



Service Priorities and Programmes Electronic Presentations

Convention ID: 299

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Evaluating Fitness for Driving After Physical Injury or Change of Health Condition– The Standardized Off-road Driver Assessment

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Keywords:

Driving assessment

Fitness for driving

Standardized off-road driver assessment

Work Rehabilitation

Driver Rehabilitation

Occupational Therapy

Introduction

There is increasing need of driver rehabilitation in Hong Kong, including the disabled driving learner, aged drivers (aged over 70 years), commercial drivers suffering from change of health condition like injury or illness. The essential component of driver rehabilitation is comprehensive assessment that includes off-road and on-road driver assessment. Off-road assessment composes of visual screen, physical screen, cognitive screen and road law test; and usually supplemented with brake reaction time test and drive simulator program. There is emerging evidence supporting the use of brake reaction time and simulators as valid tools for predicting on-road performance (Akinwuntan et al., 2005; Lew et al., 2005).

Objectives

Having access to an office-based measure (off-road assessment) that can predict fitness to drive or the need for a more in-depth assessment has become even more pressing (Brenda et al., 2011). To meet such demand, Off-road driving assessment and training program will undergo reformation in Occupational Therapy of NTWC in 2016.

Methodology

The existing driving program in NTWC included physical capacity evaluation and cognitive evaluation. Specific assessment and training included brake reaction time test; component skills simulation like steering wheel control, pedaling; and driving simulation

Result

In 2015, total 174 driver cases were assessed by Tuen Mun Hospital OT off-road assessment program. They were drivers of various types of vehicles (Truck 38.5%, bus/minibus 32.7%, taxi 18.6%) Most of the patients suffered from musculoskeletal related conditions and also some neurological conditions like stroke. 98 cases(56.3%)

were assessed to be “fit for driving”, whereas 36 cases (20.6%) and 38 cases (21.8%) were assessed to be “not fit for driving” or “require further assessment” respectively. About 10% of cases failed in brake reaction time test. Meanwhile, there is no standardized and comprehensive training for Occupational Therapists driver assessor in Hong Kong. From 2014-2015, 9 Occupational therapists were trained in University of Sydney, Australia and became qualified ‘Driver trained Occupational Therapist’ who can carry out standardized driver assessment. Two of them are experienced work rehabilitation occupational therapists working in Tuen Mun Hospital and conducting driving rehabilitation program.