# **Devices to Promote Functional Mobility**

### Do you have difficulty navigating your home or community?

More than 25% of adults over the age of 65 experience a fall each year (Elliott & Leland, 2018). These falls could be due to impaired mobility skills or problems related to balance (Elliott & Leland, 2018). There are several mobility devices that may be used to provide effective support and safety for older adults to navigate everyday participation in life activities (Walker et al., 2010). One's ability to get around the home and community safely is critical for remaining active in meaningful activities (Barney & Perkinson, 2016). Below you will find examples of mobility devices to increase independence in everyday life activities as well as resources to address mobility impairments.



### **Common Mobility Devices**

Common devices that may be used for mobility include canes, walkers, wheelchairs, and power wheelchairs. Canes and walkers can easily be obtained in many retail or medical device stores including Walgreens, CVS Pharmacy, Rite Aid, or local stores specifically dedicated to medical supplies. Devices such as canes and walkers must be fitted properly to the individual in order to prevent an increased risk for falls (Barney & Perkinson, 2016). Sometimes a store associate could

help fit the device or a medical professional including Occupational Therapists and Physical Therapists. With the proper use of a cane or walker, the individual can navigate the home or community with greater ease and safety. Wheelchairs and power wheelchairs can be used for individuals with more severe balance, motor, or energy deficits. It is best to contact a healthcare professional to receive these devices and see if they are a good fit for you. Below you will find examples and instructions on the use of canes and walkers.

#### Canes

There are many different types of canes including those pictured below. There is a standard single point cane pictured on the left, a quad cane pictured in the middle, and a freestanding cane pictured on the right.



The proper fit for any cane should include the top of the cane at the bend in the wrist, elbow slightly bent when holding the cane, and holding the cane in the opposite side from the injury or weaker side. For example, if your left leg is typically the weaker one, you should hold the cane in your right hand. A single point cane is best for someone with minor balance or stability problems, weakness in a leg, or recovering from an injury or surgery (American Academy of Orthopedic Surgeons, 2015). A quad cane may be more beneficial for someone with a little more instability as it gives more base of support and stability. Quad canes typically require a slower pace when walking to be able to use them properly, which may be a good thing if your gait and balance are impaired. A freestanding cane can be bought like it is shown or the end can be bought to place on the bottom of a single point cane. The main advantage to this type of cane is the ability to have the cane stand on its own.

With any type of cane, the way you will walk with it will be relatively the same. You will start by placing the cane one stride length in front of you. You will then follow by taking a step with the opposite side or weaker leg followed by a step with the other leg. As seen in the picture, cane is out first then step with opposite leg and then he would follow with a step from the leg that is on the same side as the cane.



#### Walkers

There are also several different types of walkers that can be used including four leg walker, and two wheeled and four wheeled walkers with or without a seat. Walkers tend to be used for a short people after a joint replacement surgery or if you need more help with gait and balance than you can get with a cane. The most stable walker option is one with four legs. The most unstable walker is the four wheeled walkers. If you do have a walker with wheels, it is a good option to make sure it has brakes, especially if there is a seat. On the left is the four-leg walker, a two wheeled walker in the middle, and on the right is a four wheeled walker with a seat and brakes. It is best to consult your Occupational or Physical Therapist to determine the best walker option for you.



Just like with a cane, the walker should be adjusted to your height with the handles around the level of your hips and elbows slightly bent. When using a walker, the following steps should be followed:

- If four legs, lift walker a few inches in front of you. If any wheels on walker, push the walker a few inches in front of you.
- With all bases on the walker on the ground, then take a step forward into the walker. The first step should be made by your weaker or affected leg.
- Follow this by stepping with the other leg, making sure it is in front of the weaker or affected leg.
- Continue with these steps making sure to stand up straight and relax the shoulders.
- If your walker has a seat and you need to use it for a rest, ensure that the brakes are locked before sitting or standing.
- Always make sure the walker does not get too far out in front of you. Keep it close to remain safe and steady.

# **Balance and Mobility Training**

Receiving training from an Occupational Therapist can help to prevent falls and ensure safety when using devices or prevent the need for devices when navigating the home or community. There are fall prevention programs and interventions that can be tailored to an individual to address issues with balance, stability, weakness, injuries, or pain. These interventions can include



exercise programs and activities to improve strength and balance, gait training, and address any questions or fears someone may have about their mobility. An Occupational Therapist has the skills and knowledge to provide evidence-based fall prevention interventions to help improve occupational engagement (Elliott & Leland, 2018).

# Resources

When shopping for canes, walkers, or standard wheelchairs through retailers online, you should look for the key words "Home Health Care". Under this category, you should fine specific links for "canes and crutches", "walkers and rollators", and "wheelchair and transport chairs". Many basic designs for these devices can also be found directly in the stores. Prices range from \$10-\$400 depending on the device. Here are some links to specific medical retailer websites:

- https://www.walgreens.com/store/c/home-health-care-solutions/ID=359443-tier1
- <u>https://www.cvs.com/shop/home-health-care?icid=cvsheader:shop</u>

If you would like to participate in occupational therapy services to participate in a fall prevention program or receiving training on mobility devices, contact your primary care physician. When calling your physician, let them know that you are having difficulties with balance or walking and would like therapy to help prevent falls. If you do not have a primary care physician, call your insurance company or go online to find a doctor in your area that may be covered by your insurance.

Fall prevention programs can also be found at local senior centers or training facilities. In the metro-Detroit area, there is a program called "A Matter of Balance (Falls Prevention)" that can help reduce falls and improve physical activity. You can go to this link to receive more information and sign up for classes: <u>https://www.detroitseniorsolution.org/a-matter-of-balance</u>



#### Other Healthcare Professionals to Consider Regarding Mobility

<u>Physical Therapists (PTs)</u>: PTs are movement experts who optimize quality of life through exercise, hands-on care, and patient education. PTs can provide assessments on mobility as well as provide education and training on how to use mobility devices.

<u>Primary Care Physician:</u> A primary care physician can provide a diagnosis of a mobility impairment and provide a prescription for OT and PT services. They can also provide a prescription for a fitted wheelchair or device that may be covered through insurance.



## **Occupational Engagement**

More than 6.8 million people in the United States use assistive devices for mobility (Walker et al., 2010). Many times, these devices are being used to increase participation in life activities that they would not be able to participate in without the device. Activities that could be improved with a mobility device include walking around the home, walking to the bathroom, doing stairs, going out with friends and family, getting into or out of the car, getting over physical barriers like curbs and many other activities that might be important for you. If you have a physical impairment or disability preventing you from participating in activities that you would like to engage in, a mobility device or fall prevention program could help you live the life you want to live!

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