Driver & Vehicle Licensing Agency

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

THURSDAY, 4 APRIL 2019

Present:

Dr A Kelion	Chair
Dr D Fraser	
Dr R Henderson	
Mr A Goodwin	
Dr K Rajappan	
Dr S Aziz	
Professor C Garratt	

Ex-officio:

Dr S Bell	Chief Medical Officer, Maritime and Coastguard Agency

DVLA:

Dr A Kumar	Panel Secretary/Doctor
Dr Nick Jenkins	Senior DVLA Doctor
Mr D Evans	Head of Complex Casework
Mrs L Jones	Panel Coordinator, Drivers Medical
Mrs R Toft	Driver Licensing Policy
Mrs G Devonald	Driver Licensing Policy

1. **Introductions and apologies**

The Chairman welcomed all present at the meeting. Apologies for absence were received from the following: Dr L Freeman, Dr S Lim, Dr E Keelan, Mr B Nimick (lay Panel Member), Dr E Hutchison (Civil Aviation Authority). Mr Nimick's panel membership term is complete and panel expressed their acknowledgement for his

contribution to panel during his membership. DVLA advised Panel that recruitment for replacing Mr Nimick is in process.

2. Chair's Remarks

The following items were discussed:

2.1 Administrative challenges:

The Chairman mentioned that there have been difficulties in getting appropriate dates and venues in time for this meeting which posed challenges for members to arrange their availabilities from their respective clinical duties. The Chair appreciated that there were factors beyond DVLA's control that led to these difficulties. He requested for efforts to be made in future to have meeting dates agreed (with everyone's availabilities) well in advance so that clinicians have adequate time to manage their availabilities for attendance at these meetings. DVLA reassured that all such efforts would be made to achieve this.

2.2 Approval process for the minutes of the Panel meetings:

The Chair mentioned that the process for approving the minutes of Panel meetings has been overly complicated. Ideally, once the minutes have been drafted by the Panel Secretary, they should be sent to the Chairman for any changes/approval and then once approved with the DVLA the final version to be sent to the Panel Chair before it is published on the web. DVLA provided clarity on the current process and advised that prior to publication the minutes need to be approved by all panel members.

A copy of the agenda for the meeting, once finalised, will also be sent to the Chair before being published on the web.

2.3 Agenda bundle:

The Chair remarked that the documents in the agenda bundle were well arranged and there was improvement in the reproduction of the electronic version, however, it was still cumbersome to download the documents from the e-mail. The agenda bundle needs to be more user-friendly and there was a proposal for a common electronic hub/drop box (password controlled) accessible to all members. The DVLA reassured the Panel that is work in progress with the aim to facilitate better access of documents to the Panel Members.

2.4 Panel vacancy:

Recruitment for replacement of the retiring lay member is in progress, however, there have been great difficulties in recruiting a vascular surgical expert on the Panel. The Chair has contacted the Vascular Society of Great Britain and Ireland to make them aware of the vacancy of an expert on this Panel, and has also contacted specific colleagues. However, DVLA advised that to date they had not received any applications for this post.

DVLA advised that a further recruitment exercise is to be held in the summer, and the DVLA Senior Doctor is to send correspondence to the Society of Vascular Surgeons of Great Britain and Ireland to encourage applications for this post.

2.5 Myocardial Perfusion Scan:

(i) Access to imaging data:

The Chair stressed that there have been ongoing problems in getting imaging data from relevant hospital trusts when Panel opinion is sought for certain cases. The Chair advised that Panel members need access to the original imaging data on a disc to provide advice on such cases. For myocardial perfusion scintigraphy, the raw data acquisitions are required as well as the processed slices: hard copies or digital snapshots are not adequate. It is not practical for Panel members themselves to arrange an image link transfer or access the PACS system of another hospital trust directly. Without the receipt of full imaging

data, panel advice and hence licensing decisions on complex cases cannot be made.

As most of these cases are post refusal/revocation of Group 2 licences when further evidence is submitted in support of licence holders, it may well be that the licence holder will need to ensure that these data are made available to DVLA if they would like their case to be processed further.

(ii) Drop in Left Ventricular Ejection Fraction (LVEF) post-stress:

It was agreed at a previous meeting that Group 2 licence cases, where a myocardial perfusion scan has shown a drop in LVEF post-stress (as compared to rest), would need to be referred to a Panel member for their opinion. The volume of such cases being referred by DVLA to the Panel members has been recently increasing. On evaluation of these cases it has been found that the majority of them have artefactual problem rather than underlying coronary artery disease causing a drop in the LVEF at stress.

