Perspectives on Tiered Older Driver Assessment in Primary Care Settings

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Received January 13, 2014; Accepted March 28, 2014

Decision Editor: Barbara Bowers, PhD

Abstract

Purpose of the Study: Widespread screening of older drivers, with in-depth evaluation only of those who screen positive (“tiered assessment”), might efficiently balance driver safety and mobility. To inform program development, we sought to examine the perspectives of older drivers and clinicians on the concept of tiered assessment in primary care settings.

Design and Methods: Iterative focus groups and interviews with 33 community-dwelling current drivers aged ≥65 years and 8 primary care providers. We used inductive and deductive theme analysis to explore driver and clinician perspectives and to identify barriers and facilitators to establishing a tiered older driver assessment program in primary care settings.

Results: Four dominant themes emerged. Two themes addressed the overall concept: (a) support for the concept of tiered older driver assessment and (b) concerns about the consequences of older driver assessment and how these could affect program viability. Two themes addressed screening: (c) tension inherent in using a generalized approach to the highly individualized issue of driving and (d) logistical considerations for screening in primary care settings.

Implications: Standardized older driver screening and referral might improve clinician–driver communication, but screening should occur in a context that includes personalized mobility counseling.

Key Words: Clinical practice, Driving, Physician-patient communication/relationships, Preventive medicine/care/services, Qualitative research methods

When is it time for an older driver to retire from driving? The question is a difficult one, as crash risk may increase due to a variety of impairments (i.e., cognitive, mental, physical, or sensory) and medications (McGwin, Sims, Pulley, & Roseman, 2000) associated with aging, but no single factor accurately predicts crashes. Complicating the issue is the importance of driving for mobility and independence, and the fact that driving cessation can negatively impact older adults’ health and well-being (e.g., Curl, Stowe, Cooney, & Proulx, 2013; Edwards, Perkins, Ross, & Reynolds, 2009; Freeman, Gange, Munoz, & West, 2006; Ragland, Satariano, & MacLeod, 2005). Thus, a key challenge is to identify and then retrain or restrict unsafe older drivers without limiting the mobility of those who can drive safely.
Therefore, in this study, we sought to use qualitative methods to explore in depth the perspectives of drivers and clinicians concerning tiered older driver assessment in primary care clinical settings. Our particular interest was in identifying specific program barriers and facilitators in order to inform future studies to design, implement, and evaluate tiered assessment programs.

**Methods**

**Study Population**

Eligible drivers were older adults (aged ≥ 65 years) who spoke English, lacked significant cognitive impairment (i.e., able to give informed consent as determined by research staff), and reported driving at least once in the past 30 days. We recruited drivers via flyers posted at a community Senior Center and at a 2600-unit independent living facility (ILF) in order to access a population of generally healthy, mobile, and independent older adults. Driver focus groups were held in a Senior Center or ILF meeting room, and participating drivers received a $10 gift card and snacks.

Eligible clinicians were physicians, physician assistants, and nurse practitioners who spoke English and cared for patients at one of three outpatient clinics (two general internal medicine and one geriatric) affiliated with a university hospital. We recruited clinicians via flyers in staff areas and e-mails from clinic directors. The clinician interviews and focus group took place in private meeting spaces on hospital property, and participating clinicians received a $5 gift card and lunch.

**Study Design and Procedures**

We used an emergent qualitative descriptive study design (Sandelowski, 2010), involving semi-structured group and individual interviews, to explore perspectives on the concept of tiered older driver assessment programs. This multimethod approach to creating qualitative data at the level of (a) group and (b) individual perspectives provided two rich opportunities. First, we suspected older adults would be more likely to interact authentically and respond effectively within a social group setting considered their norm (Jones, Cheek, & Ballantyne, 2002). Groups of older adults from the same community provided an active construction of meaning to the generational expectations, opinions, and perceived facilitators and barriers for tiered assessment of older drivers. Similarly, health professionals practicing in a clinic share common perspectives and are able to consider both what they think and why they hold certain opinions, thus surfacing professional norms, expectations, and discrepancies. Interactions within each group add a complexity and dimension to the data created that is not readily achieved in one-on-one interviews, as participants dynamically react, moderate, or extend their opinions based on both self-interest and societal structures (Barbour, 2007). Recognizing that participant views could be influenced by

(Ball, Ross, Eby, Molnar, & Meuser, 2013; Eby & Molnar, 2008).

