

Powered Mobility & Controls

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Acknowledgements



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Advisory Team

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Outline

- Benefits & Indications
- Coverage Policies
- Types of Devices
- Controls
- Case Examples



Occupational Performance

(Evans 2000, Miles-Tapping & MacDonald 1994, Buning et al. 2001)

Introduction of powered mobility improves:

- | | |
|----------------------------|------------------------|
| • Occupational performance | • Adaptability |
| • Independence | • Self-esteem |
| • Competence | • Quality of life |
| • Participation | • Role fulfillment |
| | • Social Participation |

And decreases:

- Dependency on others



Powered Mobility Devices



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Basic Coverage for PMDs (K0800-K0898)

A) Impairment in one or more MRADL in the home

A mobility limitation is one that:

- Prevents the patient from accomplishing an MRADL entirely, (INDEPENDENCE) or
- Reasonably determined heightened risk of morbidity or mortality secondary to the attempts to perform an MRADL (SAFETY); or
- Unable to complete MRADL within a reasonable time frame (QUALITY)

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Basic Coverage for PMDs

(K0800-K0898)

B) Rule out appropriately fitted cane, crutch or walker.

C) Insufficient upper extremity function to self-propel an optimally-configured manual wheelchair in the home to perform MRADLs during a typical day.

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Basic Coverage for PMDs

(K0800-K0898)

An optimally-configured manual wheelchair is one with:

- an appropriate wheelbase
- device weight
- seating options, and
- other appropriate nonpowered accessories



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Upper Extremity Function

Policy Language (C):

- Limitations of strength, endurance, range of motion, or coordination, presence of pain, or deformity or absence of one or both upper extremities are relevant to the assessment of upper extremity function.

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Scooter/POV

(K0800-K0812)



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D) Scooter Policy Language

- Safely transfer to & from a POV
- Be able to operate the tiller steering system
- Maintain postural stability and position while operating the POV in the home
- The patient's home provides adequate access between rooms, maneuvering space, and surfaces for the operation of the MAE that is provided

More POV Coverage

- E) User able to cognitively, perceptually, & physically operate device
- F) Device will maneuver in the home
- G) User meets weight capacity
- H) Device will significantly improve participation in MRADLs and will be used in home
- I) User has not expressed an unwillingness to use the device in the home.

Power Wheelchair Bases



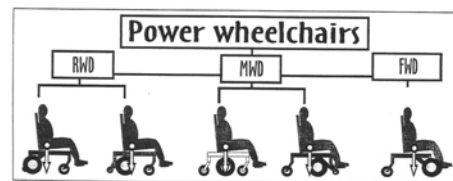
Front-Wheel Drive

Mid-Wheel Drive



Rear-Wheel Drive

Center of Gravity



(Dennison, I., & Gayton, D. (2002). Power wheelchairs – A new definition. *Proceedings of the 2002 International Seating Symposium*. 167–169.)

Power Wheelchair Coverage

Group 1 PWC (K0813-K0816) or a Group 2 (K0820-K0829)

- J) User able to cognitively, perceptually, & physically operate device
- K) or, Attendant control if attendant cannot push MWC
- L) User meets weight capacity
- M) Device will maneuver in the home
- N) Device will significantly improve participation in MRADLs and will be used in home
- O) User has not expressed an unwillingness to use the device in the home.

Group 1 PWCs

- Weight 300 lbs. or less

AND

- Do not require
 - Seat functions
 - Specialty controls



Invacare At'M Take Along (K0813 S2412)



Quickie Melody (K0816 S3267)

Group 2 PWCs



Invacare Pronto M51
(K0822 \$3913)



Jazzy 1143 Ultra
(K0831 \$4050)



Hoveround HD7 VHD
(K0827 \$4726)



Group 2 – Single Power Option

(K0835 – K0840)

Alternative drive control

OR

Need for a power tilt or recline

AND

Specialty evaluation

(OT, PT, or Physician)

- specific training & experience in rehabilitation wheelchair evaluations
- no financial relationship with the supplier
- ATP Supplier effective April 1, 2008



Invacare Pronto M71 TS
(K0835 \$4132)



Group 2 Multiple Power Option PWC

(K0841-K0843)

- Need for power tilt & recline seating system

OR

- Ventilator mounted on the wheelchair...

AND

- Specialty Evaluation
(OT, PT, Physician)



ReHab SE-3

Hoveround SE-3 (K0841 \$4552)



Group 3 PWC: No Power Options

(K0848-K0855)

- Everything mentioned before

AND

- Mobility limitation is due to:
 - neurological condition
 - myopathy, or
 - congenital skeletal deformity

AND

- Specialty Evaluation
(OT, PT, Physician)



Permobil C300 PS0
(K0848 \$5434)



Group 3 PWCs: Single or Multiple Power Options

(K0856-K0860) (K0861-K0864)

- Group 3 criteria are met

AND

- Group 2 Single Power Option criteria or Multiple Power Options are met



Permobil C400 PS1
(K0856 \$5672)



Permobil C300 PS2 Corpus
(K0861 \$5681)



Group 4 PWCs

(K0868-K0886)

- Have added capabilities that are not needed for use in the home.
- If provided and coverage criteria for a Group 2 or Group 3 PWC are met, payment will be based on the allowance for the least costly medically appropriate alternative.



Permobil C500
(K0884)



Permobil Street
(K0884)



Group 5: Pediatric PWC with Single or Multiple Power Options (K0890 or K0891)

- All the coverage criteria for a PWC are met
- AND
- The patient is expected to grow in height
- AND
- The Group 2 Single Power Option or Multiple Power Options are met



Permobil Koala Miniflex (K0890)



Permobil Playman Robo Miniflex (K0891)



Push-Rim Activated Power Assist Device (E0986)

- Basic Coverage Criteria for PWC
- AND
- Self-propelling in a MWC for at least one year
- AND
- specialty evaluation (OT, PT, Physician)



Rhonda's Power Chair

- Permobil C500
- Standing
- Tilt/Recline
- Power Elevating Legrests
- Preference based on Trials



Pete's Power Chair

- Invacare TDX-SP
- Mid-wheel drive
- Proportional joystick
- Maneuverability and performance
- Indoor/outdoor mobility



Power Wheelchair Controls



Traditional Joysticks



Joystick Handle Options



Basic Programming

Reverse Speed	Forward Speed
Turn Acceleration	Turning Speed
Acceleration	Deceleration

Switched Secondary Controls



Multi-Switch Array



Single-Switch Scanners



Summary

- Many options to consider
- Assess user's abilities and preferences
- Assess the environment
- Match device features with above