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# ELDER CARE

## A Resource for Interprofessional Providers

### Driving and the Older Adult

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As the population ages, the number of older drivers is increasing. Although the absolute number of crashes involving older drivers is low, the number of crashes per mile driven rises with advancing age.

It is important to optimize people's safety and recommend against driving when it is unsafe. At the same time, however, it is unwarranted to restrict driving and compromise an older person's mobility and independence when such restriction is unnecessary. Thus, the challenge facing health care providers is to strike a balance between an older adult's safety on the one hand and mobility and independence on the other.

#### How to evaluate older drivers

Given the many factors that contribute to safe driving, it is not surprising that there is no one measure to identify all individuals at risk. Indeed, even standard clinical dementia tests do not reliably predict safe driving or success on a road test (Table 1).

Dementia Test	Cut score	Road Test Pass Rate
Mini-Mental State Examination	≤ 24	36%
Clinical Dementia Rating	≥ 1	76%

Information from *Neurology*, 2010;74:1316–1324

The latest (2015) guidelines from the American Geriatrics Society and the National Highway Traffic Safety Administration provide a stepwise framework for addressing driver safety issues.

**Step 1 – Obtain a history** of driving frequency, usual destinations and distances, and medical problems that pose

a risk to driving. Such medical problems include conditions, medications, or functional impairments (Table 2) that may interfere with the ability to recognize threats, process information, or execute responses. These medical problems should be considered not only to determine risk. Recognition of these medical problems also identifies targets for interventions that can decrease risk and permit continued safe driving.

The history should also include inquiry into whether anyone has concerns about the older adult's driving safety. Such concerns can arise when the older driver gets lost, or has near misses, moving violations, or crashes. Examination of the older driver's vehicle by family members can also reveal whether there are scrapes or dents on the vehicle that might indicate unreported minor collisions.

**Step 2 – Observe driver performance** by having a family member ride with or behind the older driver as the individual drives typical routes - looking for how the driver interacts with traffic and pedestrians, as well as how the vehicle is controlled. If family is unable or unwilling to undertake this assessment, a formal driving evaluation can be performed by specially trained occupational therapists or the state licensing agency.

**Step 3 – Make recommendations for change** if the aforementioned evaluation convinces you, the patient,

Cognitive disorders: e.g., dementia, psychiatric illness
Medications causing sedation or cognitive impairment
Movement problems: e.g., neuropathy, myopathy, arthritis
Visual problems: e.g., cataracts, macular degeneration

Information from *JAMA*, 2010; 303:1632-41

#### TIPS FOR DEALING WITH DRIVING IN OLDER ADULTS

- Be alert for the possibility of unsafe driving when older patients get lost, or have near misses, moving violations, or crashes.
- Be aware that standard clinical dementia tests do not reliably predict safe driving or the ability to pass a road test.
- If there is concern about safe driving, arrange for observation of driver performance by family, or a formal road test.
- Before recommending cessation of driving, consider whether a change (limitation) in driving pattern might permit an individual to continue driving safely and thus maintain mobility and independence.
- Know your state laws about reporting potentially unsafe drivers to the department of motor vehicles.

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and/or the patient's family that there is need for change. Several recommendations are possible:

- **Change driving patterns** – Consolidate driving so that fewer trips are made, and limit driving to familiar routes. Avoid high-risk situations in which older drivers often experience collisions, such as merging into traffic or making left-hand turns into oncoming traffic without a turn arrow. Some people (up to 40% in one study) with mild dementia may be able to pass road tests and thus safely drive under such conditions, at least for the time being. Interval reassessment will, of course, be needed.
- **Address risk factors** – When possible, address medical conditions or modify medication regimens to improve function. Optimize prescription lenses, and consider an extra-wide rear-view mirror to minimize blind spots, though benefit of such mirrors is uncertain. Be sure the car is properly fit to the driver, such as making sure feet adequately reach the brake and fuel pedals (with heels on the floor) and that the driver is positioned at least 10" from the steering wheel.
- **Improve driving performance** – Recommend on-road and classroom instruction. These are available through the American Automobile Association, the American Association of Retired Persons, and others.

## What if driving needs to stop?

If interventions are not successful or possible to assure safety, the individual should stop driving. This is a serious step because it limits an older adult's ability to participate in society, and is associated with high rates of depression.

One approach is to give the patient the autonomy to make the decision based on your recommendation to stop driving (a similar approach can be used when recommendations are to continue driving, but on a limited basis). When the patient has cognitive impairment, obtain permission to involve the family in discussions.

The other approach, if patients will not agree to stop driving, is to report the impaired driver to the department of motor vehicles for license revocation. If all else fails, consider implementing measures to prevent driving, such as hiding keys or removing or even disabling the vehicle.

## References and Resources

American Geriatrics Society and Pomidor A, Ed. (2015) Clinician's Guide to Assessing and Counseling Older Drivers, 3rd Edition. (Report No. DOT 812 228). Washington, DC: National Highway Traffic Safety Administration.

CarFit.org. A joint endeavor of the American Society on Aging, the American Automobile Association, the American Association of Retired Persons, and the American Occupational Therapy Association.

Carr DB, Ott BR. The Older Adult Driver with Cognitive Impairment. *JAMA*. 2010; 303(16):1632-1641.

Iverson DJ, Gronseth GS, Classen S, et al. Practice parameter update: evaluation and management of driving risk in dementia. Report of the Quality Standards Subcommittee of the American Academy of Neurology. *Neurology* 2010;74:1316-1324.

Marottoli RA. Assessing Senior Patients' Ability to Drive Safely. *Virtual Mentor: American Medical Association Journal of Ethics*. 2008; 8(6):365-369.

If driving has to stop, you should work with the patient and family to identify other transportation sources to help the patient maintain mobility and independence. Social workers or local area agencies on aging can often provide information about transportation alternatives.

## Legal implications for clinicians

Adhere to the requirements of your state laws regarding the need to report unsafe drivers to the department of motor vehicles. Whether and when to report to the state licensing agency that an older adult should not drive depends, in part, on your state laws. Some states have voluntary reporting laws, while others require reporting of any suspected unsafe driver or individuals with certain medical diagnoses.

Document all discussions in the medical record. When older adults continue driving, minimize use of psychoactive medications and warn about their potential negative effects, adjust the timing, dose, and frequency to least likely affect driving, and ideally have the patient not drive when starting or adjusting the dose.

In very high risk individuals with substantial impairment, multiple adverse driving events, or unwillingness to accept your recommendations, consider reporting to the state licensing agency even if not required. If concerned about the negative effects of this action on the clinician-patient



relationship, consider a referral to a geriatric assessment center for further discussion and evaluation. Regardless of approach, the goal is to optimize safety and mobility.

## Planning for the Future

Even if interventions are successful and driving can continue, it is helpful to discuss planning for future mobility and independence when an individual may no longer be safe to drive. This is especially important if an older adult has a condition or impairment, such as a neurodegenerative disorder, that is expected to worsen over time.

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