One potentially useful approach is a tiered system for older driver assessment—widespread or universal brief screening followed by in-depth evaluation of those who screen positive—as such a program might facilitate efficient identification of at-risk older drivers. Although screening could occur in various venues, primary care settings may be optimal for the brief screening component of a tiered system; clinicians, especially primary care providers, have a well-recognized key role in the assessment of older drivers (Carr, Schwartzberg, Manning, & Sempek, 2010; Tuokko, McGee, Gabriel, & Rhodes, 2007). In prior work, we found that older drivers and clinicians were open to the idea of routine questioning about driving status and advance preparation for future driving retirement (Betz, Jones, Petroff, & Schwartz, 2013). However, limited time and resources were barriers for even basic conversations about driving (Betz et al., 2013). This suggests that it would be even more difficult for primary care providers to perform in-depth assessments in the office, which is why a tiered approach may be preferable. A tiered approach could also target costly behind-the-wheel (BTW) evaluation resources to those most at risk (Eby & Molnar, 2008).

In order to optimize effectiveness and efficiency, the design of a tiered older driver assessment program for primary care settings must incorporate input from stakeholders and address potential barriers. Prior work suggests that a tiered approach may be acceptable to providers, drivers, and their families, given general safety concerns about driving (Kerschner & Aizenberg, 1999). However, previous studies have focused on older driver, family member, and physician perspectives on driving in general (Adler & Rottunda, 2011; Connell, Harmon, Janevic, & Kostyniuk, 2013; Gillespie & McMurdo, 1999; Jang et al., 2007; Perkinson et al., 2005; Silverstein & Murtha, 2001) and on the preferred types of BTW tests (Korner-Bitensky, Bitensky, Sofer, Man-Son-Hing, & Gelinas, 2006; Stav, 2012). To date, studies have not examined in-depth stakeholder perspectives on the concept of a tiered approach to older driver assessment. Based on related work, we suspect that barriers to this kind of tiered system may include older drivers’ fear of license revocation (Kerschner & Aizenberg, 1999; Molnar & Eby, 2008), driver and clinician discomfort with the subject (Cable, Reisner, Gerges, & Thirumavalavan, 2000; Staplin, Lococo, Gish, & Decina, 2003; Sterns et al., 2001), liability concerns related to drivers identified as unsafe who continue driving (Adler & Rottunda, 2011; Carr et al., 2010; Silverstein & Murtha, 2001), BTW test cost and availability (Betz et al., in press; Stav, 2012), poor communication between drivers and physicians, and time constraints with competing priorities for clinicians (Betz et al., 2013).

Study Design and Procedures

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differing values or fears, we held the driver and clinician focus groups separately. Each driver focus group lasted 90–120 min, and the clinician focus group lasted 30–60 min.

Second, the use of individual-level data generation provided a similar, yet more detailed and contextualized, perspective of tiered assessment that is more personalized and experiential than that found through group moderation. In this study, emphasis was placed on exploring individual variations when possible. Individual interviews lasting 30–60 min were held with those drivers or clinicians who were unable to attend the focus group (e.g., because of transportation or time barriers) or who preferred to share experiences in a more private setting. We held the interviews after the respective focus groups in order to further probe and re-contextualize the perspectives of tiered driver screening that arose in the group settings. This strategy is particularly useful to challenge or gauge reaction iteratively within and between group norms and at the group versus individual level (Jones et al., 2002).

For all sessions, we used a semi-structured guide of open-ended questions developed from our research questions and prior research findings (supplementary material). We used an iterative approach (Creswell, 2013; Kvale & Brinkmann, 2009), analyzing material after each session so that findings could inform subsequent discussions and lead to deeper understandings and confidence with the relevance of the findings.

As a separate research objective, all focus groups and interviews also explored perspectives on “advance driving directives” and general communication between clinicians and drivers; these data were analyzed and reported separately (Betz et al., 2013).

