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## Driving after Brain Injury: A Clinical Model Based on a Quality Improvement Project

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### ABSTRACT

The question of whether a person can resume driving after acquired cognitive dysfunction is raised in primary care services and in hospital departments where patients suffering from brain injury are treated. These organizations rarely have a specialized program that evaluates driving fitness. This article describes a semi-structured and individualized model that serves as clinical guidelines for determining fitness to drive. The model is based on former research and clinical experience. It is exemplified by the procedure of forty-three individuals with congenital or acquired cognitive dysfunction due to head trauma or disease. A multidisciplinary team including medical, neuropsychological, occupational, and practical driving specialists optimised the clinical applicability of a driving assessment using quantitative and qualitative methods. The team discussions, including several professional evaluations and assessments, are considered very important for interpreting results, for understanding whether the cognitive impairments will have consequences on driving, and whether the individual can compensate for cognitive difficulties. The current way to determine a patient's fitness to drive after cognitive dysfunction is an individually adapted combination of assessment methods that are often performed stepwise. This well-practiced evaluation process reveals that in many cases neither off-road tests nor on-road tests alone are sufficient to ensure sound decisions. To improve on these evaluations, this study concludes that a team-based consensus approach consisting of specialized national teams should be established to support primary care services in assessing fitness to drive in more complicated cases.

### KEYWORDS

Traffic Psychology, Cognitive Dysfunction, Driving Assessment, Teamwork, Clinical Model

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