



Australasian Faculty of
Rehabilitation Medicine



The Royal Australasian
College of Physicians

AFRM POSITION STATEMENT

Equity of Access to Driving Assessment for People with Disabilities

Endorsement: Developed by the Driving Assessment Working Party of the Australasian Faculty of Rehabilitation Medicine (AFRM) of the Royal Australasian College of Physicians (RACP) in 2013/2014. Endorsed by the AFRM Policy & Advocacy Committee on 16 October 2014 and by the College Policy & Advocacy Committee (CPAC) on 30 October 2014.

Acknowledgment: The RACP and AFRM are grateful to Occupational Therapy Australia and Occupational Therapy New Zealand for providing their feedback on this position statement. Their comments have been carefully considered in producing this document.

Key Points and Recommendations

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| <ul style="list-style-type: none">• Whilst a Practical Driving Assessment provides the best assessment of driving ability, there are identified inequities in access, mainly due to location and cost. |
| <ul style="list-style-type: none">• Improved cognitive screening allows for a more efficient use of services currently available. |
| <ul style="list-style-type: none">• Improved access is dependent on the development of both Government and private funding models. |

This Position Statement has been developed by a Working Party comprised of four AFRM Fellows and one Fellow from the Australasian Faculty of Occupational and Environmental Medicine (AFOEM):

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- Dr Caron Jander, FAFOEM
- Dr Amanda Johns, FAFRM

This document is aimed at AFRM and AFOEM Fellows and applies to both Australia and New Zealand. The purpose of this document is to assist Fellows in advocacy efforts to ensure people with disability have equitable and affordable access to required professional driving assessment programs.

Principles and Recommendations

Aim: To ensure equitable access to appropriate driving assessment programs in order to avoid the marginalisation of minority groups due to cost prohibitive and poorly accessible services.

Three key strategies are recommended to achieve this aim¹:

1. Appropriate referrals to optimise access within current service frameworks. This requires:
 - A decision-making framework to determine the most appropriate driving assessment for an individual (i.e. an occupational therapist driving assessment or a driver licensing authority assessment²).
 - Considering the use of cognitive screening tools in addition to visual and physical assessment to assist clinical decision-making in regards to appropriate referrals for practical assessment.³
 - Improving education regarding the decision-making process for appropriate referrals to on-road assessments by occupational therapists or driver licensing authorities⁴. This will involve consideration of the role of non-driver trained occupational therapist and other allied health professional assessments in the screening and identification of 'appropriate' referrals for occupational therapy on-road assessments⁵ as required.
 - Increasing awareness and access to existing assessors and services.
2. Advocating for improvements in Government funding and private health rebates as the lack of appropriately trained occupational therapy driver assessors is intrinsically linked to funding and often results in increased waiting times or inappropriate return to driving pathways for the consumer.
3. Improvement in rural and regional services and funding to facilitate access to metropolitan services for rural clients in order to bridge service gaps.

Driving assessment and rehabilitation should focus on *promoting and prolonging safe driving*. An emphasis on ongoing education and research into driving training, assessment and maintenance is a key feature in improving understanding and momentum in the effort to improve outcomes for currently disadvantaged driver groups. The establishment of telehealth clinics would also assist in efforts to improve equity of access to driving assessments for clients residing in rural and remote areas in particular.

¹ Please refer to Appendix 1 for further information.

² Please refer to Appendix 2 for further information.

³ Please refer to Appendix 3 for a summary of relevant screening tools.

⁴ Please refer to Appendices 3, 4 and 5 for further information.

⁵ Occupational Therapy Australia also recommends occupational therapy driver assessor educators work in collaboration with the Royal Australian College of General Practitioners (RACGP) to provide education program regarding appropriate assessment and referral.

Background and statement of the problem

“Driving a motor vehicle is a complex task involving perception, appropriate judgement, adequate response time and appropriate physical capability. A range of medical conditions, disabilities and treatments may influence these driving prerequisites. Such impairment may adversely affect driving ability, possibly resulting in a crash causing death or injury.” – Austroads Guidelines 2012⁶.

