

The background of the entire page is a close-up, slightly blurred view of a car window covered in raindrops. The water droplets are of various sizes and are scattered across the surface, creating a textured, reflective effect. The colors are muted, with greys, blues, and greens from the background scene visible through the rain.

DRIVING WITH DEMENTIA OR MILD COGNITIVE IMPAIRMENT

2018

Consensus Guidelines for Clinicians

Members of Working Group

Core Guideline Development Group

John-Paul Taylor, Newcastle University and Northumberland, Tyne & Wear NHS Foundation Trust
Kirsty Olsen, Newcastle University
Paul Donaghy, Newcastle University

Alzheimer's Society

Tim Beanland

Clinical Psychology

Nicky Bradbury (British Psychological Society)
Nadina Lincoln (Nottingham University)
Angus McDonald (Berkshire Healthcare NHS Foundation Trust)
Sophie Monaghan (Surrey and Borders Partnership NHS Trust)

Driving Mobility

Barry Clift (North West Driving Assessment Service)
Sandra Hoggins (Driving Mobility)
Ed Passant (Driving Mobility)

Driver and Vehicle Licensing Agency

Andrew White

Geriatric Medicine

David Carr (Washington University, USA)
Frank Molnar (University of Ottawa, Canada)

General Practice

Louise Robinson (Newcastle University)

Lay Members

Beryl Downing (DeNDRoN Patient and Public Involvement Panel Member)
Pauline Smith (DeNDRoN Patient and Public Involvement Panel Member)

Nursing

Victoria Traynor (University of Wollongong, Australia)

Occupational Therapy

Kathryn Radford (Nottingham University)
Joanna Strachan (NHS Lothian)
Sue Vernon (Driver Vehicle Standards Agency Approved Driving Instructor) Retired

Old Age Psychiatry

Peter Connelly (NHS Tayside, University of Stirling and Royal College of Psychiatrists)
Daniel Harwood (South London and Maudsley NHS Foundation Trust)
Pat Myint (Northumberland Tyne & Wear NHS Foundation Trust)
John O'Brien (Cambridge University)
Mark Rapoport (Sunnybrook Health Sciences Centre and University of Toronto)
Andrew Teodorczuk (Griffith University, Australia)
Alan Thomas (Newcastle University and Gateshead Health NHS Foundation Trust)
Sarah Wilson (Nottinghamshire Healthcare NHS Foundation Trust)
Nick Woodthorpe (Berkshire Healthcare NHS Foundation Trust)

Older Drivers Forum

Graham Mylward (Hampshire County Council)

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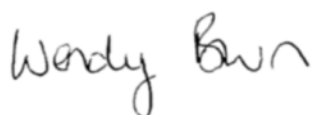
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FOREWORD

The issue of driving with dementia or mild cognitive impairment is of vital importance to patients, their families and friends, and their clinicians. The loss of the ability to drive can be a source of enduring disappointment and frustration for people with dementia. On the other hand, continued driving by people with significant cognitive impairment can cause worry and stress for their loved-ones, can be a source of conflict between them, and may put the person concerned and others at risk. In this context, the assessment and management of driving safety forms an important part of a holistic assessment of a person with cognitive impairment.

The assessment of driving risk can be difficult for clinicians, not least because there is little evidence to guide our practice. These Guidelines are the result of a collaboration between a diverse range of clinicians with involvement of carers. They set out the responsibilities of clinicians to their patients, and provide a framework for thinking about the management of their driving safety. They will be a useful tool for any clinician working in the assessment and management of people with cognitive impairment who drive.



Professor Wendy Burn

President

Royal College of Psychiatrists



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OVERVIEW

1 Introduction

- 1.1 In Great Britain, around 80% of people aged 60 - 69 years and 60% of people aged over 70 years hold a current driving licence [1].
- 1.2 As our population continues to increase in age, so too will the prevalence of dementia in the UK, which is estimated to reach over 1 million by 2025 [2].
- 1.3 Increasingly, earlier diagnosis and interventions mean that clinicians are becoming more involved in helping those with a diagnosis of dementia and their families/carers in making decisions about driving safety.
- 1.4 As well as considering the licence holder's perspective, clinicians have a duty of care to ensure the person understands the legal requirements that need to be met, and that any risk is managed appropriately.

2 Purpose

- 2.1 The purpose of this guideline is to provide clinicians with an understanding of their legal and clinical responsibilities, as well as a framework on which to base appropriate management of those who drive with a diagnosis of dementia or mild cognitive impairment.
- 2.2 The guidelines have been designed to provide assistance to clinicians rather than be prescriptive and can be adapted for local use. They are designed for use within clinical and community settings as a part of a comprehensive clinical assessment and formulation, rather than as a stand-alone assessment focussed solely on driving safety.

3 How to use this document

- 3.1 This document contains three main sections: Dementia, Mild Cognitive Impairment and Appendices. Within these sections are main headings in green. Under each of these main headings are ordered numbered statements relating to the main heading subject.
- 3.2 Summaries of the guidelines for dementia and mild cognitive impairment are presented graphically in two pathways in Appendices 7 and 8 respectively.
- 3.3 Green boxes throughout the document represent the presentation of either a point of statute/law or guidance published by official bodies (e.g. the DVLA or General Medical Council).
- 3.4 Numbered statements from Sections 5 to 31 were formed and ratified by consensus agreement of the driving and dementia Delphi panel. Appendix 6 describes the development of the Guideline and the members of the Delphi panel.
- 3.5 Footnotes throughout the document represent general comments made by the Delphi panel (although not specifically ratified by consensus) as well as points of clarification.
- 3.6 Key statements are highlighted in **bold** text.
- 3.7 All numbered statements in this guideline apply to the Group 1 licence (car and motorcycle). However, for ease of reference DVLA guidance for Group 2 licence (bus and lorry) has also been included in Box 3 (DVLA current medical guidance for group 2 licence [bus and lorry]).

