

Power operated vehicles

DME.WC.109.A

v1.0.2026

General Information

Power operated vehicles (POVs) and accessories are addressed by this guideline.

Criteria

A Power Operated Vehicle (POV) (HCPCS E1230, K0800-K0802, K0812) is considered medically necessary when **all** the following are present:

- The individual needs to use a POV in the home to take care of their daily needs.
- The individual is unable to use walkers and other less restrictive assistive devices because they are not supportive enough to enable them to take care of their daily needs.
- The individual or a caregiver is unable to safely and effectively use a manual wheelchair to take care of their daily needs due to limitations in upper extremity function and endurance.
- The individual or a caregiver can manage the POV safely and effectively.
- There is documentation of **all** of the following:
 - The individual is able to independently transfer to and from a POV.
 - The individual is able to maintain postural stability and safe positioning while operating a POV.
 - The individual is able to operate the tiller steering system.

A Group 2 POV (HCPCS K0806–K0808) which has added features designed for use outside of the home is considered medically necessary when the POV criteria above are met and the added features are needed for the individual to take care of their daily needs in a school and/or work environment.

Additional Information

One month rental of a POV (HCPCS K0462) is considered medically necessary if the individual owns a POV and it is being repaired. Payment is based on the type of replacement device that is provided but will not exceed the rental allowance for the power mobility device that is being repaired.

Group 1 and Group 2 POVs are subdivided into four (4) weight capacities:

- standard duty: up to and including 284 pounds

- heavy duty: 285 to 400 pounds
- very heavy duty: 428 to 600 pounds
- extra heavy duty: 570 pounds or more

The following items are typically included in the basic equipment package for a POV:

- batteries
- battery charger, single mode
- weight-appropriate upholstery and seating system
- tiller steering
- non-expandable controller
- complete set of tires

Additional options or modifications such as special seat cushions, back supports, or foot supports are not typically available on a POV as these features are integrated within the equipment's base and seat.

Not Covered

- The following items are not covered as they are considered not medically necessary, not primarily medical in nature, and/or convenience items:
 - A Group 2 POV designed for leisure or recreational activities
 - Any option/accessory for a POV that is used to perform leisure or recreational activities (e.g., baskets, backpacks, bags)
 - Any POV intended for use only outside the home
 - Rental or purchase of more than one wheelchair or POV at a time (backup equipment is not covered)
 - A POV provided with a separate wheelchair seat and/or back cushion (e.g., skin protection and/or positioning cushion)

Replacement of POV

- Same or similar Durable Medical Equipment
 - Duplication of the same or similar POV within the same case is considered not medically necessary.
- The anticipated reasonable useful lifetime for a POV is three (3) years
- A replacement POV is considered medically necessary when **all** of the following apply:
 - The individual has been seen recently by their provider and has a documented care plan that includes the use of POV.
 - There is clinical documentation of **any** of the following:

- The individual is no longer able to use the POV because their physical condition has changed.
- The POV has been lost or stolen.
- The POV is broken, unable to be repaired, and no longer under warranty.

Definitions

- **Mobility** refers to the ability to move about in one's environment.
- **Mobility-related activities of daily living (MRADLs, daily needs)** are activities required for personal care including toileting, feeding, dressing, grooming, and bathing in customary locations within the home.
- A **Power Mobility Device (PMD)** includes both integral frame and modular construction type power wheelchairs (PWCs) and power-operated vehicles (POVs).
- **Power Operated Vehicles (POVs)/Scooters** are chair-like battery powered mobility devices with integrated seating systems, tiller steering, and 3- or 4-wheeled non-highway vehicle. A POV has a larger turning radius compared to other wheeled mobility devices.
- **Rehabilitation Engineering and Assistive Technology Society of North America (RESNA)** is a multidisciplinary organization of medical professionals with specific training and expertise in wheelchair assessments. RESNA offers certification, continuing education, and professional development.
- **Top End Speed** is the minimum speed acceptable for a given category of devices. It is to be determined by the RESNA test for maximum speed on a flat hard surface.
- **Range** is the minimum distance acceptable for a given category of devices on a single charge of the batteries. It is to be determined by the appropriate RESNA test for range.
- **Obstacle Climb** is the vertical height of a solid obstruction that can be climbed using the standing and/or 0.5 meter run-up RESNA test.
- **Dynamic Stability Incline** is the minimum degree of slope at which the PMD in the most common seating and positioning configuration(s) remains stable at the required beneficiary weight capacity. If the PMD is stable at only one configuration, the PMD may have protective mechanisms that prevent climbing inclines in configurations that may be unstable.
- **Radius Pivot Turn** is the distance required for the smallest turning radius of the PMD base. This measurement is equivalent to the "minimum turning radius" specified in the ANSI/RESNA bulletins.

