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Recruitment of Older Drivers From Primary Care Clinics for On-Road Fitness-to-Drive Testing: Results of a Pilot Study

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To the Editor

Older driver fitness-to-drive screening in primary care clinics (as part of a “tiered assessment system” with further testing of screen-positive patients) may help balance older driver mobility and safety. Ideally, participants should be recruited from the site where an intervention will be implemented, but most prior studies of older driver screening or assessment have used convenience sampling from unique populations (e.g., specialist clinics¹ or behind-the-wheel [BTW] evaluation programs²⁻⁵) or from the general community^{6, 7} and have not reported participation rates. In this pilot study, we sought to: (1) examine the feasibility of recruiting older drivers from outpatient primary care clinics for an

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off-site BTW evaluation; and (2) estimate eligibility and completion rates. We plan to recruit patients from primary care settings in a larger study to validate a screening tool⁸ for use in these settings.

Methods

We recruited older (aged ≥ 65 years) patients from a general internal medicine and a geriatric clinic at a university hospital (April-June 2012). Eligible patients spoke English, lacked significant acute illness or dementia ("Six-Item Screener"⁹ score ≥ 4), and reported driving during the past 30 days.

Participation required completing: a brief questionnaire; a free, confidential BTW evaluation at a site 10 miles from the clinics; and telephone follow-up. During recruitment sessions (3 consecutive hours each), a research assistant (RA) used the clinic schedule to identify and approach all older patients. Encounters occurred in clinic waiting areas, and eligible patients who declined were asked why. The Institutional Review Board approved this project.

For this feasibility analysis, primary outcomes were (a) enrollment and (b) completion of the off-site BTW evaluation.

Results

During 97 hours of RA presence, 310 older patients presented for medical care. The RA missed 20% of potentially eligible participants while interacting with other patients (Figure 1). Of the 248 remaining, 53% were ineligible, most commonly because of being a non-driver. Ineligible patients were more often female (77% vs. 22%, $p<0.001$) and older (median 83 vs. 77 years, $p<0.001$). Overall enrollment was 24% (0.29 participants per hour of RA presence).

Fourteen (50%) enrolled participants completed the BTW evaluation. These participants rated highly the ease of making an appointment and the utility of the on-road session and recommendations. When asked how much money they would have been willing to pay for the BTW evaluation (priced at \$99), the median response was \$10 (mean \$21; range \$0-\$75).

Discussion

Given the goal of developing a tiered assessment program for primary care settings, we sought to recruit older drivers from these settings. These pilot results demonstrate the feasibility of this approach, at least when the BTW evaluation is free. We also identified recruitment challenges, including concern over the location of BTW evaluation site.

In this pilot sample, 24% of eligible patients enrolled. Comparison to other older driver studies is difficult, as many have used convenience samples without reporting full recruitment or participation data.^{1, 5-7} In our study, the most common primary reason given for declining participating was the off-site BTW evaluation location. A monetary incentive could mitigate transportation costs but would not address concern over driving in an

unfamiliar neighborhood, so a closer BTW evaluation site (or multiple sites) may be preferable, if feasible. Concern over possible license revocation may have been another barrier to participation, especially in the group who declined participation because of “lack of interest” or without a given reason.

Our findings have implications for the introduction of tiered older driver assessment into outpatient clinical settings, as there will be obstacles in gaining acceptance among all drivers and in finding ways to ensure drivers are able and willing to complete a BTW evaluation. Strategies could include physician involvement (e.g., counseling about testing) and integration into a larger program that includes advance planning for future changes in driving.¹⁰ In addition to BTW program location, another important barrier to “real-world” functioning of a tiered assessment program will be cost and insurance reimbursement.

Limitations include the small sample and minimal data on nonparticipants and ineligible or missed patients, so we cannot draw conclusions about participation biases or generalizability to other clinic populations.

This pilot study demonstrates that it is possible, but challenging, to recruit older drivers from outpatient primary care clinics for a study involving an off-site BTW evaluation. Researchers studying older driver screening or assessment tools should strive to recruit participants systematically from the types of locations where the tools will be used. This will allow generalizability to additional settings and hopefully, widespread adoption of evidence-based tools.

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Figure 1.
Flow diagram of patient enrollment.