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Risk profiles of workers' compensation claimants: the PACE protocol

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Abstract

Factors beyond the injury itself can lead to workers' compensation claims extending beyond expected timeframes. An unsupportive manager, a worker with underlying anxiety problems or a general practitioner writing inappropriate certificates can all delay a return to work (RTW). Early intervention to address risks associated with a claim is acknowledged as best practice in claims management, however case managers need assistance to identify the risks that may influence a claim and return to work.

Developed through a partnership between EML and Monash University, the Plan of Action for a CasE (PACE) protocol was developed to identify a range of risks within the first two weeks of claim lodgement, and help case managers to identify and apply appropriate intervention pathways. The PACE tool was based on current academic literature, interviews with case managers and analysis of existing claims data. PACE screening consists of 43 questions asked of the injured worker, the employer and the treating practitioner. The PACE tool was completed for 559 claims between August 2016 and March 2017 in matched teams in two locations. This paper presents the preliminary analysis of the risk profiles of the allocated claims.

The most common risks identified in this set of claims related to the employer was the absence of a RTW coordinator at the workplace (44.4% of cases) and whether the employer required assistance in developing a suitable duties plan (41.1% of cases). Suitable duties were not available in 14.5% of cases. Worker performance issues and workplace conflict were only described in less than 10% of the claim sample.

A low recovery expectation was the most common worker related risk identified in this sample. A high risk of psychosocial complications, represented by the short form Orebro score (a 10 item questionnaire designed to identify risk of psychosocial complications), was identified in 14.5% of claims. Addressing the risk of psychosocial complications is quite challenging, as referral for psychological assessment is commonly refused, however, addressing worker expectations about RTW may be addressed by skilled case managers.

The most common risk factor identified across all injury types was the length of the certificate issued by the treating practitioner. The three highest treatment related

risks involved certification, highlighting the importance of ensuring treating practitioners are on board with certifying capacity and using RTW as part of the recovery process.

Encouragingly the most prevalent risk factors in each key category appear amenable to case management intervention. A number of risks commonly proposed to influence RTW outcomes are only present in a small proportion of claims. Further analysis will identify important combinations of risk factors and their impact on claim outcomes.

Key words: risk screening, workers' compensation, case management

Introduction

Factors beyond the injury itself can lead to workers' compensation claims extending beyond expected timeframes. An unsupportive manager, a worker with underlying anxiety problems or a general practitioner writing inappropriate certificates can all delay a return to work. Early intervention to address risks associated with a claim is acknowledged as best practice in claims management, however case managers need assistance to identify the risks that may influence a claim and return to work.

Recent reviews have identified over 170 barriers to return to work, spanning biopsychosocial factors related the individual, the workplace and compensation systems in general. Case managers face a significant challenge in completing the tasks required for their role whilst also recognising the wide range risk factors for delayed return to work. Even if a case manager recognises a risk, they then need to intervene appropriately, all whilst managing a caseload of multiple claims.

EML, an agent for iCare in NSW, partnered with Monash University to develop a tool to assist case managers to identify risk factors and suggest appropriate intervention within the first two weeks of a claim. The Plan of Action for a CasE (PACE) project describes the development and implementation of the PACE tool and associated intervention protocols with the aim of improving outcomes for injured workers.

Development of the PACE tool and protocol

The PACE tool was developed from three key data sources: a review of existing literature, focus groups with case management staff and analysis of an EML data set. Triangulation across these three sources arrived at a list of factors to be included in the PACE tool. Analysis of usual case manager practice revealed that information on the majority of the factors was typically gathered, however how it was recorded and used varied widely between case managers. The PACE tool introduced standardised methods of information collection and linked identified risks to interventions available to case managers.

To address the risks identified by the PACE tool, case managers had access to mobile case management, referral to a psychologist, external intervention at the workplace, case conference and skilled conversations aimed to elicit specific information from the injured worker, employer or treating practitioner. Once complete information was entered into the PACE tool, the appropriate intervention to address identified risks was recommended to the case manager.

PACE project

After piloting of the tool with case managers and refining the nature of the questions asked to suit case manager practice, the PACE tool was introduced to three teams of case managers across two locations. Inclusion criteria for a claim to be included in the PACE study were:

- Claim allocated to one of the project teams
- Liability accepted (or provisionally accepted)
- Injured worker had not returned to pre-injury duties (PID) within five days of injury

Catastrophic injuries and claims where liability was declined were excluded.

The tool was designed to be completed in a staged fashion in line with usual case manager actions, i.e. items matched to information usually gathered in initial contacts were completed earlier in the course of a claim compared to items investigating psychosocial risk factors. The final version of the PACE tool was designed to be completed within two weeks of the claim being received. When an injured worker returned to pre-injury duties, PACE data collection ceased, resulting in an incomplete PACE data set for that claim. As a result, the completed PACE tool captured risk factors in workers who had not yet returned to pre-injury duties within 2 weeks of submitting a claim.

