

Cane to Wheeled Mobility – What are the Options?

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Speaker



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Ambulation Aides



- * Cane
 - * Provide a minimal amount of additional stability for persons with decreased standing balance
 - * Useful when one lower extremity has limited weight-bearing, secondary to pain or weakness

Canes – Base of Support



Straight Cane



Hurry Cane



Quad Cane

On the Go – Safely!!



Walkers



Pick-Up Walker:

- 4 point stability
- Good stability – sit to stand
- Needs to be picked-up when walking



Walker with Wheels:

- Glides without Picking up
- No Brakes

Rollator Walker



4-wheeled rollator:

- Provides support when walking
- Brakes improve stability going from sit-to-stand
- Seat and Basket popular features
- Wide base of support

3- wheeled rollator

- Smaller profile, tighter turning radius
- Bit less stability
- Available with basket – not seat



On a Roll !



Manual Wheelchairs

Transport Chair



- * Smallest Profile – Rear Wheels fit under seat.
- * Overall width about the same as the width of the chair
- * Lightweight and easily transportable
- * Best for short distances, short time periods
- * Not highly adjustable
- * Can be challenging to push over uneven surfaces, due to small wheels

Manual Wheelchairs



Hybrid – Transport Chair

- * Receiver accepts a Large wheel in the rear – increases ease of pushing outdoors
- * Quick release wheels, decreases overall width in tighter environments.

Manual Wheelchairs

Standard Manual Wheelchair:

- Highly Durable
- Fixed Axle Position – Highly Stable
- Often used in Long-term care facilities and in Rental Fleets



Manual Wheelchairs



Lightweight Manual chair

- * Lighter weight frame than standard chair – BUT not any easier to push
- * Axle adjustment is just-
UP – Standard HEIGHT
DOWN – Hemi HEIGHT
for foot propulsion

Manual Wheelchairs

Ultra-light Wheelchairs

- Easier to push
- Less to do with weight and more to do with Axle adjustment
- Further the axle is forward, the easier the chair is to push – and TO TIP OVER!



Folding Frame

Note the Cross Frame under the seat



Adjustable Axle

Manual Wheelchairs

Ultralight – Rigid Chair

- * Axle bar under the seat slides along the seat rail.
 - * Moved forward, easy to “pop into wheelie”
- * Rigid frame – no cross frame
- * To transport – Rear Wheels are quick release, backrest folds down



Manual Wheelchairs



Tilt Chair:

- Postural support chair – Dependent Mobility
- Change position relative to gravity
- Seat to back and Seat to foot rest angles stay the same



Recliner Chair:

- Changes body positioning by opening the Seat to Back angle and the seat to leg rest angle
- Able to achieve a lying-down position

Power-Assist Bridge Products between Manual and Power Mobility



- * Replacement Push Wheel
- * Rims mounted into an in-hub motor
- * One push has an extended range – longer distance for each push
- * Reduced number of push strokes with less force

Power-Assist



Rear Mounted 5th Wheel – Omni-track Wheel allows veering

Scooters

POV – Power-Operated Vehicle



3-wheeled scooter

- * Does not look like a wheelchair!
- * Great way to “augment mobility” – when longer distances are harder to manage
- * Requires good sitting balance and
- * The ability to keep arms on the tiller, controlling speed with hand and fingers

Scooters



- 4 – wheeled Scooter
 - * Increased turning stability
 - * Increased wheelbase – greater turning radius

Power Mobility



- * Joystick operation
- * Power chair using a traditional wheelchair frame
- * Standard wheelchair seating
- * Small foot print

Indoor Power Mobility



- * Separate Power Base from the Seat
- * Joystick Operation
- * Small drive wheels and motors
- * 6 wheels total for stability and tight turning radius

Indoor / Outdoor Power Mobility



Rear Wheel Drive



Mid-Wheel Drive



Front Wheel Drive

Indoor / Outdoor Power Mobility



Rear Wheel Drive

Rear Wheel Drive Chairs

- * Most stable ride when traveling at high speed outdoors
- * Need to have rear anti-tippers, as most of the weight is on the rear of the chair
- * Approach a hallway turn from the wall on the far side of the hallway

Indoor / Outdoor Power Mobility



Mid-Wheel Drive

Mid Wheel Drive Chairs

- * Tightest 360 degree turning radius – great for indoor maneuverability.
- * 6 wheeled power base
- * Approach hallway turns by coming down the middle of the hallway into the middle of the door, then turn

Indoor / Outdoor Power Mobility

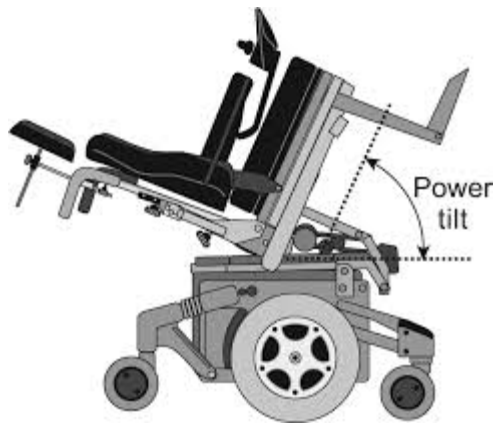
Front Wheel Drive Chairs

- * Drive wheels in the front provide increased obstacle climbing performance
- * No rotating casters in front allow for the users feet to be close to the front edge of the chair
- * Approach a hallway turn from the wall closest to the door – turning needs clearance *behind* the chair



Front Wheel Drive

Power Seating



Power Tilt

Recline



Power Recline and
Elevating Legrests



Tilt, Recline and
Elevating Legrests

Power Seating



Seat Elevator



Standing Options

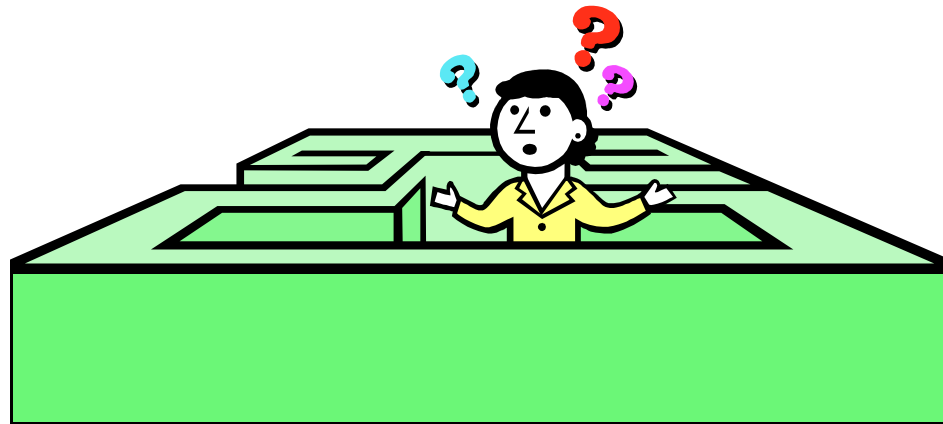


Manual Stander –
Manual Wheelchair



Power Stander on Power Chair

Questions ?



Additional Information

- * ***Mobility Alternatives – From Canes to Wheelchairs***

Available at:

http://www.unitedspinal.org/pdf/canes_to_wheelchairs.pdf

- * USAtechguide – Web guide to mobility devices

<http://www.usatechguide.org/>

- * Contact Information for speaker

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