

Blue Cross Blue Shield of Massachusetts is an Independent Licenses of the Blue Cross and Blue Shield Association

# Medical Policy Hippotherapy

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**Policy Number: 560** 

BCBSA Reference Number: 8.03.12 (For Plan internal use only)

NCD/LCD: N/A

#### **Related Policies**

None

# **Policy**

Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO Blue<sup>SM</sup> and Medicare PPO Blue<sup>SM</sup> Members

Hippotherapy is considered **INVESTIGATIONAL**.

#### **Prior Authorization Information**

#### Inpatient

 For services described in this policy, precertification/preauthorization <u>IS REQUIRED</u> for all products if the procedure is performed **inpatient**.

### Outpatient

For services described in this policy, see below for products where prior authorization <u>might be</u>
 required if the procedure is performed <u>outpatient</u>.

	Outpatient
Commercial Managed Care (HMO and POS)	This is <b>not</b> a covered service.
Commercial PPO and Indemnity	This is <b>not</b> a covered service.
Medicare HMO Blue <sup>SM</sup>	This is <b>not</b> a covered service.
Medicare PPO Blue <sup>SM</sup>	This is <b>not</b> a covered service.

### **CPT Codes / HCPCS Codes / ICD Codes**

Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

The following HCPCS code is considered investigational for <u>Commercial Members: Managed Care</u> (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:

### **HCPCS Codes**

HCPCS	
codes:	Code Description
S8940	Equestrian/hippotherapy, per session

# **Description**

### **Hippotherapy**

Hippotherapy has been proposed as a technique to decrease the energy requirements and improve walking in patients with cerebral palsy. It is thought that the natural swaying motion of the horse induces a pelvic movement in the rider that simulates human ambulation. Also, variations in the horse's movements can prompt natural equilibrium movements in the rider. Hippotherapy is also being evaluated in patients with multiple sclerosis and other causes of gait disorders, such as strokes.

As a therapeutic intervention, hippotherapy is typically conducted by a physical or occupational therapist and is aimed at improving impaired body function. Therapeutic horseback riding is typically conducted by riding instructors and is more frequently intended as social therapy. It is hoped that the multisensory environment may benefit children with profound social and communication deficits, such as autism spectrum disorder and schizophrenia. When considered together, hippotherapy and therapeutic riding are described as equine-assisted activities and therapies.

This evidence review addresses equine-assisted activities that focus on improving physical functions such as balance and gait.

# **Summary**

Hippotherapy, also referred to as equine-assisted therapy, describes a treatment strategy that uses equine movement to engage sensory, neuromotor, and cognitive systems to achieve functional outcomes. Hippotherapy has been proposed as a therapy for individuals with impaired walking or balance.

#### **Summary of Evidence**

For individuals who have cerebral palsy, multiple sclerosis, stroke, or gait and balance disorders other than cerebral palsy, multiple sclerosis, and stroke who receive hippotherapy, the evidence includes systematic reviews, randomized trials, and case series. Relevant outcomes include symptoms and functional outcomes. Studies in cerebral palsy, multiple sclerosis, stroke, and other indications have had variable findings. The randomized trials are generally small and have significant methodologic problems. In the largest randomized trial conducted to date (92 children), which had blinded outcome assessment, hippotherapy had no clinically significant impact on children with cerebral palsy. There are no RCTs showing that hippotherapy is superior to alternative treatments for patients with multiple sclerosis. Hippotherapy for other indications has been compared primarily with no intervention and, although some benefits have been seen, it has not been shown to be more effective than other active therapies. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

# **Policy History**

Date
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5/2024	Annual policy review. Policy updated with literature review through January 31, 2024;
	references added. Policy statements unchanged.
5/2023	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
4/2022	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
4/2021	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
5/2020	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
4/2019	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
4/2016	Annual policy review. New references added.
12/2014	Annual policy review. New references added.
11/2014	Medical policy ICD 10 remediation: Formatting, editing and coding updates.  No changes to policy statements. Language transferred from Medical Policy 178,  Complementary Medicine

# Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

Medical Policy Terms of Use

Managed Care Guidelines

Indemnity/PPO Guidelines

**Clinical Exception Process** 

Medical Technology Assessment Guidelines

#### References

- 1. Selph SS, Skelly AC, Wasson N, et al. Physical Activity and the Health of Wheelchair Users: A Systematic Review in Multiple Sclerosis, Cerebral Palsy, and Spinal Cord Injury. Number 241. Agency for Healthcare Research and Quality, US Department of Health and Human Services; 2021. Accessed January 31, 2024. https://www.ncbi.nlm.nih.gov/books/NBK574875/#ch4.s5
- 2. Qin Z, Guo Z, Wang J. Multiple Equine Therapies for the Treatment of Gross Motor Function in Children with Cerebral Palsy: A Systematic Review. J Community Health Nurs. Jan 16 2024: 1-14. PMID 38229243
- 3. Heussen N, Häusler M. Equine-Assisted Therapies for Children With Cerebral Palsy: A Meta-analysis. Pediatrics. Jul 01 2022; 150(1). PMID 35656779
- 4. Tseng SH, Chen HC, Tam KW. Systematic review and meta-analysis of the effect of equine assisted activities and therapies on gross motor outcome in children with cerebral palsy. Disabil Rehabil. Jan 2013; 35(2): 89-99. PMID 22630812
- Zadnikar M, Kastrin A. Effects of hippotherapy and therapeutic horseback riding on postural control or balance in children with cerebral palsy: a meta-analysis. Dev Med Child Neurol. Aug 2011; 53(8): 684-91. PMID 21729249
- Chinniah H, Natarajan M, Ramanathan R, et al. Effects of horse riding simulator on sitting motor function in children with spastic cerebral palsy. Physiother Res Int. Oct 2020; 25(4): e1870. PMID 32808394
- 7. Kwon JY, Chang HJ, Yi SH, et al. Effect of hippotherapy on gross motor function in children with cerebral palsy: a randomized controlled trial. J Altern Complement Med. Jan 2015; 21(1): 15-21. PMID 25551626
- 8. Davis E, Davies B, Wolfe R, et al. A randomized controlled trial of the impact of therapeutic horse riding on the quality of life, health, and function of children with cerebral palsy. Dev Med Child Neurol. Feb 2009; 51(2): 111-9; discussion 88. PMID 19191844
- 9. McGibbon NH, Benda W, Duncan BR, et al. Immediate and long-term effects of hippotherapy on symmetry of adductor muscle activity and functional ability in children with spastic cerebral palsy. Arch Phys Med Rehabil. Jun 2009; 90(6): 966-74. PMID 19480872

