OT AUSTRALIA

Australian Association of Occupational Therapists Victoria Inc

Medical Standards Review Response

Assessing Fitness to Drive

Stakeholder details:

Organisation: **OT AUSTRALIA Victoria – Driving Interest Group**

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OT AUSTRALIA Victoria appreciates the opportunity to provide feedback regarding issues to review in the *Assessing Fitness to Drive* Standard.

In relation to the proposed future stages of this review process:

- OT AUSTRALIA Victoria would welcome the opportunity for OT driver assessors to participate further in the development of the revised standards that impact directly on the decision to refer to an OT Driving Assessor, and the undertaking of an OT Driver Assessment.
- OT driving assessors also welcome inclusion of discussion related to occupational therapists' involvement with driving in the revised standards.
- OT driving assessors request notification of opportunity to consult on the draft standards scheduled for release in February 2010.
- Equally, OT Driving assessors recommend participation of the state specific driver licensing authorities as essential to reflect the legal and practical issues at a state level.

General Comments for entire *Assessing Fitness to Drive* standard:

Feedback has been made based on the Victorian Licensing System and in a state where OT driver assessment is reasonably available. Issues and recommendations may differ significantly in other Australian jurisdictions.

- A clearer definition of the *level of impairment* that is required to meet or fail standards is required. These definitions should include scores based upon the use of standardized assessments, where available, and they should be evidence based.
- We recommend that a literature review is conducted in all categories for new and/or further evidence/information regarding potential considerations for conditional licence.
- The current guidelines, in general, lack detail. They are currently not specified in terms which guide OT driving assessors and clinicians who refer for OT driving assessment. More specific criteria, or exclusion criteria, needs to be given for each diagnosis to act as a guide for referring clinicians.

- Reference: VicRoads document *"Guidelines for Occupational Therapy (OT) Driver Assessors"* (September 2008), 2nd ed. Melbourne: Roads Corporation.
  This document is one of the primary sources of practice definition for occupational therapists in Victoria.

- OT driving assessors also welcome inclusion of discussion related to occupational therapists' involvement with driving in the revised standards. We are available to assist with the development of this reference statement upon request.

Further Section of standard:

Part A: General information

3.5.1 Conditional Licences

What is the issue?

No definition is given for a conditional vs unconditional licence

What is the proposed course of action?

Definitions are required for conditional/ unconditional licenses.

The reviewers should also check the VicRoads document *"Guidelines for Occupational Therapy (OT) Driver Assessors"* (September 2008), 2nd ed. Melbourne: Roads Corporation., for information regarding licensing terminology, acceptable license conditions and vehicle modifications, if these are going to be referred to in the revised Austroads guidelines (e.g. pages 61 onwards of this document details license conditions and vehicle modifications)

Section of standard:

Part B: Medical Standards

4 Cardiovascular Diseases

4.2.9 Non-driving periods

What is the issue?

Recommended non-driving period post Acute Myocardial Infarction is defined at 2 weeks – this is not long enough post event.

What is the proposed course of action?

Increase minimum no driving period post AMI to greater than 2 weeks post event.

13. Musculoskeletal Disorders

13.1.2

What is the issue?

This section refers only to the motor aspects of long term musculo-skeletal issues that impact upon functional pre-requisites for driving.

What is the proposed course of action?

There should also be reference to sensory, balance, co-ordination and mobility issues which impact on both specific aspects of vehicle control (e.g. managing steering), as well as access & egress

issues that determine safe, independent vehicle use. For commercial licenses, it might be useful to refer to some aspects of vehicle management also expected of drivers (e.g. truck drivers often need to couple / uncouple the trailers, manage rigging, change tyres etc...)

13.1.5

What is the issue?
Information regarding co-morbidities and related issues is not on the same page as the main information regarding this area, and it is not clear for the reader.

What is the proposed course of action?
Direct reference needs to be made in this section (rather than on the next page) to the multiple co-morbidities and related issues that may impact upon the ability of a driver with a significant musculo-skeletal deficit to operate either a private or a commercial vehicle. For example, issues related to muscle tone / spasm, pain management, sitting tolerance and endurance as well as those listed in the box on page 70 (vision, hearing).

