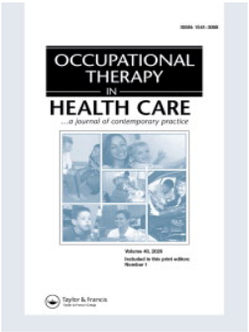

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Developing the 'MS and Driving Interview Guide': A Clinical Tool to Assist Occupational Therapists Engage in Discussions About Driving and Multiple Sclerosis

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ABSTRACT

Multiple Sclerosis (MS) may impact a person's ability to drive, requiring adjustments to and possible eventual cessation of driving. However, addressing driving is often avoided by healthcare professionals. A Community of Practice approach involving various stakeholders was used to develop an interview guide to provide a structure to discuss driving and MS that may help overcome avoidance of addressing this important instrumental activity of daily living in routine clinical practice. The 'MS and Driving Interview guide' was developed, drafts were reviewed and amended by people with lived experience, subjected to external expert review prior to limited piloting in practice.

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Clinical practice; driving; driving management; multiple sclerosis; occupational therapy

Introduction

Driving has been described as an 'occupation enabler' as it is often the means by which people sustain engagement and participation in their wider communities (Stav & McGuire, 2012). As such, driving is an essential instrumental activity of daily living for many people and the American Association of Occupational Therapy (AOTA) consider driving and community mobility to be within the domain of practice of occupational therapists (AOTA, 2020). Recent research has highlighted the very high dependency and reliance on driving, particularly among older drivers, to maintain their essential out of home activities and the lack of engagement with, and usage of, other transportation options (Unsworth et al., 2022). Research on older drivers highlights that as people live longer they will be expected to outlive their driving years (Foley et al., 2002), and although older drivers may be aware of this possible eventuality, many fail to adequately prepare for, or plan ahead for possible future driver retirement

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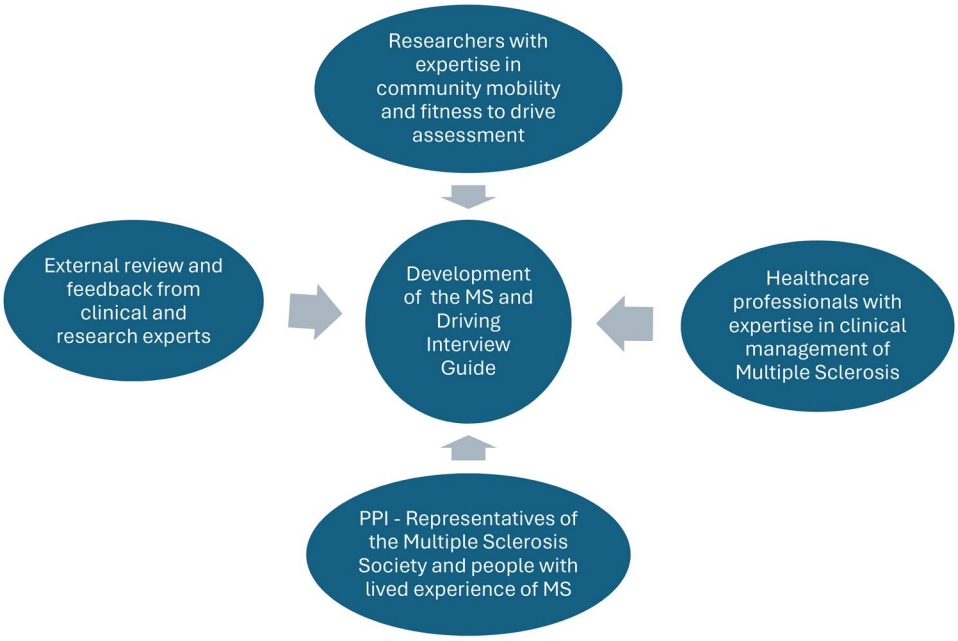

Figure 1. Overview of involvement in the CoP.

nor do they engage in proactive future alternative transportation planning (Anstey et al., 2017; Feng & Meuleners, 2020; Harmon et al., 2018).