Focus groups had both a facilitator and note-taker present, and interviews had either one or two investigators present. No investigator had pre-existing relationships with any participants. Participants provided informed consent prior to the start of the session. All sessions were digitally recorded and then transcribed verbatim for subsequent coding and theme analysis. All sessions were conducted from March to May, 2012.

The study was approved by the Colorado Multiple Institutional Review Board.

Analysis

Our team-based approach, guided by a senior qualitative researcher, used both deductive and inductive analytic techniques with an emphasis on low-inference interpretation (Fereday & Muir-Cochrane, 2006; Guest & MacQueen, 2008; Saldana, 2013; Thomas, 2003). Materials included in the analysis were session transcripts, research team debriefing meetings (which recorded dominant impressions), and field notes (which recorded non-verbal cues and interactions between participants). Two investigators independently and manually coded the material using predetermined deductive codes (from the interview guide) and new inductive codes that emerged from the participants’ responses. We examined the codes for possible overlap and resolved discrepancies through regular team discussions and an iterative consensus process. We used Atlas.ti V7.1.5 to facilitate team analysis through visual mapping of code and theme structures. We integrated the final set of codes into a core set of themes related to the concept of tiered older driver assessment and then organized them in a preliminary visual framework of driver and clinician perspectives on tiered older driver assessment in outpatient primary care settings (Figure 1). Taken together, these processes provided an in-depth comprehensive analytic matrix, whereas our multidisciplinary team provided diverse lenses for interpretation.

Results

We conducted two driver focus groups (14 and 16 participants), three driver interviews, one clinician focus group (5 participants), and three clinician interviews (Table 1). Together, this yielded 231 pages of verbatim transcripts and 10 pages of

![Figure 1](https://academic.oup.com/gerontologist/article-abstract/56/2/272/2952852)  
**Figure 1.** Preliminary framework of driver and clinician perspectives concerning tiered older driver assessment, including screening in primary care settings. Dominant themes from this study (rectangles) are shown in context of the concept of tiered older driver assessment (ovals).
notes. We ended recruitment when we appeared to reach “thematic saturation” (Creswell, 2013; Thomas, 2003), which we determined based on having (a) good quality, recorded, rich data from experienced participants, (b) a narrow study scope (the tiered driving assessment process, not driving in general), and (c) two qualitative interview methods, which provided opportunity for individual and group perspectives that resonated similarities over time (Mayan, 2009).

Four general themes related to a tiered approach to older driver assessment arose (Figure 1, Table 2). Two themes addressed the overall concept: (a) support for concept of tiered older driver assessment and (b) concerns about the consequences of older driver assessment and the effect of those concerns on program viability. The other two themes addressed the screening component of tiered older driver assessment: (c) tension inherent in using a generalized approach to the highly individualized issue of driving and (d) logistical considerations for screening in primary care settings, including cost and timing issues.

### Support for Concept of Tiered Older Driver Assessment

A dominant study theme was that both drivers and clinicians were generally supportive of the concept of screening older drivers in primary care settings as part of a larger tiered assessment approach. Participants identified value in objective testing using validated screening tools and BTW tests. Drivers generally said they would listen to clinician recommendations if concerns were linked to performance on a screening tool or to a particular medical condition or medication; they were more resistant to general advice to stop driving unconnected to a particular issue. One driver said, “If somebody said to me that they were concerned with the way I drove, I would want to know what concerns you. And take a look at what they’re saying.” Many drivers supported the idea of routine, universal screening or testing: “All people should have to renew their driving skills every 10 years. Just because you got your license once, doesn’t mean you’re capable of driving.” Drivers also identified value in BTW sessions: “I think that these driver evaluation places would tell us a lot of things we don’t know. And it’s important.” Many clinicians also supported the idea of universal screening, in part as a reminder to themselves: “I don’t think about it as often as I probably should.”

Referring to in-office screening tools, one clinician said, “And it may be one of those things like, if you have 6 things and you check off on three of them, then [. . .] it clues us in. Something quantitative that we can look at and use as a guide.”

