MINUTES OF THE MEETING OF
THE SECRETARY OF STATE FOR TRANSPORT'S HONORARY MEDICAL ADVISORY PANEL ON DRIVING AND DISORDERS OF THE NERVOUS SYSTEM

Thursday 12 October 2017

Present:

Professor G Cruickshank	Chairman
Professor A G Marson	
Mr R Nelson	
Dr Paul Reading	
Mr R Macfarlane	
Professor P J Hutchinson	
Dr A R Gholkar	
Professor J Duncan	

Professor R Al-Shahi Salman

Lay Members:

Mr C Jones

Ex-officio:

Dr S Mitchell	Civil Aviation Authority
Dr N Delanty	National Programme Office for Traffic Medicine, Dublin
Dr S Bell	Maritime and Coastguard Agency
Dr N Lewis	Panel Secretary, DVLA
Dr W Parry	Senior Medical Adviser, DVLA
Dr A Hemmington-Gorse	Medical Adviser, DVLA
Dr J Lynch	Medical Adviser, DVLA
Mrs R Toft	Driver Licensing Policy, DVLA
Miss N Davies	Head of Drivers Medical Group, DVLA
Mrs S Charles-Phillips	Business Change and Support, DVLA
Mrs K Bevan	PA to Nadine Davies Head of Group
Mrs S Taylor	Assistant PA to the Head of Drivers Medical Group, DVLA
Professor Alyn Morice	Guest Speaker

1. Apologies for absence

Apologies have been received from: Dr C Tudur-Smith, Dr C Graham

2. Chairman's remarks

Great thanks were expressed to Dr David Shakespeare who has resigned from the panel, for all his work over the years. The panel will need to appoint a new member with expertise in neuro-rehabilitation and consider how to replenish other areas of expertise as current members reach the end of their tenure.

The format of the panels was discussed at the recent Chairmen's meeting and a draft of new terms and conditions for panel members has been circulated to all members.

The current medical driving standards for transient loss of consciousness have been discussed at the British Cardiovascular Society meeting, earlier this year and Dr Parry, Professor Hutchinson, Professor Marson and Professor Cruickshank will be giving talks on 'Driving and the brain' at the Royal Society of Medicine later this year.

3. Minutes of the meeting of 23 March 2017 and matters arising

The minutes were accepted as a true and accurate record.

An update on the head injury research project was given to the panel by Professor Hutchinson. It was acknowledged that the data obtained from the studies will be invaluable to DVLA and will provide the much needed evidence to inform and allow refinement of many of the medical standards for driving.

4. Minutes of the Chairmen's meeting and update by DVLA

The meeting was held in Swansea and an invitation to visit DVLA was extended to all panel members.

The minutes from the meeting were not available for review; however DVLA provided a synopsis of the main discussion points:

- The majority of the meeting concentrated on a review of panels and proposed changes to the terms and conditions for panel members and panel chairs. See point 5 below for further information. DVLA also asked for the panel chair's support in ensuring that all panel discussions and minutes document the evidence base for any medical standards that are developed or changed. This is to ensure full transparency of the Assessing Fitness to Drive standards. The Parliamentary and Health Service Ombudsman (PHSO) report "Driven to despair" raised concerns about lack of transparency of medical standard setting.

- DVLA provided the Chairmen with an update of the cardiology changes resulting from new European legislation, which would take place from 1st January 2018.

- A more general update was also provided on performance targets at DVLA. Professor Cruickshank took this opportunity to express thanks and praise to the Medical Advisers for their interpretation of the work of the panels.

5. Review of Panels

A draft of new terms and conditions for panel members has been circulated to the panels and was recently approved by the Minister. This sets out in greater detail the responsibilities of panel members and chairs. It provides clearer expectations and recognises the level of commitment involved. It is designed to help ensure that the panels' efforts are effectively focused on delivering what is needed and that their work is more transparent.

Key points were:

a) Confirmation of the time limits on how long panel members can serve. However to help maintain continuity on some panels, it has been agreed

exceptionally to extend the 10-year limit on panel service for some members who have already served their maximum term.

b) Recruitment of experts to the panels will be more transparent with panel members being chosen from a wider pool, with greater publicity and advertisement of the role.

Concern was raised that if the process is too onerous this may deter potential applicants. Assurance was given that this would be considered and that the aim would be to minimise the paperwork required and simplify the interview process. The process is still being negotiated and any suggestions from the panel would be welcomed.

Panel suggested that it would be beneficial to widen the expertise of the panel by recruiting GPs and perhaps creating a secretarial role for gathering evidence. Also the medical societies could be approached as these may be able to target appropriate expertise. The Panel was informed that primary care representation is 'on the wish list'. It was also explained that there is desire to increase awareness of the driving regulations among clinicians, and to this end, DVLA has recruited more Medical Advisers with the capacity to provide education and training, and proposes to engage with medical schools.