Rehabilitation adopts a holistic approach to gaining and maintaining maximal independence. Driving is valued as a key element of independence, associated with increased quality of life and social integration, coupled with reduced isolation and depression^{7 8}. A lack of patient education and assessment opportunities is associated with reduced confidence and significant rates of self-imposed restriction⁹.

Off-road and on-road driving training and assessment for people with a disability are often required to optimise an individual's opportunity to attain, maintain and regain a driver's licence.

In 2013, the Australian National Transport Commission revised the Transport Medical Standards with the publication of the updated Austroads guidelines, *Assessing Fitness to Drive for Commercial and Private Vehicle Drivers*, first published in 2012¹⁰. These updated guidelines have brought a renewed focus on the importance of driving assessments. They have aimed to both broaden the focus to incorporate *functionality rather than diagnosis*, at the same time as providing clearer and more specific medical standards.

The *ideal* of driving assessment is difficult to meet in metropolitan regions, let alone rural and regional areas. Occupational therapists have been strong advocates for appropriate driving assessments, and have led the way in establishing theoretical models of best-practice. The implementation of such expertise, however, is often met with barriers of funding access, siloing of resources and the limitations of appropriately trained staff or the availability of relevant staffing positions.

These issues are most evident in rural areas where equitable access to specialist medical assessment, driver-trained occupational therapists and driving instructors is problematic. This divide is further exacerbated as rural and regional current and prospective drivers are often more isolated, have less access to public transport and are more likely to be dependent on driving ability for employment and social activities. A lack or loss of licence can have serious implications including making it more difficult to gain employment and increasing social isolation.

⁶ Austroads (2013): *Assessing Fitness to Drive for Commercial and Private Vehicle Drivers*. Online, available: <http://www.austroads.com.au/assessing-fitness-to-drive>. Accessed August 2014

⁷ Snellgrove CA. Cognitive screening for the safe driving competence of older people with mild cognitive impairment or early dementia.

http://www.infrastructure.gov.au/roads/safety/publications/2005/pdf/cog_screen_old.pdf. Accessed Feb 2014

⁸ Fricke J and Unsworth C. Time use and importance of instrumental activities of daily living. *Aust Occ Ther J*. 2001 48(3): 118-131

⁹ Finestone HM, Marshall SC, Rozenberg D, Moussa RC, Hunt L, Green-Finestone LS. Differences between poststroke drivers and nondrivers: demographic characteristics, medical status, and transportation use. *Am J Phys Med Rehabil*. 2009 Nov;88(11):904-23

¹⁰ Austroads (2013): *Assessing Fitness to Drive for Commercial and Private Vehicle Drivers*. Online, available: <http://www.austroads.com.au/assessing-fitness-to-drive>. Accessed August 2014

Current Driving Assessment Services

Significant variability in availability and cost of current driving assessment services

The practical competency to drive test accessed through driver licensing authorities is either a free or almost free service in Australia and New Zealand. These tests are usually readily available locally. Access to this service is not highlighted as deficient, though this test is not always the appropriate assessment format when reviewing the impact of a medical condition on a person's ability to drive. Inappropriate assessment may result in inconsistent outcomes and potentially premature cessation of driving or conversely unrealistic expectations when return to drive is not a viable option.

Publicly funded driver assessment programs¹¹ are not widely available across Australia and New Zealand and those that do exist have limited capacity and waiting lists of 6 to 12 months¹². Generally, the cost of a public occupational therapy driver assessment is covered by these programs, with the only cost to the client being that of the fee for the driving instructor (generally \$80-\$90).

Private occupational therapy services are more prominent. Waiting lists are significantly shorter (many within 2 weeks) but cost is significantly greater. Costs vary greatly between practitioners, from \$220-\$1000¹³. The majority of services are delivered in metro/outer metro and regional areas. Although some services charge travel-time to clients within an acceptable radius, clients residing in rural or remote areas would be required to travel to the service.

Barriers to appropriate driving assessments are universally cost and access. Age has not been identified as an individual barrier, though it must be noted that the barriers of cost and access issues may be amplified in an aged cohort. Cost barriers can result in clients relinquishing their licence without the chance of undergoing an appropriate assessment.