2.6 Meeting with GMC:

The Chair (along with Chairs from other panels) attended a meeting in January with the GMC to discuss how to increase clinicians' awareness and knowledge about fitness to drive standards. The Chair requested an update from the Senior DVLA Doctor on any outcome/proposals from the GMC on this issue. The Senior DVLA Doctor advised the Panel that there has been no further correspondence from the GMC on this issue. The Panel members expressed their views that it is difficult for clinicians to be aware of the changes in the 'Assessing fitness to drive - a guide for medical professionals' guidelines without having an alert message. It might be beneficial to have a British Cardiovascular Society (BCS) representative on Panel who would have a role to relay these changes, if any, to the BCS. There was discussion on this topic with various options suggested and it was agreed that this issue could be further discussed and a process agreed after the forthcoming BCS meeting.

2.7 Joint Cardiovascular and Neurology Panel meeting on syncope:

The Chair made the Panel aware of the joint Cardiovascular and Neurology Panel meeting regarding the syncope standards, which is scheduled for 9th May 2019. There is a potential for the syncope topic to be covered under the cardiovascular standards for those conditions where an underlying neurological cause has been excluded. Input would be needed from Panel members with relevant clinical expertise in the formulation of syncope standards. There is also a further meeting on 9th May on the issue of provoked seizure and the changes in the licensing standards suggested by the Neurology Panel. Relevant experts from the Cardiovascular and other Panels are due to attend this meeting. The Cardiovascular Panel have expressed their views on the proposed standards by e-mail correspondence to the DVLA.

2.8 Pulmonary hypertension:

Following the March 2018 meeting, and a presentation from a national expert on pulmonary hypertension, new standards were formulated for pulmonary hypertension in the AFTD. Individual assessment of each case is required with a report from their clinical specialist. The advice from Panel at that stage was that these cases would need to be referred to Panel members for assessment under the new licensing standards, especially the Group 2 licence cases (as these are high risk cases but likely to be few in number).

The current standards take into account the risk stratification into low, intermediate and high risk based on the '2015 ESC/ERS Guidelines for the diagnosis and treatment of pulmonary hypertension'. The Group 1 and Group 2 licensing standards are based on the 20% and 2% per annum risk of a sudden disabling event respectively. The Panel appreciates that it is very difficult to estimate the risk with precision in pulmonary hypertension, and hence one should be guided by the low, intermediate and high risk stratification strategy.

There was a discussion on this topic and Panel agreed that most cases should be processed based on each individual's specialist assessment and referred to Panel only in cases where there is lack of clarity of the risk assessment. The Panel proposed the following standards for pulmonary hypertension (2015 ESC/ERS, risk categories to be mentioned):

Group 1

Must notify the DVLA. Individual assessment required.

Low, intermediate risk cases – may drive provided no other disqualifying condition, review 3 year licence to be issued.

High risk cases – may drive provided satisfactory specialist assessment and deemed to be at less than 20% risk of a sudden disabling event per annum; should be no other disqualifying condition, and syncope standards need to be met. Review 1-3 year licence to be issued.

Group 2

Must not drive and must notify the DVLA.

Licence will be refused or revoked if in the intermediate or high risk group. If in the low risk group, driving may be allowed provided satisfactory specialist assessment and the risk of sudden and disabling event is deemed to be less than 2% per annum; should be no other disqualifying condition, and syncope standards to be met. An annual licence to be issued.

Classification of low, intermediate or high-risk categories as per 2015 ESC/ERS guidelines for the diagnosis and treatment of pulmonary hypertension.

3. Minutes from the previous meeting and actions

The minutes from the previous were agreed and approved. The following items discussed

(a) **Item 4** Type 2 Myocardial infarction: Group 2 licence standards, discussion section last paragraph: amendment: 'The panel had reviewed the following **journals** which were enclosed in the panel agenda bundle'. Panel members suggested **journals** to be amended to **papers/literature evidence**.

(b) **Item 5** Coronary artery disease categories not included in the current AFTD licensing standards

The Panel agreed with the new standards (evidence of obstructive coronary artery disease on invasive or CT angiography, or myocardial ischaemia on functional testing, but not falling under any of the above categories – for Group 2 licensing, such individuals would need to meet the functional test requirements (enclosed).

There was a lengthy discussion on the interpretation of "evidence of obstructive coronary artery disease".

It was agreed that the current standards in the AFTD do not need to be changed. – For patients with "mild coronary artery disease" / "mild stenosis" (usually less than 50% in every vessel) / "non-obstructive disease" / "non flow-limiting disease", Panel's advice was that no functional test would be required, if there is no history of angina / acute coronary syndrome / percutaneous coronary intervention / coronary artery bypass graft. For cases where there is "intermediate / moderate coronary artery disease" / "stenosis of 50% or more" / "unable to exclude obstructive disease", referral for a functional cardiac test would be required. If there is any uncertainty, cases need to be referred to a Panel member for their opinion. In all of these cases, if a functional test is undertaken a review licence with repeat testing in 3 years would be required.