Evidence Discussion

Mortenson and Kim (2016) reviewed 43 studies to evaluate literature pertaining to POV. The authors discussed the difference between POVs and scooters, explaining that scooters are controlled by a tiller while POVs use a joystick or alternate access. POVs are also able to more finely adjusted their speed, and have custom seating options available¹. Clinical studies have shown multiple benefits associated with the use of POVs, including increased frequency of community outings, improved functional independence, enhanced mobility, and an overall elevation in quality of life.²

Isaacson and Barkay (2020) noted that the average age of POV users is between 75 and 81 years old; as the population of individuals aged 65 and older continues to grow in the United States, a corresponding increase in the demand for mobility scooters is anticipated.³

The Rehabilitation Engineering and Assistive Technology Society of North America (RESNA, 2011) noted that when a POV is recommended by a provider to allow for participation in mobility-related activities of daily living (MRADLs) or primary role functions, the individual's environment (e.g., floor surfaces, turning radius, physical layout) must be able to accommodate the equipment. The POV should also significantly improve an individual's participation in MRADLs. Moreover, the individual or their caregiver must be able and willing to safely and routinely use the equipment.⁴

Codes addressed in this guideline

HCPSC Codes	Description
K0462	Temporary replacement for patient-owned equipment being repairs, any type
K0800	Power operated vehicle, group 1 standard, patient weight capacity up to and including 300 pounds
K0801	Power operated vehicle, group 1 heavy duty, patient weight capacity 301 to 450 pounds

¹ Mortenson WB, Kim J. Scoping review of mobility scooter-related research studies. J Rehabil Res Dev. 2016;53(5):531-540. doi:10.1682/JRRD.2015.05.0084

² Toosizadeh N, Bunting M, Howe C, Mohler J, Sprinkle J, Najafi B. Motorized mobility scooters: the use of training/intervention and technology for improving driving skills in aging adults - a mini-review. Gerontology. 2014;60(4):357-365. doi:10.1159/000356766

³ Isaacson M, Barkay D. Mobility scooters in urban environments: A research agenda. J Transp Health. 2020;18:100917. doi:10.1016/j.jth.2020.100917

⁴ Rehabilitation Engineering and Assistive Technology Society of North America, RESNA Wheelchair Service Provision Guide. 2011.

HCP Codes	Description
K0802	Power operated vehicle, group 1 very heavy duty, patient weight capacity 451 to 600 pounds
K0806	Power operated vehicle, group 2 standard, patient weight capacity up to and including 300 pounds
K0807	Power operated vehicle, group 2 heavy duty, patient weight capacity 301 to 450 pounds
K0808	Power operated vehicle, group 2 very heavy duty, patient weight capacity 451 to 600 pounds
K0812	Power operated vehicle, not otherwise specified
E1230	Power operated vehicle (3 or 4 wheel non-highway) specify brand name and model number