In addition, there are difficulties in reliably assessing the current demand for these assessments due to prohibitive costs and non-referrals preventing many from accessing the service.

Conclusion:

Within the current service framework, improvements may be achieved with better information and understanding as well as improved screening to ensure appropriate referrals¹⁴. An improved or 'ideal' service would include equity of access in terms of cost, location and timely assessment.

Proposed avenues to achieve this include:

- Advocating to Medicare (Australia) / Ministry of Health (New Zealand) for funding through GP healthcare plans.
- Advocating to private insurers regarding specific rebates for on-road occupational therapy assessments.
- Advocating for the training of rural occupational therapists to become accredited driving assessors to improve equity of access to services

¹¹ Please refer to Appendix 5 for definition of types of on-road assessment.

¹² This information has been obtained via an informal email survey of driver-trained occupational therapists.

¹³ This information has been obtained via an informal email survey of driver-trained occupational therapists.

¹⁴ Please refer to Appendix 2 and 3 for further information about decision support for referral for specialist or practical driving assessment and for a summary of appropriate screening tools.

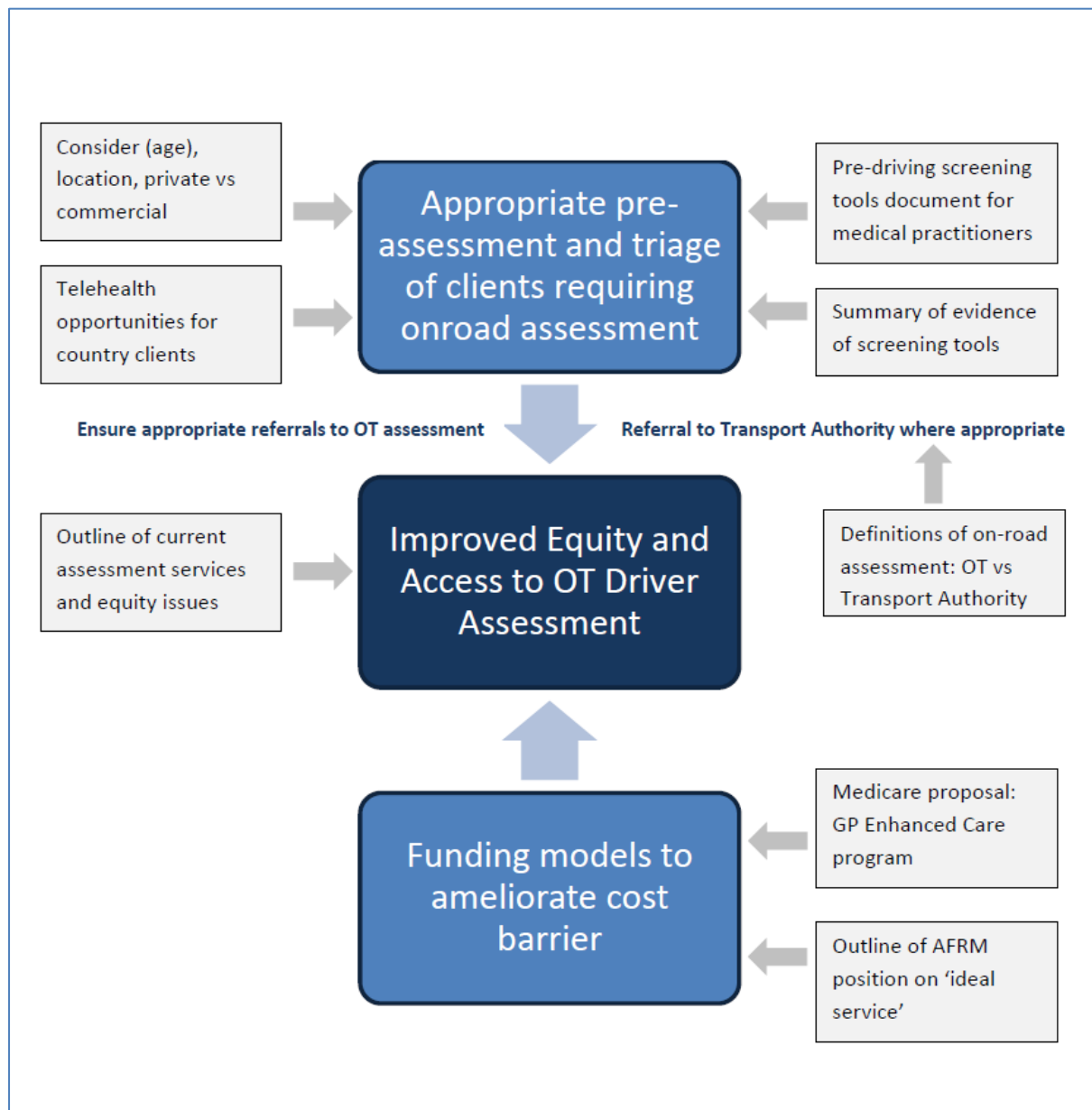
- Considering applications for Government funding and exploration of public-private funding relationships.
- Improving services for rural and remote individuals via telehealth services to access specialist medical assessments and support funding for rural individuals to access metropolitan services as well as funding for driver trained occupational therapists to travel to rural areas.

