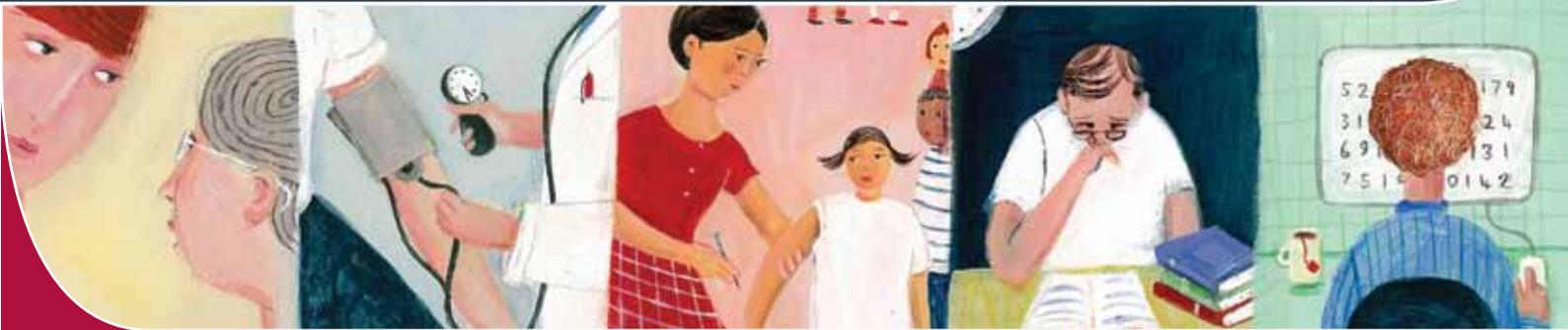


check

Independent learning program for GPs



Unit 478/479 January/February 2012

Fitness to drive



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Fitness to drive

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The issue of fitness to drive can emerge in relation to medical conditions such as diabetes and dementia, general debility with advanced age and in the postoperative setting. Concerns about fitness to drive might be raised by a patient's family or their general practitioner, or questions may be asked by the patient themselves. It is important for GPs to be aware of the current guidelines and apply them to assessment of their patients to ensure the safety of all concerned. The current guidelines are outlined in *Assessing fitness to drive for commercial and private vehicle drivers* (2006). The new edition of *Assessing Fitness to Drive* is due for publication in 2012. The authors bring a wealth of clinical, research and teaching experience to this topic.

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The learning objectives of this unit are to:

- identify those patients at greater risk of being involved in a motor vehicle collision
- understand the ethical and legal obligations that GPs face in dealing with driving competency among their patients
- display improved competence in assessing and managing patients with reduced competence to drive, especially borderline cases
- display increased confidence in appropriately completing a driver licensing authority medical report form
- understand when and how to use the *Assessing fitness to drive for commercial and private vehicle drivers* (2006) guideline
- display increased knowledge of when to refer to an occupational therapist and a medical specialist (including specialist driving clinics) for the purposes of assessment of fitness to drive
- display increased knowledge of the alternative transportation options for patients whose licence has been cancelled.

We hope that this unit of *check* will assist you to assess fitness to drive in your patients.

Kind regards,



Catherine Dodgshun
Medical Editor

CASE 1

SHOULD BOB BE PERMITTED TO KEEP HIS DRIVERS LICENCE?

Bob, aged 75 years, has been a patient of yours for several years. He appears to be increasingly forgetful. Bob is brought in by his wife who has noticed that he has difficulty finding words, asks the same questions repeatedly and has trouble finding items in the household. She has also noticed that Bob appears unable to complete the task of their weekly shopping and comes home with very few items. Bob's wife said these changes have come on gradually over several years and have been getting progressively worse. You ascertain that Bob has no specific symptoms of depression. He has been otherwise well with no past medical problems and is not taking any medications.

You perform a Mini-Mental State Examination (MMSE), which reveals a score of 22/30. Thorough physical examination, including cardiovascular and neurological examinations, is normal. Investigations performed as part of a dementia screen reveal no secondary cause of Bob's memory loss. You suspect that Bob has Alzheimer dementia of a mild degree and refer him to a psychogeriatrician who confirms the diagnosis and assesses his suitability for medication.

Bob and his wife have returned to see you today to discuss the diagnosis. You explain the diagnosis to Bob and then to his wife after seeking consent from Bob.

QUESTION 1 

What would you say to Bob about the issue of driving?

FURTHER HISTORY

You advise Bob to stop driving. When he comes to see you 2 weeks later about another matter and you question him about driving, Bob remains resistant to the idea of stopping driving. He points out that he has never had a driving accident and that aside from forgetting some trivial things he is coping very well. You agree Bob appears to be coping quite well with most of his daily activities.

QUESTION 2 

What are the general practitioner's legal obligations in this case? What should you do at this stage about reporting Bob's driving to the driver licensing authority (DLA)?

QUESTION 3 

Given that Bob is adamant about his competence to drive, what should you refer him for?

QUESTION 4 

What are the medical standards for licensing according to the Austroads *Assessing fitness to drive for commercial and private vehicle drivers* guideline for patients with early dementia?

QUESTION 5   

How would your management differ if Bob's wife had raised the question about his safety when driving?

FURTHER HISTORY

Bob is very displeased when you advise him not to drive. He says that it is quite unfair because he knows he is a very careful driver. He says he is going to change his GP and will not be returning to you.

QUESTION 6  

Do you have any further obligations and what might you do now?

QUESTION 7 

Is there a way you could obtain a second opinion to support your view that Bob should relinquish his licence?

CASE 1 ANSWERS

ANSWER 1

You should:

- inform Bob that due to his diagnosis of Alzheimer dementia, he will need to stop driving in the very near future and rely on other forms of transportation instead.¹ Inform Bob about the risks of driving with early dementia.² Guidelines recommend that people with a diagnosis of Alzheimer dementia may be unfit to drive as their judgement is likely to be impaired. Some patients with dementia believe that if they limit their driving and are 'extra careful', then they should be permitted to continue. This is an understandable reaction to being told they should not drive but might, in part, be due to a lack of insight associated with the dementing illness
- inform Bob that all drivers licensed in Australia are obliged to inform the DLA of any permanent or long term injury or illness that may impair their ability to drive safely. This advice is in keeping with current guidelines.^{2,3} Therefore, you should advise Bob to inform the DLA that he has been diagnosed with Alzheimer dementia. The DLA will subsequently write to Bob and ask him to undergo a medical assessment by his GP in the first instance
- refer Bob to the DLA, which will have further information on this issue written for the public.

