Dementia is a devastating neurologic condition now accounting for more than 100,000 deaths annually in the US. Symptoms typically begin as mild difficulties with memory that progress to incapacitation over years. Medications have modest average benefits (although amyloid-targeting antibodies show promise in some early trials), and early screening has not proven to improve prognosis. Priorities for medical care include controlling comorbidities (eg, depression), reducing risk factors (eg, alcohol use), avoiding complications (eg, constipation), optimizing supports (eg, hearing aids), maintaining lifestyle (eg, exercise), and continuing social connections. Medical care requires substantial judgment due to the tension between safety and freedom for adults with a diagnosis of dementia as a progressive illness.

Jun et al. conduct a cross-sectional ecological analysis assessing how policies of mandatory reporting of dementia might be associated with a patient’s willingness to disclose symptoms or a clinician’s willingness to diagnose dementia (presumably from the fear of losing a driver’s license). The analysis focuses on 4 states with mandatory fitness-to-drive reporting of dementia to vehicle licensing agencies (eg, California) and the apparent rate of physicians underdiagnosing dementia, defined by a statistical model contrasting observed to expected Medicare claims. The results suggest that mandatory reporting is associated with an increase in the number of physicians underdiagnosing dementia, from 7.8% in states with driver self-reporting and 7.7% in states with no mandates to 12.4% in states with mandatory reporting ($P < .001$). The implication is that mandatory reporting is aversive to patients and clinicians and is thereby associated with widespread underdiagnosis.

Correlation does not prove causation in an ecological analysis because each region differs in weather, wealth, weaknesses, and countless other factors. One interpretation of an observed correlation is direct causality; for example, mandatory reporting might prevent vehicle crashes, lead to fewer cases of brain injury, and ultimately avert cognitive declines in later life. A different interpretation is reverse causality; for example, some adults with early cognitive decline might leave California due to the high cost of living, prevailing traffic congestion, or other pressures. A third interpretation is confounding; for example, adults in California might be more likely to exercise regularly and become less prone to dementia and to driving. A final interpretation is measurement artifact; for example, an apparent decrease in dementia might reflect biased self-report.

All 4 potential interpretations of the correlation between mandatory reporting and decreased dementia can be argued, although Jun et al. emphasize measurement artifact. For example, the lower rate of dementia in California might be too good to be true and could, instead, reflect the silencing effect of governmental regulation. Furthermore, the dementia rate is also relatively low in Delaware (another state with mandatory reporting), yet not relatively low in Oregon or Pennsylvania (the other 2 states with mandatory reporting). This pattern leads Jun et al. to caution that mandates may sometimes have unintended consequences that hinder clinicians from diagnosing dementia. More generally, the tension between patient privacy and community safety has no easy solution for individuals in the US who may not fully trust their state governments.

To be sure, many investigators have been intrigued by variations in the rate of dementia across different states. In addition, many worry about underreporting, with a potential true rate substantially higher than documented in Medicare claims. This concept becomes more complicated by Jun et al., who invoke an algorithmic statistical model to impute the anticipated true number of dementia cases based on age group, sex, race and ethnicity, insurance status, and calendar year. These calculations then lead to estimating rates of underdiagnosis without accounting for other
unmeasured factors that might be associated with dementia onset or severity (eg, depression, alcohol use, and exercise). As a consequence, Jun et al² make no claim that underreporting of dementia would disappear if all mandates for reporting unfit drivers were to be rescinded.

All states recognize the importance of some mandates for traffic safety. Specific examples include laws that mandate displaying a vehicle license plate, holding a valid driver’s license, driving on the right side of the road, stopping at traffic lights, and yielding to emergency vehicles. Some states go further with sobriety checkpoints, photoradar speed enforcement, laws about wearing a seatbelt, and requirements for motorcycle helmets. In general, US roadways are less regulated than their counterparts in Canada and experience traffic fatality rates twice that of Canada (124 per million vs 58 per million in 2016).⁴ The ongoing increase in death, disability, and property destruction in the US suggests that road safety education and vehicle engineering standards are insufficient.

Research from Canada on mandatory medical warnings from clinicians suggests that counseling can be effective for patients potentially unfit to drive because of dementia or other serious medical illnesses.⁵ The results suggested that warnings improved road safety, equating to a 40% to 50% decrease in the patient’s subsequent risks of a vehicle crash. The decrease in traffic risks are immediate at onset, large in magnitude, sustained in duration, but does not bring a driver’s risk to the population mean. Medical warnings are also associated with a 25% increase in subsequent depression for the patient, as well as a significant reduction in return visits to the responsible physician. The overall effect on improving traffic safety is over 2 times larger than the combined effects of modern trauma systems for saving patients’ lives.⁶

Warning patients about traffic safety requires tact to minimize patient backlash, preserve the physician-patient relationship, and identify constructive solutions. Initial counseling should focus on identifying practical alternatives such as rideshare services, home delivery agencies, and taxi company contacts. Added attention should include treating comorbidities that exacerbate dementia, such as sleep apnea, depression, alcohol misuse, and other forms of substance misuse. Of course, clinicians should remain humble throughout and not masquerade as regulators because only the transportation agency has the power to grant or suspend a driver’s license. Ultimately, many patients need time to transition from a precontemplative stage to an action phase, so that preplanning is essential for counseling strategies to avoid sudden patient shocks.⁷

Jun et al² are exactly right that few states mandate physicians to warn patients with dementia about traffic safety. This differs from mandates for reporting suspected child maltreatment, gunshot victims, or communicable diseases (eg, syphilis), as well as many other statutory duties (eg, paying taxes). Jun et al² are also correct to caution that mandated warnings are not easy, can engender patient dissatisfaction, and need to be handled with tact; breaking bad news is what practicing medicine entails. Regardless of government mandates, counseling patients for more road safety is an essential skill for clinicians in diverse states who hope to help their patients avoid becoming more traffic statistics.

ARTICLE INFORMATION
Published: April 25, 2024. doi:10.1001/jamanetworkopen.2024.8856
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Conflict of Interest Disclosures: This project was supported by the Canada Research Chair in Medical Decision Sciences (Dr Redelmeier), the Canadian Institutes of Health Research (Dr Redelmeier), Kimel-Schatzky Traumatic...
Brain Injury Research Fund (Dr Redelmeier), and the Graduate Diploma Program in Health Research at the University of Toronto (Ms Bhatt). No other disclosures were reported.

Disclaimer: The analyses, conclusions, opinions, and statements herein are those of the authors and do not reflect those of the Ontario Ministry of Health or Ministry of Long-Term Care.

Additional Contributions: We thank Jonathan Zipursky, MD PhD, University of Toronto, for helpful comments on earlier drafts of this article. He was not compensated for his contributions.

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