Alternative Mobility Device (AMD) Considerations

For some adults with intellectual/developmental disability an AMD may be the most appropriate type of mobility device and may never transition to a long cane. For others an AMD may be used in certain situations and a long cane in other settings. No matter the ultimate purpose or goal there are many considerations when determining the style, size, and design of the cane. Please note: These recommendations are based primarily on use of the rectangular style. However, the references in the More Information section on page 3 are given as examples of other styles of AMD that should also be considered for individual needs.

1. Grip Considerations
Grips help increase hand comfort for people using an AMD/push cane. They also provide a physical cue of where to hold onto the device.

• Look to see what type of textures the individual likes to touch.
  o Do they currently have a push cart or other device that they use?
    o If yes, what is type of material this made of?
  o Choose a material type the individual is likely to want to touch.
• Width of grip: Consult with an OT, especially if the individual uses a built up grip for utensils or other personal care items.

2. Grip Types
A Google search will yield many grip materials and options including:

• Rubber golf grips
• Fleece
• Foam
Grip Types (continued)

There are also proponents of using of no grip to increase the sensitivity of information transferred through the cane shaft: Read "How Long Should the Cane Be? What Type of Cane is Best? from NFB: https://nfb.org/images/nfb/publications/fr/fr27/2/fr270213.htm

3. Caution: Trip Hazard
Due to its size, an AMD/push cane is larger-so has the potential to be a tripping hazard to other pedestrians Depending upon the following factors, the AMD/push cane can also pose a trip hazard to the user.

Factors which together can pose a tripping hazard for the user include:

- Design of the AMD/push cane in the traditional rectangle shape with or without grips on both shafts.
- Tendency for the user to hold the AMD/push cane at the top of the device (parallel to the ground) rather than on each shaft that is perpendicular to the ground.
- If the two factors above are present, together with a tendency of the individual using the AMD/push cane to raise the cane up off of the ground and hold the cane in front of him/herself, the lower rung of the push cane itself may/can swing toward the individual and be easily tripped over.
- This potential hazard should be considered when designing the push cane.

A simple and effective work around is to design the AMD/push cane with grips that are perpendicular to the ground and extend out from the cane, either directly back (toward the individual) or slightly to the left and right. When holding the push cane grips (or handles with no grips) in this position, if the push cane is lifted off of the ground, depending upon how the individual is holding the cane, it does not as easily swing back toward the individual.

If this concern for an individual is present, but it is preferred/needed to not add extended grips or handle without grips as described above:

- Care should be taken to keep the individual in close visual sight at all times when using the AMD/push cane.
Caution: Trip Hazard (continued)

- If the individual begins to move hands off of the sides of the shafts in such a way that they are holding the push cane at the top, cues – verbal, physical or by use of a physical prompt must be provided to correct the hand position on the cane.

- If the individual begins to raise the push cane off of the ground, again cues – verbal, physical or by use of a physical prompt must be provided to correct the cane position back to the ground.

- Cautionary information and solutions regarding the concern must be written into the individuals’ assessment, mobility plan and any strategy for mobility goals, etc. This information must be shared if specific for an individual and/or for information only so caregivers know what to watch out for/consider.

- Cautionary information and solutions regarding this concern must also always be shared when training all staff/caregivers in regard to how to best support an individual who is using an AMD/push cane.

4. More Information

- Alternate Mobility Device by Dona Sauerburger:
  http://www.sauerburger.org/dona/amd.htm

- How to Fit AMDs to Fit Your Students and Their Needs, from IAER 2016 presentation by Jennifer Duncan, COMS, Laurel Kramer, COMS, and Katie White Fodor, COMS from TSVI. Retrieve from Hadley Institute for the Blind and Visually Impaired:
  https://www.hadley.edu/IAER2016/Adaptive_Mobility_Devices_IAER_2016.pptx

- A new mobility tool for the visually impaired: A white cane—adaptive mobility device hybrid