It is possible that Bob's dementia is not severe enough at this stage to make it necessary for him to relinquish his licence. If you (or Bob) believe this is the case, you could make a recommendation to the DLA that Bob undergo an occupational therapy (OT) driver assessment. The OT might suggest a restricted licence, which could, for example, specify that Bob can only drive within a 5 km radius of his home. The OT will also be likely to recommend periodic reviews of his ability to drive and advise Bob on alternative community transport options.

The opinion of a geriatrician or neurologist specialising in dementia would most likely be required if this patient wishes to be considered for fitness to drive. A specialist would also be required for patients such as Bob who have Alzheimer dementia, if medication is being considered.

OT driver assessors and specialists, such as geriatricians, may only be available in metropolitan areas and larger rural centres. This may pose a difficulty for smaller rural towns and remote areas similar to the difficulties that can be experienced in accessing other health professionals.

ANSWER 2

You may be legally obliged to report Bob to the DLA, depending on the requirements of the jurisdiction in which he lives.⁴ While there appears to be no record of a doctor practising in Australia facing criminal charges as a result of providing clinical advice about driving

(litigation has been reported in America⁵⁻⁷), the potential for criminal and civil litigation exists and should be considered when providing advice and information to patients who may be at risk. When in doubt, GPs can seek advice from the DLA, or their medical defence organisation.

While there has not been successful criminal or civil proceedings taken against those who report to the DLA against the wishes of a patient, there may be conflict with the Privacy Act and the National Privacy Principles (privacy standards with which some private sector organisations, including private health service providers are required to comply). Privacy legislation provides patient autonomy over their personal information. This suggests that a patient could take action against the doctor, not for advising the DLA in itself, but for contravention of privacy. Conversely, not reporting a patient who later causes harm may also pose a risk of litigation.⁸

If a GP considers there is a significant risk to the public, the GP has an ethical obligation to inform the patient that they must report their condition to the DLA. However, if the GP does the reporting, they need to ensure that they have written good clinical notes to justify their action. In Bob's case, it would also be wise to provide him with written advice on what he should do in case his subsequent recollection about the consultation is not very clear.

Legal protection generally applies to members of the public who report drivers to the DLA.²

ANSWER 3

If patients are adamant about their competence to drive, they should be referred for an on-road driving test. If the GP makes the referral using the DLA medical report form, the DLA will take the necessary action.

There are two types of driving tests available in most jurisdictions:

- A road test administered by the DLA, at little or no cost. This may be similar to the initial licensing test and can be useful for checking patients about whom there are generalised concerns regarding bad driving habits or driving competency. This might not be appropriate in Bob's case as he has a diagnosis of a chronic and progressive medical condition.
- A more comprehensive assessment can be made by an OT driver assessor for patients with a disability or medically diagnosed condition, such as dementia. This is a more detailed evaluation that involves an off-road screening of vision, physical and cognitive capacities – as well as an on-road assessment in a dual control vehicle. Tests may cost a few hundred dollars.

ANSWER 4

The *Assessing fitness to drive for commercial and private vehicle drivers* guideline by Austroads advises on medical standards for licensing in the presence of dementia. These medical standards are outlined in *Table 1*.¹ Note that this guideline refers to criteria for a driving licence that are not met, rather than when they are.

Table 1. Medical standards for licensing – dementia and other cognitive impairments¹

| Private standards | Commercial standards |
|--|--|
| <p>The criteria for unconditional licence are NOT met if:</p> <ul style="list-style-type: none"> • there is significant impairment of memory, visuospatial skills, insight or judgement, or if problematic hallucinations or delusions | <p>The criteria for unconditional licence are NOT met if:</p> <ul style="list-style-type: none"> • the person's dementia or cognitive impairment are confirmed |
| <p>A conditional licence may be granted by the DLA, taking into account the opinion of the treating doctor/GP, and the nature of the driving task, and subject to periodic review, taking into account:</p> <ul style="list-style-type: none"> • report of any driver assessment • response to treatment | <p>A conditional licence may be granted by the DLA, taking into account the opinion of an appropriate specialist, and the nature of the driving task, and subject to periodic review, after consideration of the following:</p> <ul style="list-style-type: none"> • the cause of the condition and likely response to treatment • any appropriate neuropsychological tests • the results of a practical driving test |

ANSWER 5

If the issue was raised by Bob's wife rather than by Bob or you as his GP, you could suggest to Bob's wife that her husband should have an assessment and relinquish his licence if required. Bob might be more amenable to this approach if he could see that family members are worried about his driving. It is not unusual for family members to seek support from GPs, and for a GP to raise these difficult issues with the driver. Ensure that confidentiality and privacy issues are taken into account.⁹ Although GPs may find themselves in this quandary, they should reinforce that ultimately it is the DLA, not the GP or the family, that make licensing decisions.¹

ANSWER 6

Your main responsibility is to advise your patient to notify the DLA.^{1,10} Patients threatening to leave their GP can be quite confronting, but they might simply be unaware of the guidelines, or lack the insight to appreciate them. Alternatively, the patient might not remember your advice, or their decision to leave your practice due to the memory loss associated with dementia. If appropriate suggest to Bob's wife that she could report her concerns to DLA, or you could report Bob if you haven't already under your jurisdictional legal obligations.

ANSWER 7

Refer the patient to a geriatrician, psychogeriatrician, or aged care assessment service. If services are available, consider referral to an OT for general activities of daily living and community mobility assessment, or a specialised occupational therapy driver assessor for off-road and on-road tests to specifically evaluate driving competence.¹¹ In some states of Australia, there are specialised driving clinics located at public hospitals.

CASE 2

ANDY BELIEVES HE IS FIT TO DRIVE

Andy, aged 29 years, was diagnosed with bipolar disorder about 5 years ago. He presents to you in your suburban Melbourne clinic saying that he intends to drive to Darwin to follow up a lead about a business opportunity. He usually works as a bank clerk, but now says that he has a chance to break out of this boring routine and make a lot of money with this new investment venture, which he has read about on the internet. Andy is very excited about this, and when you challenge the wisdom of his decision and question whether he might be a bit high at the moment, he denies that his decision is in any way irrational. He says he is taking his mood stabilising medication regularly, but as he has been feeling so well lately he has skipped a few tablets.

QUESTION 1 

How do you make a diagnosis of bipolar disorder? How might this condition affect driving capacity?

QUESTION 2  

How do you judge whether Andy's ambitions about following a business opportunity are reasonable, or whether this reflects a relapse of his bipolar disorder? What advice would you give Andy?

