Cane to Wheeled Mobility – What are the Options?

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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 Care

Hurry Cane

Quad Care
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

- 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

3-wheeled scooter
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 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 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
Power Seating

Power Tilt

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:

- USAtechguide – Web guide to mobility devices

- Contact Information for speaker
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