

POSITION PAPER:

Occupational therapy and driver assessment and rehabilitation

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Occupational Therapy Australia is the professional association for occupational therapists in Australia.

Our members are qualified occupational therapists employed throughout the public and private sectors. They provide health care, vocational rehabilitation, and consultancy to clients.

Our mission is to provide member benefits through access to local professional support and resources, and through opportunities to contribute to, and shape, professional excellence.

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Occupational Therapy Australia
6/340 Gore Street
Fitzroy VIC 3065

or

standards@otaus.com.au

POSITION PAPER: Occupational therapy in driver assessment and rehabilitation



Summary statement of position

Community mobility is core scope of practice for occupational therapy. All occupational therapists understand the occupation of driving a vehicle as an instrumental activity of daily living enabling community mobility .

Occupational Therapy Australia recognises driver assessment and training as **advanced** scope of practice. Assessing and rehabilitation or training of drivers with disabilities, age-related health declines or acquired impairments must be performed by occupational therapists with post-graduate driver qualifications (Driver Assessor Occupational Therapists) from an Occupational Therapy Australia recognised training course.

The breadth of training and scope of practice of Driver Assessor Occupational Therapists encompasses the range of capacities required for driving. Some other professions such as optometry and neuropsychology provide focal, in depth elements of assessment. However only Driver Assessor Occupational Therapists encompass driving holistically and are able to provide comprehensive off-road (in the clinic) and on-road (in a dual controlled vehicle) assessment.

Introduction

The occupational therapy profession

'Occupational therapy is a client-centred health profession concerned with promoting health and well being through occupation. The primary goal of occupational therapy is to enable people to participate in the activities of everyday life. Occupational therapists achieve this outcome by working with people and communities to enhance their ability to engage in the occupations they want to, need to, or are expected to do, or by modifying the occupation or the environment to better support their occupational engagement' (World Federation of Occupational Therapy, 2011).

Driving

The occupation of driving is highly valued by many members of our community. However, participating in driving may be influenced by:

- accident, injury or illness resulting in physical, cognitive/perceptual or sensory disabilities
- congenital disabilities
- psychiatric disorders, drug use
- factors associated with ageing (e.g. deteriorating vision)
- lack of information about transport alternatives.

Driving is a complex instrumental activity of daily living, which requires the ability to adapt to different situations and environmental demands. Decisions regarding driving should be based upon not only medical fitness but functional abilities that are related to the capacity for safe driving. A driver's sensory, motor and cognitive skills require detailed assessment to determine the potential impact of any impairments on driving. A recent systematic review of all assessment tools predicting fitness to drive in adults determined behind the wheel assessment remains the gold standard for driving evaluation (Dickerson et al, 2014).

Occupational therapists aim to ensure that individuals can participate in as many of their chosen occupations as possible, hence Driver Assessor Occupational Therapists work with driving instructors, other health team members and relevant licensing authorities to assess and optimise an individual's capacity to drive independently and safely. Across jurisdictions, Driver Assessor Occupational Therapists are recognised as playing an important role in reducing risk and promoting safety.

Occupational therapist driver assessment and rehabilitation

Driver Assessor Occupational Therapists complete a comprehensive assessment of clients to ascertain their functional status, ability to drive safely and their ability to participate in driver rehabilitation and

re-training (Korner-Bitensky et al, 2006, p316). This assessment process commonly includes both an off-road and on-road assessment (Korner-Bitensky et al, 2010, p317; Classen et al, 2010, p234). On-road assessment component is conducted in collaboration with Accredited Professional Driving Instructors as per occupational therapy practice competencies (Unsworth, 2007).

In Australia, considerable research has been undertaken to develop valid and reliable off-road assessments, and that of standardising the process of conducting on-road assessments. Two Australian off-road assessments have documented reliability and validity. The OT-DORA Battery (Occupational Therapy – Off-Road Assessment Battery) (Unsworth, Pallant, Russell, Odell, 2011) is a comprehensive battery taking approximately 90 minutes and includes a full client history and need for driving as well as assessing a client's sensory, physical and cognitive skills for driving. The Drive Safe, Drive Aware (Kay & Bundy, 2009) examines a client's cognitive skills for driving and the client's determination of their own driving skills. The assessment takes 30 minutes to administer.

Considerable research has also been undertaken in Australia to develop on-road assessment protocols. For example, in Victoria Di Stefano et al have examined the elements that should be included in an occupational therapy on-road assessment route (2012). In Queensland, considerable research has also been undertaken to validate the on-road assessment. An occupational therapy on-road driving assessment with a self-navigation component administered in a standardised format, using objective scoring protocols has been shown to be a valid and reliable measure of driving ability (Wood and Mallon, 2001; Mallon and Wood, 2004; Wood et al, 2008). Mallon, Wood and colleagues report that the use of such an on-road protocol provides evidence for the justification and evaluation of driving remediation programs and furthermore, has been shown to be predictive of subsequent crash risk in older community-living drivers.

Purpose of position statement

The purpose of this position statement is to inform the occupational therapy profession, key stakeholders and consumers of occupational therapy services, of the Occupational Therapy Australia position in relation to the advanced practice status of driver assessment and rehabilitation.

Policy and environmental context

Driver Assessor Occupational Therapists have been identified as the health profession that plays a major role in driver assessment and rehabilitation services both within Australia and internationally. A process to assess persons whose medical or functional capacity to drive may impact on their ability to drive is crucial in ensuring the safety of the individual, and the community.

