



## NHS MEDICAL POLICY

### Dynamic Splinting DME 2014-009

Dynamic Splinting may be indicated when **ALL** of the following are present:

1	The dynamic splint will be used in one of the following joints: knee, elbow, wrist, ankle, finger, or toe.
2	The dynamic splint will be used in the sub-acute period, at least 3 weeks after injury or surgery to that joint.
3	The affected joint does not have a chronic contracture, defined as no significant change in joint motion for a 4-month period.
4	The member has engaged in physical or occupational therapy, which has not resulted in adequate functional improvement. The dynamic splint will be used as an adjunct to physical or occupational therapy.
5	The ordering provider has documented persistent symptoms of stiffness or motion loss in the affected joint since injury or surgery with significant functional impairment.
6	The ordering provider has documented physical examination findings of persistent stiffness or motion loss in the affected joint since injury or surgery with significant functional impairment.
7	The dynamic splint may be approved for up to 4 months of use.

### SOURCES

1. Berner SH, Willis FB. Dynamic splinting in wrist extension following distal radius fractures. J Orthop Surg Res. 2010; 5:53.
2. Farmer SE, Woollam PJ, Patrick JH, et al. Dynamic orthoses in the management of joint contracture. J Bone Joint Surg Br. 2005;87(3):291-295.

3. Halar EM, Bell KR. Contracture and other deleterious effects of immobility. In: *Rehabilitation Medicine: Principles and Practice*. 2nd ed. JA DeLisa, ed. Philadelphia, PA: J.B. Lippincott Co.; 1993; Ch. 33: 681-699.
4. Harvey L, Herbert R, Crosbie J. Does stretching induce lasting increases in joint ROM? A systematic review. *Physiother Res Int*. 2002;7(1):1-13.
5. Hepburn GR, Crivelli KJ. Use of elbow Dynasplint for reduction of elbow flexion contractures: A case study. *J Orthop Sports Phys Ther*. 1984;5(5):269-274.
6. Hewitt B, Shakespeare D. Flexion vs. extension: A comparison of post-operative total knee arthroplasty mobilisation regimes. *Knee*. 2001;8(4):305-309.
7. Jansen CM, Windau JE, Bonutti PM, et al. Treatment of a knee contracture using a knee orthosis incorporating stress-relaxation techniques. *Phys Ther*. 1996;76(2):182-186.
8. Kitis A, Ozcan RH, Bagdatli D, et al. Comparison of static and dynamic splinting regimens for extensor tendon repairs in zones V to VII. *J Plast Surg Hand Surg*. 2012;46(3-4):267-271.
9. Lucado AM, Li Z. Static progressive splinting to improve wrist stiffness after distal radius fracture: A prospective, case series study. *Physiother Theory Pract*. 2009;25:297-309.
10. Mackay-Lyons M. Low-load, prolonged stretch in treatment of elbow flexion contractures secondary to head trauma: A case report. *Phys Ther*. 1989;69(4):292-296.
11. McClure PW, Blackburn LG, Dusold C. The use of splints in the treatment of joint stiffness: Biologic rationale and an algorithm for making clinical decisions. *Phys Ther*. 1994;74(12):1101-1107.
12. McGrath MS, Ulrich SD, Bonutti PM, et al. Evaluation of static progressive stretch for the treatment of wrist stiffness. *J Hand Surg Am*. 2008;33(9):1498-1504.
13. Neuhaus V, Wong G, Russo KE, Mudgal CS. Dynamic splinting with early motion following zone IV/V and TI to TIII extensor tendon repairs. *J Hand Surg Am*. 2012;37(5):933-937.
14. Postans N, Wright P, Bromwich W, et al. The combined effect of dynamic splinting and neuromuscular electrical stimulation in reducing wrist and elbow contractures in six children with cerebral palsy. *Prosthet Orthot Int*. 2010;34(1):10-19.
15. Richard RL. Use of the Dynasplint to correct elbow flexion burn contracture: A case report. *J Burn Care Rehabil*. 1986;7(2):151-152.
16. Rose KJ, Burns J, Wheeler DM, North KN. Interventions for increasing ankle range of motion in patients with neuromuscular disease. *Cochrane Database Syst Rev*. 2010;(2):CD006973.
17. Sackley C, Disler PB, Turner-Stokes L, et al. Rehabilitation interventions for foot drop in neuromuscular disease. *Cochrane Database Syst Rev*. 2009;(3):CD003908.
18. Sameem M, Wood T, Ignacy T, et al. A systematic review of rehabilitation protocols after surgical repair of the extensor tendons in zones V-VIII of the hand. *J Hand Ther*. 2011;24(4):365-372.
19. Steffen TM, Mollinger LA. Low-load, prolonged stretch in the treatment of knee flexion contractures in nursing home residents. *Phys Ther*. 1995;75(10):886-897.
20. UpToDate.com was accessed Oct 10, 2014.
21. Furia JP, Willis FB, Shanmugam R, Curran SA. Systematic review of contracture reduction in the lower extremity with dynamic splinting. *Advances in Therapy* 2013;30(8):763-70.
22. Milliman Care Guidelines, 21<sup>st</sup> edition, accessed Aug 9, 2017: Dynamic Joint Extension and Flexion Devices (A-0882).

**CODE REFERENCE** (This may not be a comprehensive list of codes to apply to this policy.)

E 1800, E 1810, E 1825, E 1830, E 1831, L3766, L 3905

Proprietary and Confidential

## POLICY HISTORY/REVISION INFORMATION

Date	Action/Description
09/25/2015	Annual review and approval by UM Committee
03/18/2016	Updated: length of use, references and additional code
06/16/2016	Added Line #7 and Code: L 3905
03/16/2017	Added Code: L3766
09/12/2017	Added “ankle” to item 1; “ordering” to items 5 & 6; under Sources added lines 21 & 22
09/12/2018	Annual review and approval by UM Committee
09/12/2019	Annual review and approval by UM Committee
09/10/2020	Annual review and approval by UM Committee
09/10/2021	Annual review and approval by UM Committee
09/19/2022	Annual review and approval by UM Committee
08/23/2023	Annual review and approval by UM/QM Committee
08/23/2024	Annual review and approval by UM/QM Committee