References

1. National Coverage Determination (NCD) for mobility assistive equipment (MAE) (280.3). Medicare Coverage Database [Internet] Centers for Medicare and Medicaid Services. Accessed at: <https://www.cms.gov/medicare-coverage-database/>. Updated 2005
2. Power Mobility Devices - Policy Article A52498. Accessed at: <https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleid=52498>
3. LCD Wheelchair Options/Accessories (L33792) Revision 11 – MCR. Medicare Coverage Database Local Coverage Determination documents. [Internet] Centers for Medicare and Medicaid Services. Accessed at: <https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdid=33792&ver=36&>.
4. Wheelchair Options/Accessories - Policy Article A52504. Accessed at: <https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleid=52504>
5. Cullen B, O'Neill B, Evans JJ. Neuropsychological predictors of powered wheelchair use: a prospective follow-up study. Clin Rehabil. 2008;22(9):836-846. doi:10.1177/0269215508091873
6. De Souza LH, Frank AO. Problematic clinical features of powered wheelchair users with severely disabling multiple sclerosis. Disabil Rehabil. 2015; 37(11):990-996. doi:10.3109/09638288.2014.949356
7. Mountain AD, Kirby RL, Smith C, Eskes G, Thompson K. Powered wheelchair skills training for persons with stroke: a randomized controlled trial. Am J Phys Med Rehabil. 2014;93(12):1031-1043. doi:10.1097/PHM.0000000000000229
8. Kehr AL, Barkocy B, Downs B, Rice S, Chen SW, Stark S. Interventions to promote independent participation among community-dwelling middle-aged adults with long-term physical disabilities: a systematic review. Disabil Rehabil. 2022;44(25):7739-7750. doi:10.1080/09638288.2021.1998668
9. Sehgal M, Jacobs J, Biggs WS. Mobility Assistive Device Use in Older Adults. Am Fam Physician. 2021;103(12):737-744.
10. Michael E, Farrell E, Linden M, Cabahug PG, Sadowsky CL, Recio AC. Wheelchairs. In: Gonzalez-Fernandez M, Schaaf S, Zumsteg JM, Perret D, Kennedy DJ, editors. Handbook of Physical Medicine and Rehabilitation. Springer Publishing Company; 2022:543-548.
11. Hubbard Winkler SL, Wu S, Cowper Ripley DC, Groer S, Hoenig H. Medical utilization and cost outcomes for poststroke veterans who receive assistive technology devices from the Veterans Health Administration. J Rehabil Res Dev. 2011;48(2):125-134. doi:10.1682/jrrd.2010.05.0081

12. Taylor S, Gassaway J, Heisler-Varriale LA, et al. Patterns in Wheeled Mobility Skills Training, Equipment Evaluation, and Utilization: Findings from the SCIRehab Project. *Assist Technol.* 2015;27(2):59-68. doi:10.1080/10400435.2014.978511
13. Svensson E, Nilsson L. Inter-rater reliability of the assessment of learning powered mobility use, version 2.0, when applied with children and adults engaged in Driving to Learn in a powered wheelchair. *Aust Occup Ther J.* 2021;68(2):115-123. doi:10.1111/1440-1630.12709
14. Gefen N, Archambault PS, Rigbi A, Weiss PL. Pediatric powered mobility training: powered wheelchair versus simulator-based practice. *Assist Technol.* 2023;35(5):389-398. doi:10.1080/10400435.2022.2084183
15. Karmarkar AM, Dicianno BE, Graham JE, Cooper R, Kelleher A, Cooper RA. Factors associated with provision of wheelchairs in older adults. *Assist Technol.* 2012;24(3):155-167. doi:10.1080/10400435.2012.659795
16. Taylor S, Gassaway J, Heisler-Varriale LA, et al. Patterns in Wheeled Mobility Skills Training, Equipment Evaluation, and Utilization: Findings from the SCIRehab Project. *Assist Technol.* 2015;27(2):59-68. doi:10.1080/10400435.2014.978511
17. Dunaway S, Montes J, O'Hagen J, Sproule DM, Vivo DC, Kaufmann P. Independent mobility after early introduction of a power wheelchair in spinal muscular atrophy. *J Child Neurol.* 2013;28(5):576-582. doi:10.1177/0883073812449383
18. Edelstein JE. Assistive devices for mobility: canes, crutches, walkers, and wheelchairs. In: Cameron MH, Monroe LG, editors. *Physical Rehabilitation: Evidence-Based Examination, Evaluation, and Intervention.* St Louis, MO: Saunders Elsevier; 2007:877-896
19. Smith EM, Giesbrecht EM, Mortenson WB, Miller WC. Prevalence of Wheelchair and Scooter Use among Community-Dwelling Canadians. *Phys Ther.* 2016;96(8):1135-1142. doi:10.2522/ptj.20150574