

Walkers

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Introduction

Walkers are addressed by this guideline.

Criteria

A standard walker and related accessories (HCPCS E0130, E0135, E0141, E0143) are indicated if **both** of the following criteria are met:

- The individual needs to use a walker in the home to take care of their daily needs.
- The individual can manage the walker effectively.

Additional Criteria

- A heavy duty walker (HCPCS E0148, E0149) is covered for an individual who meet coverage criteria for a standard walker and who weighs more than 300 pounds.
- A heavy duty, multiple braking system, variable wheel resistance walker (HCPCS E0147) is covered for an individual who meets coverage criteria for a standard walker but is unable to use a standard walker due to a severe neurologic disorder or other condition causing the restricted use of one hand.
- A walker with trunk support (HCPCS E0140) is indicated for an individual who meets coverage criteria for a standard walker and needs the additional trunk support feature.
- Leg extensions (HCPCS E0158) are indicated for individuals who are six feet tall or more.

Not Covered

- Enhancement accessories for walkers are considered convenience items that do not contribute significantly to the therapeutic function of the walker. These may include, but are not limited to, style, color, seat attachments, tray attachments, baskets, or cup holders.
- Walkers with enclosed frames (HCPCS E0144) are not covered as the medical necessity compared to a standard folding wheeled walker has not been established.
- Battery-powered walkers (HCPCS E0152) do not meet the definition of durable medical equipment (DME). An example of this device includes the Sully Walker.

Definitions

- A **standard walker** may include wheels and glide-type brakes.
- A **wheeled walker** (HCPCS E0141, E0143, E0149) may include two, three, or four wheels. The wheels may be fixed or swivel. The walker may be fixed height or adjustable height, and it may or may not include glide-type brakes (or equivalent).
- A **glide-type brake** consists of a spring mechanism (or equivalent), which raises the leg post of the walker off the ground when the individual is not pushing down on the frame.
- A **walker with enclosed frame** (HCPCS E0144) is a wheeled walker that has a frame that completely surrounds the individual and an attached seat in the back.
- A **heavy duty, four-wheeled, adjustable height, folding-walker** (HCPCS E0147) includes the following characteristics:
 - The walker is capable of supporting individuals who weigh greater than 350 pounds.
 - The walker has hand-operated brakes that cause the wheels to lock when the hand levers are released.
 - The hand brakes can be set so that either or both can lock both wheels.
 - The pressure required to operate each hand brake is individually adjustable.
 - There is an additional braking mechanism on the front crossbar.
 - At least two wheels have brakes that can be independently set through tension adjustability to give varying resistance.
 - A **heavy duty walker** (HCPCS E0148, E0149) is able to support individuals who weigh more than 300 pounds. It may be fixed height or adjustable height. It may be rigid or folding.

Evidence Discussion

Medical background

The United States Food and Drug Administration (FDA) considers walkers to be Class I devices (FDA, 2001). As such, they are considered to be of low to moderate risk, and manufacturers are not required to complete premarket notifications prior to marketing the devices.

Literature review

- A 2021 retrospective observational study by Yeoh and colleagues evaluated patient satisfaction and safety when using wheeled knee walkers. Surveys were distributed to 80 adults with a history of unilateral foot or ankle surgery with non-weightbearing status and the option of using the knee walker. Primary endpoints were

occurrence and frequency of falls. Secondary endpoints were patient demographics, comorbidities, knee walker characteristics, duration of use, and patient satisfaction. The results of the study demonstrated that the majority of respondents used a four-wheeled knee walker. Moreover, 68 participants (85%) were satisfied with their knee walker. Thirty-four of the 80 respondents (43%) fell while using the knee walker; nearly two-thirds of those who fell (62%) reported multiple falls. Most respondents who fell (91%) reported satisfaction with the knee walker. There was no statistical association between falls and age, body mass index, or number of comorbidities. In conclusion, the investigators noted that, although nearly 43% of participants reported falling during knee walker use, 85% were satisfied with their knee walker experience, and therefore, the knee walker may be preferable to standard walkers and crutches for non-weightbearing after foot and ankle surgery.