- 3.8 Official guidelines in this document, for example, from the DVLA or General Medical Council may be subject to change. It is the responsibility of the user of this document to cross-check these.¹

4 Definition of terms

- 4.1 For clarification some of the terms used throughout the document are defined below:

DVLA	Driver and Vehicle Licensing Agency – users of the Guidelines in Northern Ireland should substitute DVA (Driver and Vehicle Agency)
Person	Refers to the individual with a diagnosis of dementia or mild cognitive impairment
Clinician	Refers to the professional with lead responsibility for the person. This includes, for example, doctors, nurses, social workers, clinical psychologists, occupational therapists and other healthcare professionals

¹ The DVLA provides email updates regarding their Guidance:

www.gov.uk/government/publications/assessing-fitness-to-drive-a-guide-for-medical-professionals

DEMENTIA

5 Background

- 5.1 Dementia in this Guideline refers to a progressive decline in cognition that interferes with the person's ability to carry out their normal activities of daily living [3].
- 5.2 These guidelines were created with particular consideration of services dealing with the more common dementias i.e. Alzheimer's, vascular, mixed, Lewy body and frontotemporal dementias.
- 5.3 Prior to any assessment of dementia or cognition (and especially within a memory clinic setting) it is good practice that a person is notified that there could be implications for their future driving.²

Box 1 – DVLA legal basis for medical standards

According to Section 92 of the Road Traffic Act 1988:

- A relevant disability is any condition which is either prescribed (by Regulations) or any other disability where driving is likely to be a source of danger to the public. A driver who is suffering from a relevant disability must not be licensed, but there are some prescribed disabilities where licensing is permitted provided certain conditions are met.
- Prospective disabilities are any medical conditions that, because of their progressive or intermittent nature, may develop into relevant disabilities in time. Examples are Parkinson's disease and early dementia. A driver with a prospective disability may be granted a driving licence for up to 5 years, after which renewal requires further medical review.

(DVLA – Assessing fitness to drive – a guide for medical professionals. 2018 [4])

6 Legal basis for medical standards

- 6.1 The legal basis for the medical standards for fitness to drive are set out in Box 1.
- 6.2 The Secretary of State for Transport acting through the DVLA has the responsibility to ensure that all licence holders are fit to drive.
- 6.3 The legal basis of fitness to drive lies in the 3rd EC Directive on driving licences (2006/126/EEC), which came into effect in the UK on 19th January 2013, the Road Traffic Act 1988 and the Motor Vehicles (Driving Licences) Regulations 1999 (as amended).

² This should be relayed with sensitivity and in the context of general impact on broader psycho-social function.

7 DVLA – Official guidance

7.1 The DVLA official guidance in reference to dementia is set out in Box 2 and currently states:

Box 2 – DVLA current medical guidance for group 1 licence (car and motorcycle)

[A person with dementia] May be able to drive but must notify the DVLA.

It is difficult to assess driving ability in people with dementia. The DVLA acknowledges that there are varied presentations and rates of progression, and the decision on licensing is usually based on medical reports.

Considerations include:

- poor short-term memory, disorientation, and lack of insight and judgement almost certainly mean no fitness to drive
- disorders of attention cause impairment
- in early dementia, when sufficient skills are retained and progression is slow, a licence may be issued subject to annual review

A formal driving assessment may be necessary.

(DVLA – Assessing fitness to drive – a guide for medical professionals. 2018[4])

7.2 If the person holds a group 2 licence the DVLA official guidance set out in box 3 currently states:

Box 3 – DVLA current medical guidance for group 2 licence (bus and lorry)

[A person with dementia] Must not drive and must notify the DVLA.

Licensing will be refused or revoked.

(DVLA – Assessing fitness to drive – a guide for medical professionals. 2018[4])

8 Effects of dementia on driving

- 8.1 Driving is a complex task that requires a combination of cognitive processes, sensory abilities and manual/motor skills.
- 8.2 Dementia can be associated with impairments to these processes and skills, which may affect driving ability (see Figure 1 for examples).

Figure 1: Examples of how dementia can affect driving skills

EXECUTIVE FUNCTIONS
<ul style="list-style-type: none"> • Take appropriate action to avoid accidents • Plan routes • Respond appropriately to road signs, traffic signals and other road users • Sequence the tasks required to start, control and stop the car • Respond to unexpected changes on the road (e.g. road closures, lane alterations and diversions) • Anticipate and react to future road scenarios (e.g. parked car indicating to pull out)
VISUO-SPATIAL & VISUOPERCEPTUAL SKILLS
<ul style="list-style-type: none"> • Recognise other road users and judge their speed and distance • Recognise road signs, lane markings and traffic signals • Maintain a safe and consistent position on the road
ATTENTION & CONCENTRATION
<ul style="list-style-type: none"> • Maintain attention to the road • Maintain attention to other road users • Maintain appropriate speed • Divide attention to attend to multiple hazards in busy situations
REACTION TIMES
<ul style="list-style-type: none"> • Anticipate and react quickly and consistently to the actions of other road users
MEMORY
<ul style="list-style-type: none"> • Plan and remember routes • Remember the meaning of road signs, lane markings and traffic signals

- 8.3 **Not everyone who has received a diagnosis of a dementia, particularly in the early stages, will need to cease driving immediately.**
- 8.4 Driving is an overlearned process and after diagnosis some people will retain the skills necessary to be able to drive safely for a period of time.

- 8.5 **However, drivers with dementia must fulfil certain legal requirements such as informing the DVLA of their diagnosis.**
- 8.6 For those with a progressive dementia, executive function, visuo-spatial skills, memory, perception and the ability to perform everyday tasks will become increasingly impaired, and the ability to drive will be lost.
- 8.7 **The stage when this occurs will be different for each person. When a person's condition deteriorates to the point where they may be unsafe on the road, they must cease driving.**

9 Assessment of safety to drive in people with dementia

- 9.1 Typically assessing a person's safety to drive is not done in isolation but forms one part of a broader clinical assessment that should be carried out when assessing someone with cognitive impairment or dementia.
- 9.2 Assessing a person's safety to drive involves a discussion with the person and, whenever possible, a collateral history. This can be of particular importance and may need to be done separately from the person with dementia, as this gives an opportunity to explore any disparities.³
- 9.3 This should include an assessment of their current driving habits, their functional ability, any clinical co-morbidities, medications and their cognitive function.
- 9.4 Potential reported 'red flags' to be aware of are changes in driving behaviour such as:
- Any 'at fault' accidents or 'near misses'
 - Parking problems/hitting kerbs/scrapes
 - Speeding or lack of awareness of speed limits when driving
 - Driving excessively slowly
 - Delayed reactions to, or poor judgement of, road situations in driving
 - Passengers becoming actively involved in managing operational aspects of the journey ('co-piloting' e.g. pointing out hazards or traffic light changes), rather than being a passive traveller
 - Poor control of vehicle or increased hesitations at junctions and roundabouts
 - Passengers or drivers no longer feeling safe when in the car
 - Consistently getting lost on familiar routes
- 9.5 The presence of other symptoms that may affect driving ability should be asked about, for example:
- Changes in personality with disinhibition, impulsivity and/or aggression
 - Excessive daytime sleepiness and variations in arousal
 - Psychotic symptoms such as hallucinations or delusions
 - Severe anxiety and/or depression
 - Poor insight into how dementia may affect/has affected their driving performance
- 9.6 In some cases further assessment may be needed to determine whether a person with dementia can drive safely (e.g. driving assessment at a Driving Mobility Centre).

