UPDATE: EVALUATION AND MANAGEMENT OF DRIVING RISK IN DEMENTIA

This is a summary of the American Academy of Neurology (AAN) guideline update regarding evaluation and management of driving risk in dementia.

Please refer to the full guideline at www.aan.com for more information, including the AAN's definitions of the classification of evidence for studies of diagnostic accuracy and the classification of recommendations.

How strongly are global measures of dementia severity associated with decreased driving ability?	
Strong evidence	For patients with dementia, the Clinical Dementia Rating (CDR) scale is established as useful for identifying patients at increased risk for unsafe driving (**Level A**).
Weak evidence	For patients with dementia, Mini-Mental State Examination (MMSE) scores of ≤24 may be considered useful for identifying patients at increased risk for unsafe driving (**Level C**).
To what extent are patients and their caregivers able to assess driving ability and risk?	
Strong evidence	For patients with dementia, a patient's self-rating of "safe" driving ability is established as *not* useful for identifying patients at increased risk for unsafe driving (**Level A**).
Good evidence	For patients with dementia, a caregiver's rating of a patient's driving ability as "marginal" or "unsafe" should be considered useful for identifying patients at increased risk for unsafe driving (**Level B**).
Which elements of the driving history are associated with decreased driving ability?	
Weak evidence	A history of traffic citations may be considered useful for identifying patients at increased risk for unsafe driving (**Level C**).
	A history of crashes may be considered useful for identifying patients at increased risk for unsafe driving (**Level C**).
	For patients with dementia, reduced driving mileage may be considered useful for identifying patients at increased risk for unsafe driving (**Level C**).
	Self-reported situational avoidance may be considered useful for identifying patients at increased risk for unsafe driving (**Level C**).
	Lack of situational avoidance may be considered as *not* useful for identifying patients at increased risk for unsafe driving (**Level C**).
	Aggressive or impulsive personality characteristics may be considered useful for identifying patients at increased risk for unsafe driving (**Level C**).
Which neuropsychological tests provide additional prognostic information?	
Insufficient evidence	There is insufficient evidence to support or refute the benefit of neuropsychological testing, after controlling for the presence of dementia, for drivers with dementia (**Level U**).
Are there interventions that reduce driving risk?	
Insufficient evidence	There is insufficient evidence to support or refute the benefit of interventional strategies for drivers with dementia (**Level U**).

CLINICAL CONTEXT*

Clinicians are obligated to identify conditions that may risk their patients' or the public's health. Because there is no test result or historical feature that accurately quantifies driving risk, clinicians can make only qualitative estimates of driving risk. Clinicians may present data showing that patients with mild dementia (CDR of 1) are at a substantially higher risk for unsafe driving and thus should strongly consider discontinuing driving. However, advocates for maintaining driving privileges may cite the wide CIs for relative risk and on-road driving test (ORDT) pass rates of 41% to 76% as evidence against a categorical recommendation for these patients to cease driving. Such advocates do not want truly capable drivers to cease driving prematurely. In that case, one may look for evidence of increased risk in an individual patient. Consideration of these additional issues can result in a more accurate prediction of driving performance.