FURTHER HISTORY

Andy becomes agitated in response to your suggestions that he should not drive to Darwin and says that he is not going to take your advice. He insists on going to Darwin. Andy tells you he is going to live his dream and firmly ends the consultation.

QUESTION 3  

What are the regulations about driving and psychiatric disorders, including bipolar disorder?

QUESTION 4 

For how long should Andy's licence be suspended? Should you ask a psychiatrist to advise the DLA when Andy is fit to drive again?

CASE 2 ANSWERS

ANSWER 1

Bipolar disorder is characterised by abnormal elevations in mood and, usually, separate episodes of depression.^{12,13} However, the distinction between normal mood swings, personality disorders and early manifestations of bipolar disorder can be difficult to make. Driving capacity is affected by arousal, learning, perception, memory, attention, concentration, emotion, reflex speed, decision making and personality, so a patient's mental status is a vital component in assessing competence to drive.^{5,14,15} Bipolar disorder,^{1,12,13} other serious psychiatric disorders, abnormal stress, and drug and alcohol abuse are all relevant in this regard, and all have been shown to increase the motor vehicle accident rate.^{5,15,16}

ANSWER 2

You need to make a clinical judgement on whether Andy is thinking as a reasonable person would, or whether he is having a hypomanic episode. To consider whether his thinking is part of a hypomanic episode you would need to consider his premorbid personality, whether he has symptoms of hypomania such as reduced need for sleep, findings on mental state examination such as flight of ideas, the behaviour of others in the same situation and consider obtaining a corroborative history. If you suspect that Andy is having a hypomanic episode, it would be wise to advise him not to drive and refer him for a psychiatric opinion. Getting Andy to take your advice might be a challenge.

ANSWER 3

Drivers with serious mental illness, such as schizophrenia and bipolar disorder, are twice as likely as an age-adjusted sample to have a motor vehicle accident.¹

In general, they should not be permitted to drive a commercial vehicle, or be granted a licence to drive a private vehicle if they have impairment of perceptual, cognitive or motor functions; if they exhibit behaviour incompatible with safe driving, such as aggression; or are taking psycho-active medication, which impairs driving performance.^{1,10} Check if there is a history of crashes, road rage, or erratic or suicidal behaviours involving driving. If a GP has any doubt about a patient's driving capacity because of a psychiatric diagnosis, the opinion of a psychiatrist should be sought. This might also be the case in patients with a personality disorder.

ANSWER 4

Andy would benefit from a psychiatric assessment, even though fitness to drive is only one of the problems he faces. If Andy is adamant on pursuing a very risky course of action, he may need to be made an involuntary patient.

The duration of suspension of Andy's licence depends on many factors. Relevant issues that impact on a person's capacity to self

regulate driving include insight, family supervision, control of the illness and lack of medication side effects.^{12,13}

The decision about returning to drive might be assisted by psychiatric and OT advice. It would be prudent to recommend that the DLA obtain an opinion from a psychiatrist in assessing when Andy is fit to drive again. Frequent reviews by the DLA may be recommended, particularly in the first few years until the degree of long term stability of his mental state is known.

CASE 3 ANSWERS

ANSWER 1

General practitioners should have a clear understanding about whether their patient with diabetes has suffered any 'defined hypoglycaemic events' and whether they have impairments of end-organ function before completing a medical report form for driving purposes.^{17,18} A defined hypoglycaemic event is one that is of sufficient severity to cause impairment of perception or motor skills, abnormal behaviour or impaired consciousness. It is more serious than the common, mild hypoglycaemic reactions of sweating and tremulousness, which occurs not infrequently in patients with diabetes who are on either insulin or oral hypoglycaemic drugs. Remember that impairment of consciousness can occur very rapidly and without warning.¹⁹

ANSWER 2

In the free text box of the DLA medical report form it would be reasonable to document the following:

- the presence, or absence, of any defined hypoglycaemic events and the precautions being taken to prevent them in the future. These would include not skipping meals before a long drive, frequent blood glucose testing and keeping sugary snacks in the vehicle
- whether there are any physical complications of diabetes such as visual impairment from retinopathy or cataracts, or peripheral neuropathy.^{20–22} It is important to make an assessment of the risk of a cardiovascular or cerebrovascular event. Jill may also need a vision assessment by an optometrist or ophthalmologist if there is a suggestion of visual impairment.

ANSWER 3

The frequency of medical reviews for driving purposes in patients with diabetes depends on the severity of the underlying disease, the presence or absence of hypoglycaemic events, the treatment provided – whether it is diet alone, oral hypoglycaemics or insulin – and the presence of comorbidities.

The following requirements generally apply to people with diabetes mellitus regarding the frequency of a medical review associated with driving a private vehicle.

If the patient has diabetes, which is treated with diet alone, they might be eligible for an unrestricted licence, but should be reviewed by their GP regularly for progression of the disease.

If the patient has type 2 diabetes treated with oral hypoglycaemics, but not requiring insulin, 5 yearly reviews with notification to the DLA is probably reasonable, unless a defined hypoglycaemic event has occurred in the past, or there are physical complications of diabetes or significant comorbidities. If either of these is present, the patient might be granted a conditional licence dependent on periodic review.

If the patient has insulin requiring diabetes (type 1 or 2), they should have a conditional licence – which is reviewed at least 2 yearly – provided that their condition is well controlled, there is no history of defined hypoglycaemic events and there are no physical complications of diabetes or comorbidities that might impair driving capacity.¹

In Jill's case, she is already known to the DLA and is required to undertake an annual review.

ANSWER 4

In Jill's case, you would be required to make a decision about whether the dizzy spells are likely to be the forerunners of a significant hypoglycaemic event or not.

If you think that Jill's dizzy spells are not likely to be forerunners of a significant hypoglycaemic event, providing advice to Jill about careful monitoring of blood glucose levels and carrying glucose in the car would be sensible. Obtaining the opinion of a diabetes physician would also be sensible.

However, if Jill had a recent defined hypoglycaemic event, she should not drive for 6 weeks after the hypoglycaemic event while a specific cause is identified and perhaps a specialist opinion is sought. In the presence of a defined hypoglycaemic event that poses such a significant risk to her ability to drive that she requires specialist review, or licence restrictions, the presence of the event should be documented on the form.

If a motor vehicle accident occurred as a result of the hypoglycaemic event, the DLA must be notified.