³ See Appendix 4 for examples of questions that could be asked to investigate this.

10 Functional ability

- 10.1 An assessment of functional ability is a necessary pre-requisite for a diagnosis of dementia.
- 10.2 It may also be useful to take into account the person's current functional ability in carrying out day to day tasks and activities of daily living when addressing safety to drive. Difficulties with instrumental daily living tasks (e.g. sequencing required for cooking), when taken with other evidence, may indicate reduced safety to drive.

11 Physical co-morbidities and medications

- 11.1 An assessment of safety to drive should also include consideration of any co-morbidities.
- 11.2 These may, when combined with functional or cognitive impairment, contribute to reduced driving ability and safety to drive.
- 11.3 Examples of important co-morbidities include:
 - Sensory deficits
 - Visual impairments
 - Hearing problems
 - Peripheral neuropathy
 - Physical impairments
 - Impaired head/neck-turning ability
 - Musculoskeletal problems (e.g. arthritis, chronic pain, weakness)
 - Neurological problems (e.g. Parkinson's disease, residual stroke symptoms, syncope)
 - Other physical co-morbidities
 - Endocrine (e.g. hypo/hyperglycaemia)
 - Cardiac (e.g. cardiac arrhythmias, hypotension)
 - Seizures
 - Sleep apnoea
 - Drugs and toxins
 - Sedating (e.g. benzodiazepines, narcotics, antihistamines)
 - Anticholinergic (e.g. tricyclics, antipsychotics, oxybutynin)
 - Recent excessive alcohol or illicit drug use

12 Cognitive tests

- 12.1 Although no threshold in any cognitive test or test battery can definitively predict driving safety among the diverse population that present to clinical services with cognitive complaints, cognitive tests are an important part of the assessment of a person's ability to drive safely.
- 12.2 Controversy exists as to what cognitive tests may be useful or serve as a 'red flag' regarding driving safety, although some sources advocate the clock drawing test and Trail Making Test B test as helpful.
- 12.3 Test scores need to be interpreted with regard to the person's previous intellectual attainment and in light of the full clinical assessment. There is no consensus on specific thresholds in cognitive tests which can predict safe or risky driving behaviours and further research is needed.
- 12.4 Discrepancies may occur between reported functional skills and objective cognitive performance. Although poor performance on cognitive testing does not automatically transfer to driving safety, if a good report of driving performance has been received from the person and/or family, but poor performance is seen upon cognitive testing, this may raise a concern and indicate a need for referral for further assessment.
- 12.5 **Clinical judgement must be used to identify those who must stop driving immediately, and those who require further assessment.**

13 Clinical discussion

- 13.1 Advise licence holders that they are legally required to inform the DVLA.
- 13.2 Any person who receives a diagnosis of dementia must inform the DVLA by law. If they do not it is a criminal offence with a fine of up to £1000.
- 13.3 **The person must be informed that it is their responsibility to notify the DVLA.** It should also be recorded in the clinical notes that the person has been advised to notify the DVLA.
- 13.4 The person can inform the DVLA by a number of methods: 1) completing and returning the form CG1, available from <https://www.gov.uk/government/publications/cg1-online-confidential-medical-information> or 2) writing a letter to DVLA.
- 13.5 Although the DVLA guidance states that it is the duty of the licence holder to notify the DVLA of any medical condition which may affect safe driving, people with dementia may lack the insight to understand the issues about driving with their condition.
- 13.6 In these cases it is important for the clinician to determine capacity, and if necessary ensure that a relative or carer will support the person with dementia to notify the DVLA, or obtain the person's permission to write a letter⁴ on their behalf to the DVLA stating that a diagnosis of dementia has been made.
- 13.7 If none of these courses of action are available to the clinician, please refer to the guidance on page 12 in section 19.5 (Box 5).

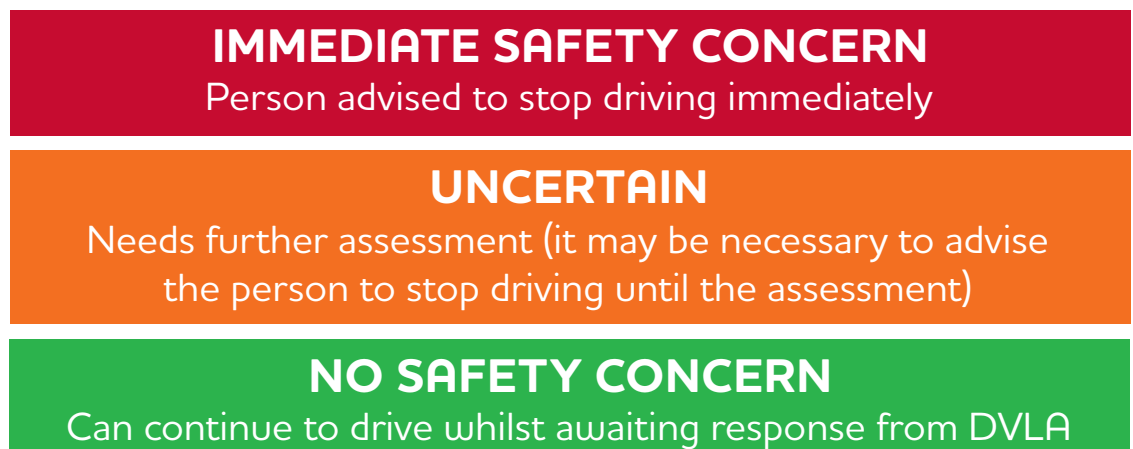
⁴ This can also be e-mailed or faxed.

- 13.8 If it is determined that the clinician⁵ is to notify the DVLA, the letter should be sent to the Drivers Medical Group, and include the person's full name, address, date of birth and driving licence number if known. Examples of template letters can be found in Appendix 3 or online, for example at <http://research.ncl.ac.uk/driving-and-dementia/>
- 13.9 **A person with a diagnosis of dementia must also inform their car insurance company, or their policy could be declared invalid. It is a criminal offence to drive without at least third party cover.**

14 Can the person continue to drive whilst awaiting a response from the DVLA?

- 14.1 Following the clinical assessment, a decision will be made about whether the person is safe to drive or not. This is made on the basis of all available evidence rather than the presence or absence of any one feature.
- 14.2 It should be recognised that a number of 'lower level' deficits (see section 11.3) or impairments that alone would not be sufficient to raise concerns about driving safety may, in combination, make a person's driving unsafe.
- 14.3 **In the first instance it is important to establish whether there are any immediate concerns with regards the person's safety to drive based on the assessment described above.**
- 14.4 **If there are any immediate concerns then the clinician must advise the person (and family where appropriate) to cease driving until a decision has been made by the DVLA.**
- 14.5 **If clinically there are thought to be no immediate safety concerns, then the person can be advised that there is no identified reason to stop driving until a decision has been made by the DVLA. If doubt exists regarding driving safety, it is recommended that a referral is made to a local driving mobility centre for a comprehensive assessment. It may be necessary to advise the person not to drive until the assessment is completed (Figure 2).**

Figure 2: Advice on driving whilst awaiting a response from the DVLA



⁵ Professional bodies may have individual professional protocols for this process (e.g. Royal College of Occupational Therapists' information for members: Fitness to Drive Briefing 2018). Please refer to these where appropriate.