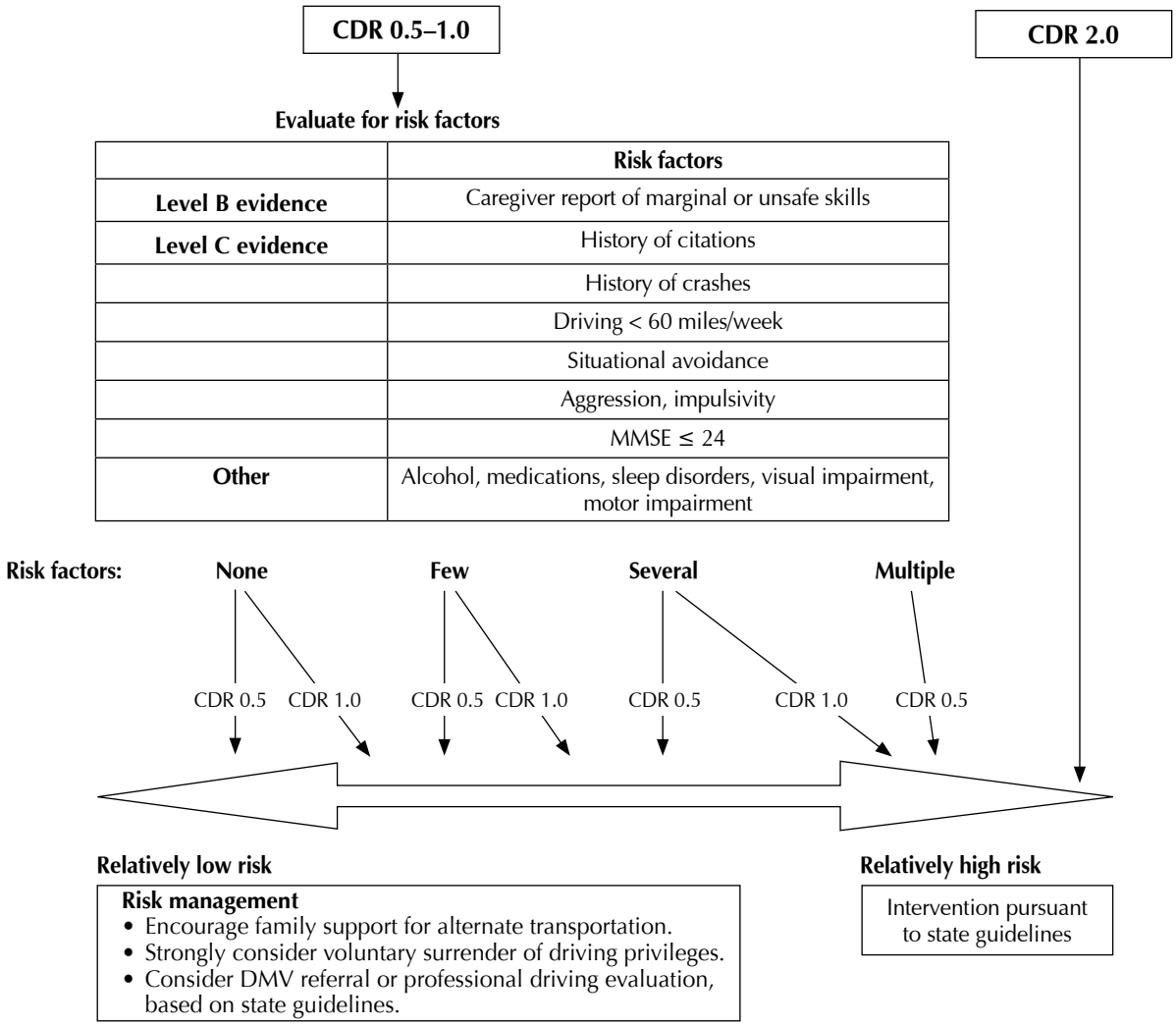
A clinician may wish to integrate this information into an algorithm (see next page) to obtain a qualitative estimate of driving risk. This algorithm should only be considered supplementary to the clinician's judgment. Patients at higher risk may agree to surrender privileges. For those who wish to continue driving, clinicians may consider referral for a professional or governmental driving evaluation, depending on state reporting laws. Patients who continue to drive should be reassessed at six-month intervals. Neuropsychological testing offers a means of assessing memory, spatial

cognition, and executive functioning that is more sensitive than the MMSE or CDR. While it seems intuitive that a more accurate determination of impairment in specific cognitive domains would result in a more accurate estimate of driving risk, there are no data at this time to support or refute this approach. Additional medical conditions also may be relevant, but those issues are beyond the scope of this review.

Qualitative risk estimates are a familiar part of clinical practice. However, clinicians may be less comfortable making such judgments in a legal context. When the threshold for "likely" impairment is low or unclear, some clinicians may choose to report borderline cases. In some states, doing so may leave them open to civil litigation. This practice parameter cannot operationalize these types of subjective statutory requirements; it is intended for use in a clinical setting to assist in an evidence-based estimate of driving risk.

*Clinical context slightly abridged. See the published guideline for the complete text.

Figure 1. Sample algorithm for evaluating driving competence and risk management in patients with dementia



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