With regards to recruitment of lay members for Panels, it was suggested that thought be given to approaching specific organisations who may be able to suggest individuals who could offer an impartial view.

6. Obstructive Sleep Apnoea Syndrome

The guidelines which came from the European legislation have caused difficulty in terms of their integration and application within the medical standards for driving. They have therefore been clarified in order to establish a 'workable' guidance which is compatible with the legislation. A particular difficulty has been the legal requirement to consider the Apnoea Hypopnoea Index (AHI).

The proposed draft of the standards was shown to the panel. Discussion ensued about the uncertainty GPs may face and the difficulty of predicting whether the condition will be controlled within three months. Question was also raised about whether allowing a three month window for the condition to come under control was setting a lower standard than legislation allowed. Panel was assured that this most recent draft meets the legal requirement as well as satisfying the clinicians who were consulted DVLA's Assessing Fitness to Drive (AFTD) guidance will be updated by the end of the year.

It was suggested that a note be made to refer clinicians to the Narcolepsy guidance within another section of the AFTD where appropriate.

7. Policy update regarding seizures not impairing function/consciousness after epilepsy surgery

This topic has been discussed in previous meetings; legislation currently prohibits licensing for those whose seizures following surgery for epilepsy would meet the concession criteria (the seizures cause no functional impairment or alteration of consciousness), were it not for their pre-surgery seizures. A paper is due to be published which should provide the evidence to support a recommendation to change the current standards. It was recognised that this would require a change to legislation.

8. Convexity Subarachnoid Haemorrhage

Professor Al-Shahi Salman provided statistical data on the risk of a sudden and disabling event (stroke due to intracerebral haemorrhage [ICH]) for people who have had a non-aneurysmal convexity subarachnoid haemorrhage (SAH) with brain MRI features suggesting cerebral amyloid angiopathy. The annual risk of ICH in a meta-analysis of retrospective studies was 19%. This would not affect group 1 licensing, but for group 2 new medical standards might be required. It was agreed that reference within AFTD to 'amyloid spells' should be removed, it currently lies in the section for transient global amnesia, and new categories for aneurysmal and non-aneurysmal SAH should be introduced. Professor Al Shahi Salman kindly agreed to work with the panel secretary to draft the new wording.

9. Cavernoma Standards

Proposed changes to the current wording of the standards were agreed, however it was felt that it would be clearer to retain (and introduce into the 'infratentorial' section) a separate category for cavernoma treated by radiosurgery, albeit that the standard following stereotactic radiosurgey should be the same as for cavernoma without surgical treatment.

The standards will therefore be as follows:

Cavernoma

Cavernomas are also known as cavernous malformations, cavernous angiomas, or cavernous haemangiomas. They are all surrounded by haemosiderin on brain MRI, but this does not necessarily imply that they have 'bled' in the past. The risk of events that might affect driving differs according to cavernoma location (brainstem vs. other locations) and symptoms attributable to the cavernoma (stroke vs. epileptic seizure vs. no symptoms). A person's age, the number of cavernomas, and the size of the cavernoma do not seem to affect these risks. With multiple cavernomas, licensing restrictions differ according to cavernoma location, symptoms, or treatment; the most restrictive guidance will apply.

Supratentorial cavernoma

	Group 1 **Car and motorcycle**	**Group 2** **Bus and lorry**
Incidental finding, no surgical treatment	✓ - May drive and need not notify the DVLA.	✓ - May drive and need not notify the DVLA.
With seizure, no surgical treatment	✘ - Must not drive and must notify the DVLA. The epilepsy regulations (see Appendix B) apply if there is a history of seizure.	✘ - Must not drive and must notify the DVLA. The epilepsy regulations (see Appendix B) apply if there is a history of seizure.
With haemorrhage	! - May drive but must notify the	✘ - Must not drive and must notify

and/or focal neurological deficit, no surgical treatment	DVLA. Driving will depend on the following: ■ there must be no debarring residual impairment likely to affect safe driving. The epilepsy regulations (see Appendix B) apply, and the patient must not drive and must notify the DVLA if there is a history of seizure.	the DVLA. The licence will be refused or revoked permanently.
Surgical treatment by craniotomy	✘ - Must not drive and must notify the DVLA. Driving may resume after 6 months if there is no debarring residual impairment likely to affect safe driving. The epilepsy regulations (see Appendix B) apply if there is a history of seizure.	✘ - Must not drive and must notify the DVLA. The licence will be refused or revoked. Relicensing may be considered 10 years after surgical obliteration of the lesion. The epilepsy regulations (see Appendix B) apply.
Treated by radiosurgery (after haemorrhage and/or focal neurological deficit)	! - May drive but must notify the DVLA. Driving will depend on the following: ■ there must be no debarring residual impairment likely to affect safe driving. The epilepsy regulations (see Appendix B) apply, and the patient must not drive and must notify the DVLA if there is a history of seizure.	✘ - Must not drive and must notify the DVLA. The licence will be refused or revoked. The epilepsy regulations (see Appendix B) apply, and the patient must not drive and must notify the DVLA if there is a history of seizure.