- 14.6 **It is the clinician's responsibility to inform a person whether or not they are safe to drive when awaiting the DVLA's decision [4].**

15 Driving Mobility Centres

- 15.1 Independent assessment of the impact of a person's medical condition on their driving is available at any of the Centres accredited by Driving Mobility (see Appendix 5).
- 15.2 Ideally, Mobility Centres and memory/dementia services should develop close local links, so that referral routes and local knowledge of available services is shared. For some Centres there may be a small charge for this assessment to the person.
- 15.3 In certain circumstances (for example in remote areas) the DVLA may request a DVSA driving appraisal (an adapted driving test). However, when further assessment is needed, it is recommended that this is carried out at a specialist accredited Mobility Centre wherever possible.

16 Discussing the risks and benefits of continuing to drive with the person with dementia and family

- 16.1 It is important to discuss the risks and benefits of continuing to drive with the person (and family). Many will not have considered that they may have to cease driving, or even if they are safe to drive at present that they will eventually have to stop.

17 DVLA process after notification

- 17.1 Once the notification has been received, the DVLA will seek permission from the person to obtain medical reports from the clinician (usually the consultant), the person's general practitioner (GP) and/or other specialists. Once this is received, the DVLA will contact the clinician involved in the care of the person (or, if no clinician details are provided, their GP).⁶
- 17.2 On receipt of all the required medical evidence, the medical adviser at DVLA will decide whether or not the driver or applicant satisfies the national medical guidelines and the requirements of the law. A licence is accordingly issued or revoked/refused. **The Secretary of State, in the person of DVLA's medical advisers, alone can make this decision.**

⁶ The medical questionnaire requested by the DVLA is completed by the person's clinician and includes information on diagnosis, medication, information from third parties about the person's driving ability, and a note of other medical conditions potentially affecting the person's ability to drive.

18 Possible outcomes

- 18.1 Once the medical reports have been received by the DVLA, there are a number of possible outcomes (Figure 3). Clinicians may want to refer to these (available from DVLA leaflet INF94 [5]).
- 18.2 As noted above the decision concerning driver licensing ultimately rests with the DVLA, and therefore the person should be signposted to the authority for further information.

Figure 3: Possible outcomes from referral to DVLA [5]

Retain licence	Additional information needed	Retain licence (subject to restrictions)	Revoke Licence
<ul style="list-style-type: none"> Licence is retained or new one issued 	<ul style="list-style-type: none"> Obtained through an examination by a local medical officer or specialist Obtained through a formal practical driving assessment by a registered specialist assessment centre or a DVSA driving appraisal (an adapted driving test) 	<ul style="list-style-type: none"> Time limited licence where further medical reports are sought after a defined period (typically one year) 	<ul style="list-style-type: none"> If the DVLA decides a person is no longer safe to drive, that person must return their licence to the DVLA If the person disputes this decision there is an appeals process. A formal appeal must be lodged with the Magistrates Court within 6 months in England & Wales. (In Scotland appeals need to be made to the Sheriff Court within 21 days)

Box 4 – Outcome of DVLA medical enquiries

The DVLA does not routinely tell doctors of the outcome of a medical enquiry. Drivers are always informed of the outcome, either by being issued a licence or by notification of a refusal or revocation.

For cases in which the driver may not have the insight and/or memory function to abide by the refusal or revocation of their licence – for example, in cognitive impairment, dementia or a mental health condition – the DVLA would usually send a decision letter to the GP.

When a notification is received from a doctor in accordance with the GMC guidelines, unless relevant to one of these conditions affecting mental capacity, the DVLA will send an acknowledgement letter only to the GP, to confirm receipt of the original notification.

(DVLA – Assessing fitness to drive – a guide for medical professionals. 2018 [4])

19 What to do if the person refuses to accept the decision/cease driving

- 19.1 If the person refuses to stop driving when they have been advised they are unsafe to do so, or they refuse to inform the DVLA of their diagnosis, the clinician must inform the person that they have an obligation to inform the DVLA of the diagnosis and other agencies as appropriate on road safety grounds.⁷
- 19.2 If the licence has already been formally revoked by the DVLA and the person chooses to continue driving, the clinician must inform the person that, as their clinician, they have an obligation to inform the DVLA medical adviser.
- 19.3 It is also recommended that the clinician discusses with the family (if appropriate) the possibility of removing opportunities to drive if the person presents an immediate danger to others and that the insurance company may not cover any liability arising after it has been documented the person is unfit to drive.
- 19.4 A record should be made in the clinical notes of actions taken by the clinician.
- 19.5 Confidentiality may be of concern in this instance, and the General Medical Council advises accordingly (Box 5):

Box 5 – General Medical Council guidance for reporting concerns to the DVLA

If a patient refuses to accept the diagnosis, or the effect of the condition or treatment on their ability to drive, you can suggest that they seek a second opinion, and help arrange for them to do so. You should advise the patient not to drive in the meantime. As long as the patient agrees, you may discuss your concerns with their relatives, friends or carers.

If you become aware that a patient is continuing to drive when they may not be fit to do so, you should make every reasonable effort to persuade them to stop. If you do not manage to persuade the patient to stop driving, or you discover that they are continuing to drive against your advice, you should consider whether the patient's refusal to stop driving leaves others exposed to a risk of death or serious harm. If you believe that it does, you should contact the DVLA or DVA promptly and disclose any relevant medical information, in confidence, to the medical adviser.

Before contacting the DVLA or DVA, you should try to inform the patient of your intention to disclose personal information. If the patient objects to the disclosure, you should consider any reasons they give for objecting. If you decide to contact the DVLA or DVA, you should tell your patient in writing once you have done so, and make a note on the patient's record.

(General Medical Council - Confidentiality: Reporting concerns about patients to the DVLA or DVA, 2017 [6])

⁷ If this is an issue of safety the clinician has the responsibility to breach confidentiality in line with the policies of the NHS Trust or other organisation that they are employed by.