CASE 4

MAGGIE'S ALTERNATIVES TO DRIVING

Maggie, aged 88 years, has been a favourite patient of yours for many years. You have been watching her park her car in the car park, which is located at the front of your suburban clinic and is visible from your consulting room window. You are relieved that your car is in the doctors' car park at the rear of the building, as Maggie's parking skills are a concern. You review her medical record and note that she has generalised osteoarthritis, osteoporosis, hypertension, mild macular degeneration and wears hearing aids. Her main clinical problem is pain from her arthritis, which especially involves her knees and feet. She frequently complains that she cannot take other analgesics beside paracetamol, but she does appear to get around reasonably well. Maggie rarely asks you to do a home visit. She is quite alert and lives on her own.

In view of Maggie's worrying demonstration of parking in your clinic car park, you consider the issue of fitness to drive. Maggie says that she only drives locally, such as to the shops, to visit one friend who lives in the next suburb and to your medical practice.

QUESTION 1  

Are the elderly at increased risk of driving accidents compared with other age groups?

QUESTION 2  

If Maggie said that she would feel terribly isolated if she lost her licence, what advice would you give her?

QUESTION 3  

Is walking a safe option for people of Maggie's age? What do the statistics reveal about elderly pedestrians?

FURTHER INFORMATION

You decide to evaluate Maggie's risks in driving a little further. You notice, as a consequence of the arthritis in her knees and feet, that she is a little slow in getting onto the examination couch. The rest of the general examination is essentially normal. Her visual acuity is 6/12 in the left eye and 6/18 in the right eye. In spite of her hearing aids, she can only hear you clearly when you speak up a little. Her cognitive state appears normal, although you notice that she is mentally slowing down a little. She puts this down to normal ageing, and you agree with her.

QUESTION 4  

The dilemma of Maggie still being able to drive represents an increasingly common problem in our ageing society. Although she is in reasonably good health for her age, it is true that her musculoskeletal, sensory and cognitive systems are not what they used to be. From the perspective of driving safety, how do you know when Maggie crosses the line and becomes unfit to drive?

CASE 4 ANSWERS

ANSWER 1

People aged 75 years and older are at increased risk of motor vehicle accidents compared with all age groups except drivers aged 18–20 years. However, this statistic is confounded by the fact that older drivers tend to drive less, undertake shorter distances and are more likely to drive on local roads (including side streets) than highways (which pose extra crash risks).⁹ For this reason, statistics should be quoted on a 'distance driven' basis, despite this not removing all of the bias. *Figure 1* provides a graphical representation of the annual crash rate for different ages, controlling for annual mileages.

Advanced age itself is not a barrier to driving, but there is an obvious increased likelihood of physical and cognitive impairment as a person grows older. In particular, vision, reaction times, hearing, upper and lower limb strength and movement, and neck and trunk movement tend to deteriorate with age.^{1,23,24} As mental impairment occurs attention, concentration, insight, judgement, problem solving skills, thought processing and visuospatial skills might also deteriorate.

Further, if the elderly are involved in a serious motor vehicle accident, they are more likely to have a fatal outcome compared to younger drivers, due to their increased physical frailty.^{25–27}

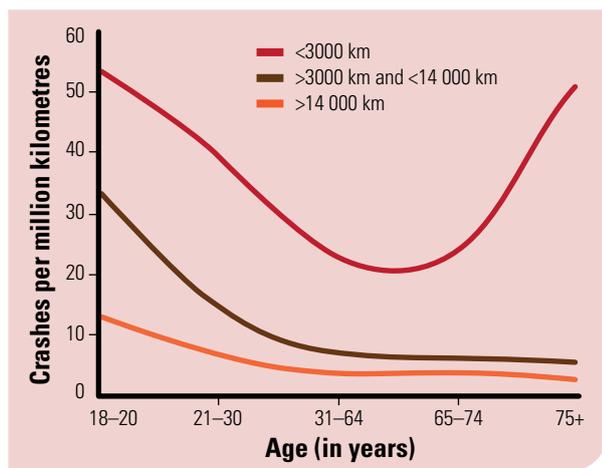


Figure 1. Annual crash involvement for different driver ages, controlling for annual mileages⁹

ANSWER 2

If Maggie stops driving there is the potential for problems. People who stop driving run the risk of becoming more socially isolated,^{28–30} which might result in depression. However, you could inform Maggie and other people in this situation about some of the alternative transport options such as:

- private car driven by family member, friend or neighbour
- public transport – this is not always available or suitable, especially if the person has significant osteoarthritis
- taxi travel – patients may qualify for a taxi fare concession under

taxi subsidy schemes, depending on which state the patient lives in. General practitioners should inform their patients about the possibility of applying for a taxi fare concession

- bus – some councils run special bus services for the elderly and provide other services such as personal care attendants who can assist with shopping needs
- motorised mobility device or scooter – this may be a viable option for Maggie, depending on where she lives and assuming she retains sufficient upper limb, trunk, vision, and cognitive and perceptual abilities. An OT can help assess her needs in this regard.

Another possible appropriate option for Maggie at this stage could be a 'local area only – 5 km radius from home' conditional licence. Such licence options assist drivers to retain their driving privileges while enabling local community engagement, but they are only appropriate if the driver has retained sufficient driving skills.¹ If after further assessment this option was selected as the most appropriate for Maggie, you should inform Maggie and her family (with her consent) about the likelihood of having to give up her licence in the future. You could advise her that it would be wise for her to plan for this.

ANSWER 3

Older pedestrians are at increased risk of death or injury because of fragility, slower movements and reactions, and unfamiliarity with dangerous road environments, especially at intersections.²⁸ Simply asking the elderly to stop driving will not remove all of their risk of injury if they become pedestrians instead.

ANSWER 4

This case illustrates the problem of multiple morbidities in a person. These problems might impair Maggie's reaction time or motor functions. Multiple morbidities often look challenging when presented as a list, but they can be dealt with one-by-one and may not necessarily mean a person is unfit to drive. Maggie has the following medical issues that warrant consideration in assessing her fitness to drive:

- deteriorating vision – Maggie's visual acuity is borderline and she should have a visual field test in view of the macular degeneration.^{20–24} If you suspect a field defect her visual fields should be formally tested, most likely by an optometrist or ophthalmologist. Visual acuity needs to be at least 6/12 in the better eye on a Snellen chart (or equivalent), which has at least five letters on that line, and the patient must be able to read at least three letters in that line. That is, no more than two mistaken letters are permitted.¹ Macular degeneration is one of a number of progressive eye conditions; others include cataract, glaucoma, diabetic retinopathy and optic neuropathy. Periodic review is required for any of these progressive eye conditions
- osteoarthritis and deteriorating mobility. Assessing the effect of musculoskeletal conditions on driving competency could be difficult in the consulting room unless there is gross disability or deformity.^{24,31} It is a good idea to ask about the patient's car or

have a look at it yourself. Multiple small dents and scrapes are a clue to driving difficulties

- reduced hearing. Reduced hearing is usually not such a significant problem in most older people from a driving perspective.^{1,32} However, hearing loss might become very important if it is present with other conditions that reduce cognitive or perceptual abilities or arousal – for example: side effects of medication and sleep disturbance, as overall sensory uptake is further diminished.³³

If in doubt about Maggie's fitness to drive, it might be best to advise her to have a driving assessment.