The Austroads (2012) National Fitness to Drive Guidelines sets a template for how this may occur with individual states determining their own legislation. Austroads (2012) defines the respective roles of Medical Practitioner, Occupational Therapists trained in driver assessment (Driver Assessor Occupational Therapists) and the driver licensing authority.

Processes

Assessing safety to drive is a three-fold process – medical fitness, functional ability and licensing:

- Medical Fitness: is the responsibility of medical practitioners and the expectation of them is defined for each of the medical conditions in Austroads (2012). A health professional may request a practical driver assessment to provide information to supplement the clinical assessment in some borderline cases and to assist in making recommendations regarding a person's fitness to drive (Austroads 2012, p22)
- Functional Ability: Austroad's position is that the Driver Assessor Occupational Therapist assess a person's functional status including cognitive function, physical strength and skills, reaction time, insight level and ability to self-monitor driving, the driver's lifestyle and the nature, frequency and requirement for driving, the need for specialised equipment or vehicle modifications, rehabilitation or retraining (Austroads 2012, p22).

Regulation

Licensing – this includes assessing driving ability to control the vehicle, understanding and application of road law and licencing. Licensing is the sole responsibility of the Driver Licensing Authority. National Fitness to Drive Guidelines are nationally applicable and contain appendices with current legislative situation of each State/Territory. However, the Guidelines are not legally enforceable and some states may choose not to use aspects of the Guidelines.

Occupational Therapy Australia publish Driver Competency Standards upon which driver assessment and

training courses are based. These Standards are currently being revised (Unsworth & Fields). Occupational therapists are also regulated by AHPRAⁱ.

Statement of position being taken

Occupational Therapy Australia recognises driver assessment and rehabilitation as an **advanced** area of occupational therapy practice. Assessing and training of novice drivers with disabilities or retraining drivers with age-related health declines or acquired impairments must be performed by occupational therapists with post-graduate driver qualifications for Driver Assessor Occupational Therapists from an Occupational Therapy Australia recognised training course.

Other professions have the competence to conduct elements of an assessment; however occupational therapy is the only profession with the breadth of competence to address driving, including assessment and rehabilitation, as a whole. Driver Assessor Occupational Therapists assess biomechanical, sensory-motor, cognitive, intra- and interpersonal components as well as the environmental factors for driving.

Occupational Therapy Australia recognises access to and quality of driver assessment and rehabilitation must be addressed in the interests of the driving public. This includes recognition of the advanced scope of practice of Driver Assessor Occupational Therapists; addressing inconsistent legislation across jurisdictions for the recognition of qualified driver assessment; access to training courses and Driver Assessor Occupational Therapists; costs to individuals requiring assessment; and the need for increased research and an evidence clearinghouse to inform policy.

Statement of significance to society

Driver Assessor Occupational Therapists are occupational therapists with advanced practice skills. They undergo post graduate training, and are experienced to assess the driving competence of a person with a medical condition, design relevant driver rehabilitation and driver retraining programs, and provide guidance through the licensing process.

Assessing fitness to drive and ensuring medical standards and clinical management guidelines are in place impacts on the whole community. It is essential both to individuals to enable independence and quality of life, and also to ensure broader community safety.

References

Austroroads (2012). Assessing Fitness to Drive: Austroroads

Dickerson, A.E., Brown Mueul, D., Ridenour, C.D., & Cooper, K. (2014). Assessment Tools Predicting Fitness to Drive in Older Adults: A Systematic Review. *American Journal of Occupational Therapy*, 68 (6), pp670-680.

Di Stefano, M., Macdonald, W. (2012). Design of occupational Therapy on-road routes and related validity issues. *Australian Occupational Therapy Journal*, 59 (1), pp37-46.

Kay, L., & Bundy, A. (2009). Drive Safe Drive Aware. Sydney: Pearson Assessment.

Mallon, K. & Wood, J. M. (2004). Occupational therapy assessment of open-road driving performance: Validity of directed and self-directed navigational instructional components. *American Journal of Occupational Therapy*, 58 (3), pp279-286.

Unsworth, C.A. & Baker, A. (2014). Driver rehabilitation: A systematic review of the types and effectiveness of interventions used by occupational therapists to improve on-road fitness-to-drive. *Accident Analysis and Prevention*, 71, pp106-114.

Unsworth, C.A. (2007). Development and current status of occupational therapy driver assessment and rehabilitation in Victoria, Australia. *Australian Occupational Therapy Journal*, 54, pp153- 156.

Unsworth, C.A. Pallant, J.P., Russell, K.J. & Odell, M. (2011). OT-DORA Battery: Occupational Therapy Driver Off-Road Assessment Battery. Bethesda, MD: AOTA Press.

Wood, J. M. & Mallon, K. (2001). Comparison of driving performance of young and old drivers (with and without visual impairment) measured during in-traffic conditions. *Optometry and Vision Science*, 78(5), pp343-349.

Wood, J. M., et al (2008). A multidomain approach for predicting older driver safety under in-traffic road conditions. *Journal of the American Geriatrics Society*, 56, pp986-993.

World Federation of Occupational Therapy (2011) (WFOT).



www.otaus.com.au

info@otaus.com.au

National Office

Ph (61) 3 9415 2900
Fax (61) 3 9416 1421

6/340 Gore Street
Fitzroy, Victoria 3065
Australia