

Should family physicians assess fitness to drive?

NO

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All provincial jurisdictions hold medical practitioners responsible for determining whether individuals are able to drive safely. Whether this delegation of responsibility is justified is questionable, and it might be that the process of assessment taking place is a *perception* of reality, meaning that an activity is being undertaken ostensibly to address the issue without actually addressing it.

Driving a motor vehicle is probably the most complex activity undertaken during normal daily functioning. For safe driving, competency in the triad of motor function, visuospatial abilities, and cognition must be present: overall, as stated in the Canadian Medical Association driver's guide,¹ the focus of any driver assessment is on functional abilities, not medical diagnoses.

Physicians are trained to diagnose and manage medical disorders, not to conduct assessments of functional abilities, and the physical examination is primarily designed to detect the presence or absence of disease, not to assess function as it applies to safety. Diagnosing a disorder that prevents driving is not the same as determining fitness to drive: absence of disease does not translate to fit to drive.

Setting aside absolute disqualifying diagnoses, 2 questions arise: firstly, does current physician examination in a standard office setting adequately assess fitness to drive; and secondly, does assessment of safe driving ability require physician-specific skills? Also, why should this important, essentially non-medical determination, relevant to the collective community's safety, be a physician's responsibility?

Can we adequately assess fitness to drive?

The British Columbia medical examination comprises a questionnaire, a blood pressure measurement, and a test of visual acuity and field of vision; otherwise, there is no standardized assessment or examination format. My contention is that abilities related to driving either cannot be adequately assessed or cannot be tested in a family physician's office.

Whatever assessment of the triad is undertaken, it is conducted in a static, focused environment, not in the multitasking, moving, and distracting arena of motor vehicle traffic, which renders its reliability as a predictor

of driving ability suspect. It is doubtful that family physician in-office assessment of motor function translates to performance when driving a motor vehicle. When attempting to relate safe driving ability to activities of daily living (ADL), one study has reported that no correlations were found between ADL and instrumental ADL scores and the ability to pass a simulated driving test.²

The visual abilities known to relate to crash risk are useful field of vision and recovery from glare. The confrontation test for field of vision has been reported to be only 35% sensitive and to be inadequate for detecting visual field defects.³ Recovery from glare, a necessary component for safe night driving, is not tested. There is no increase in crash risk for patients with visual acuity between 20/40 and 20/70.⁴

Good cognitive ability is the foundation of competent driving.¹ Executive function, which encompasses goal-directed and self-regulated behaviour such as strategizing, organizing, attention, and planning, is a major component of cognitive ability. Cognitive function ranges from the norm through mild cognitive impairment to dementia. None of the current assessment formats has been validated as an indicator of safe driving ability: the Mini-Mental State Examination is recognized as insensitive for detecting mild cognitive impairment. A Canadian review of driving and dementia states that the Mini-Mental State Examination "is inadequate as a predictor of on-the-road driving performance because it is not designed to assess cognitive function with respect to driving."⁵ Physicians' and neuropsychologists' predictions are not significantly correlated with road-test results, and neuropsychological tests scores are not predictive of road-test performance.⁶

Who should be responsible?

If cognitive tests are conducted, all formats can be appropriately conducted by suitably trained personnel other than physicians. Any contention that an individual's family physician, on the basis of providing longitudinal care, is best able to determine fitness to drive can be countered by the studies that have consistently shown that physicians miss cognitive impairment in more than 50% of the cases where it exists.⁷

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Although, there is considerable medical literature relating to medical assessment of fitness to drive, it has proved difficult to develop a screening tool for older drivers that is evidence-based, valid, and clinically practical to administer.^{8,9} A review of approaches to assessing older drivers in medical offices concluded that there “is no evidence-based information to help physicians make decisions regarding medical fitness to drive.”⁹

In contrast, a simple visual recognition test of 10 selected road signs conducted by non-physicians can reliably predict ability to pass an on-road driving test, with a score of 7 or less correctly predicting failure.¹⁰

Other than for determining absolute disqualifying diagnoses, the current physician-based paradigm should be set aside and simulated road testing, supplemented by on-road testing when ability remains questionable, should be established: “a standardized road test is preferable to neurological testing, a medical examination, or mental status examination alone in determining driver competence,”⁶ and “[t]he behind-the-wheel test of driving ability has been identified as the most appropriate method to determine driving competence and is the current criterion [standard].”¹¹

As it seems that there is sufficient study information to question the usefulness and reliability of physician-conducted medical examination as a predictor of driving competence compared with functional on-road or simulator driving tests, the time might have come to pass this responsibility to hands other than those of primary care physicians. The provincial Offices of Superintendents of Motor Vehicles should become the agencies responsible for assessing fitness to drive.

Physicians should be reminded that the legal precedent has been set whereby they can be held legally responsible in motor vehicle accident suits involving their patients who are unfit to drive, even when they did not know that the patients were still driving. 

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Competing interests

None declared

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CLOSING ARGUMENTS

- Fitness to drive requires competency in motor function, visuospatial ability, and cognition, but focused testing of these domains relevant to safe driving does not require physician-specific skills.
- Physician assessment has not been shown to predict on-road driving performance, and required visual abilities cannot be assessed in the standard family physician office setting.
- Physicians should not be responsible for the overall assessment and determination of fitness to drive, and any assessment carries legal liability.