4. Fractional flow reserve (FFR): (Group 2 licence standards)

Panel have advised previously that if a Group 2 licence holder / applicant has had an angiogram with pressure wire studies for clinical reasons and information available indicates that FFR is greater than 0.8, then a Group 2 licence could be issued despite a previous positive functional test.

As invasive functional assessment of coronary stenoses is a complex clinical area, with several methodologies entering clinical practice over recent years (including fractional flow reserve, FFR, and instantaneous wave-free ratio, iFR), Panel advice is needed on how to action these cases for licensing purposes when relevant reports/information are presented to DVLA. Dr D Fraser gave a comprehensive presentation to the panel on FFR, including the newer modalities like iFR.

A lengthy discussion ensued on this topic following the presentation.

Conclusion: There was general agreement that, for licensing purpose, FFR cannot be used to replace the exercise tolerance test or alternative functional tests due to a general lack of prognostic data from the FFR studies. Its only role would be to demonstrate that a positive ischaemia test is spurious / false positive, by proving that each and every angiographic stenosis has FFR greater than 0.8. Hence the following was agreed:

1. If an individual has a history of angina/ACS/PCI/CABG, he/she should be referred for an ETT (alternative functional test if ETT not appropriate), 6 weeks post event (12 weeks for CABG). If the functional test is positive, but subsequent angiogram shows completely unobstructed coronary arteries, Group 2 licence could be issued. If any obstructive disease is present which could plausibly explain the ischaemic stress test, but pressure wire studies report that the FFR is greater than 0.8 in **all** the vessels with stenosis, then the Group 2 licence could be issued after review by a Panel member.
2. If the information on FFR is provided to DVLA before the DVLA has referred an individual for a functional test, the individual should still be referred for an exercise test or alternative functional test as per the usual process. If there is ischaemia on the functional testing then at that point the FFR information could be considered, as above (in point number 1).

In both situations, given the potential for uncertainty about the interpretation of FFR results, functional testing or the presence of disease in vessels other than those interrogated by FFR, all cases need to be referred to a Panel member with copies of the angiogram reports and full imaging data.

Discussion Section:

Following the presentation from Dr Fraser the following points were noted:

FFR studies are not primarily prognostic studies but mainly aimed at guiding intervention strategies.

Newer techniques for measuring FFR are available, although not all are in widespread clinical use as yet; iFR (Instantaneous Wave-Free Ratio) is being used in clinical practice now.

Three major studies with 5 year outcomes were looked at: DEFER 2001, FAME, FAME 2.

Currently DVLA are accepting an FFR value of greater than 0.8 for Group 2 licence purposes, and it was considered that an iFR value of greater than 0.89 could be similarly accepted for Group 2 licence purpose. It was agreed that FFR or iFR should not be promoted for licensing purpose, but if the information has been presented to DVLA from a clinician then this could be considered as above.

5. AFTD Review:

ICD: Group 1 Licence Standards

Panel agreed that there needs to be clarification of the phrase "Symptomatic anti-tachycardia pacing (ATP)" in the current licensing standards as there could be a range of symptoms associated with ATP, from a mild awareness of a flutter, through more severe palpitation or pre-syncope, all the way to full syncope. There was discussion around the interpretation of the word "incapacity" as mentioned widely across The Assessing Fitness to Drive Guide. The Panel agreed that the word "incapacity" is a

very subjective term and there is no objective way of defining it in this context given the wide spectrum of symptoms.

The best way to define incapacity for licensing purposes would be 'any episode which renders an individual incapable of controlling their vehicle safely'. This would be in line with the definition of "disability" in the Road Traffic Act 1988, section 92(2)(b). It was agreed that the interpretation of the phrase "incapacity" could be further discussed at the forthcoming joint syncope meeting.

Successful catheter ablation: Group 1 and Group 2 Licence standards

The current standards for successful catheter ablation in AFTD is divided into two categories based on whether the individual had arrhythmia causing or likely to cause incapacity or arrhythmia not causing or not likely to cause incapacity.

A lengthy discussion on this topic ensued.

Although Panel agreed that the current division of standards based on incapacity was reasonable, it was felt that the risk of a sudden disabling event associated with arrhythmia post-ablation would also depend upon the underlying heart condition. For example, an individual with a history of ventricular tachycardia in the setting of structural heart disease is likely to have a much higher risk of recurrence compared to an individual with WPW syndrome in whom the accessory pathway has been definitively ablated. It was felt that the ablation section on 'arrhythmia causing or likely to cause incapacity' should be aligned with the general arrhythmia standards in AFTD (four weeks control of arrhythmia for Group 1, three months control of arrhythmia for Group 2).

