



## Physician input and licensing of at-risk drivers: A review of all-inclusive medical evaluation forms in the US and Canada

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### ABSTRACT

This article details a systematic review of medical evaluation forms in support of licensing decisions for medically at-risk drivers. Comparisons were made between all-inclusive forms utilized by 52 State and Provincial Departments of Motor Vehicles (DMVs) in the US and Canada. Comparisons focused on length, format, content, instructional quality, medical coverage, ease of use, and other qualitative characteristics. Median page length was 2 (range 1–10), and mean word count was 1083 (494–3884). Common response options included open-ended (98%), forced choice (87%), and check box (81%). While the majority of forms (77%) required driver consent, only 24% requested information from the driver. Less than half (46%) included text on confidentiality protection. While all forms requested general medical information, just over half included specific sections for vision (54%) and cognitive/neurological conditions (56%). Most forms (81%) required that a judgment be made concerning driver safety, and half prompted for possible license restrictions. Criterion-based quality ratings were assigned on a five-point Likert scale by group consensus. One third of forms were rated as marginal or poor in comprehensiveness and utility, and just two garnered an excellent overall rating. Findings are discussed relative to current research on driver fitness and elements of a proposed model form. Best practice recommendations include a page length limitation, emphasis on in-person evaluation (i.e., as opposed to a records-only review), prompts to collect crash and other driving history information, clear instructions and stepwise format, content prompts across relevant medical categories, documentation of functional status and impairment levels, options for driving with restrictions in lieu of de-licensing, and emphasis on relative (vs. absolute) clinical judgments of overall driver safety.

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### 1. Introduction

An important function of State and Provincial Departments of Motor Vehicles (DMVs) is to ensure that licensed drivers are “medically fit” to operate a motor vehicle safely and responsibly. This function is especially important for older drivers, as they may be at greater risk for health conditions that can lead to crashes (Meuser et al., 2009; Carr, 2000). While definitions of medical fitness vary

across jurisdictions, most include sensory, cognitive, neurological, psychiatric, and musculoskeletal components. The *medically fit* driver is one with sufficient vision, alertness, cognition, joint range of motion, and motor skills, to manage the operational, tactical and strategic demands of driving (Anstey et al., 2005; Wang and Carr, 2004; Wang et al., 2003; Michon, 1989).

Despite years of research in this area, however, a “gold standard” for medical fitness evaluation is still lacking (Molnar et al., 2005, 2006), and many jurisdictions rely on decades old forms and local practices. Little is known about how current medical review forms compare and whether certain forms incorporate practices consistent with current consensus approaches, such as practices recommended by the Older Drivers Project (ODP) of the American Medical Association (Meuser et al., 2010; Wang and Carr, 2004). The AMA older driver curriculum encourages physicians to adopt a fitness to drive “sensitivity” into general practice, whereby driving-related questions are asked in the flow of

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