**CAOT Abstract: *Intelligent Wheelchairs: Training & Assessment***

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# **Reference:** Lo, J., Pham, P., Viswanathan, P., & Mihailidis, A. (2014, May). *Intelligent Wheelchairs: Training & Assessment*. Poster session presented at the Canadian Association of Occupational Therapists Annual Conference 2014, Fredericton, NB.

**Introduction**: Power mobility devices have been associated with increased autonomy and quality of life (Auger et al., 2008). However, older adults with cognitive impairments are often not approved for power mobility devices due to safety concerns. A number of technologies have been developed to augment commercially available power wheelchairs in the form of collision avoidance and navigational support. To further refine these technologies, it is necessary to understand how modified power wheelchairs may influence the experiences of occupational therapists and physiotherapists who assess and train cognitively-impaired older adults for power mobility use. **Objectives:** To determine the value of modified wheelchair technologies to clinicians and collect feedback to shape future development. This will enhance the process of training and assessing power wheelchair users. **Approach:** Semi-structured interviews will be used to explore the experiences of clinicians in training and assessing cognitively impaired older adults for power wheelchair use. **Practice Implications:** An exploration of clinician views on modified power wheelchairs will guide future development of this technology and inform best practice for assessment and training approaches for such devices. **Conclusion:** User-centred development of modified power wheelchairs will improve the potential utility of these technologies and increase the likelihood that cognitively-impaired older adults will experience increased autonomy and quality of life through access to power mobility devices.

Reference:

Auger, C., Demers, L., Gélinas, I., Jutai, J., Fuhrer, M. J., & DeRuyter, F. (2008). Powered mobility for middle-aged and older adults: Systematic review of outcomes and appraisal of published evidence. *Physical Medicine & Rehabilitation, 87*(8), 666-680. doi:10.1097/PHM.0b013e31816de163

Summary:

A number of technologies have been developed to augment commercially available power wheelchairs with collision avoidance and navigational support. It is necessary to understand how modified power wheelchairs may influence the experiences of occupational therapists and physiotherapists who assess and train cognitively-impaired older adults for power mobility use.