

Driving assessments for older adult patients

Interviews with general practitioners to gauge current strategies and future directions

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Background and objective

General practitioners (GPs) in New South Wales are required to perform annual medical assessments of driving fitness in patients aged 75 years or older. The objective of this study was to understand GPs' attitudes towards driving assessments and to highlight guideline limitations and possible solutions.

Methods

Semi-structured interviews with a sample of 10 GPs were audio-recorded, transcribed and thematically analysed.

Results

The key themes that emerged were challenges GPs face with the current driving fitness assessment, techniques used to overcome these challenges, and the process of negotiating with patients.

Discussion

The findings highlighted the need for further support of GPs and for more statistical evidence of driving risks. Key areas of uncertainty were applying licence restrictions, calculating the sum of effects of comorbidities and assessment of new patients. This study might prompt consideration of a range of supports to assist GP decision making, as well as contribute to a decision aid for older drivers.

AUSTRALIA'S POPULATION IS AGEING.

In 2020, 16% of Australians were aged 65 years and over, with this proportion expected to increase to 21–23% by 2066.¹ Consequently, there is a rising proportion of older drivers with dementia and other disabilities.² These disabilities can affect vision, hearing, reaction time, problem solving, alertness and coordination, all of which are vital for the complex task of driving.³ In Australia, the burden of assessing fitness to drive falls largely on medical professionals. Often the onus is on general practitioners (GPs) to assess when patients should stop driving.⁴

However, this is not a simple assessment. Although there are guidelines provided in Austroads' *Assessing fitness to drive*,⁵ the nature of dementia and age-related decline means assessment needs to be individualised, and there is a lack of consistency among existing findings regarding cognitive testing and driving.⁶ The main physical test used to assess driving fitness is a standardised on-road driving test,⁷ while proposed neuropsychological tests include, but are not limited to, the trail-making test,⁸ clock drawing test,⁹ Wechsler digit symbol substitution test¹⁰ and the Mini Mental State Examination (MMSE).^{6,11} A composite cognitive test was proposed by Clark¹² and includes the MMSE, trail-making test-A and the Wechsler Adult Intelligence Scale-block, with a sensitivity and specificity of 82% and

90% for dementia, respectively. However, it is not yet established whether such an assessment alone would be adequate to disqualify drivers, or whether it should only be used as a screening tool to identify patients who require road testing. In summary, there is not yet any conclusive evidence that assessing driving ability will improve safety for drivers with dementia,¹² or other disabilities associated with ageing.

Critically, driving is a task largely intertwined with self-identity and independence,¹³ and is a skill that prevents individuals from growing socially isolated – especially in the outskirts of metropolitan centres, where services and facilities are often accessible only by car.¹⁴ Driving cessation is an emotionally charged topic that can invoke feelings of sadness, powerlessness, frustration, anger and decreased self-esteem.¹³ The context of discussions between GPs and patients about driving cessation can affect both the tone and the outcome of conversations.¹⁵ Given the issue's frequency and complexity, more needs to be done to help GPs in decision making and communication surrounding this sensitive topic.

This study was conducted as part of a larger project aimed at producing a decision aid for older drivers. The specific aims of this study were to explore the barriers that GPs face when making decisions about patients' driving, as well as techniques used by GPs to address these.

Methods

The research question was addressed using an interpretative description approach.¹⁶ Members of the research team comprised two medical students, as well as researchers with backgrounds in nursing, public health, health services and general practice. Although the students had no previous exposure to qualitative research, they were supervised by an expert clinician and researcher working with older people and GPs. The methodology adopted, as well as the interdisciplinary composition of the team, facilitated a pragmatic approach that sought to describe how GPs manage within the existing context, potentially enabling knowledge sharing within the general practice community, in addition to providing recommended enhancements to current processes.

Ten semi-structured interview questions, informed by extant literature, were developed to gain insight into GPs' professional opinions on the process of driving assessment (Box 1). GPs were

purposely sampled from the Network of Research General Practices in the Newcastle, Central Coast and Sydney regions to allow for a broad range of experience and age groups.

Interviews were conducted by EM, with all but one of the interviews conducted face to face at the interviewee's practice; one interview was conducted via videocall. The average length of the interviews was 25 minutes. Brief biographical data were collected from each of the participants. Data collection and analysis took place from January 2019 to June 2020.

Interviews were audio-recorded and transcribed using an online transcription service, then reviewed and corrected by EM. Participants were given the option of reviewing and editing their interview transcript, although none requested this. Transcripts were de-identified and then analysed using Braun and Clarke's inductive thematic approach.¹⁷ Adopting this method enabled the analysis to be data driven while account could be

taken of potential biases arising from the researchers' backgrounds and experiences. Two of the authors (EM and DP) independently coded the transcripts, and descriptive codes were discussed and agreement reached. Codes were then grouped into categories and themes were agreed upon by the researchers. Quotes were then selected to illustrate the themes and categories to ensure grounding in the data and provide an integrated description of participants' experiences. The researchers used NVivo 12 to manage coding and analysis.