- A review of current literature is required to check for new research which might support the evidence base for the comments in this section. In particular, the reviewers should refer to the content of the following text book which contains sections related to drivers with musculo-skeletal limitations:
  J. Pellerito (Ed.), (2006). *Driver rehabilitation and community mobility: principles and practice* St. Louis, Missouri: Elsevier Mosby.

13.3.1 - Table on page 69

What is the issue?
Both private and commercial standards lack a clause regarding the possibilities of co-morbidities and their impact.

What is the proposed course of action?
For both private standards and commercial standards, under "The criteria for an unconditional licence are NOT met...." there should be a clause which covers the possibility of co-morbidities which might impact upon the ***safe, timely and consistent*** execution of driving related skills - at the moment, all the criteria are very prescribed.

13.3.1- Table on page 69

What is the issue?
Terminology and content regarding conditional licence

What is the proposed course of action?
Revise statement "A conditional licence may be granted....."
- to include reference to the possibility of a conditional license for using specific vehicle modifications *within a specific vehicle*
- improve clarity with regards to references to amputation levels, use of prostheses etc.
- check the inclusion of amputation levels, use of prostheses etc. in consultation with rehabilitation specialists and occupational therapists who work with amputees.

13.3.4

What is the issue?
There is reference to motor cycles but not trikes - trikes are now being used more frequently as a mobility alternative for riders unable to cope with the balance and transfer demands of two-wheeled motor bikes.

What is the proposed course of action?
Include details regarding trikes.

14 Neurological Disorders:

14.2.6 Stroke

What is the issue?

Minimum no driving period post stroke is one month post event. Stroke clients generally have their medical neurology review 3 months post stroke and this would be a more appropriate time frame to decide if the client is stable and able to return to driving.

What is the proposed course of action?

Increase non driving period post stroke to 3 months, to come in line with clinical practice.

14.2.12.1 Head Injury

What is the issue?

The use of the term 'head injury'.

What is the proposed course of action?

This term should be reviewed, as the term traumatic brain injury (TBI) is now more commonly used

14.2.12 Head Injury

What is the issue?

Current guidelines state "that a person who recovers from a loss of consciousness of less than 24 hours with no complications does not present any special risk"

What is the proposed course of action?

1. The guidelines need to define 'complications' e.g. (visual disturbance is very common after TBI, slowed information processing, poor concentration, high levels of fatigue and difficulty dividing attention. These factors all present significant risk to driving performance)
   Source: Jennie Ponsford et al. Factors influencing outcome following mild traumatic brain injury in adults. Journal of the International Neuropsycological Society (2000), 6 568-579

2. Duration of Post Traumatic Amnesia may be a better predictor of injury severity than loss of consciousness and is routinely recorded in Victorian Hospitals. Duration of LOC is not always recorded in medical records.

- Some studies used Glasgow Coma Score (GCS) to measure injury severity, but Fisk et al., found that GCS was not a good predictor of return to driving.
  Source: Fisk GD, Schneider JJ, Novack TA. Driving following traumatic brain injury: prevalence, exposure, advice and evaluations. Brain Injury, 1998, vol12, No8, 683-695

14.2.12 Head Injury

Guideline stating that 'persons who have had a minor head injury should not drive immediately afterwards'.

What is the issue?

Minor head injury is not defined.

What is the proposed course of action?

Provide clear guideline for minor head injury– in the literature, severity of TBI is discussed in terms of mild, moderate and severe. Refer to definition in reference: Fary Khan, Ian L Baguley, Ian D Cameron. Medical Journal of Australia 2003, 178 (6) 290-295, for severity measured by PTA and GCS.

14.2.12 Head Injury

What is the issue?

The term 'immediately afterwards' is open to interpretation. Does this mean in the next half hour or the next day, or the next week? No information available in the literature, to our knowledge, regarding timing for return to driving following TBI.

What is the proposed course of action?

Further investigation is required to resolve this. In the study conducted by Jennie Ponsford et al: Jennie Ponsford et al. *Factors influencing outcome following mild traumatic brain injury in adults*. Journal of the International Neuropsycological Society (2000), 6 568-579 Cognitive impairment was noted one week after TBI, but had largely resolved at three months post TBI.