Infratentorial cavernoma

	Group 1	Group 2

	Car and motorcycle	Bus and lorry
Incidental finding	✓ - May drive and need not notify the DVLA.	✓ - May drive and need not notify the DVLA.
With haemorrhage and/or focal neurological deficit, no surgical treatment	! - May drive but must notify the DVLA. Driving will depend on the following: ■ there must be no debarring residual impairment likely to affect safe driving.	✘ - Must not drive and must notify the DVLA. The licence will be refused or revoked permanently.
Surgical treatment by craniotomy	! - May drive but must notify the DVLA. Driving will depend on the following: ■ there must be no debarring residual impairment likely to affect safe driving.	! - May drive but must notify the DVLA. There must be no debarring residual impairment likely to affect safe driving.
Treated by radiosurgery (after haemorrhage and/or focal neurological deficit)	! - May drive but must notify the DVLA. Driving will depend on the following: ■ there must be no debarring residual impairment likely to affect safe driving.	✘ - Must not drive and must notify the DVLA. The licence will be refused or revoked permanently.

10. Immunotherapy/targeted treatments with no clearly defined date for 'completion of primary treatment'

Professor Cruickshank provided an analysis of the current literature and of discussions with oncology colleagues. Whilst current medical standards prohibit licensing for many drivers receiving immunotherapy, because of the requirement for primary treatment to have been completed one or two years previously, the data suggest that group 1 licensing should be possible given certain caveats. The following was agreed:

Solitary brain metastasis treated by immunotherapy without radiotherapy:

Group 1: Must not drive and must notify DVLA. Relicensing will be considered 1 year after starting immunotherapy if there is imaging evidence of disease stability or improvement, with no deterioration both intracranially and elsewhere in the body.
Group 2: Must not drive and must notify DVLA. The licence will be refused or revoked permanently.

Multiple brain metastases treated by immunotherapy without radiotherapy: Group 1:

Must not drive and must notify DVLA. Relicensing will be considered 2 years after starting immunotherapy if there is imaging evidence of disease stability or improvement, with no disease progression both intracranially and elsewhere in the body.
Group 2: Must not drive and must notify DVLA. The licence will be refused or revoked permanently.

Panel members present agreed suggested standards for this topic after discussion. However DVLA's Senior Medical Doctor notes, on reviewing the minutes of this discussion, that the Panel does not currently have a neuro-oncologist member and that therefore publishing and implementing the suggested standards should and must be subject to appropriate specialist input and approval.

11. Review of Medical Standards

11.1 Transient loss of consciousness

The panel agreed that this topic needed representation from the cardiology department. These standards will be reviewed when a joint discussion can be organised.

11.2 Craniotomy

For almost all of the medical standards in which craniotomy is a consideration, there is a minimum 6 month driving ban. Panel was therefore asked whether there should also be a 6 month driving ban when intracranial aneurysm (with and without haemorrhage) has been treated via craniotomy. Panel advised that the ISAT (International subarachnoid aneurysm trial) data had been used to inform the medical standards and that it was remarkable that the seizure risk in this group of patients is as low as it is. The standards should therefore be that driving can resume on recovery and DVLA need not be informed (for MCA, non-MCA and incidental aneurysms treated by craniotomy).

11.3 Grade 1 meningioma

For group 1, the current medical standards state "*driving may resume after 6 months provided there is no debarring residual impairment likely to affect safe driving. The epilepsy regulations apply if there is a relevant seizure history*". Panel was asked to consider whether 6 or 12 months should apply when there has been a 'relevant seizure' and whether this additional driving ban relating to the seizure, dates from the time of the seizure or of surgery.

Panel confirmed that where there is a relevant history of seizure (that is, a seizure that is likely to have been related to the meningioma), whether before or after surgery, driving must cease for 12 months, as this is in legislation (an isolated seizure with an underlying causative factor that may increase risk). However, it was also explained that as well as requiring driving cessation for 12 months after the seizure, the 12 month driving ban where there is a relevant history of seizure (as opposed to the usual 6 month ban in the absence of seizure) should also be applied from the date of surgery because the seizure risk following surgery would be greater in the population with a relevant seizure history.

The wording of the medical standards in AFTD will therefore need to be changed to make this explicit.