An important aspect of this theme, however, was that both participant groups thought that older drivers would vary in their receptiveness to routine screening or assessment. Some drivers suggested that testing would have to be mandatory: “It has to be required by law, because people will not [do it] otherwise.” Others thought that participation would be affected by the perceived value of the assessment and its results: “If you feel capable of driving, why would you want to take that test?” Speaking of her own reasons for considering an assessment, one driver said:

> It’s still individual. It’s important for me to know, and that’s why I’d go through an evaluation. [. . .] I know I must be doing something wrong. I can’t be doing everything right. Even though I’m not aware of what I’m doing wrong. I’m probably making some mistakes, I’d like to know what those mistakes are before I make one and really get whacked.

Clinicians also anticipated variable receptiveness to screening on the part of older drivers: “I think it would be variable, some would say ‘I’m a great driver, and this test is meaningless,’ and there’s others who probably would take it to heart, and think about stopping driving, or doing some driver training.” But some clinicians also suggested that patients may be more willing to undergo screening than expected and made analogies to screening for other sensitive conditions:

> I’m astounded at how comfortable people are with things like depression screening. [. . .] It’s in the exam room, but the medical assistant is administering it. And at first they administer a verbal screening, and if that’s positive, they give them the paper screening, and say “Fill this out, Dr. so-and-so may want to talk to you about this.” So that seems incredibly invasive to me, but everyone seems to be cool with it. Maybe it’s just me.

### Concerns About the Consequences of Older Driver Assessment

Another dominant theme—concerns over the possible consequences of older driver assessment, including license revocation—was closely linked to the theme of general receptiveness. Both drivers and clinicians brought up a variety of possible consequences to older drivers and connected these issues to overall system feasibility in suggesting that participation was less likely if all anticipated outcomes were negative. Drivers expressed concerns over possibly
Table 2. Representative Quotes, by Emergent Theme and Participant Group

<table>
<thead>
<tr>
<th>Theme</th>
<th>Older drivers</th>
<th>Clinicians</th>
</tr>
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<tbody>
<tr>
<td>Support for concept of tiered older driver assessment</td>
<td>• “If you can’t pass the [BTW] test, you shouldn’t be driving.”</td>
<td>• “It’s kind of an American thing. You know, we all want proof, we want some data, we want some pass or fail.”</td>
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<tr>
<td><strong>Concerns over consequences of tiered assessment</strong></td>
<td>• “There are always going to be people who aren’t going to cooperate . . . unless they are ordered to, and you would almost have to threaten them to lose their license before they would go and take a test. You’re going to have a certain percentage of those people, that’s all there is to it.”</td>
<td>• “What’s the alternative for her, so that she still feels independent, and she doesn’t have to call the family all the time for things . . . you can’t just leave people at home.”</td>
</tr>
<tr>
<td>Tension in using a generalized approach to the individualized issue of driving</td>
<td>• “It’s easier to remember to ask everyone, rather than just asking certain people.”</td>
<td>• “It’s not a routine question for me, and it should be.”</td>
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<tr>
<td>Logistical issues</td>
<td>• “Would probably take less of the doctors time, and he would be able to give you a 1-on-1, if he had those 5 questions there, and it would be pretty obvious to him which ones needed to be discussed. Because I doubt if the doctors would have time to do all this.”</td>
<td>• “So the party line is that it’s individual. In my sense, I think people in their early eighties probably.”</td>
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<td></td>
<td>• “It sounds like an auxiliary person would be trained and could do it, absolutely . . . And your doctor looks at it and reviews it.”</td>
<td>• “Have the medical assistant distribute it, give the directions, actually make sure someone completes it, because as a provider that saves me 3 minutes, so that’s helpful. So if it’s there when I come into the room, if it can be something that I will definitely discuss”</td>
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<td></td>
<td></td>
<td>• “If we could incorporate it somehow into [the electronic medical record], would be great.”</td>
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losing their driving privileges, mostly related to a lack of acceptable transportation alternatives to allow them to continue their regular activities. As one driver summarized:

Let’s say that you decide that the time has come for you to quit driving, and all of a sudden you’re faced with some problems that you don’t know how to solve [ . . . ] with going to the grocery store, and all kinds of chores and so forth. [ . . . ] What are you supposed to do, as far as solving those problems? You either call on your own people, or if you don’t have any money, I guess you’re out of luck and you have to walk.

