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The Impact of Pre-existing Health Conditions on Cost of Recovery after Workplace Injury: Insight from population-based data linkage in the State of Victoria, Australia

Hassani-Mahmoei, Behrooz^{1*}, Janneke, Berecki-Gisolf², and Collie, Alex¹

¹Institute For Safety, Compensation and Recovery Research

²Monash University Accident Research Centre

Objectives

Comorbidity is known to affect length of hospital stay and mortality after trauma but less is known about its impact on recovery beyond the acute care period. A main challenge to study the impact of pre-existing conditions is that information on these conditions is not collected systematically and comprehensively. The aim of this study was to investigate the role of pre-existing health conditions in recovery from workplace injury using linked data.

Approach

In Victoria, Australia, approximately 85% of the labour force is covered by the state workers compensation scheme regulated by WorkSafe Victoria. The scheme provides financial compensation for healthcare and income support to eligible injured workers. One year of WorkSafe claims for injuries that occurred between 1/07/2008 and 31/06/2009 (N = 49,171) were linked to eight years of pre-injury hospital admission admissions and emergency department presentations, received from the state Department of Health and Human Services. Main outcomes of the study included the total and categorical cost of recovery (e.g. hospital, medical, allied health) measured over short (2-6 months), medium (1-2 years) and long-term (5 years) periods. All models controlled for characteristics of the worker, workplace and injury.

Results

The preliminary results show that the cost of recovery from workplace injury is significantly associated with history of pre-injury admissions: Workers with pre-injury admissions have higher cost of recovery including longer periods of time off work as well as further cost of health service use during recovery. As this is

an ongoing project, further detailed results will be presented at the conference such as the impact of admission under each category of pre-existing conditions according to ICD codes on a wide range of outcomes after workplace injury.

Conclusion

Our findings are expected to help government injury compensation regulators to better understand the drivers of compensation costs and other key system outcomes such as return to work. The findings will support better allocation of financial resources, better internal management of claims and efficient allocation of physical and human resources and therefore greater client satisfaction leading to ensuring faster recovery, return to work and more effective as well as efficient service provision.

*Corresponding Author:

Email Address: behrooz.hassani.mahmoei@monash.edu (B. Hassani-Mahmoei)