Ethics approval was granted by the University of Wollongong Ethics Committee, approval number 2019/ETH03735.

Results

Twelve GPs were invited to participate, with 10 of those agreeing to be interviewed. Participation in the study was voluntary, and written consent was obtained from each participant. The key characteristics of the sample are provided in Table 1.

Three main themes were identified: challenges GPs face with the current driving fitness assessment, techniques used to overcome these challenges, and the process of negotiating with patients.

Challenges with the current process

Contextual nature of driving assessment

A common issue raised was the contextual nature of driving assessment, with some describing the difference in someone with commercial or professional driving experience.

He was a professional driver all his life, and he could be 50% worse than what he was and still be better than the average person. [GP3]

GPs also questioned whether driving frequency should be considered when estimating the accident risk.

If a trans-vasc [sic] gives you a 10% chance of stroke per year but you're only driving 15 minutes twice a week, then are you okay to drive? [GP3]

Box 1. Interview questions

1. What are your biggest concerns currently about the process of assessing a patient's driving safety?
2. Do you believe that assessing patients' driving safety is your responsibility as their general practitioner?
 - a. If not, who do you think should be responsible?
 - b. Do you think that anyone else should be involved in the process?
3. How do you decide that a patient should hand in their licence?
4. What is your usual approach to bringing up this conversation with patients?
5. What are the added challenges when assessing someone's driving capability if they have dementia or you suspect are in the early stages of dementia?
6. Several people that I have discussed this topic with previously have mentioned that people with dementia will sometimes forget that they have handed in their licence or had restrictions put on their licence. Is there anything you do to try to ensure that somebody who has handed in their licence does not drive, such as involving family members or ensuring the car is sold/disabled?
7. Currently do you have (or know of) any resources that are available to support older drivers, either:
 - a. to help them retain their licence safely, or
 - b. for after they have handed in their licence?
8. Of the resources mentioned, do you use any of these? Why/why not?
9. Do you believe that if you had evidence-based recommendations concerning driving safety that this would make the topic easier to approach with patients?
10. Have you ever reported someone to Transport for NSW that you believe shouldn't be driving? Did you do it confidentially or did you inform them that you were going to do it? Why did the patient refuse to voluntarily hand in their licence?

Table 1. Participant characteristics

GP	Age (years)	Years of experience as a GP	Location* ²¹	Gender
1	30	3	MM1 – Metropolitan	Female
2	67	33	MM1 – Metropolitan	Female
3	58	29	MM2 – Regional centre	Male
4	58	31	MM2 – Regional centre	Female
5	49	22	MM1 – Metropolitan	Male
6	29	1	MM1 – Metropolitan	Female
7	63	37	MM1 – Metropolitan	Female
8	56	30+	MM5 – Small rural town	Male
9	42	8	MM1 – Metropolitan	Female
10	61	33	MM1 – Metropolitan	Male

*Location was classified according to the Modified Monash Model of geographical location²¹
GP, general practitioner

Therefore, while a standard approach to driving assessments would make the process easier, contextual issues do not make this practicable.

Assessment limitations

The limitations of the assessment were regularly raised, with respondents questioning how capacity is confidently assessed, since there are many processes that can impact driving capacity.

There are so many things that we don't even think about that can be involved with driving. [GP1]

GPs were also uncertain of the relevance of office-based assessment and their ability to predict risk and driving capacity.

A lot of driving is coordinating complex tasks, which is hard with the discrete office-based tools we have to get a quick sense of in the room. [GP6]

Moreover, it is far more difficult to determine fitness when there is no specific medical diagnosis underlying lack of capacity, which might be attributable to general age-related decline in physiological or cognitive functioning.

He mightn't have any discernible medical diagnosis, but he might run into things all the time just because his coordination is slowed down. [GP5]

New patient assessments

While GPs were unsure whether driving assessments should be their responsibility, they did state that because they knew their patients well, they were probably best suited. However, problems arise when new patients present to GPs for the first time for a driving assessment. All GPs discussed the added difficulties this posed, indicating they require a collateral history for the patient prior to proceeding with the assessment, which takes time.

We've been put in positions where we'll get a new patient join us, bring us the forms and ask us to fill in those forms to say they're okay to drive. This has to be an automatic no. Not until the records are received. [GP9]

GPs also found difficulty in probing whether a patient presented as a new patient with the driving assessment form after other GPs refused to sign it.