While the existing research on driving reduction or cessation is primarily focused on older drivers with age related health conditions, parallels can be drawn to other conditions occurring earlier in the life span that may impact on a person's driving ability. Multiple Sclerosis (MS) is one such condition that can have typical onset in early mid-life, when people are in their thirties and forties and affects more women than men. The global prevalence of MS is estimated at 23.9 cases per 100,000 population, with incidence continuing to rise across North America and Europe, with countries including Sweden, Canada, Norway, Ireland, UK, and northern states in the US with the highest prevalence rates (Khan and Hashim 2025). The course and progression of MS is individualized and depends on the subtype of MS and the severity of symptoms (Multiple Sclerosis Society UK, 2024). Driver licensing bodies in the UK and Ireland list MS as a neurological condition that may impact on a person's driving ability and must be declared to the relevant licensing authority (Driver and Vehicle Licensing Agency (DVLA), 2024; Road Safety Authority (RSA), 2025). The regulation around licensing for people with MS in both jurisdictions is less prescriptive and renewal of driver license is based on an evaluation that the person's driving ability is not impaired by their MS symptoms, with the option that restricted driving or driving adaptations may be required in some cases.

The presenting symptoms of MS will be different for each person, but the diagnosis is associated with a variety of possible symptoms spanning physical and sensory function, vision, cognition, and fatigue, symptoms that can impact negatively on the person's ability to drive (Akinwuntan et al., 2012). Cognitive and perceptual deficits including executive functions, visual memory, information processing and visuospatial abilities are most frequently associated with impaired driving (Akinwuntan et al., 2018). Additionally, inattention, judgment, reduced reaction times, and physical changes including loss of muscle power, sensation and coordination have all been outlined as impacting on driving in MS (Archer et al., 2014). People with cognitive deficits and MS were found to have a higher incidence of motor vehicle crashes than people with MS without cognitive deficits (Archer et al., 2014). Vision, visual acuity, and visual processing speed among people with MS were found to correlate with critical driving errors and these impairments may be indicative that a person's fitness to drive may be at risk (Archer et al., 2014; Classen et al., 2018). However, systematic reviews examining the association between MS symptoms and likely driving cessation have for the most part been inconclusive with some associations between cognitive, visual deficits, speed of processing and likelihood of failing an on-road or simulator-based assessment of driving (Krasniuk et al., 2019; Seddiq Zai et al., 2022). Interestingly, MS demographic factors such as age, gender, time since onset MS, and MS subtype were generally not found to have any major association with the outcomes of driving assessment in on-road or simulator-based assessment (Krasniuk et al., 2019, Seddiq Zai et al., 2022).

Research among older drivers has begun to address issues of driving management, including preparation for driving reduction and possible driving cessation with some established occupational therapy led driving cessation preparation programmes such as 'Car-Free-Me' (formerly UQDRIVE) in existence (Liddle et al., 2007; 2014). Two recent systematic reviews have highlighted the importance of early planning for driver retirement and that this process should be commenced well in advance of the actual driving retirement decision (Dickerson et al., 2024; Schofield et al., 2023). Both reviews highlight the need for healthcare professionals to initiate and proactively engage in this process through a collaborative approach involving the older driver and family members. While these reviews were focussed on older drivers, the process of preparation for possible driving restriction and eventual driving retirement are applicable to other populations, including younger people with deteriorating conditions such as MS that may impact on their ability to drive. The research on MS and driving has mostly focussed on the assessment of fitness to drive and less so on approaches to engage in driving management, coaching or preparing people with MS in managing and maintaining their driving

abilities, or proactively planning for possible driving reduction and cessation. Utilizing and translating the available research emerging for the older driver population underpinned this initiative to develop a clinical resource to assist generalist occupational therapists address driving management within their practice when working with people with (pw)MS.

Methods

A community of practice (CoP) was the chosen approach for this undertaking. A CoP involves a group of people who engage in a process of collective learning in a shared domain of practice (Wenger, 2011). Practitioners within a CoP share their knowledge in a free-flowing creative manner to foster new approaches to a problem(s), while the primary output of a CoP may be on the sharing of 'knowledge', the reach of CoP can extend beyond knowledge sharing and can be used to improve organizational performance and foster best practice within organizations (Wenger & Snyder, 2000). Features of a CoP include their ability to solve problems quickly, enable the adoption of best practice, and the development of professional skills among CoP practitioners. CoP's are often informal and self-organizing, however, in order to be effective the CoP must have a clear focus and structure (Wenger & Snyder, 2000). The theoretical and conceptual framework underpinning CoP have not significantly developed beyond that originally outlined by Wenger, and while the approach has been used successfully in business and industry it has not been fully appreciated in the healthcare sector (James-McAlpine et al., 2023).