- A 2023 study conducted by Lee and colleagues examined the effectiveness of a six-week gait aid training program for individuals with dementia. Twenty-four community-dwelling elderly individuals with dementia participated in four 30-minute physiotherapy home visits augmented by additional supervised practice over 12 weeks. The outcome measures included falls with gait aid use and spatiotemporal gait outcomes. Twenty-one participants (87.5%) achieved safe gait aid use. Twenty falls occurred, and a gait aid was used during one of the reported falls. Walking speed, step length, and cadence significantly improved when walking with the gait aid at week six compared with week one. No significant improvements in spatiotemporal outcomes were retained at week 12. The authors concluded that a training program may improve some spatiotemporal gait outcomes. Notably, the study reported a high level of falls when gait aids were not used. However, the authors noted that further research was needed with larger studies to investigate these findings.
- Mahoney et al. (1992) conducted a cross-over controlled trial to compare different types of walkers in measures of gait, mobility, and patient satisfaction. Fifteen Veterans with a mean age of 82 years old were evaluated with either: no walker, a two-wheeled walker, or a three-wheeled walker. Participants ambulated on a 15-foot walkway and a 60-foot obstacle course. Outcome measures included stride length on the walkway, time on the course, and walker preference. The results of the study found that stride length was 1.4 inches greater with the three-wheeled walker than with the two-wheeled walker. In addition, time on the obstacle course was 16 seconds less with the three-wheeled walker than with the two-wheeled walker. Moreover, the three-wheeled walker was subjectively preferred. Thus, the authors concluded that the three-wheeled walker appeared to have a greater positive impact on gait and mobility than the two-wheeled walker.
- Schüle et al. (2017) examined whether spatiotemporal gait parameters can be used to measure the gait stabilizing effects of a wheeled walker. One hundred six patients wore sensor-equipped shoes and passed over an instrumented walkway with and without gait support from a wheeled walker. The following gait parameters were assessed: velocity, swing time, stride length, stride time, and double support

time variability. The use of a wheeled walker improved the risk of fall-associated spatiotemporal parameters including velocity, swing time, and stride length. First-time users of wheeled walkers demonstrated similar gait parameter improvement patterns as frequent wheeled walker users. However, frequent users with higher levels of gait impairment improved more in velocity, stride length and toe off angle compared to the first time users. The authors concluded that using a wheeled walker improved the risk of falling associated gait parameters in the hospitalized geriatric patient cohort examined in the study.

- Holder et al. (1993) compared the oxygen cost, cardiovascular stress, and perception of effort of non-weightbearing ambulation using unassisted ambulation, axillary crutches, a standard walker, and a wheeled walker. Nine female physical therapists ambulated at self-selected velocities for seven minutes during each ambulation mode. Data was obtained, including oxygen consumption, heart rate, blood pressure, and ratings of perceived exertion. The VO₂ peak was defined as the highest oxygen uptake attained during the test. The results of the study demonstrated that unassisted ambulation resulted in the lowest VO₂ and greatest velocity. Results also indicated that ambulation with axillary crutches resulted in lower oxygen consumption and greater velocity than either standard or wheeled walker ambulation. No differences were observed among assisted ambulation modes for heart rate, blood pressure, and ratings of perceived exertion values. In conclusion, the authors opined that axillary crutches should be prescribed for non-weightbearing ambulation because patients typically ambulate for specific distances, and use of crutches was demonstrated to result in a lower oxygen consumption per unit distance.

Professional organizations/societies:

- The Chronic Osteoarthritis Management Initiative of the U.S. Bone and Joint Initiative (Nelson et al., 2014) reported on a systematic review of recommendations and guidelines for the management of osteoarthritis. Sixteen articles were included in the review. Walking aids (such as canes, crutches, and walkers) were recommended as needed for osteoarthritis to improve activities of daily living.
- The 2022 National Institute for Health and Care Excellence (NICE) evidence review aimed to evaluate the clinical and cost effectiveness of devices in the management of osteoarthritis in adults. The authors noted that walking aids may be used to offload a joint, to help with walking function/tolerance and balance, and to help individuals while having an osteoarthritis flare. Walking canes were compared to no device intervention for individuals with knee osteoarthritis. Outcomes were reported in two studies. The quality of outcomes ranged from moderate to very low quality, with the majority being of low quality. The authors acknowledged that there may be a benefit in using walking aids to support with balance, and thus, the use of walking aids was recommended for individuals with lower limb osteoarthritis.

Codes addressed in this guideline

HCPCS code	Description
A4636	Replacement, handgrip, cane, crutch, or walker, each
A4637	Replacement, tip, cane, crutch, walker, each
E0130	Walker, rigid (pickup), adjustable or fixed height
E0135	Walker, folding (pickup), adjustable or fixed height
E0140	Walker, with trunk support, adjustable or fixed height, any type
E0141	Walker, rigid, wheeled, adjustable or fixed height
E0143	Walker, folding, wheeled, adjustable or fixed height
E0144	Walker, enclosed, four sided framed, rigid or folding, wheeled with posterior seat
E0147	Walker, heavy duty, multiple braking system, variable wheel resistance
E0148	Walker, heavy duty, without wheels, rigid or folding, any type, each
E0149	Walker, heavy duty, wheeled, rigid or folding, any type
E0152	Walker, battery powered, wheeled, folding, adjustable or fixed height
E0154	Platform attachment, walker, each
E0155	Wheel attachment, rigid pick-up walker, per pair
E0156	Seat attachment, walker
E0157	Crutch attachment, walker, each
E0158	Leg extensions for walker, per set of four (4)
E0159	Brake attachment for wheeled walker, replacement, each

References

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