If it was a new patient coming in for the first time wanting a driver's assessment,

you'd be suspicious that they've sought you out because their previous doctor has knocked them back. [GP10]

Social and emotional implications

The social implications of removing someone's licence makes this an emotionally charged topic. Nevertheless, GPs recognised the importance of conducting thorough driving assessments and acting on suspicions of incompetence, given the implications of allowing someone to drive if they pose a risk to others.

[My biggest concern is] the balance of impacts – so community safety versus the impact on the patient but really the impact on the patient is [a] much lesser consideration. [GP3]

However, GPs also identified the negative effect the loss of a licence has on the social life and health of patients, particularly for patients in areas that lack adequate public transport.

You completely wreck their social life and then that's bad for their health as well. [GP2]

The GPs agreed that it is primarily males who feel affronted when their fitness to drive is questioned, as often their identity and dignity become entwined with their long history of driving.

The tricky ones are the fellows [for whom] driving has been a really important part of their life and it feels like an affront to say they shouldn't. [GP2]

These emotional implications can result in GPs losing them as patients, which is also detrimental for patients' long-term health.

It's not uncommon for a GP who takes the licence off a patient to then lose them as a patient, which is not good for the patient and not good for the GP. [GP3]

Because you're their doctor, there's an expectation that you're on their side and there's kind of an adversarial bit about assessing driving fitness. [GP7]

As difficult as this is, several GPs stated that they believe the assessments should be done by the patient's regular GP, because the patient is more likely to understand that the GP's intentions are well placed and not a personal attack.

Most of the time with these patients, I've been their GP for a long time, and they've seen that you've advocated for them in all these other ways and that you're not doing this to punish the patient. [GP5]

Techniques used by general practitioners

Family involvement

One of the key tools GPs reported using to assist in decision making was involving patients' families, as they have spent the most time in the car with the patients.

A good rule of thumb is if an intelligent family member refuses to sit in the car with someone, then they're probably well past when they should be driving. [GP3]

This generally required the families being involved in the aftercare, ensuring that patients were supported to transition to non-driving.

To keep talking with the family about how they're able to support people in that transition would be the most important thing. [GP6]

There are confidentiality issues and potential conflicts of interest here, so family involvement needs to be broached carefully and, when possible, with the consent of the patient.

Multidisciplinary healthcare involvement

Commonly, GPs expressed that input from other healthcare professionals should be determined on a case-by-case basis. This can increase the GP's confidence in their final decision, as well as help patients accept the outcome if they feel there is consensus.

I think hearing it from another professional person helps people. So, they hear it from the nurse, they hear it from the geriatrician, they hear it from their GP. [GP4]

Geriatricians and practice nurses were often consulted, and one GP suggested introducing a 'disinterested' third party – for example, another GP unknown to the patient to perform the assessments. This has the potential to limit bias and preserve GP–patient relationships.

Part of the driving assessment probably should be reviewed by a disinterested party. So, you refer to a GP down the road ... They'll hate the doctor down the road, but they won't hate you. [GP8]

Several GPs referred their patients for further assessment to an occupational therapist (OT) to complete an on-road driving test.

We quite willingly very much involve the driving assessment OTs as well because, often, it comes down to a sort of a functional assessment where the person is unknown to the patient and thus doesn't have those biases. [GP3]

Other GPs stated that such an assessment poses a risk to patients, other road users and the OTs and so they felt that there is a need for more definitive evidence to support their usage.

Using the guidelines

GPs recognised that although the Austroads guidelines are lengthy, they are useful for searching specific indications and providing more definitive advice.

Even though they're unbearably long, if you were searching for a particular thing, they're actually quite helpful. [GP2]

One GP raised that often older patients experience multiple comorbidities, and that the guidelines do not provide a way to determine a patient's total risk by considering all comorbidities.

It's not necessarily just one problem, it's often three or four, and there's generally no guide for putting the problems together and working out the sum of the effects. [GP3]

Generally, GPs would prefer more evidence-based guidelines that provide

statistical evidence on risk. Interestingly, most interviewees stated that they would like that level of evidence to feed back to patients in the negotiation process, as patients find it easier to accept the outcome if they can understand the reasoning behind decisions.

No one ever brings up the actual evidence – 'This is the percentage of people who will be prevented from having an accident if you do this' – and that's what you need. [GP2]

The negotiation process

Coming to a compromise

GPs described the assessments as often being a negotiation between themselves and patients, aiming for mutual compromise. They explained that sometimes OT driving assessments are used to negotiate with patients.