Specific concerns related to public transportation included convenience, exposure to bad weather, and cost, and a few drivers suggested older adults receive free bus passes. But drivers also noted that “driving is an independent thing” and they were concerned that relying on family or friends for rides “becomes a burden on them.” However, a few drivers mentioned that they disliked driving and would be happy to give it up if they had a good alternative: “I think I would [stop] if I knew there was another way of getting around.” Although many participants discussed the benefits of a preventive approach to driving in general, one driver brought up a specific positive consequence of going through an assessment: “Sometimes there’s exercises that you could do, or there’s various things that you actually could do to improve your own motor skills.”

Clinicians were also very aware of these concerns over the possible negative effects of driving cessation: “Maybe they don’t have family nearby . . . that’s how they get their groceries, that’s how they get their medications . . . their caregivers. It’s a crippling thing, quite honestly.” They also noted that the availability of transportation options could affect an older driver’s decisions about continued driving; as one said:

For the most part, those who aren’t driving, it’s because they have a successful alternative. They’re either able to use the bus, or everything is close, or their spouse drives, that’s probably the most common, or their kids drive. So really I see people choosing not to drive appropriately when they have an easy option.
Clinicians also recognized that they often had limited resources for patients, and they therefore worried about their role in the driver assessment process: “It’s a lot harder to try to explore with a patient who continues to drive, who I know is not safe, what their options could be. And frankly we don’t have a ton to offer them.” Another clinician commented:

It’s easy for somebody else to say “hey, you cannot drive,” but “are you going to come help me get groceries?” is what my patients ask. So it’s easy for someone else to say you cannot do it, but what does the patient do? Does he or she have help?

Opposing the fears over the negative individual effects of possible driving cessation were concerns about individual and community safety if an unsafe driver continues driving. Such concerns were implicit in many of the comments of clinicians, who recognized their role in identifying, communicating with and possibly reporting unsafe drivers. However, there were very few clinician comments explicitly about public safety, especially in relation to the amount that clinicians discussed wanting to avoid harming individual patients’ health and well-being through unnecessary driving restrictions or driving cessation without adequate transportation alternatives. Drivers, on the other hand, frequently brought up public safety: “If you’re not capable of driving, then you shouldn’t renew your license. That one time you go out, you may cause an accident, you know.” As one driver said about the balance between independence and safety: “But you know, all seniors have to look at it this way. You could have your independence and lose your life at your own hand and so what have you gained? Nothing.” Other drivers added, “Wrecked some other family’s life,” “And your children’s lives and they would be so affected, and on and on and on.”

Tension Inherent in Using a Generalized Approach to the Highly Individualized Issue of Driving

Just as drivers and clinicians recognized the trade-offs between older driver mobility and community safety, they also identified a tension in using standardized approach for the individualized issue of driving. They noted both the potential efficiency of using a generalized approach to older driver assessment and also the fact that driving is affected by a number of individual factors. Drivers supported the idea of routine and universal screening: “I would think at a certain birthday, either the 60th birthday or the 70th birthday . . . every patient the doctor has should be given this questionnaire. That way the doctor doesn’t have to think [laughs].” But drivers had lively discussion about the age at which to start such screening. One said “Someone might be 62 and not be a safe driver, and someone like me who is 82, I feel like I am capable of being on the road. So age is not a number, you know.” Another countered: “There’s always exceptions but you start somewhere.” The issue of ageism also came up:

At a certain age like 75 or so, you have to be so careful or otherwise they are going to say “well this is discriminating against seniors,” so that would be a little touchy thing as to say what age, because there are many people out there who shouldn’t be driving as well as senior citizens.

Clinicians similarly recognized that there is no single age, medical condition, or other factor that impacts driving ability; as one said:

You know, for some people it’s not an age issue, it’s their medical condition. I think everybody knows a 60 year old who is functioning like an 80 year old and my mom is, she’ll be turning 87 this year, and she’s completely independent, just does her own thing, so in her case, she is a young 87, and then I know these ancient 60 year olds. So I think across the board, just pick some random number [for screening], maybe 75. Because 70 is the new 60. I can think of a whole lot of active, skiing, travelling, busy 70 year olds.

