

Standing Frames

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Introduction

Standing frames are addressed by this guideline.

Health Equity Consideration

Health equity is the highest level of health for all individuals; health inequity is the avoidable difference in health status or distribution of health resources due to the social conditions in which individuals are born, grow, live, work, and age. Social determinants of health are the conditions in the environment that affect a wide range of health, functioning, and quality of life outcomes and risks. Examples include the following: safe housing, transportation, and neighborhoods; racism, discrimination, and violence; education, job opportunities, and income; access to nutritious foods and physical activity opportunities; access to clean air and water; and language and literacy skills.

Criteria

A standing frame is considered medically necessary when there is documentation of **all** of the following:

- The individual is unable to stand due to weakness, loss of muscle tone, or decreased motor control.
- The individual is unable to walk.
- The individual is under the care of a physician trained to evaluate function, rehabilitation, and the neuromuscular system.
- The device is prescribed by the specialty trained physician for daily use in the home.
- The individual has tried the device and is able to tolerate being upright.
- The individual and/or a caregiver is able to safely operate the device.

Evidence Discussion

A 2022 retrospective cross sectional study by Barbier et al. of 24 individuals classified at Gross Motor Function Classification System (GMFCS) levels IV and V (severely limited walking ability), found that those who engaged in standing for an average of 30 minutes per day showed higher total body bone mineral content excluding the head, with similar improvements confirmed at the lumbar spine. The authors also reported that

bone resorptive markers (such as CTX) were higher among individuals who did not use a standing frame, suggesting that standing practice helped limit bone resorption while maintaining stable osteoformation factor levels. Although bone mineral density at the proximal femur and total body (less head) did not differ significantly between groups, the findings indicated a positive trend that favored regular standing. No differences were found in fracture history. Overall, the study suggested that standing frame use contributed to improved bone health profiles in non ambulatory individuals with cerebral palsy.

Dennett et al. (2020) conducted a qualitative study embedded in the Standing Up in Multiple Sclerosis (SUMS) trial to further understand the experiences of individuals with progressive multiple sclerosis and their standing frames. Of the 140 participants in the SUMS trial, 12 participants kept audio diaries of their experiences. Over the six month data collection period, the investigators reported subjective improvements in physical and psychological symptoms, which were associated with an increase in activities of daily living and engagement with previous activities. The authors noted that the subjective findings of this study complemented the objective findings related to improved motor function reported in the randomized SUMS trial.

Townsend et al. (2020) conducted a cohort study to describe stander use in non-ambulatory children with spinal muscular atrophy (SMA). The study included data from 397 children with SMA types 1 and 2. Approximately 70% of children with type 2 SMA engaged in consistent (defined as a minimum of three to five times per week) stander use. In addition, one out of 10 children with severe type 1 SMA engaged in consistent stander use, despite significant weakness requiring lower extremity bracing and trunk and head support.

Freeman et al. (2019) reported on a multicenter, randomized controlled trial (Standing Up in Multiple Sclerosis (SUMS)) which examined the effectiveness of a home-based, self-managed, standing frame program for individuals with progressive multiple sclerosis and severe mobility impairment. The study randomly assigned 140 individuals with progressive multiple sclerosis to either a standing frame (intervention) group (n=71) or a usual care group (n=69). The intervention group used the standing frame for at least 30 minutes three times per week for 20 weeks. Motor function, as assessed by the Amended Motor Club Assessment (AMCA), was measured in all participants at baseline, at 20 weeks, and at 36 weeks. The primary clinical outcome was the AMCA score at 36 weeks, and a 9-point AMCA change was considered clinically meaningful. At 36 weeks, the use of the standing frame resulted in a significant increase in AMCA score compared with that for usual care alone. The authors found that the standing frame protocol significantly increased motor function in individuals with severe progressive multiple sclerosis compared to usual care alone; however, the improvement did not reach the predetermined minimal clinically meaningful level of improvement. Moreover, the authors found evidence for improved hip and ankle joint range of motion and quality of life in the standing frame group. In summary, the authors opined that

the use of a home-based, self-managed standing frame program could improve motor function in individuals with progressive multiple sclerosis.

The 2016 National Institute for Health and Care Excellence (NICE) guidelines for spasticity management in children under 19 years of age (primarily those with cerebral palsy (CP)) endorsed the use of standing systems as part of individualized postural management. The guideline also emphasized considerations for safe and appropriate use of equipment, particularly for children with poorly controlled seizures, respiratory compromise, risk of aspiration, and risk for bone fracture due to osteoporosis.

In an update of the 2007 consensus statement by the International Conference on the Standard of Care for spinal muscular atrophy (SMA), Mercuri et al. (2018) recommended supported standing for up to 60-minute intervals at least three to five times per week, with goals including: lower extremity stretching; maintaining range of motion; promoting bodily functions, bone health, and optimal spine and trunk posture; and enabling upright participation. Moreover, the authors reported increasing evidence that a proactive approach, including regular sessions of physical therapy utilizing stretching including the use of standing frames was recommended as a comprehensive approach to rehabilitation in individuals with SMA.

Codes addressed in this guideline

The inclusion of any code in this table does not imply that the code is under management or requires prior authorization. Refer to the applicable health plan for management details. Prior authorization of a code listed in this table is not a guarantee of payment. The Certificate of Coverage or Evidence of Coverage policy outlines the terms and conditions of the member's health insurance policy.

HCPSC Codes	Description
E0637	Combination sit to stand frame/table system, any size including pediatric, with seat lift feature, with or without wheels
E0638	Standing frame/table system, one position (e.g., upright, supine or prone stander), any size including pediatric, with or without wheels
E0641	Standing frame/table system, multi-position (e.g., three-way stander), any size including pediatric, with or without wheels
E0642	Standing frame/table system, mobile (dynamic stander), any size including pediatric

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