



Return to Work Following Knee Surgery

Objective

The purpose of this study is to examine factors associated with returning to partial or full work duties following work-related knee meniscus surgery among injured workers in BC.

Methods

Two administrative data sources maintained by WorkSafeBC, the worker's compensation board of BC, were used to identify the study cohort and to construct the research database. Injured workers who underwent knee meniscus surgery from 2001 to 2005 were identified using a combination of fee item codes and service provider payee numbers from WorkSafeBC claims data. The primary study variables for these workers were then manually abstracted from WorkSafeBC's surgical/ clinical/rehabilitation database, and linked by scrambled claim number at the individual level to WorkSafeBC's Health Benefits Payment and Medical Services databases (to obtain sociodemographic and work characteristics).

Return-to-work outcomes were defined by:

- Return to partial duties
- Return to full duties

Multinomial logistic regression was used to calculate odds ratios (OR) and 95% confidence intervals (CI) for the association of return-to-work outcomes with sociodemographic, work and clinical characteristics. Differences in time to return-to-work were examined using descriptive statistics (median days, with interquartile ranges).

Results

Study sample

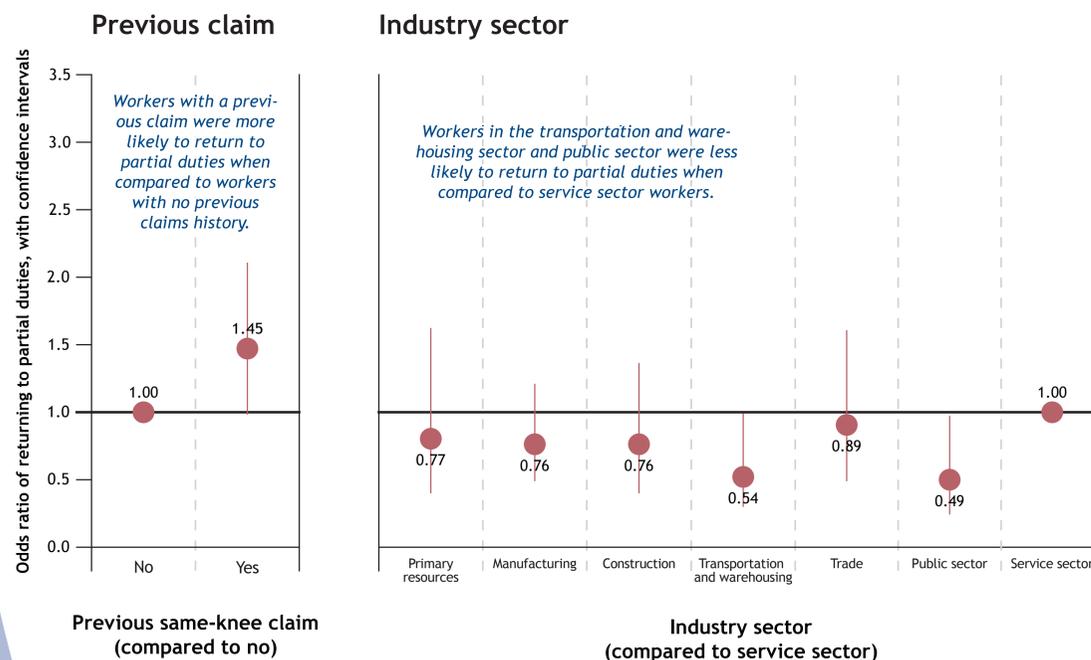
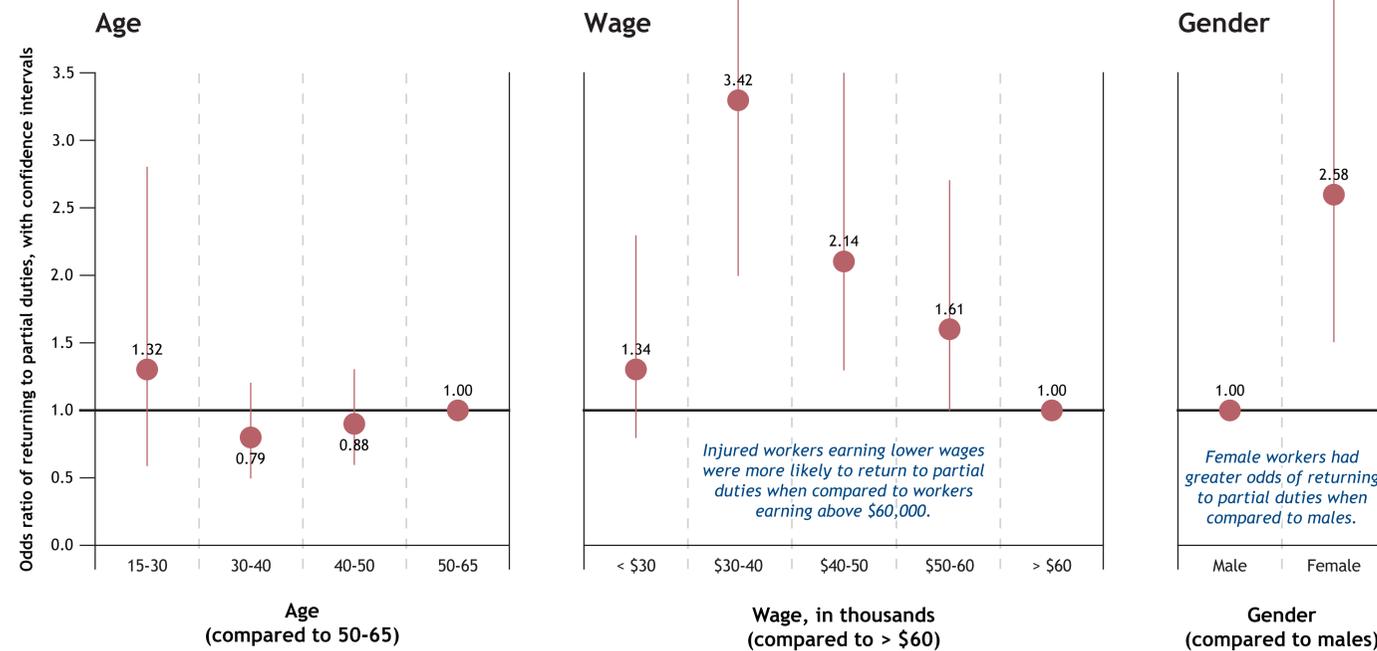
Data was extracted for a cohort of 1,474 injured workers with meniscal knee surgery. The overall return to work rate was 85.4% (n = 1,259), of which 36.1% (n = 455) returned to partial duties, and 26.4% (n = 333) returned to full duties. 471 workers returned to unspecified duties and were excluded from this analysis.

