## **Driving Fitness and Cognitive Impairment**

Issues for Physicians

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s the population of the United States continues to age, society will be faced with increasing numbers of older drivers, some of whom may be cognitively impaired. In their role identifying cognitive impairment and caring for these patients, physicians will increasingly face the need to assess risk and intervene, if necessary. However, research has yet to determine the level of cognitive impairment that constitutes an unacceptable driving risk, although a great deal is known about how dementia (a major cause of age-related cognitive impairment) affects many of the critical abilities needed for driving.<sup>1</sup>

Many older individuals in the early stages of dementia can and do drive safely; however, at some point as the disease progresses they will need to stop driving. Physicians' roles in addressing the needs and safety of these patients and their community are particularly challenging. First, valid and reliable screening and assessment tools to help physicians and other professionals identify medically at-risk drivers are lacking, but research into this topic is continuing. Second, older drivers with dementia are likely to lack the insight needed to make appropriate decisions about stopping or restricting their driving in response to declines in driving-related abilities. Furthermore, unlike older adults with noncognitive decline, drivers with dementia generally lack the capacity to benefit from retraining or vehicle modifications.2 Third, health professionals often look to the families of cognitively impaired patients to raise concerns and provide information about driving fitness. However, not all older drivers have involved family members who can monitor their driving or support them in moving toward driving retirement. Societal trends resulting in increased single-adult households will likely exacerbate this situation. Furthermore, recent research suggests that even when family members are available and involved, they may not be reliable sources of information about the driving of their older relatives.<sup>3</sup>

Despite the shortcomings of the screening and assessment process, the physician is often the one asked to

See also p 1632.

make the determination of a patient's fitness to drive, even though licensing actions are the responsibility of the licensing agency. While a number of interventions are available for physicians dealing with cognitively impaired drivers, <sup>4</sup> US policy and practice with respect to referring and reporting such patients, as well as the establishment and functioning of medical advisory boards (MABs), could be improved.

Physicians unsure of a patient's driving fitness can refer him or her to a driver rehabilitation specialist (DRS)—an individual with special training in evaluating and coordinating driving for persons with decreased functional capacities. The DRS can perform a detailed evaluation of the driver, including an on-road assessment, and recommend services that match the patient's needs and resources. There is considerable variation in how DRSs evaluate drivers and the tools they use.<sup>2</sup> Although guidelines have been developed,5 other practices, such as referral practices, vary widely among programs. Standardization of these procedures would likely be beneficial; research is essential to determine which are most effective. Also, DRSs are not available in all areas, and there is no single resource that can be consulted to locate these services. In addition, most insurance plans, including Medicare, do not consistently cover driver rehabilitation services. With no or only partial insurance coverage, the cost of the evaluation is often left to the patient or family to pay out of pocket. Expanded reimbursement for assessment and remediation services is needed.<sup>6</sup> Premature driving cessation and driving beyond the time it is safe for one to do so carry significant societal costs. Therefore, it is in the interest of society to support the services that have the best chance of balancing safety and mobility of individuals.

Physicians can also report patients they consider to be medically at risk to their state's licensing agency. Currently, no state specifically bans physicians from reporting, 22 encourage reporting, and 12 require physicians to report. Of states that require reporting, some require reporting of specific medical conditions, such as dementia, while others mandate reporting of drivers who are

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"unsafe" or "not fit to drive." Several problems with physician reporting have been identified.7 Many physicians are not aware of reporting requirements, and others may be reluctant to engage in the process for a number of reasons, including lack of data linking medical conditions to crash risk, lack of valid screening tools, the timeconsuming and expensive nature of current assessments, potential negative effects of reporting on the patientphysician relationship, and concerns that reporting will lead to civil liability lawsuits against the physician. Indeed, only 25 states provide immunity from lawsuits resulting from reporting.4 Some barriers to physician reporting could be alleviated through state law protecting the identity of the reporting physicians, yet only 19 states have such laws and in many, the reporter's identity can be discovered through a legal process, such as a court order mandating disclosure. According to consensusbased guidelines developed during a 2-day workshop with 36 internationally recognized experts in older adult safety and mobility,6 physician reporting and licensing decisions should be made based on functional abilities related to driving, not on medical conditions per se or on age. This suggests that mandatory reporting would be best served if it were based on symptoms (or functional abilities) rather than medical conditions. The guidelines also recommend that standard reporting laws across states be enacted; all states should provide for civil immunity for medical personnel who report unsafe drivers, especially when reporting is not mandated; and educational programs are needed to help physicians understand laws, regulations, and policies related to reporting medically unfit drivers.

The licensing agencies in many states use MABs, which comprise various health professionals, to help with issues on medical fitness to drive. The responsibilities related to these boards vary greatly among the 36 states that have them.<sup>8</sup> The boards could advise states on licensing policy and guidelines related to medical fitness to drive, as well as advise on individual cases—yet in most states, MABs do only one or the other. Some states have MABs in place, but they are inactive. Research investigating the role of MABs across the United States has led to more than 20 consensusbased guidelines for improving the function of MABs,8 including that every state should have an MAB; MABs should be composed of paid physicians and other health professionals; the MAB should provide policy and guideline advice and should review and recommend actions on individual cases: and MAB members should be immune from civil liability.

As evidence continues to evolve about how best to identify and deal with medically at-risk drivers, particularly those with cognitive impairment, it has become clear that the scope of responsibilities should be shared by physicians, other health care professionals, licensing agencies, and the community.9 Such a comprehensive, interdisciplinary approach is necessary not only to appropriately identify cognitively impaired drivers who may pose a threat to public safety but also to ensure that the resources are in place to help these drivers manage the transition to driving retirement while maintaining their mobility in the community. Examples of this kind of approach are already in place in jurisdictions outside the United States, including Australia, where the "safe system" approach, derived from Sweden's Vision Zero and the Netherlands' Sustainable Safety, has been applied to keeping older drivers safely mobile. 10 Australia's approach includes the establishment of a network of community-wide referral sources for medically atrisk drivers and the use of multitiered assessment involving a variety of health professionals. Future policy and practice in the United States will benefit considerably from integrating a systems perspective into the development of programs and initiatives and ensuring that these programs and initiatives undergo scientific evaluation before they are disseminated throughout the country.

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