20 Person with dementia retains licence/is to keep driving

20.1 If the decision from the DVLA is favourable, and the person is to continue driving, there are then a number of further areas which may need to be addressed by the clinician (sections 21-24).

21 Policy for monitoring

21.1 In the first instance, the DVLA will have informed the person of the period for which the licence has been granted (typically one year), and the conditions upon which it has been retained.

21.2 The person may be subject to a medical review (typically annual) by the DVLA. Overall, this responsibility lies with the DVLA, although it is good practice that clinicians involved in the person's ongoing care should respond to any new concerns about their safety to drive in the same manner detailed above in Section 14 and Figure 2.

21.3 Depending on the progress of the person's condition, monitoring of the person's driving ability may be required within the prescribed licencing period the DVLA has granted.

21.4 Driving safety of the person should be considered within the context of an integrated clinical assessment and formulation.

22 Discuss safe driving practices with the person with dementia and family

22.1 If the person with dementia is deemed safe to continue driving, then a discussion about safe driving practices may be helpful for them and their family. Examples of practical advice include:

- Try to keep to familiar roads or routes⁸
- Avoid driving at night where possible
- Do not drive if feeling tired or unwell
- Do not take any alcohol at all on the day of driving and avoid drinking to excess the day before
- Try not to drive in poor weather conditions

23 Discuss plan around gradual reduction in driving

23.1 The clinician should acknowledge the importance that the person with dementia may place on driving as part of their identity.

23.2 Although the person may remain safe to drive in the present, the clinician should begin the process to prepare them for the practicality that in the future they may need to cease driving.⁹

23.3 What form this takes will depend upon what service provision is available locally; however, there are a number of resources detailed in Appendix 1 that can be given to the licence holder and family.

⁸ However, unexpected events and diversions can happen in familiar areas and the person with dementia may have difficulty remembering restrictions.

⁹ In situations where a person has a progressive condition likely to affect driving ability later on, and particularly if memory is affected, learning new ways of getting around may become difficult. The person can be advised that rather than focusing on the necessity of driving, and excluding other methods, they should begin to experiment with other means of getting around and to practise and use those methods, so other solutions become a natural part of life before the transition to not driving becomes necessary. Driving cessation may then not become a major issue when it occurs.

24 Discuss awareness of changes in driving safety

- 24.1 Detecting the point at which driving becomes unsafe can be a problem for individuals and family members. Often there is no 'significant event' but rather a series of small incremental changes that can be difficult to detect.
- 24.2 If, however, there are emerging concerns by the person with dementia and/or family member/s regarding driving safety then a review may be appropriate to assess these concerns and driving safety more fully. The person with dementia and/or family member/s should be advised who to contact in this instance.
- 24.3 Outlined below are subtle changes in driving safety that may indicate that driving is starting to become unsafe:
- Visuospatial judgement
 - Changes to the proximity of the car the individual is driving to stationary vehicles or when overtaking
 - Unable to hold a steady course in a defined lane
 - Difficulty in following subtle changes in the course of the road
 - Response to hazards
 - Repeated failure to respond in busy environments such as junctions or crossings
 - Reduction in attention
 - Seeming 'overwhelmed' in everyday driving situations
 - Decision making
 - Decline in ability to make independent decisions when driving
 - Verbal prompt required by passenger
 - Over-correction or erratic correction to changes in road direction or the environment
 - Errors in sequencing
 - Failing to release the handbrake
 - Failing to check for hazards before moving off
 - Trouble changing gears or missed gear changes
 - Heightened passenger vigilance
 - Passengers becoming more aware of changes in driving ability when travelling in the car
 - A change from being a passive traveller to providing prompts or cues

25 Person with dementia has licence revoked/decides to cease driving

- 25.1 If the person with dementia realises it is time to stop driving or the decision from the DVLA is to revoke the person's licence they may find this difficult to accept.
- 25.2 There are a number of things the clinician can do to provide support to the person and family:¹⁰
- Acknowledge how difficult it may be for the person and their family. The person with dementia may have relied upon their ability to drive (or been relied upon by family members) for most of their lives.
 - Highlight that it is recognised they have been responsible in making/accepting the decision.
 - Encourage them and their family member/s to take charge and explore alternative transport arrangements.
 - Highlight that the decision to cease driving/having a licence revoked is not a reflection upon their previous driving skills, but is due to a medical condition that is now impacting on their ability to drive safely.

26 Discuss alternatives and benefits of not driving

- 26.1 It can be helpful to highlight some of the benefits of not driving, as well as signposting the person with dementia and their family member/s to alternatives that they may not have considered.
- 26.2 Alternatives to driving may include:
- Using public transport and taxis
 - Finding out about local community transport schemes
 - Using local NHS transport service for hospital appointments
 - Setting up direct debits for bill payments
 - Ordering shopping online for delivery
 - Joining organised trips or excursions
 - Getting a lift with friends or family
- 26.3 Benefits of not driving may include:
- Less stress from no longer having to find a parking space
 - Saving money by not paying for costs such as petrol, insurance, car tax and parking permits
 - Not having the stress of finding routes or remembering the way
 - Less stress from negotiating busy routes/traffic
 - Preserving safety of self and others

27 If someone is having difficulty coming to terms with the decision

- 27.1 It may be helpful to point them in the direction of a source of alternative help (See recommendations and resources and additional information sections for further information).

10 Covering all these driving related issues in a single clinical encounter may be challenging particularly when there are other issues (e.g. dementia diagnosis) which need to be dealt with. In this context, following this up via another face to face meeting or a letter may be necessary and supported with the use of appropriate advice leaflets.

MILD COGNITIVE IMPAIRMENT

28 Background

- 28.1 The purpose of this section is to clarify guidance and outline the clinical and legal responsibilities of the clinician in cases of mild cognitive impairment (MCI).
- 28.2 In this guideline, MCI refers to the presence of subjective and objective cognitive impairment, with preserved independence of function in daily life, with minimal aids or assistance [7].
- 28.3 In addition, the use of the term MCI in this guideline specifically refers to people thought to be at risk of progression to dementia (e.g. Alzheimer's disease, vascular dementia, dementia with Lewy bodies or frontotemporal dementia).
- 28.4 This guidance is therefore not intended for other causes of MCI such as head injury, stroke or substance misuse, which may be static or even reversible.

29 DVLA – Official Guidance

- 29.1 The DVLA official guidance in reference to mild cognitive impairment (not mild dementia) currently states (Box 6):

Box 6 - DVLA current medical guidance for group 1 licence (car and motorcycle) and group 2 licence (bus and lorry)

No likely driving impairment: May drive and need not notify the DVLA.