14.3.1 Neurological Disorders
Medical standards for Licensing.

Recommendations about neuropsychological testing need to be reviewed as the literature is inconclusive regarding the validity of neuropsychological testing with regard to predicting safe return to driving, (refer to references 2, 5, 6, 7 below) and suggests that on road driving evaluation is the preferred method of assessment. (References 8, 9, 10, below).

Useful References for TBI (head Injury):

1. Fisk GD, Schneider JJ, Novack TA. Driving following traumatic brain injury: prevalence, exposure, advice and evaluations. Brain Injury, 1998, vol12, No8, 683-695
2. Brooks N, Hawley CA. return to driving after traumatic brain injury: a British perspective. Brain Injury , March 2005; 19 (3): 165-17
3. Jennie Ponsford et al. Factors influencing outcome following mild traumatic brain injury in adults. Journal of the International Neuropsychological Society (2000), 6 568-579
4. Fary Khan, Ian L Baguley, Ian D Cameron. Medical Journal of Australia 2003, 178 (6) 290-295
5. Schanke AK, Sundet K. Comprehensive driving assessment: Neuropsychological testing and on-road evaluation of brain injured patients. Scand J Psychol 41 (2000)
6. Brouwer WH, Withaar FK, Tant MLM, van Zomeren AH. Attention and driving in traumatic brain injury: A question of coping with time-pressure. J head Trauma Rehabilitation. 2002; 17(1)- 1-15
7. Lundqvist A, Alinder J V. Driving after brain injury: Self awareness and coping at the tactical level of control. Brain Injury, 2007 21:11 1109-1117
8. Pietrapiano P, Tamietto M, Torrini G, Mezzanato T, Rago R, Perino C. Role of premorbid factors in predicting safe return to driving after severe TBI. Brain Injury, March 2005; 19(3): 197-211
9. Coleman RD, Rapport LJ Ergh TC, Hanks RA, Ricker JH, Millis SR. Predictors of driving outcome after traumatic brain injury. Arch Phys Med Rehabilitation Vol 83, October 2002
10. Hopewell, A. Driving assessment issues for practicing clinicians. J head trauma Rehabilitation 2002;17(1): 48-61

**** Please refer to Appendix A for further notes regarding specifically relevant current research for driving and TBI (Head Injury).**

14.2.4 Dementia

What is the issue?

The term "Significant Impairment" is currently too broadly open to interpretation. Need to consider that skill level of the clinician assessing the licence holder varies greatly e.g. GP versus Specialist/ Neuropsychologist/ Comprehensive Memory Clinic Evaluation – these professionals may rate level of impairment differently, or not have assessed adequately to judge level of impairment.

What is the proposed course of action?

Further definition of level of impairment is required. Where possible, recommend minimum assessment tools required to diagnose level of impairment. Preference is for Specialist/ Neuropsychologist/ Comprehensive Memory Clinic Evaluation.

What is the issue?

The phrase:" Baseline and periodic review are required". No indication is given of the frequency that "periodic review" is required. A specific time frame will ensure that all impaired drivers are monitored in a reasonable cycle.

What is the proposed course of action?

Recommend definition of minimum and maximum limit for periodic review - minimum of 6 monthly reviews, not greater than 2 year review cycle, based on clinical experience and literature.

What is the issue?

The phrase: "If unsure refer to a driver assessor" – leaves an option for referral to a driver assessor rather than instructing the user to specifically take action, or absolve them from action.

What is the proposed course of action?

Recommend change to "where impairment in memory, visuo-spatial skills, insight or judgment is identified, an Occupational Therapy Driver Assessment is **required**".

What is the issue?

The phrase: "Where a driver assessment is refused by the patient, then consideration should be given to reporting the matter to the Driver Licensing Authority"

- this is not the case in Victoria, as a medical report form specifying fitness to drive is required PRIOR to OT driver assessment, thus any referred client who declines assessment would have medical report form submitted to Licensing Authority.

What is the proposed course of action?

Standard should stipulate "Should a license holder decline driver assessment, this **MUST** be reported to the Licensing Authority." This clearly explains to the reader their responsibility.
Requires consultation with the states to ensure a uniform procedure – or standard should specify laws state by state.

15 Older Drivers

15.2.3

What is the issue?

