Preliminary assessment of vision, perception and cognitive function for safe driving of powered wheelchairs in clients with neurological conditions

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Summary
People with compromised independent mobility who have neurological conditions or have suffered brain trauma often have the goal of using powered mobility. As therapists we need to assess their base-line functional capacity prior to making a decision with them about what wheeled mobility may be most appropriate for their needs and capabilities. We will present an evidence-based sequential process which assesses vision, then visual processing, then cognitive functions, to establish whether the person's essential skills for driving a powered wheelchair are intact, prior to considering introducing practical driving training.

Aims and Objectives
Attendees will gain an understanding of the importance of preliminary assessment of vision, visual processing and cognitive functions necessary for driving a powered wheelchair. They will participate in some assessment processes to gain direct experience of the kind of essential information these can provide. The difficulty of disappointing people found to have serious deficits which rule out powered wheelchair driving will be discussed, together with how having good assessment information can increase insight into deficits for the client and their family. Thus making it easier to discuss specific problems, reducing the possibility of disagreement, and making conflict less likely.

Background
This process has been developed over 10 years as a result of the significant risks of powered provision for those with neurological problems who have had unrecognised deficits come to light. The motivation has been to make the decision-making process equitable, transparent and effective for clients and therapists. The process aims to eliminate conflict and reduce the need for repeated interventions from therapists who previously found themselves having to retrace assessment steps to manage risk and understand deficits which had become apparent.

Discussion
We hope that by sharing this process, colleagues who assess people with neurological conditions for wheelchair provision will be better equipped to:
- Identify problematic visual, visual processing and cognitive deficits
- Discuss deficits with vision experts
- Communicate about deficits and the potential risks effectively with clients and their families
- Help clients and family members understand limitations and capabilities in a realistic way
- Make better decisions about appropriate wheelchair provision
- Reduce time-consuming reviews, reassessments and emergency risk-management interventions
- Improve resource management by providing the right wheelchair from the outset.

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