Possible driving impairment: It is difficult to assess driving ability in people with MCI. The DVLA acknowledges that there are varied presentations and rates of progression, and the decision on licensing is usually based on medical reports.

Considerations include:

- poor short-term memory, disorientation, and lack of insight and judgement almost certainly not fit to drive
- disorders of attention causing impairment

A licence may be issued subject to review.

(DVLA – Assessing fitness to drive – a guide for medical professionals. 2018[4])

30 When should the DVLA be notified?

- 30.1 DVLA guidance states that those with MCI and 'no likely driving impairment' need not notify the DVLA. Those with 'possible driving impairment' must notify the DVLA but may be able to continue to drive.
- 30.2 **As with a diagnosis of dementia, if there are any immediate concerns about driving safety then the clinician must advise the person to stop driving until a decision is made by the DVLA.**
- 30.3 As most people with a diagnosis of MCI will not have significant functional impairment it follows that the majority of people that have a diagnosis of MCI will not need to notify the DVLA.
- 30.4 **As with dementia, MCI must be considered in the context of other co-morbidities which may cumulatively affect driving safety (section 11.3).**
- 30.5 In addition, if any of the significant 'red flags' detailed in the dementia section (section 9.4) are present, or there is evidence of significant co-morbidities or any other safety concerns, then consideration should be given to advising the person with MCI to notify the DVLA and/or making a referral to a Driving Mobility Centre.
- 30.6 In alignment with guidelines on dementia the onus to contact the DVLA and/or monitor whether the person is safe to drive is with the person, but guidance from the clinician as to whether notification to the DVLA is required would be reasonably expected.

31 Follow up

- 31.1 People with a diagnosis of MCI and family members should be given information on what steps to take if deterioration in the person's condition raises concerns regarding driving safety, as a review may be appropriate to assess these concerns and driving safety more fully. The person with MCI and/or family member/s should be advised who to contact in this instance.
- 31.2 Ideally, people with MCI should be followed up either in primary or secondary care to monitor for progression to dementia and, as part of this process, it is good practice that those people with MCI who drive should have a clinical re-assessment of their safety to drive.

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- [2] Alzheimer's Society. 2014. Dementia UK: Update. Available at: <https://www.alzheimers.org.uk/about-us/policy-and-influencing/dementia-uk-report>
- [3] McKhann, G. M., Knopman, D. S., Chertkow, H., Hyman, B. T., Jack, C. R., Kawas, C. H., ... & Mohs, R. C. (2011). The diagnosis of dementia due to Alzheimer's disease: Recommendations from the National Institute on Aging-Alzheimer's Association workgroups on diagnostic guidelines for Alzheimer's disease. *Alzheimer's & dementia*, 7(3), 263-269.
- [4] DVLA. 2018. Assessing fitness to drive – a guide for medical professionals. Available at: <https://www.gov.uk/government/publications/assessing-fitness-to-drive-a-guide-for-medical-professionals>
- [5] DVLA. 2017. INF 94: Customer service guide for drivers with a medical condition. Available at: <https://www.gov.uk/government/publications/inf94-customer-service-guide-for-drivers-with-a-medical-condition>
- [6] General Medical Council. 2017. Confidentiality; reporting concerns about patients to the DVLA or the DVA. Available at: http://www.gmc-uk.org/guidance/ethical_guidance/30652.asp
- [7] Albert, M. S., DeKosky, S. T., Dickson, D., Dubois, B., Feldman, H. H., Fox, N. C., ... & Snyder, P. J. (2011). The diagnosis of mild cognitive impairment due to Alzheimer's disease: Recommendations from the National Institute on Aging-Alzheimer's Association workgroups on diagnostic guidelines for Alzheimer's disease. *Alzheimer's & dementia*, 7(3), 270-279.

APPENDICES

32 Appendix 1 – Resources

32.1 Dementia & Driving Clinical Decision Pathways

The accompanying information pack is also available from: <http://research.ncl.ac.uk/driving-and-dementia/>

32.2 Information for person with dementia/MCI/relatives

Information leaflets that can be adapted for local use, as well as a template letter to the DVLA for licence holder use is available from: <http://research.ncl.ac.uk/driving-and-dementia/>

A DVLA information leaflet on the notification process for drivers with a medical condition is available online. INF 94: Customer service guide for drivers with a medical condition. Available at: <https://www.gov.uk/government/publications/inf94-customer-service-guide-for-drivers-with-a-medical-condition>

A decision aid for licence holders and families, around giving up driving, is available at: <https://smah.uow.edu.au/content/groups/public/@web/@smah/@nmih/documents/doc/uow179550.pdf> it is an Australian resource, but could be adapted for local use.

A factsheet from Alzheimer's Society is available at: <http://www.alzheimers.org.uk/factsheet/439>

A free online seminar is available from the American Association of Retired People at: http://www.aarp.org/home-garden/transportation/we_need_to_talk/. This provides tools and advice on approaching the conversation of retiring from driving with family members.

Advice on driving safely for older people is available from <http://www.ridc.org.uk/content/older-drivers-driving-safely-life>

32.3 Resources for Clinicians

DVLA – Assessing fitness to drive – a guide for medical professionals.
Available at: www.gov.uk/dvla/fitnessdrive

Medical fitness to drive guidelines for Ireland are available from: <https://www.rcpi.ie/traffic-medicine/medical-fitness-to-drive-guidelines/>

A template guide of questions to facilitate discussion with Licence holders and their families is available at: <http://research.ncl.ac.uk/driving-and-dementia/>

Although a Canadian resource, a lot of useful information can be found at: <http://brainxchange.ca/Public/Resource-Centre-Topics-A-to-Z/Driving-and-dementia.aspx>

A toolkit for driving and dementia, that has been developed in Canada, but is a useful resource the latest version is available at: <http://www.rgpeo.com/media/30695/dementia%20toolkit.pdf> and the accompanying paper at: <http://www.biomedcentral.com/1471-2318/13/117>

32.4 Useful Literature

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Chee JN, Rapoport MJ, Molnar F et al. (2017) Update on the Risk of Motor Vehicle Collision or Driving Impairment with Dementia: A Collaborative International Systematic Review and Meta-Analysis. *American Journal of Geriatric Psychiatry* 25(12):1376-90.

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Molnar, F. J., & Simpson, C. S. (2010). Approach to assessing fitness to drive in patients with cardiac and cognitive conditions. *Canadian Family Physician* 56(11):1123-1129.

Molnar FJ, Rapoport MJ, Roy M. (2012). Dementia and driving: maximizing the utility of in-office screening and assessment tools. *Can Geriatr Soc J CME* 2(2):11-14.