The CoP approach, when used within healthcare, may have a dual intention; firstly, as a method of sharing knowledge and information, and secondly promoting evidence-based practice (Ranmuthugala et al., 2011). CoP can be effective at an individual practitioner level to increase knowledge and competence, but when used at a team level CoP can facilitate practice change by enabling the translation and implementation of knowledge and the evidence base into changing practice (Barwick et al., 2009).

In order to be considered a CoP, the collective must demonstrate three elements: Domain, Community, and Practice (Wenger, 2011). The members of the CoP must have a shared domain of interest and a shared competence that distinguishes members of the CoP from other people. In this case the 'domain' of interest was a group of healthcare professionals and stakeholder representatives with shared knowledge and expertise working in a neurological rehabilitation center and a shared concern about how driving was being addressed among their service users who had multiple sclerosis. Stakeholder groups inputting to this CoP are outlined in Figure 1. The 'community' involves the practitioners within the CoP engaging in joint interaction, discussion, and shared learning, alongside collaboratively working on shared

activities that address the domain of interest. In this CoP there was an element of 'intentionality', the focus included information sharing with the intention of using and translating the information (evidence base) into a tangible outcome that could be incorporated into practice. The focus of the community was on the development of a process that would enable generalist occupational therapists to address driving related issues among people with multiple sclerosis, that would include driving management strategies, recognize when the process of driver cessation may have to begin and how to implement this within practice. The final element of a CoP, 'practice', involves the development of a shared repertoire among the CoP practitioners for their practice. Usually, a CoP needs to sustain their interactions over a period of time to achieve their final intention of a shared practice. In this CoP there was a prolonged period of interaction involving sharing of knowledge, collaborative development of a framework involving continuous rounds of feedback to inform the development of an interaction framework that may enhance how occupational therapists and other healthcare professionals address driving and driving cessation with their clients who have multiple sclerosis.

Rather than employing a 'expert-led' instructional type approach it was considered that a co-operative approach which was inclusive of the relevant stakeholders may be more effective in enhancing shared ownership of the change process. As such the CoP approach aligned well with aims of the undertaking where the CoP elements of domain, community, and practice were encompassed. The aims of the project were two-fold;

1. to create a forum for sharing of knowledge and expertise in a shared domain of interest (multiple sclerosis and driving), and,
2. to focus on implementation and translation of the knowledge and evidence into everyday practice through the collective development of a guiding tool to address driving and applying it specifically to multiple sclerosis that could then be embedded in everyday practice.

The proposed development of the tool was assessed using the NHS Health Research Authority (HRA)/Medical Research Council (MRC) toolkit. As the project did not involve direct patient recruitment or changes to patient care it was considered a quality improvement initiative and therefore exempt from research ethics requirements. An Equality Impact Assessment was undertaken and approved prior to commencement of the CoP.

Results

Overview of the CoP process

The origin of this CoP emerged following discussion between the two authors who are qualified occupational therapists both of whom have

applied clinical and research experience encompassing driving and multiple sclerosis. Specialist driving assessment centers do exist and pwMS are frequently referred for more formal driving assessment (including on-road testing) as the disease progresses. The authors however recognized a need for closer monitoring of changes in driving ability to facilitate driving as a meaningful occupation through a proactive and enabling approach over time by more generalist occupational therapists. This ongoing monitoring and discussions around driving management should commence earlier and be embedded within generalist occupational therapy interventions, with possible future referral for more specialized driving assessment at a later stage. Both authors engaged in initial communication *via* email and online virtual meetings to explore possible collaborations to advance practice in driving and multiple sclerosis. Both authors agreed to approach the work in a joint coordination and leadership capacity given the two complimentary strands of essential expertise of both authors. It was agreed that an inclusive approach was required for optimum impact rather than a traditional 'expert-led' top-down approach and therefore a CoP approach was chosen the favored method to maximize involvement of all relevant stakeholders.