Conclusion Wording of ICD standards for 'symptomatic anti-tachycardia pacing' and catheter ablation standard: work in progress. In the interim the current licensing standards to be applied.

Pacemaker standards

Panel members noted that the pacemaker implant standards mentions 'Pacemaker implant – including box change'. This implies that the current licensing standards for time off driving would need to be applied if an individual has a box change for their pacemaker, that is, they would need to notify DVLA for both Group 1 and Group 2 licence purpose. This was discrepant with the ICD standards as for "defibrillator box change" - drivers do not need to notify the DVLA. It was agreed that individuals do not need to notify DVLA if they had a pacemaker box change.

Clarification was also sought for the time period off driving following a pacemaker implant if there had been a history of syncope. Current practice is that if an individual had a pacemaker implanted for Group 1 purpose driving would cease for a period of one week, however if there has been associated syncope for which the pacemaker was implanted, the syncope standards need to be met. This needs to be clarified further when the syncope standards are reviewed.

Panel secretary sought clarification (for interim period, till new standards in place) for Group 2 licence standards in cases where successful ablation had been undertaken for arrhythmia causing or likely to cause incapacity, whether the individual needs to be off driving for 12 weeks from the arrhythmic episode or 6 weeks if a successful ablation had taken place (as per ablation standards). Panel advised that if a successful ablation had been undertaken then Group 2 driving may be allowed six weeks post ablation (as per current standards till new standards finalised.

6. Takotsubo cardiomyopathy

Apologies were received from Dr Lim who was due to present on this topic. The chair advised that this topic would be discussed at a future meeting with presentation from Dr Lim.

7. **Older vulnerable road users** – informing government future policy thinking

Panel was provided with information on the Government's future policy thinking with regards to different groups of drivers and were advised of the Ministerial announcement made in June 2018.

More information can be found at: https://www.gov.uk/government/speeches/road-safety-recent-progress-and-future-work

Panel advised that as cardiovascular conditions generally become more common with increasing age, the current guidelines are applicable for most of the cardiovascular conditions regardless of the age group. Panel agreed that currently there is no need for any new standards or any separate action plan to address this topic as the current standards should cover the relevant conditions. However, Panel did have concerns about the 2% annual risk of sudden disabling event in elderly patients with a Group 2 licence, especially with co-morbidities present.

8. **Cases for Discussion**

Two cases were discussed and appropriate panel advice was given on each of them. The first case was a case of coronary artery disease with failed exercise tolerance test

but no known history of angina / acute coronary syndrome / percutaneous coronary intervention / coronary artery bypass graft. The second case was of Brugada syndrome.

9. Tests

10. Research and Literature

11. Horizon Scanning

The Agenda items in the current meeting cover the above 3 items.

12. Appeal cases since last Panel meeting: October 2018 -31st January 2019.

DVLA received 94 summonses out of which 1 was cardiac related appeal. The medical condition involved in the appeal case was 'arrhythmia'. The case has been processed with further information available and the appeal has been withdrawn.

13. Declaration of member's interests (enclosure 14) - panel members to complete the declaration of members interest form and to send it via email to the DVLA.

14. AOB

The senior DVLA doctor asked the Panel if they would consider representation of an occupational health physician on the Cardiovascular Panel. Panel would like to know more details regarding the contribution that the occupational health physician would make to the Panel and then consider it further.

Marfan's Syndrome: G**roup 1 licence standards**

Panel secretary raised the issue on behalf of Dr Freeman (apologies for absence) that there is need for guidance in the AFTD guide on the time off driving required following surgery for Marfan's Syndrome, as exists for CABG and in the valvular heart disease section.

It was agreed:

Group 1: Re-licensing could be considered 4 weeks after successful surgical treatment if no further enlargement of the aortic diameter.

The current Group 2 licence standard for Marfan's Syndrome following surgery remains unchanged. The minimum time off driving following surgery: 3 months from the time of the surgery.

15. Date and time of the next meeting.

DVLA to inform Panel members of the date of the next meeting at the earliest opportunity. A provisional date of 17th of October 2019 was agreed but this needs to be confirmed by DVLA.

First Draft Minutes prepared by: **Dr A Kumar MBBS MRCGP**
Panel Secretary

Final Minutes signed off by: **Dr Andrew Kelion**
Panel Chair
Date 6th June 2019

The DVLA will consider the advice provided by the panel and no changes to standards will take effect until the impact on individuals and road safety is fully assessed