Sometimes it's a process of negotiation. Like organising an occupational therapy driving assessment and saying to the patient, 'Look, I'm happy to certify you but only if you undergo this assessment'. [GP5]

The OT driving assessments do, however, incur a cost to patients and potentially discriminate against those of lower socioeconomic status who cannot afford it.

I would like to [refer patients for OT assessments] but it's so expensive most people can't afford it. [GP7]

Licence restrictions

Placing restrictions on patients' licences, such as a kilometre-radius restriction, was another compromise GPs used in negotiations.

They'll agree to a 10 km limit because they look at where they need to go and say, 'Well, it doesn't really affect my life, I can get to the shops, I can get to the bank'. [GP10]

Licence restrictions were, however, another point of uncertainty. While some GPs revealed they apply restrictions often, others were unsure of the efficacy of such restrictions in reducing accident risk, highlighting the knowledge gap

requiring either further research or GP education.

That's probably an area where I don't feel particularly confident in deciding between if someone can have an accident 20 km from home, then they can have one 5 km from home. [GP5]

Communication tips

Communication methods were an important aspect of negotiations. Each GP had their preferred communication tactics, but several stated that it was important to address the topic early to allow patients time to prepare. Most GPs indicated that their approach differed patient by patient. Some communication tips GPs reported using are listed in Table 2.

Discussion

The findings of this study highlight the need for further support of GPs in the complex process of driving assessments. They commonly feel uncertain in their decision-making processes, particularly in regard to the limitations of assessment and applying guidelines. This study builds on earlier research conducted on GPs and driving assessment.^{6,18,19}

Although a standard protocol would potentially make GPs feel more confident in their approach and prevent 'doctor shopping' by patients, it would not be appropriate. A subjective, context-sensitive approach must be followed for the best interest of patients and for the safety of the wider community. This study highlights a number of techniques used by GPs to contextualise their assessment, including involving the family, using the multidisciplinary team and a negotiation process (new to the literature as far as we could tell, although the literature does refer to negotiation by and with family carers).²⁰

The findings highlight aspects of the guidelines that require improvement, including provision of statistical evidence of risk incurred by disability. This would increase confidence in decision making, as well as give GPs 'back up' in patient negotiations.

A strength of this study was the inclusion of GP participants ranging

in age and experience. The study limitations include the small sample size of participants, who were predominately located in metropolitan areas. While it would have been desirable to draw from a wider range of locations, as defined by the Modified Monash Model classifications,²¹ it was not possible for this student project due to budget constraints. Further, mid-career GPs were difficult to recruit due to clinical demands on their time. As part of the qualitative focus on reflexivity, we note that EM has a first-degree relative who is a GP, potentially introducing some unconscious bias about the profession. Additionally, her role as a medical student meant that there is the likelihood she may have approached the topic from a professional rather than consumer point of view. She was acquainted with one of the participants through her association with the University of Newcastle, but did not know any of the other participants prior to interviewing them.

Nonetheless, the current study adds to the extant literature by highlighting the limitations of driving assessment guidelines, and the challenges that GPs face in managing the fraught issue of assessment while balancing the needs of their older patients and wider community. The aim of driving assessments is to

reduce preventable car crashes involving older drivers, due to their higher fatality rate following an accident and their potential to injure others. In drawing attention to these critical issues of public health and safety, we call on Austroads to review their guidelines⁵ in order to assist GPs, and to initiate further research to support further evidence.

The findings in his study could provide other GPs with new techniques to support them in future assessments or reinforce that their current methods are appropriate given systemic limitations. Ideally, these assessments can be conducted in a manner that not only enables GPs to feel confident in decision making, but also helps preserve doctor-patient relationships.

A further outcome of the study will be its contribution to the development of a decision aid to support older people in their decisions about driving. This builds on previous work in which the University of Wollongong developed a Dementia and Driving Decision Aid²² and a related GP education module, and it should be possible for the findings of this study to inform a future iteration of this decision aid and education.

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Table 2. Communication tips for the negotiation process

GP1	'Sometimes it's good to use a bit of sort of CBT [cognitive behaviour therapy] techniques and put it back on them. So, like "Do you think you're safe?" and those who have good insight, they'll be like, "I should probably give it up.'
GP2	'I would say "This is your responsibility and the risk is that you may not only harm yourself, but the rest of the community".'
GP3	'I do the put-yourself-in-their-shoes argument, you know: "If you were a mother with a child in the streets".'
GP5	'I use some statistical information like the risks inferred by being 75 and older, which is much more than other road users in terms of accident risk per unit time.'
GP5	'Sometimes I use other strategies like the cost of holding a licence and maintaining a car can be quite expensive and they can use that money to fund other forms of transport.'
GP9	'We just explain why this is an important assessment. It's not just about your safety, it's about the other people on the road.'

GP, general practitioner

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