They thought that routine screening could be helpful to improve both care and communication. One clinician thought that regular questioning might make the topic easier to discuss with both patients and family members:

If it’s being brought up on a regular basis, at least on a yearly basis [ . . . ] because it has been brought up, they may feel more comfortable saying, “oh there’s been a change since we talked about that last year” [ . . . ] and there may be more of a sense of comfort in doing that.

Clinicians also likened it to other routine practices like screening for depression and other conditions:

It would be neat if we could, further down the line, if we could incorporate some sort of question within the organization. In the primary care clinics, like they ask about pain, “are you in pain,” some of these other questions. We think about the patients that are in a medical home, having something, “are you driving?”

But clinicians also brought up the need to have a relationship with the patient in order to address individual issues related to driving or driving retirement:

I think a person who has to have that [driving] question answered shouldn’t be seeing anyone other than their PCP who knows them best. His entire medical history in 20 minutes--do I really have time to sit down and read his entire chart?

Logistical Considerations for Screening in Primary Care Settings

Both drivers and clinicians identified a number of logistical issues related to screening within a primary care setting,
including time constraints and competing priorities. As one clinician said:

[Driving has] probably only come up for a quarter of my patients. So the barriers are time, we’re talking about either acute issues, or chronic management. [ . . . ] So I just feel that perhaps the priority is not to discuss driving, because we’re working on other things to improve their functional status, and then there’s certainly a defect or barrier on my part of because we’re perhaps dealing with issues that seem more urgent, I’m ignoring an issue that is equally important, but just never gets done.

Another clinician, who was in a leadership position, was concerned about the added burden on patients:

We already get so many complaints from patients about how many questions they have to answer, because every year with Joint Commission, there is more and more questions they have to answer, more and more things the medical assistants have to put in the chart, and another one is just, I have to say, seems like it would be too much.

The drivers participating in this study were generally open to the concept of discussing driving with their clinicians, but they had mixed opinions on whether the clinicians would have time; one said “With a primary care doctor, your appointment is usually scheduled for 15 or 20 minutes, he’s not going to take 5 or 10 minutes out of that to discuss your driving,” whereas another countered “My doctor will make time.”

A partial solution offered by both clinicians and drivers was to administer the screening tool on paper or with assistance from a medical assistant. The chosen format might depend on the screening tool length, as one clinician pointed out:

It depends on how many questions there are. If it’s a short 2 question, probably the medical assistant can do it as their checking them in, but if it’s 5–6 questions, probably would be best to give it to them at the front desk when they check in, so they can just do it on paper.

Drivers were also open to the idea of filling out a paper form: “Yes, a paper would be good. To think through before I talked to the doctor, and then to hand it to the doctor to look at.”

Verbal feedback from the clinician concerning the screening results was identified as critical by both clinicians and drivers. This feedback process was important because, as a clinician said, a screening result “probably needs a physician’s validity mark on it”; similarly, a driver stated: “I don’t want a medical assistant looking at it over and saying ok. No, I would expect my doctor to have access to it.” A verbal discussion after screening was also important to drivers as a sign that clinicians were actually reviewing the results: “I would question whether anybody is paying any attention to it, anyone is going to be reading what I’m filling out.”

Clinicians suggested that the screening process be integrated into the electronic medical record system as a way to remind providers, save time, and make the process seem routine and less threatening to patients:

So if there was maybe a little template, for me and my computer, you know I’m there going through my stuff, and I pull up my “smart phrase” that says driver assessment, and I’m just you know, it seems like a natural flow of conversation.

Concerning the tone of conversations, a number of drivers also had opinions about the kind of language clinicians should use. As one summarized:

“Let me get to know you better, are you still driving? Do you have any issues with that?” That kind of question, rather than “an old person like yourself shouldn’t be driving.” As in most things, it’s in how you present the question or the issue.