In the first instance, it would be reasonable for Maggie to be assessed by a private driving instructor if there are no significant medical problems identified. In general, a private driving instructor could provide good advice to patients whose only problems are those associated with ageing, such as decreasing joint mobility and minor deterioration in the sensory system.

If you have any further concerns, Maggie could be referred to an OT for either an assessment of activities of daily living and community mobility, or for a specialist OT driver evaluation. It may be possible to arrange a subsidised assessment through a local hospital or geriatric service. Referring Maggie to an OT would create the opportunity for her to be introduced to alternative mobility options, which she should be familiar with as she plans for the time when she can no longer drive.

FEEDBACK

If a patient has an acute eye problem such as a foreign body, trauma or recent surgery for a cataract they should be advised not to drive until they have recovered adequate vision. However, neither the GP nor the patient needs to refer a self limiting visual problem to the DLA.

CASE 5

EDWARD HAS RECENTLY HAD A STROKE

Edward, aged 68 years, is a retired man who had an embolic stroke secondary to atrial fibrillation. It appears likely that his dose of warfarin had been subtherapeutic at the time of his embolus. He has made a reasonable recovery, but it is 6 months after his stroke and he still has residual weakness in his right hand, and his speech is still a little hesitant. Edward’s cognitive functioning is good and he has no other medical problems. He is keen to drive as he was a volunteer bus driver for the local community health centre.

QUESTION 1  

Is Edward fit to drive a private car?

QUESTION 2  

In what ways are the rules more stringent for those who drive a bus transporting members of the public, such as commercial licences?

QUESTION 3 

Is it mandatory for Edward to be assessed by an OT? If you thought Edward should be referred to an OT, how would you do this and what type of costs would be involved? Would it be more appropriate to refer Edward to a neurologist?

FURTHER INFORMATION

Edward sees a general OT associated with his stroke rehabilitation and they suggest he be assessed by a specialist OT driver assessor.

QUESTION 4 

What will you tell Edward about what is likely to happen during the OT driver assessment?

QUESTION 5 

If Edward has lost some of his confidence in driving his private car, how might he regain this?

In some cases, timely access or availability of OT services may be a major problem, particularly in rural areas.

It might be worth getting a visual field test done by an ophthalmologist or optometrist because the presence of a significant visual field loss may preclude a drivers licence even if other vision criteria for safe driving are met, including adequate visual acuity.²⁰⁻²³

ANSWER 4

You could inform Edward that the OT driver assessor will arrange:

- an off-road assessment – this includes a detailed driving and medical history, visual assessment, physical and cognitive screen, road law test and other tests judged appropriate such as brake reaction time, balance and other cognitive tests
- an on-road test – this would involve undertaking a driving assessment in a dual control vehicle with a driving instructor. The OT evaluates the impact of any impairments on driving performance, as well as the need for vehicle modifications or driver retraining.^{35,36}

Pamphlets describing the service provided by the OT driver assessor may be available from DLAs, health facilities or OTs.

ANSWER 5

Occupational therapy driver assessors sometimes recommend corrective or refresher lessons and these could be provided by a private driving instructor or a driving school, such as those operated by state based automobile clubs. It is best to ask the OT to follow this up, as they are usually familiar with the driving schools that offer this service.

ANSWER 6

Edward can ask for an internal review by the DLA and he would need to produce supportive medical reports. If he did not agree with the review determination, he could appeal the decision through a Magistrates' Court. This course of action should only be taken if he has sufficient grounds for a challenge.

The DLA can provide details about the appeal process.

ANSWER 7

It is important to document the current status of Edward's medical condition on the DLA form. The DLA will then decide what assessments are required.

In general, if significant deficits had been identified during the initial OT driver assessor on-road test 12 months prior, it might be necessary to have a repeat on-road test to see if the issues have resolved and to determine if any licence restrictions or conditions, such as requirements for vehicle aids or adaptations, can be removed. The DLA will decide what assessments are required based on the review documentation and on concerns about the presenting driver and their medical condition(s).

CASE 6

WILL GEORGE'S SLEEP APNOEA AFFECT HIS DRIVING COMPETENCY?

George, aged 48 years, presents to you for a check up. He has enjoyed good health to date, but says he is always tired. He says he works long hours, but has always done so. He doesn't feel particularly stressed and a brief symptom review elicits no other symptoms. George enjoys 1–2 standard drinks of alcohol every night; he does not smoke and says he does not do any physical exercise. You conduct a physical examination, which reveals a body mass index of 30 and waist circumference of 104 cm. The rest of his physical examination is normal.

You request blood tests and perform a urinalysis, none of which reveal a cause for George's tiredness.

When George comes back for review, you explain to him that his tests were all normal and you could not find any abnormality, apart from his excess weight. He then informs you that his wife told him he is a restless sleeper and that his snoring has been worse in the past few years. You suspect George might have sleep apnoea and that this could be the cause of his tiredness.

QUESTION 1 

How do you confirm a diagnosis of sleep apnoea and how would you know if it is the cause of George's tiredness?

QUESTION 2   

If you were satisfied that George does have sleep apnoea, and that it is most likely the principal cause of his tiredness, what are your obligations at this stage from the fitness to drive perspective?

QUESTION 3 

What conservative measures would you advise George to undertake to improve his condition?

QUESTION 4  

To what extent is fatigue a cause of driving accidents rather than driver error, road hazards or faults with motor vehicles?

ANSWER 6

DLAs provides help lines for doctors and the telephone numbers can be found in Austroads *Assessing fitness to drive for commercial and private vehicle drivers* guideline.¹

Epworth Sleepiness Scale

Name: _____ Today's date: _____

Your age (years): _____ Your sex (Male = M, Female = F): _____

How likely are you to doze off or fall asleep in the following situations, in contrast to feeling just tired?

This refers to your usual way of life in recent times.