List of appendices

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- Appendix 2: Flowchart - Decision support for referral for specialist or practical driving assessment
- Appendix 3: Summary of screening Tools
- Appendix 4: Useful resources for health professionals
- Appendix 5: Definition of Terms

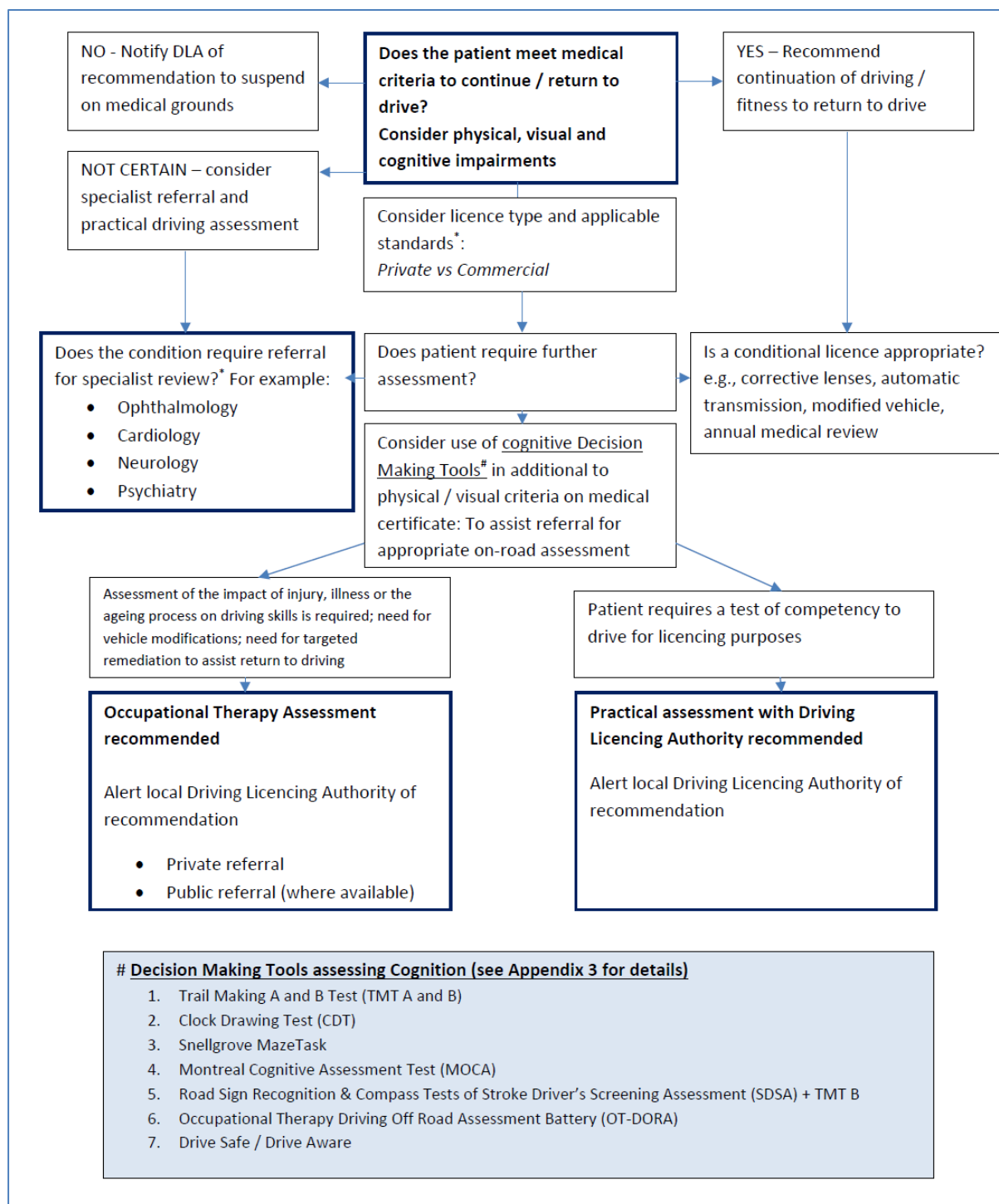
Appendix 1

Flowchart - Driving Assessment Working Party Approach



Appendix 2

Flowchart – Decision support for referral for specialist or practical driving assessment



* Australian rehabilitation physicians need to apply these recommendations in context with the Austroads Guidelines: Assessing fitness to drive for commercial and private vehicle drivers (2012). Available online: <http://www.austroads.com.au/drivers-vehicles/assessing-fitness-to-drive>, last accessed 22/10/2014]

** New Zealand rehabilitation physicians need to apply these recommendations in context with the NZ Transport Agency Guidelines: Medical aspects of fitness to drive: A guide for medical practitioners (2009) [Available online: <http://www.nzta.govt.nz/resources/medical-aspects/>, last accessed 30/10/14]. In particular, in differentiating the need for an occupational therapist's assessment and the requirement of "a test of competency to driving for licencing purposes"*

Appendix 3:

Screening Tools

The following tools are recommended for screening only. No test is 100% predictive of on-road driving ability, and must only be used to help identify those who might benefit from further assessment.

| Trail Making Test A and B (TMT A and B) | |
|--|---|
| Reference: | Tombaugh, T. Trail Making Test A and B: Normative data stratified by age and education. <i>Archives of Clinical Neuropsychology</i> 19(2004) 203-214 |
| Summary: | A time taken on TMT B of >180 seconds is generally accepted as a cut-off for further intervention / assessment. |
| Accessing Tool: | http://doa.alaska.gov/dmv/akol/pdfs/uiowa_trailmaking.pdf |
