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Initial development of a practical safety audit tool to assess fleet safety management practices

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ABSTRACT

Work-related vehicle crashes are a common cause of occupational injury. Yet, there are few studies that investigate management practices used for light vehicle fleets (i.e. vehicles less than 4.5 tonnes). One of the impediments to obtaining and sharing information on effective fleet safety management is the lack of an evidence-based, standardised measurement tool. This article describes the initial development of an audit tool to assess fleet safety management practices in light vehicle fleets. The audit tool was developed by triangulating information from a review of the literature on fleet safety management practices and from semi-structured interviews with 15 fleet managers and 21 fleet drivers. A preliminary useability assessment was conducted with 5 organisations. The audit tool assesses the management of fleet safety against five core categories: (1) management, systems and processes; (2) monitoring and assessment; (3) employee recruitment, training and education; (4) vehicle technology, selection and maintenance; and (5) vehicle journeys. Each of these core categories has between 1 and 3 sub-categories. Organisations are rated at one of 4 levels on each sub-category. The fleet safety management audit tool is designed to identify the extent to which fleet safety is managed in an organisation against best practice. It is intended that the audit tool be used to conduct audits within an organisation to provide an indicator of progress in managing fleet safety and to consistently benchmark performance against other organisations. Application of the tool by fleet safety researchers is now needed to inform its further development and refinement and to permit psychometric evaluation.

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1. Introduction

Work-related vehicle crashes are the most common cause of occupational injury (Driscoll et al., 2001, World Health Organization and World Bank, 2004). It has been estimated that 20–30% of fleet vehicles crash each year, with drivers of company vehicles experiencing 50% more crashes than private vehicle drivers (Haworth et al., 2000). In addition to crashes that result in serious and prolonged injuries, there are many more vehicle crashes that result in minor injuries (i.e. injured workers not admitted to hospital) and/or vehicle damage (Blincoe et al., 2002). Fleet vehicle crash costs have been estimated to account for 13–15% of all fleet spending (Haworth et al., 2000).

The management of fleet vehicles has traditionally focused on asset management rather than on occupational health and safety (OHS) management (Haworth et al., 2000). In the road safety field, there is considerable knowledge about risk factors for vehicle crashes (World Health Organization and World Bank, 2004) and a range of these factors are amenable to control by employers.

However, there have been few studies that document the fleet safety management practices used by organisations and fewer still that evaluate safety management practices in the light vehicle fleet context (Stuckey et al., 2007). One of the impediments to gathering and sharing information on effective fleet safety management is the lack of any standardised measurement tool capable of capturing the complex system of risk management policies and practices that an organisation might implement.

No risk management audit tools specifically focus on the management of light vehicle fleet safety and allow organisations to consistently assess themselves against current best practice. The aim of this paper is to describe the initial development of a safety audit tool to assess fleet safety management practices in light vehicle fleets.

2. Method

There were four main stages in the development of the fleet safety management audit tool. The first stage involved a review of the literature to identify best practices in relation to fleet safety management. The second stage involved semi-structured interviews with fleet managers and drivers. The third stage involved drafting the audit tool using information from the literature review

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