

## Change · Challenge · Opportunity

Injury & Disability Schemes Seminar 12 - 14 November 2017 Sofitel • Brisbane



## **SYNOPSIS**

DETERMINANTS OF RETURN TO WORK: EXPERIENCE FROM WORKERS INSURANCE IN NSW Dr Sriyani Dias, Catherine Day

**Key words:** Return to work; workers compensation; claimant characteristics; workplace, regression analysis

**Purpose of your paper/presentation:** to analyse and present on factors impacting return to work outcomes for injured workers in the workers compensation system in NSW.

**Synopsis:** The aim of the presentation is to present outcome of a detailed analysis into factors impacting injured workers return to work (RTW) in NSW based on workers compensation data. The presentation will provide an overview of the current status of RTW in NSW, based on recent research, and discuss the results of analysis using three mutually exclusive cohorts of data.

Based on literature factors impacting on RTW outcomes can be grouped into four broad categories: Work Place and Environment, Health Care System, Claim and Claimant Characteristics and System features and legislative framework. These broad categories cover a large number of factors and they are considered multifactorial in nature.

Data used in the present analysis is based on workers compensation claims data for two claim cohorts: pre 2012 period and post 2012 period (July 2012 to June 2016) and return to work survey data for 2016. The claims data from payment transactions have also been merged with the RTW outcomes data for post 2012 period, to allow for increase in predictive power with dynamic data.

The claims data cohorts included predictor variables for claimant demographics, claim characteristics and additional employer characteristics, together with RTW outcomes as the dependent (outcome) variable. Analyses on the pre 2012 cohort used 'duration' as a proxy measure of RTW, while the other two cohorts used the work status to determine if the injured worker was back at work or not. Unlike workers compensation based data, survey data included 42 variables and were grouped into five broader categories: injured worker health, medical care, phycho-social, claim experience and employer support.

Regression models were used in data analysis related to the three cohorts. The analysis revealed that characteristics of injured worker together with workplace environment explain only limited variance in RTW outcomes in NSW. The claimant model (post 2012) performed well, although the R square value achieved was lower. Previous research has shown that a lower R square value is expected generally when attempting to predict human behavior related factors, such as RTW following injury.

Results of pre 2012 analysis together with post 2012 analysis point to the important role that other individual characteristics which are not captured in traditional workers compensation statistics. These form the focus of the RTW Survey data which encompass other aspects such as heath, medical care, psychosocial, claim experience and employer support. The survey



## **Change · Challenge · Opportunity**

Injury & Disability Schemes Seminar

12 - 14 November 2017 Sofitel • Brisbane



based data revealed statistically significant outcomes explaining large amount of variance with the factors associated with medical care and psychosocial factors.