Even if you haven't done some of these things recently, try to work out how they would have affected you.

Use the following scale to choose the most appropriate number for each situation:

0 = would never doze
 1 = slight chance of dozing
 2 = moderate chance of dozing
 3 = high chance of dozing

It is important that you answer each question as best you can.

| Situation | Chance of dozing (0–3) |
|--|------------------------|
| • Sitting and reading _____ | |
| • Watching TV _____ | |
| • Sitting, inactive in a public place (eg. a theatre or a meeting) _____ | |
| • As a passenger in a car for an hour without a break _____ | |
| • Lying down to rest in the afternoon when circumstances permit _____ | |
| • Sitting and talking to someone _____ | |
| • Sitting quietly after a lunch without alcohol _____ | |
| • In a car, while stopped for a few minutes in the traffic _____ | |

Thank you for your cooperation

(Developed by Dr MW Johns 1991)

Figure 2. The Epworth Sleepiness Scale⁴⁴

Summary checklist for GPs about driving assessments in general practice

- A GP sometimes needs to balance a patient's right to confidentiality with the risk to the public posed by medically unsafe drivers.
- It is the patient's legal responsibility to notify the DLA of any permanent or long term injury or illness that might impair their driving capacity. It is the GP's ethical duty to inform the patient of this responsibility. The DLA will then send a medical report form to the patient for the GP to complete.
- The final decision to permit a person to hold a drivers licence rests with the DLA. A GP gives the DLA medical advice, which will help it to make that decision, but the GP is not ultimately responsible for that decision. The DLA may take this advice to their medical review board or seek further specialist input. It is easier to ascertain that a person is unfit to drive than establish that they are fit to drive.
- GPs should have a reasonable understanding of the implications for driving capacity of common medical conditions. Medical conditions associated with increased crash risk are serious psychiatric disorders, drug and alcohol abuse, epilepsy, dementia, insulin dependent diabetes, sleep apnoea, multiple sclerosis and visual impairments. Of particular concern are conditions associated with cognitive and perceptual impairments and behaviour disturbance, especially if accompanied by reduced insight. GPs should refer to the *Assessing fitness to drive for commercial and private vehicle drivers* guideline in the first instance when seeking advice on how to assess and manage driving patients, and when completing a medical report form for the DLA.
- Older drivers present with particular problems due to a greater prevalence of comorbidities, accumulated age related impairments over 75 years of age, and the social and psychological consequences of having a licence revoked. GPs sometimes find these consultations difficult, partly because of the potential for negative consequences when older people lose their driving licence and some of their mobility. Sharing the responsibility for decision making about driving capacity with family, the DLA, relevant medical specialists and occupational therapists makes the management of these patients easier.
- Occupational therapists can assist GPs by providing assessments of activities of daily living and community mobility while specialist occupational therapy driver assessors can provide suitable patients with off-road screening and on-road driving assessments. The DLA might make a recommendation, based on the GP's medical input, that a specialised occupational therapy assessment is required.
- The DLA can issue the following licences:¹
 - a full licence without restriction
 - a full licence with a requirement for periodic health examination
 - a licence with one or more conditions or restrictions. Examples include daylight or off-peak only driving, local area restriction and driving a vehicle with modifications
 - commercial licences may also be issued subject to conditions (eg. for trucks, buses and taxis). Drivers frequently require specialist medical advice, more stringent restrictions and frequent medical reviews.