Many of the methods suggested in the implementation of CoP in healthcare including expert presentation, workshops, seminars, meetings, emails, face to face meetings, homework and information gathering between meetings (Ranmuthugala et al., 2011) were employed in this CoP. The work of the CoP extended over a two-year period, the main sequence is outlined in Table 1. In total there were four full CoP team meetings over the course of this undertaking with homework to be completed between the meetings by the CoP participants. The two leaders undertook much of the planning and integration work between the full CoP group meetings, all meetings were conducted online, and communication was *via* email and online virtual meetings given the geographical spread of the CoP members.

The first full CoP team meeting started with a presentation on assessment of fitness to drive and brief overview of current research on MS and driving. The remainder of the meeting focussed on exploration and discussion among the participants of their experiences, levels of competence, comfort, and satisfaction with their current level of engagement in driving related issues within their clinical practice. It was agreed at this meeting that the initial focus should be on increasing levels of confidence and competence to address driving and multiple sclerosis within clinical practice.

The two leaders compiled resources following the initial CoP meeting to distribute among CoP participants to review in preparation for the next full CoP meeting. Available self-rated driving scales (Adelaide Driver Self Efficacy Scale (George et al., 2007), Drivers 50 Plus Self-rating form

Table 1. Evolution of the CoP MS and driving.

	Focus	Decision
Initial Contact (email communications)	Initial email contact and preliminary communications between the two leaders of this project (TS & JP)	Discussion and agreement between both leaders to collaborate on the development and operationalization of this clinical project
Initial Pre-planning meeting (virtual online meeting)	Initial virtual meeting between the 2 leaders of the project (TS & JP)	Planning how to approach and commence the project. Agreed that a CoP approach was appropriate to encourage engagement of all stakeholders. Plan to set up a full team meeting and agreed the agenda and format of the initial CoP meeting.
First Full CoP Team Meeting (1) (virtual online meeting)	Inaugural Full team meeting (N = 19) Disciplines represented: Occupational Therapy, Rehabilitation Medicine/Neurology, Optometry, Nursing, Physiotherapy, Neuropsychology, Speech and Language Therapy and representation from the MS Society Scotland.	Initial introductions Presentation on current research evidence and recommended best practices in assessing fitness to drive (TS). Full team discussion to identify and articulate current issues in practice. 1. Formulate and agree a prioritized plan of action. Suggestions arising:Establish pathway/guidance for addressing driving with MS – including but not exclusively focussed on assessment of fitness to drive? 2. How to address driving and MS as part of routine practice? 3. Develop interventions around managing and maintaining driving (education, self-management, individual behavioral adaptations). 4. Identify when a fitness to drive assessment is required (what assessments should be included in an off-road assessment). Outline a process/pathway of assessment? 5. Planning for driver retirement/cessation, how to prepare for alternative transportation use.
Planning meeting (virtual online meeting) And Sharing resources (email communications)	Planning meeting of the 2 leaders to prepare next full team meeting. The 2 leaders gathered and agreed resources for distribution to the full team for their review prior to next full team meeting	Resources gathered and distributed to full team for review prior to next full team meeting: Multiple Sclerosis and Driving Information leaflets Driver Self Assessment Tools. Whole team to review the Driver Self Assessment Tools and the MS Driver Information booklets in preparation for the next full team meeting.
Full CoP Team Meeting (2)	Team discussion following review of the resources, the driver self-assessment tools were deemed useful but team felt none of existing tools were specific enough to capture MS issues. Discussion among full team on next steps and priorities to advance the work.	Team decided that initial focus should be on the development of a process for addressing driving with MS patients that could be embedded into everyday clinical practice. Agreed task: To develop an interview guide/template specific to MS and driving that therapists could use in their practice
Planning Meeting	The two leaders designed initial basic draft of the interview guide template, informed by the available research and resources and feedback from the CoP team.	Basic skeletal draft of the interview guide template sent out to all CoP participants for their review, comment, and their suggested recommendation for additional content for inclusion in the interview template.

(*Continued*)

Table 1. Continued.