- Lavín-Pérez AM, Collado-Mateo D, Caña-Pino A, et al. Benefits of Equine-Assisted Therapies in People with Multiple Sclerosis: A Systematic Review. Evid Based Complement Alternat Med. 2022; 2022: 9656503. PMID 35529929
- 11. Bronson C, Brewerton K, Ong J, et al. Does hippotherapy improve balance in persons with multiple sclerosis: a systematic review. Eur J Phys Rehabil Med. Sep 2010; 46(3): 347-53. PMID 20927000
- 12. Silkwood-Sherer D, Warmbier H. Effects of hippotherapy on postural stability, in persons with multiple sclerosis: a pilot study. J Neurol Phys Ther. Jun 2007; 31(2): 77-84. PMID 17558361
- 13. Muñoz-Lasa S, Ferriero G, Valero R, et al. Effect of therapeutic horseback riding on balance and gait of people with multiple sclerosis. G Ital Med Lav Ergon. 2011; 33(4): 462-7. PMID 22452106
- 14. Frevel D, Mäurer M. Internet-based home training is capable to improve balance in multiple sclerosis: a randomized controlled trial. Eur J Phys Rehabil Med. Feb 2015; 51(1): 23-30. PMID 24755773
- 15. Lee CW, Kim SG, Yong MS. Effects of hippotherapy on recovery of gait and balance ability in patients with stroke. J Phys Ther Sci. Feb 2014; 26(2): 309-11. PMID 24648655
- 16. Bunketorp-Käll L, Pekna M, Pekny M, et al. Effects of horse-riding therapy and rhythm and music-based therapy on functional mobility in late phase after stroke. NeuroRehabilitation. Dec 18 2019; 45(4): 483-492. PMID 31868694
- 17. Çoban O, Mutluay F. The effects of mechanical hippotherapy riding on postural control, balance, and quality of life (QoL) in patients with stroke. Disabil Rehabil. Jun 11 2023: 1-10. PMID 37303153
- 18. Bunketorp Käll L, Lundgren-Nilsson Å, Blomstrand C, et al. The effects of a rhythm and music-based therapy program and therapeutic riding in late recovery phase following stroke: a study protocol for a three-armed randomized controlled trial. BMC Neurol. Nov 21 2012; 12: 141. PMID 23171380
- 19. Wood WH, Fields BE. Hippotherapy: a systematic mapping review of peer-reviewed research, 1980 to 2018. Disabil Rehabil. May 2021; 43(10): 1463-1487. PMID 31491353
- 20. Kim SG, Lee CW. The effects of hippotherapy on elderly persons' static balance and gait. J Phys Ther Sci. Jan 2014; 26(1): 25-7. PMID 24567669
- 21. Araujo TB, Silva NA, Costa JN, et al. Effect of equine-assisted therapy on the postural balance of the elderly. Rev Bras Fisioter. 2011; 15(5): 414-9. PMID 22002189
- 22. de Araújo TB, de Oliveira RJ, Martins WR, et al. Effects of hippotherapy on mobility, strength and balance in elderly. Arch Gerontol Geriatr. 2013; 56(3): 478-81. PMID 23290005
- Homnick DN, Henning KM, Swain CV, et al. Effect of therapeutic horseback riding on balance in community-dwelling older adults with balance deficits. J Altern Complement Med. Jul 2013; 19(7): 622-6. PMID 23360659
- 24. Kaya Y, Saka S, Tuncer D. Effect of hippotherapy on balance, functional mobility, and functional independence in children with Down syndrome: randomized controlled trial. Eur J Pediatr. Jul 2023; 182(7): 3147-3155. PMID 37186034
- 25. Abdel-Aziem AA, Abdelraouf OR, Ghally SA, et al. A 10-Week Program of Combined Hippotherapy and Scroth's Exercises Improves Balance and Postural Asymmetries in Adolescence Idiopathic Scoliosis: A Randomized Controlled Study. Children (Basel). Dec 30 2021; 9(1). PMID 35053648
- Silkwood-Sherer DJ, Killian CB, Long TM, et al. Hippotherapy--an intervention to habilitate balance deficits in children with movement disorders: a clinical trial. Phys Ther. May 2012; 92(5): 707-17. PMID 22247403
- 27. Giagazoglou P, Arabatzi F, Dipla K, et al. Effect of a hippotherapy intervention program on static balance and strength in adolescents with intellectual disabilities. Res Dev Disabil. 2012; 33(6): 2265-70. PMID 22853887
- 28. Lechner HE, Kakebeeke TH, Hegemann D, et al. The effect of hippotherapy on spasticity and on mental well-being of persons with spinal cord injury. Arch Phys Med Rehabil. Oct 2007; 88(10): 1241-8. PMID 17908564
- 29. American Academy of Neurology. Complementary and Alternative Medicine in Multiple Sclerosis. March 2014. https://www.aan.com/Guidelines/home/GuidelineDetail/641. Accessed January 31, 2024.
- 30. American Hippotherapy Association, Inc. Statements of best practice for the use of hippotherapy by occupational therapy, physical therapy, and speech-language pathology professionals. Revised February 2021.
  - https://www.americanhippotherapyassociation.org/assets/docs/AHA%20Statements%20of%20Best%20Practice%20February%202021.pdf. Accessed January 31, 2024.