11.4 Incidental asymptomatic glioma

In AFTD, the medical standards for incidental asymptomatic glioma are stipulated only in the section on infratentorial tumours. Panel was asked whether the same standards should in fact apply both to supra- and infra-tentorial incidental gliomas. It was confirmed that this should indeed be the case and that AFTD would therefore need to be amended.

11.5 Uncomplicated hydrocephalus

The medical standards for hydrocephalus state "May drive and need not notify DVLA. If the hydrocephalus is uncomplicated, driving may continue under the 'till 70 licence". There is debate about the meaning of uncomplicated, and panel was asked to advise. It was agreed that the word 'uncomplicated' be replaced with 'asymptomatic'.

11.6 Standards for seizures not considered to be provoked but with an underlying cause

Panel was asked to consider the medical standards for seizures in:

- encephalitis/meningitis
- venous thrombosis
- subarachnoid haemorrhage from aneurysm
- seizures due to prescribed medication/drugs/alcohol

Historically these conditions have necessitated a driving ban of 6 months, however they have not been reviewed by the panel since the change in legislation which states:

"An isolated seizure is prescribed for the purposes of section 92(4)(b) of the Traffic Act in relation to an applicant for a Group 1 licence, who—

(a)(i)in a case where there is an underlying causative factor that may increase future risk, has had such a seizure more than one year immediately before the date when the licence is granted; and

(ii)in any other case, has had such a seizure more than 6 months immediately before the date when the licence is granted;"

It was agreed that seizures occurring in these circumstances would require a period of time off driving and could not be dismissed as 'provoked seizures'. It was therefore apparent that as they are to be considered as isolated seizures and as they have an underlying causative factor that may increase risk, so the 12 month driving ban set out in the legislation must be applied.

The panel's attention was drawn particularly to seizures where the underlying causative factor is considered to be alcohol, because the Advisory Panel for Alcohol, Drugs, Substance Misuse and Driving is also reviewing this medical standard.

DVLA explained that during their meeting earlier in the week, the Drugs and Alcohol Advisory Panel requested that the Advisory Panel on Driving and Disorders of the Nervous System consider a specific case in which there had been multiple asleep seizures related to alcohol. Following much discussion it was suggested that the driver be reviewed by one of the panels' experts in epilepsy so that the full details can be considered and further advice given.

During the discussion about provoked seizures a panel member highlighted the discrepancy in the standards relating to whether seizures due stroke or intracranial surgery and those due to head injury can be classed as provoked. It was agreed that this be addressed at the next meeting in the spring.

12. Cough Syncope

Professor Morice gave a fascinating presentation about cough syncope. Of particular interest in relation to the current medical standards were the following points:

- On average 25 people are killed each year on UK roads because of cough syncope
- The pathophysiology of pre syncope is different from cough syncope; cough syncope occurs without any prodromal symptoms.
- In the first three months following smoking cessation, the frequency of cough and therefore risk of further cough syncope is increased

- Treatment of gastro-oesophageal reflux disease with protein pump inhibitors will reduce acid and heartburn but does not reduce the risk of cough syncope because the reflux (which precipitates cough) is a normal physiological response which is not affected by reducing the acidity
- In cough syncope there is hypersensitivity to normal physiological reflux and hypersensitivity to natural cough
- When whooping cough is said to have been a precipitant for cough syncope, the diagnosis is almost certainly incorrect. The diagnostic test for whooping cough is very unreliable

On reviewing the current standards it was agreed that the current list of bullet points, which permit early relicensing if all criteria can be met, should be removed. It was also felt that there should be a minimum six month driving ban for any case of cough syncope. The new standards were agreed to be as follows:

Group 1 single episode of cough syncope – 6 month driving ban
Group 1 multiple episodes of cough syncope – 12 month driving ban
Group 2 single episode of cough syncope – 12 month driving ban
Group 2 multiple episodes of cough syncope – 5 year driving ban.

If more than one episode of cough syncope occurs within a 24 hour period, this will be counted as a single event. However if the episodes of cough syncope are more than 24 hours apart, these are considered as multiple episodes (consistent with the regulations for epilepsy).

Items 13 and 14 were not covered during the meeting due to a lack of time.

15. Cases for discussion

Two cases were discussed. For one it was agreed that the new standards agreed during this meeting - for brain metastases treated by immunotherapy – would be applied. The other case was that of a Chordoma, and it was agreed that for group 2 licensing 5 years off driving would be appropriate, in line with the group 2 standards for grade 1 meningioma.

16. Any other business

No issues were raised.

17. Date and time of next meeting

Thursday 22nd March was proposed and is to be confirmed in due course.

Original Draft Minutes prepared by: **Dr N Lewis**
Panel Secretary

Date: 13th December 2017

Final Minutes signed off by: **Professor G Cruickshank**
Chair

Date: 23rd April 2018