Last sentence of this paragraph "… referral to geriatrician may assist if there is … "

What is the proposed course of action?

Edit to recommend not just geriatrician, but to also include physician or specialist.

15.3 Physical Functioning

What is the issue?

"**15.3.2** The medical practitioner should consider the following possible age-associated changes:

Vision
Reaction times
Hearing
UL and LL strength/movement
Neck and trunk range of movement"

Instruction for practitioner to *consider* these areas – does not stipulate any need for assessment or clinical evaluation of these, or other, areas of function that may affect driving.

What is the proposed course of action?

Recommend the practitioner conduct a physical assessment which includes the older driver's vision, reaction times, hearing etc.
Where available, specify standardized assessments which should be used for these assessments.

Include a link, or reference, back to other relevant areas of Section B.
For example:
Vision – refer back to visual guidelines, section …
Hearing - refer back to hearing section of this document, section …
UL strength/movement and neck/trunk movement – link testing requirements back to musculoskeletal section.

15.5 Driving Tests

15.5.1

What is the issue?

This varies from state to state and does not instruct the professional clearly if there is a *responsibility* to advise the Driver Licensing Authority of the need for a driver assessment or not. The standard should remove all ambiguity – either a report is required to be submitted to the Driver Licensing Authority where a professional has doubt about the patient’s abilities, or it is not required.

What is the proposed course of action?

This section should summarise the requirements for each state and clearly instruct professionals that a report *is* required to the Driver Licensing Authority where a professional has doubt about the patient’s abilities.

15.5.2

What is the issue?

Statement indicating “Elderly people required to do a driving test …confidence may sometimes be improved with one or two driving lessons.”

What is the proposed course of action?

This statement should be re-worded to read: “Driving lessons can help to improve a driver’s confidence, correct on driver’s habits, and assist them to revise the road rules. “
Include a link to the *Victorian Older Driver Handbook* published by VicRoads

15.6

What is the issue?

Valuable reference to information regarding the role of OT assessors is not made.

What is the proposed course of action?

Include a link to the “*Guide for OT driving assessors*” (VicRoads), and similar guides in other states.

Appendix A

Current Occupational Therapy Research Project
Driving Assessment and Traumatic Brain Injury (Head Injury)

I am an occupational therapist and have worked in the area of driver assessment for the past 22 years. Although I have conducted driving assessments on a wide group of clients, I have specialized in driver assessment following traumatic brain injury (TBI). Throughout this time I have conducted driving assessments, both at Epworth Rehabilitation (formerly Bethesda hospital) and in my private practice. In my clinical work, I am frequently asked to provide an opinion about fitness to drive and the need for OT driver assessment. I have completed a literature search on this subject, but in order to add to the evidence based knowledge about return to driving after TBI, I am keen to analyse the outcomes from the driver rehabilitation program at Epworth Rehabilitation.

I have just been successful in being awarded an RACV scholarship to fund this project, with the following aims:

1) To document outcomes of OT driving assessments in patients with traumatic brain injury between 1999 and 2009.
2) To establish predictors of successful outcome of driving assessments. Factors to be considered will include injury severity, years of driving experience prior to TBI, physical and visual impairments and to ascertain whether driving behaviour has changed following the injury.
3) Based on the findings, a set of guidelines for health professionals will be developed indicating which risk factors following TBI, would indicate the need for an OT driving assessment, to be used in conjunction with the Austroads guidelines.

Brower (6) found that most TBI patients with milder injuries returned to driving without any negative effects on driving performance. From my clinical experience, I have also noted that there is a group TBI patients, who return to driving after a single on road assessment, who don't present with any cognitive impairment affecting their driving performance during the assessment. I have observed that some of the predictive factors associated with this group, who return to driving after one on road assessment include:

- The date of assessment is at least 3 months from their date of injury
- They have had at least 3 years of frequent driving experience
- The length of post traumatic amnesia (PTA) is less than two weeks.

I therefore propose to analyse the data that is available from the Epworth Driver Rehabilitation Program, to determine whether the evidence correlates with my observations.

As the timeframe to complete this project is within 12 months, I am hoping that I may be able to contribute to the review of the Head Injury section (14.2.12) of this standard.

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