Sociodemographic characteristics

After adjusting for covariates, the odds of returning to partial versus full duties were greater for female workers compared to male workers (OR = 2.58; 95% CI = 1.52-4.36), and for workers earning less than \$60,000 compared to those earn-

The Role of Sociodemographic, Work and Clinical Characteristics

Association between work duties and sociodemographic, clinical, and job characteristics Adjusted for covariates



Time to return to work from surgery

Median days with interquartile range

	Median	Interquartile range
Partial duties	54	34-96
Full duties	41	24-69

ing above \$60,000 (OR = 3.42, 95% CI = 1.98-5.91 for \$30-\$40,000 salaries; and OR = 2.14, 95% CI = 1.30-3.52 for \$40-\$50,000 salaries).

Work characteristics

Workers in the transportation and warehousing sector and the public sector were less likely to return to partial duties when compared to workers in the service sector (OR = 0.54, 95% CI = 0.29-0.99; and OR = 0.49; 95% CI = 0.25-0.97 respectively).

Clinical characteristics

Having a previous claim was associated with greater odds of returning to partial work duties compared to workers with no previous claims (OR = 1.45, 95% CI = 1.01-2.10).

Time to return-to-work

Median time to return-to-work from injury date was longer among workers returning to partial duties (54 days, IQR = 34-96) compared to workers returning to full duties (41 days, IQR = 24-69).

Conclusions

Results suggest that gender, wage, and previous claims history play a role in determining the return-to-work trajectory of injured workers undergoing meniscal knee surgery. Specifically, females, middle income workers, and workers with a previous claims history were more likely to return to partial work duties.

Workers in the service sector were more likely to return to partial duties when compared to workers in all other industry sectors, although this difference was not always significant. Possible reasons for the variations by sector include injury type (i.e. chronic injury conditions seen in the service sector may necessitate return to partial duties and a longer return-to-work trajectory), conditioning effects within the more physically demanding industries (i.e. physically demanding jobs may provide conditioning and facilitate faster recovery to full duties), or differences in the capability of the heavy industries to provide modified work accommodations necessitating a return to full duties.

Further identification of factors that influence the type of return to work may be beneficial to WorkSafeBC for identifying at-risk groups for targeted intervention.

Acknowledgements

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