| Clockface Drawing Test (CDT) | |
| Reference: | Freund B, Gravenstein S, Ferris R, Burke B, Shaheen E. Drawing Clocks and Driving Cars: Use of Brief Tests of Cognition to Screen Driving Competency in Older Adults. <i>J Gen Intern Med</i> 20 (2005) 240-244 |
| Summary: | Candidates scoring less than 5/7 for the CDT made more driving errors (hazardous and total) Freund Clock Scoring for Driving Competency (mark out of 7) |
| Accessing Tool: | http://www.rehabmeasures.org/PDF%20Library/Clock%20Drawing%20Test%20Instructions.pdf |
| Snellgrove Maze Task | |
| Reference: | http://www.infrastructure.gov.au/roads/safety/publications/2005/pdf/cog_scren_old.pdf Barco P, Wallendorf M, Snellgrove C, Ott B, Carr D. Predicting Road Test Performance in Drivers with Stroke. <i>Am J Occ Therapy</i> (2014) 68: 221-229 Carr D, Barco P, Wallendorf M, Snellgrove C, Ott B. Predicting Road Test Performance in Drivers with Dementia. <i>J Am Geriatr Soc</i> (2011) 59: 2112-2117 |
| Summary: | In patients with mild cognitive impairment (MCI) or dementia, the Maze Task discriminates with accuracy participants who passed or failed the on-road driving test |
| Accessing Tool: | Access via contacting author: Carol.snellgrove@health.sa.gov.au Fee to access for clinical purposes |
| Montreal Cognitive Assessment Test (MOCA) | |
| Reference: | Nasreddine ZS, Phillips NA, Bedirian V, et al. The Montreal Cognitive Assessment, MoCA: A brief screening tool for mild cognitive impairment. <i>J Am Geriatr Soc</i> 53 (2005) 695-699. |
| Summary: | Montreal Cognitive Assessment (MoCA) has been shown to have greater sensitivity and specificity when compared to MMSE, as well as an ability to detect cognitive decline at an earlier stage. An upcoming development for MOCA will be: MoCA-Drive : To assess MoCA's ability to predict success or failure on a road test |
| Accessing Tool: | http://www.mocatest.org Test can be printed, and accessed in different languages |