	Focus	Decision
Full CoP Team Meeting (3)	Full meeting to review basic draft of the interview template and brainstorm other important clinical aspects that should be included.	Agreement sought from CoP participants on additional recommendations of content to be included in the interview template. CoP members provided additional suggestions on layout and presentation of the interview template.
Planning Meeting	Both leaders redrafted the interview template following the CoP team discussion and feedback. Draft 2 of the template drafted for circulation among CoP members.	Draft 2 of interview template distributed via email to CoP participants for individual review and feedback.
Planning Meeting	Further revisions and additions were received by the leaders and incorporated into the 3rd draft of the template to be re-circulated to CoP	Draft 3 of the interview template distributed to CoP participants for review prior to next CoP full team meeting
Full Team Meeting (4)	Full CoP team online meeting to review and discuss Draft 3 of the interview template.	General consensus among CoP members that content was relevant and valid. Some CoP members volunteered to try out the tool in practice. Decision to seek feedback and input on the Draft tool from people with the lived experience of MS and driving.
Engagement with people with lived experience	Leaders were invited to make brief presentation of the work of the CoP at an MS Society information evening (online meeting)	Discussion and feedback from people living with MS attending the online information evening. A number of people with lived experience subsequently volunteered to review the interview template.
Planning Meeting	Leaders revised and refined the tool based on feedback from people with lived experience following the online meeting and direct feedback from individuals who volunteered to review the tool.	Final draft of the interview template dispersed among the full CoP
Expert review	Final draft of the interview template shared with external experts for review and commentary. Reviewer 1 – Senior Academic Occupational Therapy researcher with extensive experience in driving related practice and research Reviewer 2 – Clinical Specialist Occupational Therapist (Neurology) with advanced clinical experience in multiple sclerosis.	Feedback received from the expert external reviewers and incorporated into the interview template.
Preliminary Pilot	A number of clinicians trialed the final draft of the interview template in their practice.	Feedback received from CoP members who trialed the interview template.

(Saskatchewan driver's licensing and vehicle registration Canada SGI, n.d), Driving Habits Questionnaire (Owsley et al., 1999) and information brochures on driving and multiple sclerosis published by international MS Societies (Driving with Multiple Sclerosis [US] (Niewoehner & Thomas, 2020), Motoring with Multiple Sclerosis [UK] (Multiple Sclerosis Society UK, 2016), Practical everyday advice, Driving and Multiple Sclerosis (Australia) (MS Plus, 2022) were gathered and distributed among the CoP participants for their review.

At the second meeting of the full CoP team the consensus was that none of the existing self-rating tools were adequate to address the specific MS symptoms/issues that may impact on driving. The decision was taken to develop an 'interview schedule' that could guide occupational therapists initiate discussion with their clients on how MS may impact on their driving, and to do so in a natural non-threatening manner. Collective clinical knowledge and experience of the CoP participants was shared and discussed to formulate a preliminary list of MS symptoms or presentations that may impact on a person's ability to drive, or trigger concerns among healthcare staff about the person's ability to drive. CoP participants also made suggestions as to what should be included in an interview schedule that would help them initiate conversations about MS and driving with their clients.

The two leaders merged the discussions and suggestions from the full CoP meeting and began the development of a draft interview schedule. The first section of the interview schedule covered basic driving history, type of car driven, usual driving patterns and routines etc. The second section focussed on MS specific symptoms and how these might impact on driving, these initial statements were developed on typical MS symptoms such as spasticity, vision, fatigue, coordination, and cognition (Lococo et al., 2018), and how these may impact on driving. Statements were phrased that linked common MS symptom and their possible impact on driving performance. The person would indicate their level of difficulty on a three-point scale: no difficulty, some difficulty, or very problematic (see Table 2). The initial draft of the interview schedule was circulated among the full CoP for their review and consideration before the next full CoP meeting.

The third full CoP meeting allowed for in-depth discussion of the initial draft of the interview schedule and feedback from the CoP participants on clarity of the statements, content omissions, and recommendations for further content to be included. General discussion on how the interview schedule could be structured to enable ease of use for the healthcare professional, and a suggestion to develop the schedule so that it might have potential to be used as a self-completed tool. CoP participants recommended the addition of a third section to the interview schedule that would enable summative clinical decision making and recommendations

Table 2. Sample of symptom statements.

		Level of difficulty		
Symptom	Statement	I can do this without any problem/ difficulty	I have some problems /difficulty with this, or I intermittently have problems with this task.	I find this very problematic
Physical/ coordination	I can get in and out of the driver seat, put on/take off seatbelt, open/close the car door etc?			
Spasticity	I can drive without my arms or legs stiffening up or getting increased spasticity?			
Vision	I do not have any difficult with my vision, I have not noticed any problems with blurred vision or double vision when driving			
Fatigue	Sometimes I feel too tired to drive			

regarding the client's current and future driving actions. The leaders took notes of all commentary and feedback during the CoP meeting and encouraged all participants to email any further suggestions they may have after the CoP meeting.