1. Assessing Fitness to Drive – for commercial and private vehicle drivers. Sydney: Austroads Incorporated; 2006.
2. ANZ Society for Geriatric Medicine. Driving and Dementia. Position Statement No.11, 2009. Available at: www.anzsgm.org/documents/PS11DrivingandDementiaapproved6Sep09.pdf [Accessed 4 July 2011].
3. Stern RA, D'Ambrosio LA, Mohyde M, et al. At the crossroads: development and evaluation of a dementia caregiver group intervention to assist in driving cessation. *Gerontol Geriatr Educ* 2008;29(4):363.
4. Bird S. A GP's duty of confidentiality. *Aust Fam Physician* 2005;34(10):881.
5. Hollister LE. Automobile driving by psychiatric patients. *Am J Psychiatry* 1992;149(2):274.
6. Molnar FJ, Byszewski AM, Marshall SC, et al. In-office evaluation of medical fitness to drive: practical approaches for assessing older people. *Can Fam Physician* 2005;51:372–9.
7. Elder Advocates Of Alberta Society. DriveAble responsible for license taken from BC senior deemed fit to drive, 2010. Available at www.elderadvocates.ca [Accessed 12 July 2011].
8. Beran RG. Analysis and overview of the guidelines for assessing fitness to drive for commercial and private vehicle drivers. *Intern Med Journal* 2005;35(6):364.
9. Fildes BN, Charlton J, Pronk N, et al. An Australasian model license reassessment procedure for identifying potentially unsafe drivers. *Traffic Inj Prev* 2008;9(4):350–9.
10. Love CM, Welsh RK, Knabb JJ, et al. Working with cognitively impaired drivers: Legal issues for mental health professionals to consider. *J Safety Res* 2008; 39(5): 535–545.
11. Di Stefano M, Macdonald W. An Introduction to Driver Assessment and Rehabilitation. Curtin M, editor. In: *Occupational Therapy and Physical Dysfunction: Enabling Occupation*. 6th edn. Philadelphia: Elsevier, 2010.
12. Gleason A, Castle D, Piterman L, et al. check Program: Bipolar disorders. The Royal Australian College of General Practitioners, 2011.
13. Piterman L, Jones KM, Castle DJ. Bipolar disorder in general practice: challenges and opportunities. *Med J Aust* 2010;193(4 Suppl):S14–7.
14. Somerville ER, Black AB, Dunne JW. Driving to distraction – certification of fitness to drive with epilepsy. *Med J Aust* 2010;192(6):342–4.
15. Wylie KR, Thompson DJ, Wildgust HJ. Effects of depot neuroleptics on driving performance in chronic schizophrenic patients. *J Neurol Neurosurg Psychiatry* 1993;56(8):910–3.
16. Hocking B, Landgren F. New medical standards for drivers. *Aust Fam Physician* 2003;32(9):732–6.
17. MacLeod KM. Diabetes and driving: towards equitable, evidence-based decision-making. *Diabet Med* 1999;16(4):282–90.
18. Weinger K, Kinsley BT, Levy CJ, et al. The perception of safe driving ability during hypoglycemia in patients with type 1 diabetes mellitus. *Am J Med* 1999;107(3):246–53.
19. Lam LT, Lam MKP. The association between sudden illness and motor vehicle crash mortality and injury among older drivers in NSW, Australia. *Accid Anal Prev* 2005;37(3):563–7.
20. Bohensky M, Charlton J, Odell M, et al. Implications of vision testing for older driver licensing. *Traffic Inj Prev* 2008;9(4):304–13.
21. Cross JM, McGwin G Jr, Rubin GS, et al. Visual and medical risk factors for motor vehicle collision involvement among older drivers. *Br J Ophthalmol* 2009;93(3):400.
22. Subzwari S, Desapriya E, Babul-Wellar S, et al. Vision screening of older drivers for preventing road traffic injuries and fatalities (Cochrane Review). *Cochrane Database Syst Rev* 2009;(1).
23. Ross LA, Anstey KJ, Kiely KM, et al. Older drivers in Australia: trends in driving status and cognitive and visual impairment. *J Am Geriatr Soc* 2009;57(10):1868–73.
24. Anstey KJ, Wood J, Lord S, et al. Cognitive, sensory and physical factors enabling driving safety in older adults. *Clin Psychol Rev* 2005;25(1):45–65.
25. Meuleners LB, Harding A, Lee AH, et al. Fragility and crash over-representation among older drivers in Western Australia. *Accid Anal Prev* 2006;38(5):1006–10.
26. Eberhard J. Older drivers' high per-mile crash involvement: the implications for licensing authorities. *Traffic Inj Prev* 2008;9(4):284.
27. Langford J, Bohensky M, Koppel S, et al. Do older drivers pose a risk to other road users? *Traffic Inj Prev* 2008;9(3):181–9.
28. Currie GS, Stanley J. No Way To Go: Transport and Social Disadvantage in Australian Communities. Monash University ePress; 2007.
29. Donorfio LK, D'Ambrosio LA, Coughlin JF, et al. To drive or not to drive, that isn't the question – the meaning of self-regulation among older drivers. *J Safety Res* 2009;40(3):221–6.
30. Kaiser HJ. Mobility in old age: beyond the transportation perspective. *J Appl Gerontol* 2009;28(4):411–8.
31. Kamenoff I. Assessing elderly people to drive – practical considerations. *Aust Fam Physician* 2008;37(9):727.
32. Hickson L, Wood J, Chaparro A, et al. Hearing impairment affects older people's ability to drive in the presence of distractors. *J Am Geriatr Soc* 2010;58(6):1097–103.
33. Di Stefano M. The clinical evaluation of hearing. Pellerito J, editor. In: *Driver rehabilitation and community mobility: principles and practice*. St Louis, Missouri: Elsevier Mosby, 2006.
34. National Stroke Foundation. Clinical Guidelines for Stroke Rehabilitation and Recovery. Canberra: NHMRC, 2005.
35. Di Stefano M, Macdonald W. Advanced strategies for on-road driver rehabilitation and training. Pellerito J, editor. In: *Driver rehabilitation and community mobility: principles and practice*. St Louis, Missouri: Elsevier Mosby, 2006.
36. Di Stefano M, Macdonald W. On-the-road evaluation of driving performance. Pellerito J, editor. In: *Driver rehabilitation and community mobility: principles and practice*. St Louis, Missouri: Elsevier Mosby, 2006.
37. Commonwealth of Australia. Home studies for the diagnosis of sleep disorders. Canberra: Department of Health and Ageing, 2007.
38. Ellen RL, Marshall SC, Palayew M, et al. Systematic review of motor vehicle crash risk in persons with sleep apnea. *J Clin Sleep Med* 2006;2(2):193–200.
39. McEvoy RD. Asleep at the wheel: who's at risk? *Med J Aust* 2003;178(8):365–6.
40. Mazza S, Pepin JL, Naegele B, et al. Driving ability in sleep apnoea patients before and after CPAP treatment: evaluation on a road safety platform. *Eur Respir J* 2006;28(5):1020–8.
41. Krieger J. Sleep apnoea and driving: how can this be dealt with? *Eur Respir Rev* 2007;16(106):189–95.
42. Sleep Disorders Australia. CPAP. South Australia: Sleep Disorders Australia, 2006.
43. Lamond N, Dawson D. Quantifying the performance impairment associated with fatigue. *J Sleep Res* 1999;8(4):255–62.
44. Johns MW. A new method for measuring daytime sleepiness: the Epworth Sleepiness Scale. *Sleep* 1991;14(6):540–5.

RESOURCES FOR DOCTORS

Austrroads *Assessing fitness to drive for commercial and private vehicles* guideline provides information for doctors on the medical requirements for licensing for private cars and commercial licences in the presence of a range of medical conditions. It also outlines regulatory and legislative requirements in relation to reporting, and lists contacts for doctors and general enquiries at the driver licensing authority in the relevant jurisdictions. It is available at www.austrroads.com.au/assessing-fitness-to-drive. The new edition of *Assessing Fitness to Drive* is due for release in 2012.

An article on completing fitness to drive forms: a guide for GPs is available at www.racgp.org.au/afp/201111/201111landgren.pdf.

RESOURCES FOR DOCTORS AND PATIENTS

The driver licensing authority for each jurisdiction provides information on driver licensing:

Australian Capital Territory

www.rego.act.gov.au/licensing/licencemain.htm

New South Wales

www.rta.nsw.gov.au/licensing/index.html

Northern Territory

www.nt.gov.au/transport/mvr/licensing/index.shtml

Queensland

www.tmr.qld.gov.au/Licensing.aspx

South Australia

www.sa.gov.au/subject/Transport,+travel+and+motoring/Motoring/Drivers+and+licences

Tasmania

www.transport.tas.gov.au/licence_information

Victoria

www.vicroads.vic.gov.au/Home/Licences

Western Australia

www.transport.wa.gov.au

Fitness to drive

In order to qualify for 6 Category 2 points for the QI&CPD activity associated with this unit:

- read and complete the unit of *check* in hardcopy or online at the *gplearning* website at www.gplearning.com.au, and
- log onto the *gplearning* website at www.gplearning.com.au and answer the following 10 multiple choice questions (MCQs) online
- complete the online evaluation.

If you are not an RACGP member, please contact the *gplearning* helpdesk on 1800 284 789 to register in the first instance. You will be provided with a username and password that will allow you access to the test.

The expected time to complete this activity is 3 hours.

Do not send answers to the MCQs into the *check* office. This activity can only be completed online at www.gplearning.com.au.

