplies that a Provider, exercising prudent clinical judgment, would provide to a patient for the purpose of preventing, evaluating, diagnosing or treating an illness, injury, disease or its symptoms, and that are:

A. In accordance with nationally accepted standards of medical practice;
B. Clinically appropriate, in terms of type, frequency, extent, level of care, site and duration, and considered effective for the patient's illness, injury or disease; and
C. Not primarily for the personal comfort or convenience of the patient, physician or other health care provider, and not more costly than an alternative service or sequence of services at least as likely to produce equivalent therapeutic or diagnostic results as to the diagnosis or treatment of that patient's illness, injury or disease.

For these purposes, “nationally accepted standards of medical practice” means standards that are based on credible scientific evidence published in peer-reviewed medical literature generally recognized by the relevant medical community, Physician Specialty Society recommendations and the views of Physicians practicing in relevant clinical areas and any other relevant factors.

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