The second iteration of the interview schedule was expanded to include more MS symptoms that may impact on driving such as continence issues, expansion of cognition related statements, driving anxiety, and medication awareness. A total of 22 statements were developed that included physical MS symptoms (6 statements), fatigue (3 statements), continence (2 statements), vision (3 statements), cognition and executive function (5 statements), levels of comfort or stress (2 statements), and medication awareness (1 statement). To facilitate possible self-completion all statements were presented in the first person, each statement starting with 'I can…', 'I am able to', 'I worry about…', and the three response levels to each statement were color coded using the traffic light color system: green for no difficulties/problems with the statement, orange for some problems or difficulty, and red for any statement that was very problematic for the person.

A final section was added to the interview guide to enable the occupational therapist to formulate an overall clinical decision or recommendation following completion of the interview schedule. The main purpose of the interview guide is to enable discussion about how MS symptoms may be impacting on the person's driving. While the interview guide was not designed as an assessment of a person's fitness to drive, it is possible that completion of the interview may highlight concerns of a deterioration in the person's symptoms that may have an impact on their driving ability, therefore it was agreed by the CoP team that a recommendation section be added to the schedule.

A visual analogue scale (VAS) was added to indicate an overall impression of impact of MS symptoms on driving using a similar traffic light color coding system as was used throughout all 22 statements. The VAS is on a scale of 1 to 10, where higher scores of 8 to 10 would indicate that no concerns were highlighted and the person was fit to continue their regular driving with no need for any intervention or restrictions. Intermediate scores on the VAS of 4–7 may indicate the need for some driving management advice or recommending some driving restrictions. Possible restrictions may include reducing the amount of driving, stopping driving at night, or implementation of self-management strategies such as fatigue management for driving, journey planning etc. Scores in the lower end of the VAS (1–3) would indicate that there were major concerns that the MS symptoms were seriously impacting on the person's ability to drive and a more detailed formal assessment of fitness to drive by a relevant healthcare professional including occupational therapy, optometrist or ophthalmologist, or review by neurologist/physician was indicated. Scores on the low end of the VAS may also indicate that driving cessation, and preparation for driving cessation should be considered.

This revised draft of the interview schedule was circulated to all CoP participants in advance of the fourth full CoP meeting. There was agreement at the full CoP meeting that the previous feedback had been comprehensively addressed and incorporated into the revised interview schedule and no further revisions were recommended. Some CoP participants agreed to pilot the interview schedule with some of their client and would feedback to the group.

Patient and public involvement (PPI)

The development of the interview schedule was primarily informed by a multidisciplinary group of healthcare practitioners with considerable clinical expertise in MS treatment and rehabilitation and a representative from the MS Society Scotland. The two leaders were invited to present at an MS Society Scotland information evening on the development of the 'MS and Driving Interview Guide', following this presentation several people living with MS volunteered to review and provide feedback on the interview guide. Written anonymous feedback comments were received from three people living with MS, all three stated that they never had any discussion with a healthcare professional about driving, or how MS might impact on their driving, and no input advising them regarding driving assessment or adaptations.

> I don't think I have ever discussed driving with a healthcare professional …I don't think the healthcare professionals realise how much MS can impact your driving (even if you don't have obvious disability) and how much this impacts your life. It

> would be nice to know what help is available for people to keep driving or even just to have some acknowledgment that MS makes driving difficult. I don't feel that my healthcare professionals understand how much people with MS can struggle with driving. (PPI 1 person living with MS).

> I was surprised before and continue to be surprised that it appears to be rarely, if ever, discussed as part of on-going conversations with healthcare professionals. (MS Society Representative)

They reported that they would have welcomed discussion with their healthcare providers on how they could manage the impact of their MS symptoms on their engagement in driving activity.

> (the interview schedule is) very helpful. I was very fearful about how my disability will impact my driving and independence. Having clear advice on how to get adaptations or when I need them would be invaluable. (PPI 3 person living with MS)

They reported that this interview guide would be helpful to address their driving concerns, but they also expressed some fear that it could trigger the loss of driving privileges. Therefore, it is essential that healthcare professionals approach the discussion in a supportive manner, explaining that the purpose of the questions are to establish if the person is having any difficulty with driving and to work on solutions to assist the person manage their driving needs alongside their MS symptoms.