Drivers and clinicians also identified logistical considerations related to the after-screening process of referring screen-positive drivers for a BTW evaluation—issues that are less controllable by clinic leadership but important in ensuring success of a tiered assessment program. Cost of a BTW evaluation was a large concern, as such comprehensive evaluations often cost hundreds of dollars; drivers said they would only be willing to spend far less: “$25 especially for seniors who are on a fixed income. $25 maximum. And that’s stretching it.” Some drivers suggested having an incentive for completing the BTW process; one joked it could be a t-shirt. As a clinician elaborated on this concern over costs:

Most of my patients, they’re not going to spend a couple hundred dollars because I say, “You know I really think you ought to get your driving evaluated.” I mean, most these people don’t have that kind of money, and if they’re thinking “I don’t really have a problem, I’m fine” I don’t think they’re easily going to go spend money to do that. So if that was something that was covered by insurance, or very reasonable to afford, I think that would help a lot.

Participants also discussed the concern over having the BTW evaluation located away from the clinic, both because of familiarity and travel costs. A BTW evaluation at the clinic site was preferred by both drivers (“I think it would be much better if they could come here”) and clinicians (“Going to a place that is already familiar to them would be huge”). A clinician pointed out that this option would also save money for patients who live in remote areas: “The travel costs. A gallon of gas is nothing to me, but I have patients who have to cluster their appointments.”
Discussion

This study sought to examine the perspectives of older drivers and clinicians concerning a tiered approach to older driver assessment, including screening in primary care settings. Both groups supported the concept of tiered older driver assessment and widespread or universal screening but recognized that driving discussions also need to be tailored to the individual. A dominant theme among both older drivers and clinicians was the potential negative consequences of assessment—especially driving cessation—that could threaten program acceptability, but they had practical suggestions about how to do routine screening as a way to begin these conversations. Both older drivers and clinicians suggested reframing older driver assessment to emphasize positive aspects such as enhanced safety and confidence.

Tiered older driver assessment, consisting of widespread screening followed by in-depth evaluation of those who screen positive, has been identified as a possible way to balance older driver safety and independence and prioritize BTW evaluation resources for those most at risk (Eby & Molnar, 2008). In this study, older drivers and clinicians were generally supportive of the concept, including the implementation of the brief screening component in primary care clinics. Older drivers noted that universal, routine screening might be easier for physicians than targeted screening and might also seem less threatening to patients. Clinicians noted the added benefit of a standard screening tool in increasing their confidence, which is in line with a prior survey that found that 45% of responding Canadian family physicians lacked confidence in their ability to assess driving fitness in older patients (Jang et al., 2007). Improved clinician knowledge and confidence about older driver assessment, supported by a standard screening program, could also benefit the families of older drivers. Families are often identified as key decision makers concerning driving reduction or cessation in older adults (Adler & Rottunda, 2006; Perkinson et al., 2005), yet most avoid driving discussions or have difficulty with them (Connell et al., 2013; Kostyniuk & Shope, 2003; Silverstein, 2008). In a recent qualitative study with older drivers’ family members, many reported poor experiences in trying to enlist help from physicians to convince an older driver that it was time to stop driving (Connell et al., 2013). Improved protocols and education around older driver assessment could thus help families avoid feeling abandoned when dealing with these difficult issues (Connell et al., 2013).

Although participants supported the general concept of routine screening of older drivers in primary care clinics, they also anticipated variable receptiveness among patients. This is in line with prior work (Adler & Rottunda, 2010; Connell et al., 2013); Adler and colleagues (2006) even categorized older drivers as “proactive,” “reluctant accepters,” and “resisters” according to their approach to driving reduction or cessation. Thus, conversations about driving with older adults must ultimately be customized to address the individual’s needs, abilities, and perspectives. Ideally, older driver screening and assessment would be embedded in a larger context that “normalizes” anticipatory conversations (Betz et al., 2013) about driving, driving safety, and plans for future driving retirement (Adler & Rottunda, 2006; Curl et al., 2013). Routine and regular screening could be a way to begin these conversations, whereas tools like the “Assessment of Readiness for Mobility Transition” (Berg-Weger, Meuser, & Stowe, 2013) may be useful to help clinicians tailor their subsequent counseling approach. Any program also needs to take into account state regulations concerning physician reporting requirements or liability, which currently vary widely across (Carr et al., 2010) but likely to affect clinicians behavior.