If you have any queries or technical issues accessing the test online, please contact the *gplearning* helpdesk on 1800 284 789.

QUESTION 1

Pearl, aged 80 years, has early dementia. Her family is concerned about her driving as she has had a number of minor collisions resulting in multiple scrapes and dints to her car. Which of the following individuals or organisations has the final say regarding whether Pearl should retain her drivers licence?

- Pearl herself
- Pearl's family
- Pearl's GP
- An occupational therapy driver assessor
- The driver licensing authority.

QUESTION 2

Stan, aged 87 years, presents to you with memory loss. He has a Mini-Mental State Examination of 18/30 and after a comprehensive assessment you diagnose Stan with dementia. You assess that he is unable to appreciate the impact of his condition on his driving due to his cognitive impairment. There may be a mandatory requirement to report Stan to the driver licensing authority; however, this depends on:

- Stan's age
- the presence of additional medical problems
- the type of drivers licence Stan holds (private or commercial)
- the jurisdiction in which Stan lives
- whether Stan is receiving treatment for his condition or not.

QUESTION 3

Maisy, aged 82 years, has been seeing you, as her GP, for many years in your suburban practice. You diagnose her with early Alzheimer dementia following a comprehensive assessment, including a Mini-Mental State Examination where she scored 24/30. You advise Maisy to stop driving, but she is adamant that she is competent to drive and intransigent in her intention to continue driving. After explaining to Maisy that the driver licensing authority must be informed of any permanent illness that might impair her ability to drive, what is the next most appropriate step in Maisy's management?

- Allow Maisy to drive if she agrees to be especially careful
- Recommend a restricted driving licence
- Refer Maisy to a neuropsychologist
- Refer Maisy to an occupational therapy driver assessor
- Confiscate Maisy's drivers licence.

QUESTION 4

Glen, aged 32 years, has a background of chronic schizophrenia, which has contributed to extreme difficulties in maintaining employment. Which of the following is true in relation to the statistics, fitness to drive and legal requirements of individuals with serious mental illnesses in general?

- They are 10 times as likely to have a motor vehicle accident compared with an age adjusted sample
- In general, they should not be permitted to drive a commercial vehicle
- Long term use of psychoactive medications leading to drowsiness in individuals with serious mental illnesses does not necessarily imply lack of fitness to drive
- Decisions about fitness to drive a private car in individuals with serious mental illnesses must be made by a psychiatrist
- They cannot be referred to an occupational therapy driver assessor as these professionals deal only with physical illness.

QUESTION 5

Dean, aged 45 years, consults you in relation to completion of a medical report for the driver licensing authority. He has type 2 diabetes, for which he is taking metformin and gliclazide. While many factors pertaining to an individual's diabetes may be relevant, which of the following details relating to control of his diabetes is the most important to elicit before completing the driver licensing authority medical report form?

- Dean has episodes of hyperglycaemia resulting in polyuria
- Dean's most recent HbA1c was 8.0
- Dean had a period of sweating that was resolved with him drinking orange juice
- Dean had a period of hypoglycaemia associated with confusion
- Dean had an episode of blurred vision in association with a finger-prick blood glucose level of 12.

QUESTION 6

Hunh, aged 53 years, has insulin dependent diabetes mellitus, which is treated with basal bolus insulin. He presents to you for a medical assessment and completion of a medical report for the driver licensing authority. Which of the following is/are the most important in determining his fitness to drive and the interval for subsequent medical review for driving purposes?

- A. Dose of insulin or oral hypoglycaemic agent(s)
- B. Presence of defined hypoglycaemic events
- C. Physical complications of diabetes
- D. Significant comorbidities
- E. Options B, C and D.

QUESTION 7

Salvatore, aged 70 years, has cataracts. He asks you to complete the driver licensing authority medical report form. You test his vision on a Snellen chart, which includes at least five letters on the line. Which of the following are necessary to meet the requirements to drive a private car (even if on a conditional or restricted licence) based on visual testing, in the absence of a field defect?

- A. Visual acuity needs to be at least 6/6 on a Snellen chart (or equivalent) in the better eye, with no more than one incorrect letter in that line
- B. Visual acuity needs to be at least 6/6 on a Snellen chart (or equivalent) in the better eye, with no more than two incorrect letters in that line
- C. Visual acuity needs to be at least 6/12 on a Snellen chart (or equivalent) in the better eye, with no more than two incorrect letters in that line
- D. Visual acuity needs to be at least 6/12 on a Snellen chart (or equivalent) in the better eye, with no more than three incorrect letters in that line
- E. Visual acuity needs to be at least 6/18 on a Snellen chart (or equivalent) in the better eye, with no more than one incorrect letter in that line.

QUESTION 8

Elsie, aged 90 years, has many medical problems. She is frail and slowing down with age. Elsie is a resident of an inner suburb in a major city in Australia. You advise her to stop driving after making an overall assessment because of significant concerns about her motor and cognitive response times. You explain your reasons and she becomes upset.

You tell Elsie:

- A. it is necessary for all drivers to relinquish their drivers licence at an advanced age such as hers
- B. there is very little risk of social isolation when elderly people stop driving
- C. those who stop driving in circumstances such as hers are automatically eligible for a taxi fare concession
- D. public transport, taxi travel and bus services run by the council might be possible alternatives to driving a car
- E. a conditional licence can overcome insufficient driving skills due to advanced age.

QUESTION 9

Samuel, aged 79 years, had a thromboembolic stroke 2 months ago. He has residual minor right hand weakness and he asks you about returning to drive a private car. He has no neglect, visual field defect or dysphasia. Which of the following are considered essential requirements for Samuel to be considered fit to return to driving a private car?

- A. Three months have elapsed since his stroke
- B. The stroke did not involve his dominant arm
- C. He has no residual disability whatsoever resulting from the stroke
- D. The source of his stroke has been identified where possible and treated
- E. He has been assessed by a neurologist in relation to fitness to drive.

QUESTION 10

Throughout the course of a month you see many patients whose conditions necessitate assessment of fitness to drive. You reflect on these patients. Which of the following is a scenario most likely to be consistent with a determination that the patient is currently fit to drive a private vehicle?

- A. Alzheimer dementia with a score on Mini-Mental State Examination of 18/30
- B. Type 2 diabetes on oral hypoglycaemic agents with a defined hypoglycaemic event occurring 4 weeks ago and good control since
- C. Bipolar disorder with history of episodes of road rage in the setting of hypomania
- D. Stroke with residual homonymous hemianopia
- E. Obstructive sleep apnoea adequately treated with continuous positive airways pressure.