

Fit to drive

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One of the main problems facing the medical profession, licensing authorities, and legislators is how to determine medical fitness to drive a vehicle. Driving requires many functions, including vision, mobility, reflexes, and cognition. Most of these can be, and are, tested, and national standards have been set and are followed. For example, visual acuity, depth perception, and visual field defects are regularly examined in physicians' offices, and whether patients meet currently accepted standards is assessed.

Of greater concern is cognition—the mental faculties of perception, thought, reason, and memory. Problems with poor or altered cognition (usually a result of aging) should be investigated in older drivers. Tests to determine cognitive function are not always standardized or reproducible. They are time-consuming and, most importantly, standards for determining decrease in cognitive function have not been established and applied consistently to drivers.

Excellent articles by Dr David Hogan (page 362) and Dr Frank Molnar and colleagues (page 372) appear in this issue. They review and discuss approaches to office assessment of driving competence and consider practical approaches to evaluating medical fitness to drive in older patients, especially with regard to mental ability.

The number of older drivers is increasing and will continue to increase, relative to younger drivers, in the future. Unfortunately, there will also be a progressive increase in cognitively impaired drivers. Cognitive impairment negates the positive effects of experience and skills gained by older drivers during their lives.

Cognitive impairment can be subtle and inconsistent in presentation, making it very difficult for physicians to assess in a single office visit. Subtle or early aberrations are hard to spot, especially if patients are not seen regularly. Other complexities

arise, as pointed out by Dr Hogan, in association with other debilitating diseases, and with use of multiple medications—prescribed as well as over-the-counter—and possible adverse reactions and interactions that might impair cognition.

Office assessment using tests such as trail-making, clock drawing, and counting backward, are useful in themselves, but these tests are not calibrated, and standards have yet to be established and universally adopted. The Mini-Mental State Examination is a useful screening procedure to assess cognitive function. It is standardized, easy to use, and has been accepted as valid by many authorities, including the Canadian Council of Motor Transport Administrators, whose Medical Review Board has set national standards for Canadian drivers.

Ultimately, actual road tests might be required for assessment. Some computer tests are available, but unfamiliarity with computers and stress or nervousness on the part of examinees can be problems in assessment. A road test with a qualified examiner might be the final hurdle. A test where a driver is asked to follow a set of instructions (eg, “turn left,” “change lanes,” or “pull to the curb”) might be completed accurately, because these are short-term directions. A request such as, “Take me to your doctor's office” (or barber, or bank, or grocery store), might be of more value. These more complicated requests rely on memory and other cognitive skills. Those types of requests, however, add cost, requirements for personnel, and possible delays to the process of licensing drivers.

Rural seniors are at a greater disadvantage when they lose their licences than those in urban areas, as they are more likely to become isolated and lose their independence. In rural areas, however, there is usually less traffic, less chance of physical change in familiar routes and places, and fewer signs, directions, and instructions to be followed. Seniors from rural areas can sometimes benefit from restricted


licences permitting them to drive only during daylight hours, in uncongested areas, and within a defined radius of home. Similar restrictions might, on occasion, be placed on urban drivers, prohibiting, for example, driving during peak traffic hours or in heavy traffic areas. Seniors often impose these limitations on themselves.

Society, as well as civic and municipal jurisdictions, will have to come to grips with the loss of mobility and independence imposed on seniors due to restriction or loss of drivers' licences. Alternative transportation services, such as small buses, affordable and accessible taxis, or groups willing to drive seniors to doctors' appointments and errands, will be needed. Such resources exist in some areas, but will need to be expanded and be universally available. More seniors might be willing to forgo drivers' licences if convenient, available, and inexpensive alternatives are in place. The cost of a vehicle, maintenance, and insurance can pay for a lot of taxi fares!

Education and reinforcement of driving skills are especially important for seniors, who might be experiencing slower reaction times, poorer judgment and attitudes, a lack of attentiveness, or increasing loss of cognition. Retraining courses, defensive driving classes, and retesting help to

erase or correct poor driving habits and rebuild confidence.

Physicians must be willing to take the time to assess patients and to explain their concerns about driving for the safety of all concerned.

The articles by Hogan and Molnar et al are to be commended. It is increasingly important not only to bring these problems and concerns to the forefront, but also to present solutions and to establish evidence-based tools that can be used to assess more accurately patients' ability to drive safely. 

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