> If I knew before I answered about the help I could get – yes. Otherwise I may be fearful of the outcome being bad. (PPI 1 person living with MS)

> I would be a bit scared they would think I was unsafe to drive… I think it may be too much of a rush to answer all of those questions in a consultation - perhaps a checklist you could take away and fill in would be better provided you are reassured that your licence won't be taken away and that it is only to help you. (PPI 2 person living with MS).

Expert field review

The final phase in the development of the MS and Driving Interview Guide was an independent review by two experts who were not involved in the CoP or development of the tool. One senior occupational therapy academic and researcher with extensive experience in in driving related research, and one clinical specialist Occupational Therapist practicing exclusively in neurology/MS agreed to independently review and feedback on the interview guide. Both reviewers reported that the Interview Guide would be a useful addition to clinical practice and provided a relevant framework for having a MS specific conversation about driving. Both reviewers made some minor commentary on phrasing and clarifications within the guide.

Two CoP members (occupational therapist, and rehabilitation physician) piloted the interview guide with three clients with MS in their practice. Feedback on the clinical utility of the interview guide was positive.

> I used the driving assessment tool last week and it worked a treat! The patient was very honest and constructive in her answers and stated that she had found it really helpful to frame our discussion. (occupational therapist).

> I had a potentially challenging driving discussion with a patient this week. I used the format and it was brilliant. As for our earlier concerns about people not being honest in the discussion - well that was completely blown out of the water. This person was incredibly honest and clearly felt enabled and supported in the process. The tool most definitely has potential, it offers such a well-structured and natural flow to the discussion. (occupational therapist).

The tool was clearly useful in guiding a recommendation with another client. Through using the interview guide the client was able to disclose problem areas but was also enabled to demonstrate their level of insight and awareness into the difficulties and articulated self-management approaches they were using to manage their driving. This conversation was adequate to enable a decision that continued driving with the existing self-restrictions was the recommended outcome.

> (she) has got an appropriate automatic car and avoids driving when she has infection, feels tired, feels stiffness in limbs, after taking certain medications, long distances, unfamiliar routes, at night, in bad weather or with children in car. (rehabilitation physician).

Discussion

The processes of this CoP involving combined contributions from participants with clinical expertise, research expertise, and importantly, people with lived experience in the development of the MS and Driving Interview Guide have been outlined. Symptoms of MS may have a detrimental impact on a person's ability to continue driving but this is an area that is often overlooked or avoided altogether by healthcare professionals, reflected by the PPI contributors in this CoP stating that they never had any level of discussion with a healthcare professional on how MS may impact on their driving ability. Research in the older adult driver area highlighted that some healthcare professionals do not see this as part of the professional remit and others may avoid engagement as they feel ill-equipped to address this challenging area of practice (Dickerson et al., 2024).

The primary focus on medical fitness to drive assessment may sometimes discourage healthcare professionals from engaging in driving related matters with their clients. Changing the focus from assessing whether a person is fit to drive to an ongoing 'driving management' approach may lessen the avoidance of driving related issues in practice (Dickerson et al., 2024).

Redelmeier et al. (2012) highlighted the benefits of physician issued warning to at-risk older drivers in reducing the annual rate of crashes, but such warnings were associated with increase in low mood/depression and also negatively impacted on the doctor-patient relationship. To counter the negative impact, Li and Mielenz (2013), suggest that multifaceted approaches need to be provided to enable the person to maintain their mobility to allow for continued community participation, provision of information on alternative transportation options and driver assist technology that may prolong driving.

The risk to the patient physician relationship when addressing driving has been highlighted (Dickerson et al., 2024), however, this is usually directly associated with the fact that healthcare professionals often avoid or delay engagement in any discussions about driving until there is a major concern and a high risk that the person needs to be informed that they should stop driving. 'Up-streaming' discussions about driving and advanced preparation for possible future driving restriction and eventual driving cessation are recommended as strategies healthcare professionals need to incorporate into their practice (Dickerson et al., 2024; Schofield et al., 2023), additionally both reviews emphasized the need to incorporate elements of ownership in the decisions about driving restrictions and driving cessation. The development of the MS and Driving Interview guide outlined in this paper was aligned with these recommendations, and was designed to provide a framework for healthcare professionals to proactively engage in early collaborative discussions with the person on how MS symptoms may impact on driving and driving management strategies. This collaborative process of discussion and problem solving facilitating a 'driving management' approach rather than an 'assessment of driver fitness' approach may potentially minimize the negative impact on the patient-physician/healthcare professional relationship and enable the person with MS to have some ownership in their own management of driving and preparation for possible changes, including future cessation of driving.