33 Appendix 2 – Additional Information

Additional information, help and resources are available from:

DVLA

Drivers Medical Group
Swansea SA99 1DA
www.dvla.gov.uk/medical.aspx

Doctors' Helpline

Tel: 01792 782337 (Medical Professionals Only)
Email: medadviser@dvla.gsi.gov.uk (Medical Professionals Only)
DVLA guide for medical professionals: www.gov.uk/dvla/fitnesstodrive

Driver and Vehicle Agency Northern Ireland

Tel: 0300 200 7861
Email: dva@infrastructure-ni.gov.uk

Alzheimer's Society

0300 222 11 22 (national dementia helpline)
E-mail: info@alzheimers.org.uk (general information)
helpline@alzheimers.org.uk (helpline)
Web: alzheimers.org.uk
Talking point (an online community forum for support and advice): <http://forum.alzheimers.org.uk>

Age UK

Web: www.ageuk.org.uk
Tel: 0800 169 2081

Driving Mobility

www.drivingmobility.org.uk

34 Appendix 3 – Example letter to DVLA

Name
Address

Date:

Driver and Vehicle Licensing Agency
Swansea
SA99 1TU

Dear Sir/Madam

I have attended the Clinic for investigations of my memory problems.
As a driver, I have been advised by and the team, to inform you of this.

I have been given a diagnosis of.....

If you need to contact the consultant at the clinic, the address is:

Clinic Address

My driving licence number:

My date of birth:

Yours sincerely

.....

Copy to: Insurance Company

Own Records

35 Appendix 4 – Example questions to assess driving safety

Ten questions to ask the person

1. Have you noticed any change in your driving skills?
2. Have you lost any confidence in your overall driving ability, leading you to drive less often or only in good weather?
3. Do others sound their horn or flash lights at you or show signs of irritation?
4. Have you ever become lost while driving?
5. Have you ever forgotten where you were going?
6. Do you think that at present you are an unsafe driver?
7. Have you had any car accidents in the last year?
8. Have you had any minor accidents with other cars in car parks?
9. Have you received any cautions or fines for speeding, going too slowly, failing to stop at a red light, etc.?
10. Have others criticised your driving or refused to drive with you?

Ten questions to ask family members

1. Do you feel uncomfortable in any way driving with your relative?
2. Have you noticed any abnormal or unsafe driving behaviour?
3. Has your relative had any recent crashes?
4. Has your relative had near-misses that could be attributed to mental or physical decline?
5. Has your relative received any fines or cautions?
6. Are other drivers forced to drive defensively to accommodate your relative's errors in judgement?
7. Have there been any occasions where your relative has got lost or experienced navigational confusion?
8. Does your relative need many cues or directions from passengers?
9. Does your relative need a co-pilot to alert him or her to potentially hazardous events or conditions?
10. Have others commented on your relative's unsafe driving?

Questions adapted from: Molnar, F. J., Byszewski, A. M., Marshall, S. C., & Man-Son-Hing, M. (2005). In-office evaluation of medical fitness to drive: practical approaches for assessing older people. *Canadian Family Physician*, 51(3), 372-379.

36 Appendix 5 – Driving Mobility

There are 16 main Centres within the UK, delivering driving assessment services from over 50 venues to ensure a broad geographical spread. People may be referred by their clinician or may self-refer.¹¹ In some cases DVLA may refer as part of their medical driver licensing enquiries.

The assessment is clinically led, involving a team comprising an occupational therapist and an approved driving instructor, both of whom have undertaken further specialist training. The assessments typically are comprised of:

- an assessment of physical function
- a screening assessment of vision function
- cognitive assessment utilising a defined battery
- an on-road driving assessment in a dual controlled vehicle within a defined route of varying road conditions lasting between 45 minutes and an hour

A full written report of the assessment is provided and initial verbal feedback is given to the person.

The assessment process is valuable in determining fitness to drive where this is unclear but there are other positive benefits. Driving Mobility Centres offer the skills and expertise to assist people early in their diagnosis of dementia or MCI by providing advice on their current driving and they would be able to monitor changes in driving function by recommending a regular review. Centres can also raise the issue of driving cessation at an early stage with the person and family members to ease the process of transition.

11 There are some differences in the way the Scottish Driving Assessment Service operates, including the need for a referral from a doctor or the DVLA prior to assessment.

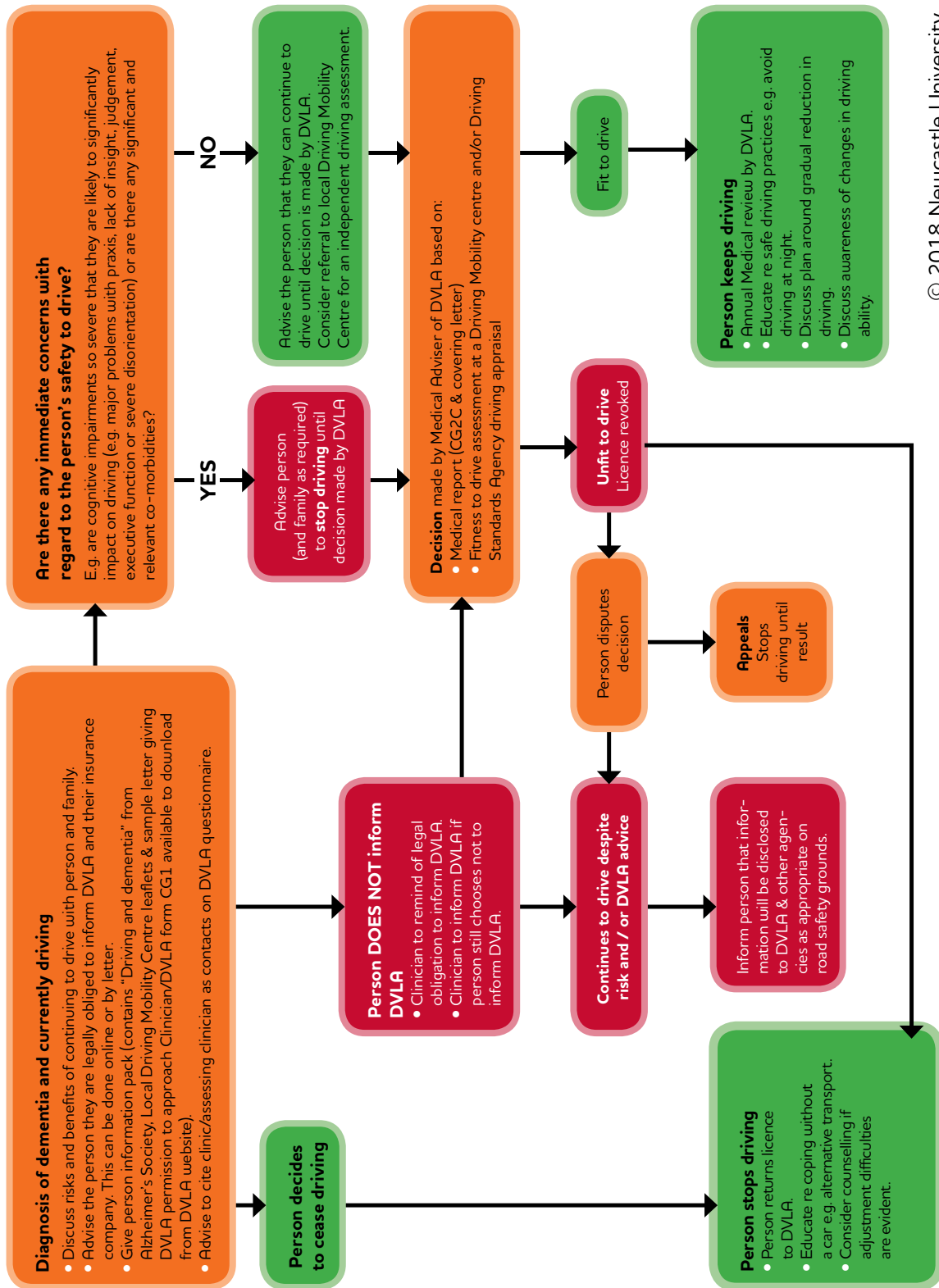
37 Appendix 6 – Development of the Guidelines

