Predicting fitness-to-drive in elderly drivers with cognitive impairments.

The goal of the current study is to develop an assessment battery to assess fitness-to-drive of elderly drivers experiencing cognitive impairments. The study is part of a larger project focusing on assessment and training of elderly, cognitively impaired drivers. 136 Elderly drivers from the Limburg region of Belgium (mean age: 79, mean driving experience: 55 years, mean MMSE: 26.9) completed an extensive set of neuropsychological and physical tests. Driving performance was assessed on road by an evaluator of CARA (Center for Fitness to Drive Evaluation and Car Adaptations; official fitness-to-drive assessment authority in Belgium) resulting in a pass/fail/conditional pass decision. Furthermore the TRIP questionnaire (Test Ride for Investigating Practical fitness-to-drive (de Raedt, Ponjaert-Kristoffersen, 2000)) was scored after each on-road test. Classical fitness-to-drive evaluation outcome and TRIP score were predicted by different functional tests. A parsimonious set of functional ability tests that is useful as a screening instrument for fitness-to-drive in the doctor’s office is proposed.