International Journal of Population Data Science





Journal Website: www.ijpds.org

Data linkage to build detailed return-to-work trajectories for work disability research

Maas, E¹, Zhang, W¹, Koehoorn, M¹, and McLeod, 2²

Introduction

Musculoskeletal disorders (MSDs) are the most prevalent chronic condition in Canada, and account for the highest disability costs. Gradual-return-to-work (GRTW) can improve health and labour market outcomes in an aging workforce at risk of MSDs. Linked longitudinal data enables us to generate evidence of GRTW to inform policy needs.

Objectives and Approach

The objective of this study was to investigate the effectiveness and cost-benefits of GRTW for workers with a work-acquired MSD in British Columbia, Canada. We linked workers' compensation data, health services data, and prescription data from three governing bodies to 1) identify injured workers with an accepted MSD lost-time injury between 2010 and 2015; 2) identify trajectories of RTW states (injury, sickness absence, GRTW, RTW, and non-RTW) and the probability of transitioning between states; and 3) assess the association between workers characteristics and RTW trajectories, and analyze the cost-benefits of GRTW.

Results

Final results are expected early 2019. To our knowledge, this will be the first study linking workers' compensation data (in particular detailed RTW data), health services data and prescription data from three different governing bodies for a comprehensive, population-based investigation of work disability experiences over a longitudinal time period and within the Canadian context. Also, using this data for the purpose of assessing the cost-benefits is new, and will help to prioritize prevention resources and strategies to limit the health and economic impact of work-related MSDs on employers, workers' compensation boards and society.

Conclusion/Implications

Evaluating the effects of GRTW on work disability is essential to maximize the health and economic benefits for injured

workers. The innovation of this project is that is links three population-based databases to capture multiple indicators of health and work status to build RTW trajectories over time.



¹University of British Columbia

¹UBC School of Population and Public Health