These guidelines were initially developed by a team at Newcastle University comprising John-Paul Taylor, Kirsty Olsen and Paul Donaghy. We would like to acknowledge and thank Dr Andrew Teodorczuk for his contribution in developing early versions of the driving pathways.

A working group was convened to further develop the Guidelines and produce a final document. Members of the working group are listed on the inside front cover. Two meetings were held at Newcastle University, followed by a Delphi process to agree on the content of the Guidelines. Using an online survey, participants were asked whether they agreed or disagreed with each numbered statement in the guidelines. Where there was sufficient agreement on a statement, it was included in the guideline. Where there was not sufficient agreement, the statement was removed from the guideline, or was revised on the basis of comments from the participants and resubmitted in the next round of the Delphi process. The Delphi process consisted of three rounds. The threshold for acceptance of a statement in Round 1 was 80%. The threshold for acceptance in Rounds 2 and 3 was 75%.

38 Appendix 7 – Dementia Pathway

Driving Pathway for Dementia



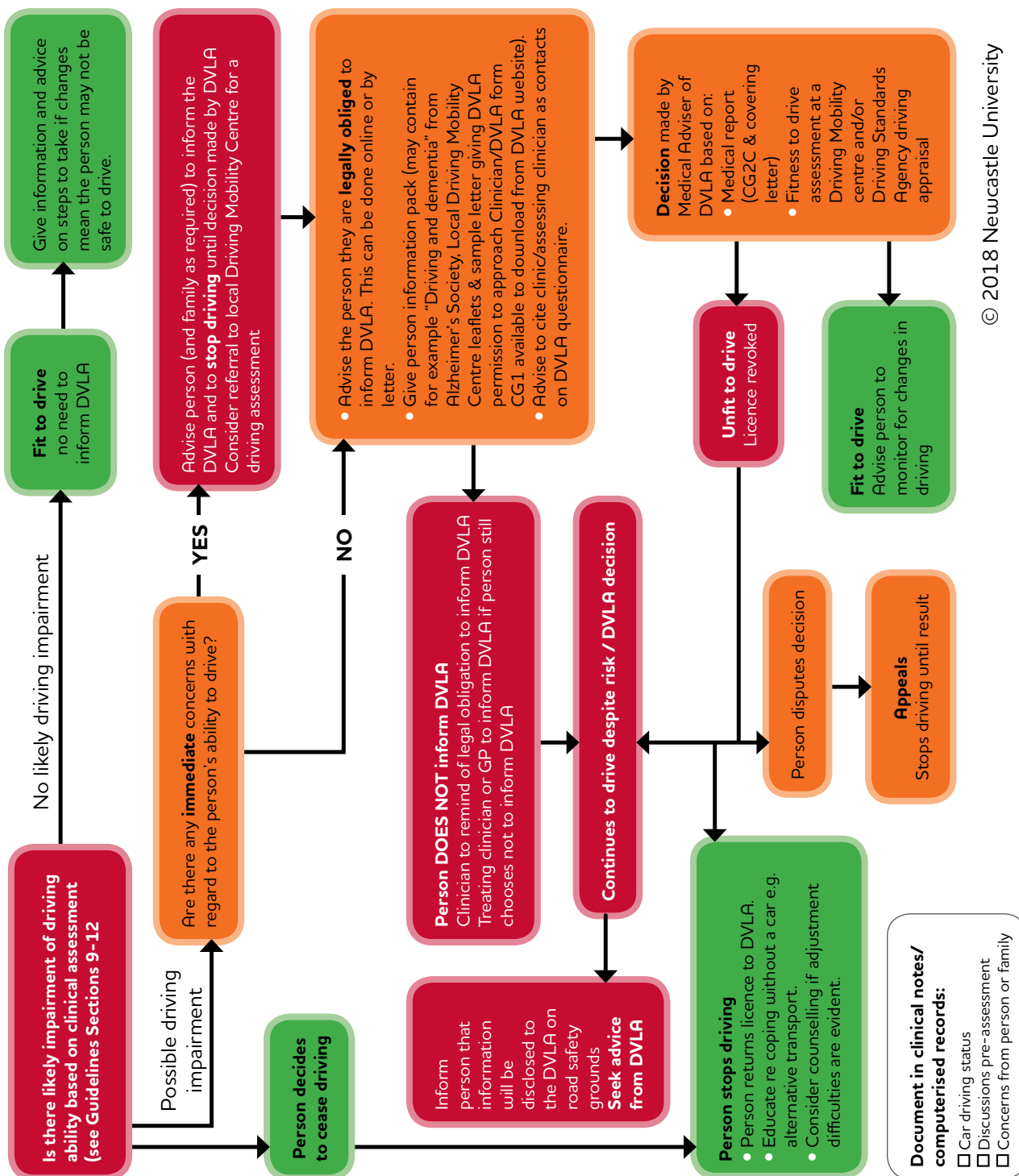
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Document in clinical notes/computerised records:
 Car driving status Discussions pre-assessment Concerns from person or family

39 Appendix 8 – MCI Pathway

Driving Pathway for Mild Cognitive Impairment

Mild cognitive impairment (MCI) refers to the presence of subjective and objective cognitive impairment, with preserved independence of function in daily life, with minimal aids or assistance.



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