The focus of this undertaking using a CoP approach was to develop a resource that would enable generalist occupational therapists and other healthcare professionals to begin discussions with clients about how MS symptoms may impact on driving and move the focus to 'addressing' driving issues rather than the predominant focus on 'assessing' driver fitness. The CoP approach was well suited to this undertaking as it facilitated a collective, non-threatening approach to the exploration and planning in a manner that allowed for discussion and acknowledgement of the 'real-life' clinical issues that needed to be addressed and factored into this proposed practice and service development. While the focus was on developing a resource to enable generalist occupational therapists address driving management, the CoP included contribution from other relevant

members of the multidisciplinary team signaling their support for occupational therapy in undertaking this task to meet the interests and needs of the service users. The CoP approach was flexible and responsive to allow for inclusion and input from other relevant stakeholders at appropriate time points along the process of developing the interview guide, including the expert peer reviewers and the very important involvement and contribution of people with lived experience in the development and evolution of the MS and Driving Interview Guide.

The interview guide was developed with the aim that it be used to facilitate conversations about driving and MS across the different stages of the person's individual trajectory and their presenting symptoms. Ideally the discussion should commence well before there are any concerns about the persons fitness to drive ability and may enable a proactive and guided self-management approach to driving embedded within the management of a fluctuating or progressive condition. The interview guide provides a structure that enables these ongoing discussions and management of driving that aligns with the 'start early, repeat often' approach that has been advocated in the driving literature (Jouk & Tuokko, 2017; Sinnott et al., 2019).

There was limited piloting of the guide but the field testing that was completed has been very positive and promising for the adoption of this interview guide for use in clinical practice. The MS and Driving Interview Guide (Stapleton & Preston, 2025) is available for free download at https://doi.org/10.25546/111939

The MS and Driving Interview Guide was primarily developed to be completed by a generalist occupational therapist as part of an overall discussion about the possible impact MS symptoms may have on the person's driving, and as a resource to enable the initiation of conversations around driving management when living with a long-term deteriorating condition. During the CoP process people with lived experience commented on the importance of a self-report version which was incorporated into the design of the interview guide so it could also be completed independently by the person themselves. The interview guide has the potential to be completed by a proxy such as a family member or in a dyad approach involving the person and a trusted significant other. The interview guide was not developed as an assessment of fitness to drive, nor should it be used as such. Ongoing use of the interview guide may enable monitoring over time and depending on symptom progression may signal the need for a more specific and comprehensive assessment of fitness to drive by a suitably qualified driving specialist/agency.

Conclusion

The primary focus of this CoP undertaking was to conceptualize and develop an interview guide that would enable generalist occupational therapists (and

others) proactively engage in discussion about the impact and management of MS symptoms on a person's driving. Input from stakeholders with combined clinical and research background as well as a strong PPI element has strengthened the development and relevance of the interview guide.

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Author contributions

CRediT: **Tadhg Stapleton**: Conceptualization, Investigation, Methodology, Project administration, Resources, Validation, Writing – original draft, Writing – review & editing; **Jenny Preston**: Conceptualization, Investigation, Methodology, Project administration, Resources, Validation, Visualization, Writing – original draft, Writing – review & editing.

Consent statement

Informed verbal consent was obtained from all stakeholders who voluntarily participated in this Community of Practice undertaking.

CRediT roles

TS and JP were involved in all stages from conception of the research idea, design of the methodology, execution of the study, analysis and drafting of the manuscript.

Disclosure statement

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Research ethics

The proposed development of the tool was assessed using the NHS Health Research Authority (HRA)/Medical Research Council (MRC) toolkit. As the project did not involve direct patient recruitment or changes to patient care it was considered a quality improvement initiative and therefore exempt from research ethics requirements. An Equality Impact Assessment was undertaken and approved prior to commencement of the Community of Practice (CoP).

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