

# CRASH screening tool not recommended for clinical practice

Betz ME, et al. *J Am Geriatr Soc.* 2017;doi:10.1111/jgs.15222.

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The CRASH screening tool, which is used to identify older drivers who need a behind-the-wheel test, was not recommended for clinical practice, according to findings recently published in the *Journal of the American Geriatrics Society*.

“Primary care providers are uniquely positioned to initiate brief screening of older drivers as part of a tiered driver assessment program, with referral of those who screen positive for [behind-the-wheel] tests,” **Marian E. Betz, MD, MPH**, of the department of emergency medicine at the School of Medicine at the University of Colorado, and colleagues wrote. “Still missing is a valid, brief, simple way for clinicians to screen for driving risk in the general older adult population.”

Researchers studied questionnaires (including the CRASH tool), assessments, behind-the-wheel tests and telephone interviews 1-month later completed by 315 cognitively intact drivers older than 65 years. Analyses contained descriptive statistics and examination of predictive ability of the CRASH tool to discern normal (pass) from abnormal (conditional pass or fail) on the behind-the-wheel test, with logistic regression and Classification and Regression Tree techniques for tool refinement.

Betz and colleagues found that the CRASH tool poorly predicted behind-the-wheel performance with an area under the curve of 0.51. Of the 266 participants who had a behind-the-wheel test, 83% had abnormal results, and among those, 45% were advised to limit driving under particular conditions. Neither the CRASH tool nor its individual component variables were significantly associated with the summary behind-the-wheel score.

“During the month after enrollment, no participants ceased driving. Low driving cessation rates in the short term may have implications for future studies that consider driving behaviors in older drivers over shorter time spans,” Betz and colleagues wrote. “Future studies should also examine changes in driving habits along with driving cessation, because research shows that older drivers are likely to modify their driving behavior before completely ceasing driving. Further prospective follow-up over 12 to 24 months could identify high risk groups to target for intervention to prolong safe, active driving.” – *by Janel Miller*

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PERSPECTIVE



**Alice Pomidor**

Driving is a highly complex skill, and the reasons that our skill sets may be become unsafe are very different from person to person. For example, one older adult might have vision problems, where another person may have medical problems and medications that are affecting their judgement or reflexes. Unfortunately, there isn't just one quick set of screening questions that can cover everything, because people often are afraid of what will happen if they admit they are concerned about driving, may not even recognize that they have problems, and often don't realize which condition or medication is actually contributing to the problem. So family and medical caregivers usually need to provide some observer input for health care providers to help choose which tests are needed for each individual person. A good set of warning signs for drivers or observers to watch for are available at <http://www.healthinaging.org/aging-and-health-a-to-z/topic:driving-safety>, along with other helpful information.

A screening questionnaire can certainly help get us get started with finding people who both need and are willing to be helped out with their driving. A caution to keep in mind is that people seldom see themselves the same way others do when driving. Studies comparing self-rated behavior to the perceptions of a trained observer or a driving rehabilitation specialist from occupational therapy have not shown the driver to be very accurate. The CRASH study by Dr. Betz et al took another step by having older drivers who signed up for their study rated at regular driving schools, which do not do medical rehabilitation and are therefore lower cost, so it might have resulted in easier, more accessible services for people in their community. It is too bad that at this stage, it doesn't look like it can reliably identify folks who need help from those who do not.

A more detailed questionnaire called the Modified Driving Habits Questionnaire is available in the American Geriatrics Society's Clinician's Guide to Assessing and Counseling Older Drivers appendix of Clinical Team resources, and it is free and available at <https://geriatricscareonline.org/ProductAbstract/clinicians-guide-to-assessing-and-counseling-older-drivers-3rd-edition/B022>. You can also find the Clinician's Guide as a downloadable document at the National Highway Traffic Safety Administration (NHTSA) website under Professional Caregiving at <https://www.nhtsa.gov/document/clinician%E2%80%99s-guide-assessing-and-counseling-older-drivers>. The American Geriatrics Society worked closely with the NHTSA and a clinical team of experts from medicine, nursing, pharmacy, social work and occupational therapy to come up with a toolbox and strategy for evaluating driving

in older adults. It has evidence-based, practical, office-based functional assessment tests for driving-related skills and is called the Clinical Assessment of Driving Related Skills (CADReS), and is explained in the Clinician's Guide.

One other tool, the Fitness-to-Drive Screening Measure, asks caregivers to rate actual observed driving maneuvers by older drivers and has been shown to be accurate when compared to ratings of the older driver by driving rehabilitation specialists. It's recommended for use by the public by the Clinician's Guide and is available at <http://fitnesstodrive.php.ufl.edu/us/>. Right now, it takes a while to complete, but it can be done ahead of time and the results printed to bring to a patient's primary care provider.

We do need to keep working on how to help older adults and their health care providers recognize when they are at risk for unsafe driving, so we can help folks remain mobile and independent for as long as possible, whether that is by personally driving or by transitioning to alternative transportation. The goal is always to keep moving!

**Alice Pomidor, MD, MPH, AGSF**

*Professor, Department of Geriatrics*

*Florida State University College of Medicine*

**Disclosures:** Pomidor is editor of the American Geriatrics Society's Clinician's Guide to Assessing and Counseling Older Drivers.