

Medical Coverage Policy | Constraint-Induced Movement Therapy



EFFECTIVE DATE: 03 | 16 | 2010
POLICY LAST UPDATED: 03 | 01 | 2023

OVERVIEW

Constraint-induced movement therapy (CIMT), also known as forced use movement therapy, is a form of intensive physical therapy aimed at reorganizing and reprogramming the brain after a stroke, traumatic brain injury, spinal cord damage, or neuromotor disorder.

MEDICAL CRITERIA

Not applicable

PRIOR AUTHORIZATION

Not applicable

POLICY STATEMENT

Medicare Advantage Plans

Constraint-induced movement therapy is not covered for any indication, as the evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Commercial Products

Constraint-induced movement therapy is considered not medically necessary for any indication, as the evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

COVERAGE

Benefits may vary between groups/contracts. Please refer to the appropriate section of the Benefit Booklet, Evidence of Coverage or Subscriber Agreement for services not medically necessary.

BACKGROUND

Constraint-induced movement therapy (CIMT), also known as forced use movement therapy, is a form of intensive physical therapy aimed at reorganizing and reprogramming the brain after a stroke, traumatic brain injury, spinal cord damage, or neuromotor disorder.

CIMT developed out of behavioral research on the phenomenon of “learned nonuse” of an upper extremity, commonly observed following sensory and/or motor central nervous system (CNS) injury, in which failure to regain use persists even after a period of partial recovery. CIMT includes three key elements: (1) constraining the use of the less-impaired upper extremity (UE); (2) intensive, repetitive daily therapist-directed practice of motor movements with the impaired UE for an extended period (2-3 weeks); and (3) shaping of more complex action patterns through a process of rewarding successive approximations to the target action.

Numerous case studies, as well as a small number of randomized or controlled clinical trials have reported substantial gains in functional use of the hemiplegic UE following CIMT with children. Protocols vary widely in terms of type of constraint used, intensity and duration of training, and outcome measures.

High-quality research is required to sufficiently support the use of CIMT on patients following a stroke, traumatic brain injury, or spinal cord injury. Because the methods and outcomes used are inconsistent among

clinical trials, it has not been proven which techniques, if any, are clinically useful. Further studies are needed to find out the optimal treatment protocols for CIMT.

CODING

Medicare Advantage and Commercial Products

There are no specific code(s) for this service. To report, use the unlisted physical medicine code:

97799 Unlisted physical medicine/rehabilitation service or procedure

Please Note: It is incorrect to file this service with other or Physical Medicine and Rehabilitation codes.

RELATED POLICIES

Unlisted Procedures

PUBLISHED

Provider Update, May 2023

Provider Update, May 2022

Provider Update, April 2021

Provider Update, May 2020

Provider Update, June 2019

REFERENCES

1. Steven L. Wolf, PhD, et al. JAMA. 2006;296:2095-2104. Effect of Constraint-Induced Movement Therapy on Upper Extremity Function 3 to 9 Months After Stroke. The EXCITE Randomized Clinical Trial. <http://jama.ama-assn.org/cgi/content/abstract/296/17/2095>
2. Hoare BJ, Wasiak J, Imms C, Carey L. Constraint-induced movement therapy in the treatment of the upper limb in children with hemiplegic cerebral palsy. Cochrane Database of Systematic Reviews 2007, Issue 2. Art. No.: CD004149. DOI: 10.1002/14651858.CD004149.pub2
3. Sirtori V, Corbetta D, Moja L, Gatti R. Cochrane Database Syst Rev. 2009 Oct 7;(4):CD004433. Constraint-induced movement therapy for upper extremities in stroke patients. http://www.ncbi.nlm.nih.gov/pubmed/19821326?itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVDocSum&ordinalpos=14
4. DeLuca, SC, Echols, K, Landesman Ramey, S., Taub, E. Physical Therapy, Vol 83, Number 11, November 2003. Pediatric Constraint-Induced Movement Therapy for a Young Child with Cerebral Palsy: Two Episodes of Care.
5. AU Sung IY; Ryu JS; Pyun SB; Yoo SD; Song WH; Park MJ. Efficacy of forced-use therapy in hemiplegic cerebral palsy. Arch Phys Med Rehabil. 2005 Nov; 86(11):2195-8.
6. Singh P, Pradhan B. Study to assess the effectiveness of modified constraint-induced movement therapy in stroke subjects: A randomized controlled trial. Ann Indian Acad Neurol. 2013 Apr; 16(2):180-4.
7. Peurala SH, Kantanen MP, Sjögren T, Paltamaa J, Karhula M, Heinonen A. Effectiveness of constraint induced movement therapy on activity and participation after stroke: a systematic review and metaanalysis of randomized controlled trials. Clin Rehabil. 2012 Mar;26(3):209-23.
8. Hoare BJ Wasiak J, Imms C, Carey Constraint-induced movement therapy in the treatment of the upper limb in children with hemiplegic cerebral palsy.: <http://www.ncbi.nlm.nih.gov/pubmed/17443542>
9. Brady K, Garcia T Constraint-induced movement therapy (CIMT): pediatric applications: <http://www.ncbi.nlm.nih.gov/pubmed/19489088>
10. Chen YP, et al. Effectiveness of constraint-induced movement therapy on upper-extremity function in children with cerebral palsy: a systematic review and meta-analysis of randomized controlled trials. Clin Rehabil 2014 Oct; 28(10):939-53
11. Eliasson AC, et al; European network for Health Technology Assessment (EUnetHTA). Guidelines for future research in constraint-induced movement therapy for children with unilateral cerebral palsy: an expert consensus. Dev Med Child Neurol 2014 Feb; 56(2):125-37
12. Fleet A, et al. Modified constraint-induced movement therapy for upper extremity recovery post stroke: what is the evidence? Top Stroke Rehabil 2014 Jul-Aug; 21(4):319-31.

CLICK THE ENVELOPE ICON BELOW TO SUBMIT COMMENTS

This medical policy is made available to you for informational purposes only. It is not a guarantee of payment or a substitute for your medical judgment in the treatment of your patients. Benefits and eligibility are determined by the member's subscriber agreement or member certificate and/or the employer agreement, and those documents will supersede the provisions of this medical policy. For information on member-specific benefits, call the provider call center. If you provide services to a member which are determined to not be medically necessary (or in some cases medically necessary services which are non-covered benefits), you may not charge the member for the services unless you have informed the member and they have agreed in writing in advance to continue with the treatment at their own expense. Please refer to your participation agreement(s) for the applicable provisions. This policy is current at the time of publication; however, medical practices, technology, and knowledge are constantly changing. BCBSRI reserves the right to review and revise this policy for any reason and at any time, with or without notice. Blue Cross & Blue Shield of Rhode Island is an independent licensee of the Blue Cross and Blue Shield Association.