| Stroke Drivers Screening Assessment (SDSA) | |
|---|---|
| Reference: | Devos H, Akinwuntan AE, Nieuwboer A, Truijen S, Tant M, De Weerd W. Screening for Fitness to Drive After Stroke: A Systematic Review and Meta-Analysis. <i>Neurology</i> 76 (2011)747-756 Lincoln NB, Radford KA, Nouri FM. Stroke Drivers Screening Assessment Manual Revised 2012 |
| Summary: | Combination of Road Sign Recognition, Compass and TMT B are useful to identify person with stroke at risk of failing an on-road assessment. Note that the Road Sign Recognition Test is a UK-based tool, with validated Australian version; Australian Road Sign cards in SDSA available at extra cost when purchasing SDSA The manual indicates use of the SDSA tool in non-stroke populations is not validated. |
| Accessing Tool: | http://www.nottingham.ac.uk/medicine/documents/publishedassessments/sdsa-manual-2012-uk.pdf |
| OT Driving Off Road Assessment Battery | |
| Reference: | Unsworth, Pallant, Russell and Odell, 2011 |
| Summary: | Off-road screening tool developed in Australia |
| Accessing Tool: | Available through American Occupational Therapy Association (AOTA) Press for \$99; subtests can be used by GPs for free as screening tools and include the Drive Home Maze Test |
| Drive Safe / Drive Aware | |
| Reference: | Kay and Bundy 2009 |
| Summary: | Assessment of awareness of driving environment and driving ability. Research currently underway looking into converting DriveSafe and DriveAware into an iPad test for doctors to use to screen and identify drivers who require further assessment. |
| Accessing Tool: | Available through Pearson Assessment for \$509 |

Appendix 4:

Useful resources:

- Occupational Therapy Australia website
 - <https://www.otaus.com.au/> [last accessed on 23/06/2014]
- Austroads Guidelines
 - <http://www.austroads.com.au/> [last accessed on 23/06/2014]
 - <http://www.austroads.com.au/assessing-fitness-to-drive/> [last accessed on 23/06/2014]
 - <http://www.austroads.com.au/for-commercial-vehicle-drivers> [last accessed on 23/06/2014]
- New Zealand Guidelines
 - <http://www.nzta.govt.nz/resources/medical-aspects/> [last accessed on 23/06/2014]
- Driving Education / Learning Opportunities
 - NSW <http://www.mynrma.com.au/motoring/education/assessment.htm> [last accessed on 23/06/2014]
 - SA www.mylicence.sa.gov.au [last accessed on 23/06/2014]

Appendix 5

Definitions of Practical Driving Assessment¹⁵:

“A practical driver assessment may be conducted to assess the impact of a health condition on driving. Such assessments are to be distinguished from the tests of competency to drive that are routinely conducted by driver licensing authorities for licensing purposes.

“A practical driver assessment is designed to assess the impact of injury, illness or the ageing process on driving skills including judgement, decision-making skills, observation and vehicle handling. The assessment may also be helpful in determining the need for vehicle modification to assist drivers with musculoskeletal and other disabilities.”

¹⁵ Austroads (2013): *Assessing Fitness to Drive for Commercial and Private Vehicle Drivers*. Online, available: <http://www.austroads.com.au/assessing-fitness-to-drive>. Accessed August 2014