Overshadowing the discussion about routine screening of older drivers was concern over the potential negative consequences of driving assessment—predominantly driving cessation and its effects—and how these consequences might affect the viability of tiered assessment. Both older drivers and clinicians noted the real and valid fears of loss of independence and mobility because of driving cessation, which is in line with a large body of literature (e.g., Adler & Rottunda, 2006; Edwards et al., 2009; Freeman et al., 2006; Ragland et al., 2005). Public transportation in the United States has generally been described as inadequate to meet older adults’ transportation needs (Adler & Rottunda, 2006); over half of older adults live in communities with no public transportation, and approximately, 90% of trips by older adults occur in private vehicles (Ball et al., 2013). Our study participants similarly expressed concerns over using public transportation, but they were also fearful of becoming a burden on friends or family. Other studies have also identified older adults’ fear of being a burden (Adler & Rottunda, 2006), and recent work by Connell and colleagues (2013) documented that some family members share this fear and do not want older relatives to rely on them for transportation. Our study contributes to the existing body of literature by demonstrating that these fears may impact the viability of older driver assessment programs, as clinicians and patients may hesitate to participate given possible negative outcomes. Thus, again, what is needed in the primary care setting is a comprehensive approach to older driver safety that includes not just screening but also anticipatory conversations (Betz et al., 2013), individualized mobility counseling (Berg-Weger et al., 2013), and resources that older adults can actually use. An anticipatory approach may also be appealing to clinicians living in states with mandatory reporting requirements, as conversations focused on prevention rather than assessment may seem less threatening.

Participants in our study had practical suggestions about how to implement routine screening, including having the patient or a medical assistant complete the screening with discussion and feedback led by the clinician. But perhaps a more important general suggestion was to reframe the issue of older driver assessment to focus on the positive aspects (i.e., using “gain-framed”
Prior work suggests that even driving cessation can have some positive benefits, such as increasing social interactions by getting rides from friends (Adler & Rottunda, 2006; Connell et al., 2013). Insurance discounts or other financial incentives for completing a BTW evaluation might be attractive to many older adults and deserve attention by researchers, practitioners, and policy makers. Such incentives might also help offset the cost of the BTW evaluations, but coverage by third-party payers like health or automobile insurance should also be explored (Betz et al., in press).

A study limitation is that participants came from university-based primary care clinics, one from senior community center and one from independent living facility, and the older drivers were generally healthy. Brief older driver screening might be performed in other settings, such as at home or in community settings; our sessions focused exclusively on primary care settings, so we cannot comment on participants’ perspectives about screening in other venues. More women than men participated; given that driving behaviors and beliefs differ by gender (Blanchard, Myers, & Porter, 2010; Tuokko et al., 2007), future studies will need to selectively target men. In addition, participants’ views may not reflect those of the general populations of older drivers or clinicians. Study volunteers may be more interested in driving safety or other driving issues than non-participants, which could have led to an overestimation of support for tiered older driver assessment programs. However, the use of an iterative study design strengthened the validity of our findings and their applicability to other populations (Creswell, 2013). Finally, we had a relatively small sample size, but we have sufficient similarities and variation that inform potential transferability across other older driver and primary care physician experiences.

Despite these limitations, this study provides useful new information supporting the concept of tiered older driver assessment in primary care settings. Standardized approaches to screening and referral of older drivers might be a way to increase clinician confidence, normalize potentially fraught discussions, and balance older driver mobility and safety. Ideally, such assessment programs would be embedded in a context that includes anticipatory conversations about driving, mobility counseling, and discussion of acceptable and usable transportation alternatives. As a next step, studies examining actual implementation of tiered assessment programs are needed to examine “real-world” feasibility, acceptability, and efficacy.

**Funding**

This work was supported by the Paul Beeson Career Development Award Program [the National Institute on Aging; AFAR; the John A. Hartford Foundation; and the Atlantic Philanthropies, grant number K23AGO43123]; and the John A. Hartford Center/University of Colorado Denver Center of Excellence. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the funding agencies. No sponsor had any direct involvement in study design, methods, subject recruitment, data collection, analysis, or manuscript preparation.

**Conflict of interest**

None declared.

**References**


**Supplementary Material**

Please visit the article online at [http://gerontologist.oxfordjournals.org/](http://gerontologist.oxfordjournals.org/) to view supplementary material.