PACE risk profile

The PACE tool consists of 43 questions aimed to identify risks across three key domains: risks related to the individual worker, risks related to the employer and risks related to the injury and treatment of the injury. The risks captured in each category are summarized in Table 1.

Table 1: risks captured by the PACE tool

Individual	Employer	Treatment/injury
Recovery expectations	Employer size	Injury type
Risk of psychosocial complications	Availability of suitable duties	Certificate length, status and progress
Job satisfaction	Presence of RTW coordinator	Confirmed diagnosis
Injury impact of injury on activities of daily living	Assistance required to plan suitable duties	Recovery focused on RTW
Level of support at home	Employer concerns with RTW	Treatment plan in place
Level of support at work	Worker performance issues	Certificate matched to injury
Contact with employer	Workplace conflict	Worker, employer and health professional on same page

Results

Over the study period (August 2016 – March 2017) 3,172 claims were allocated to the teams applying the PACE tool. Of these claims, the complete set of PACE items was completed for 559 injured workers. The main reasons for PACE items not being completed were claims reaching PID before the end of the data collection period (1,367 claims), claims were notification only (562 claims) and claims were transferred to a non-project team (207 claims).

The prevalence of high risk categories is reported in percentages of claims with data related to each risk. Tables 2, 3 and 4 describe the risks, method of capture and the prevalence of the high risk categories across each of the groupings of risk.

Table 2: Individual focused risk prevalence

Risk	PACE question	N available	High risk proportion
Worker recovery expectation for 1 month	In your estimation, what are the chances you will be working your normal duties in 1 month On a scale from 0 to 10, where 0 is "no chance" through to 10 which is "a very large chance"	554	7 or less 45.0%
Worker recovery expectation for 3 months	In your estimation, what are the chances you will be working your normal duties in 3 months? On a scale from 0 to 10, where 0 is "no chance" through to 10 which is "a very large chance"	552	7 or less 20.5%
Total short form Orebro score	10 questions designed to identify psychosocial risk factors necessitating referral to psychologist. Possible scores range from 0 (least risk) to 100 (greatest risk)	552	50 or more 14.5%
Job satisfaction	Taking everything into consideration, how do you feel about your job as a whole (where 1 is extremely dissatisfied and 7 is extremely satisfied)?	559	4 or less 10.0%
Worker ADLs impacted	Have any of your day to day activities been affected by the injury?	559	Yes 31.0%
Worker concerns about RTW	Do you have any concerns relating to your recovery and return to work?	559	Yes 15.4%
Home support	Do you have support from family or friends to help you while you recover?	559	No 2.3%
Worker contact with employer	Has your employer been in contact with you?	559	No 4.3%
Workplace support	Do you have support from co-workers &/or supervisors to help in your RTW?	559	No 6.3%

Table 3: Employer related risk prevalence

Risk	**PACE question**	**N available**	**High risk proportion**
Suitable duties	Is the employer able to provide suitable duties?	559	No 14.9%
RTW Coord	Is there a RTW Coordinator at work?	559	No 44.4%
Suitable duties planning	Are they confident in developing a suitable duties plan, or do they need assistance?	559	No 41.1%
Employer concerns RTW	Are there any concerns regarding RTW?	559	Yes 16.8%
Employer contacted injured worker	Have you been in contact with your injured employee?	445	No 5.2%
Worker performance issues	Is the employer aware of any issues that would prevent the worker from returning to work?	559	Yes 6.8%
Conflict 1	Has your employer made an effort to find suitable duties/employment for you?	559	Strongly disagree/ disagree 6.1%
Conflict 2	Are the employees and management generally supportive of each other?	559	Strongly disagree/ disagree 6.1%
Conflict 3	Is your employer doing what they can to support you?	559	Strongly disagree/ disagree 5.2%

Table 4: Injury and treatment related risk prevalence

Risk	PACE question	N available	High risk proportion
Certificate: length	Is the certificate length for unfit for suitable duties or RTW > 14 days?	559	Yes 56.7%
Certificate: no upgrade	Has the worker had no certified upgrade?	559	Yes 31.7%
Certificate: status	Is the worker still certified as unfit?	559	Yes 25.6%
Diagnosis confirmed	Has the diagnosis been confirmed?	559	No 10.0%
Recovery focused on RTW	Is the treatment plan focused on functional recovery and RTW?	559	No 10.9%
Treatment plan in place	Has a treatment plan been implemented?	559	No 11.8%

The prevalence of each risk factor is also presented in Figure 1 to illustrate the most commonly occurring risks across each of the categories.

As part of the initial analysis the availability of suitable duties was compared with company size (Table 4), and injury type was investigated for certification factors and whether a diagnosis had been confirmed by 2 weeks (Figure 2).

Table 4: Availability of suitable duties by company size*

	Company size			
Suitable duties available	Micro	Small	Medium	Large
No (high risk)	33.0%	22.8%	9.9%	2.3%
Yes (low risk)	67.0%	77.2%	90.1%	97.7%
	112 claims	233 claims	393 claims	177 claims

* Total n for analysis = 919 claims

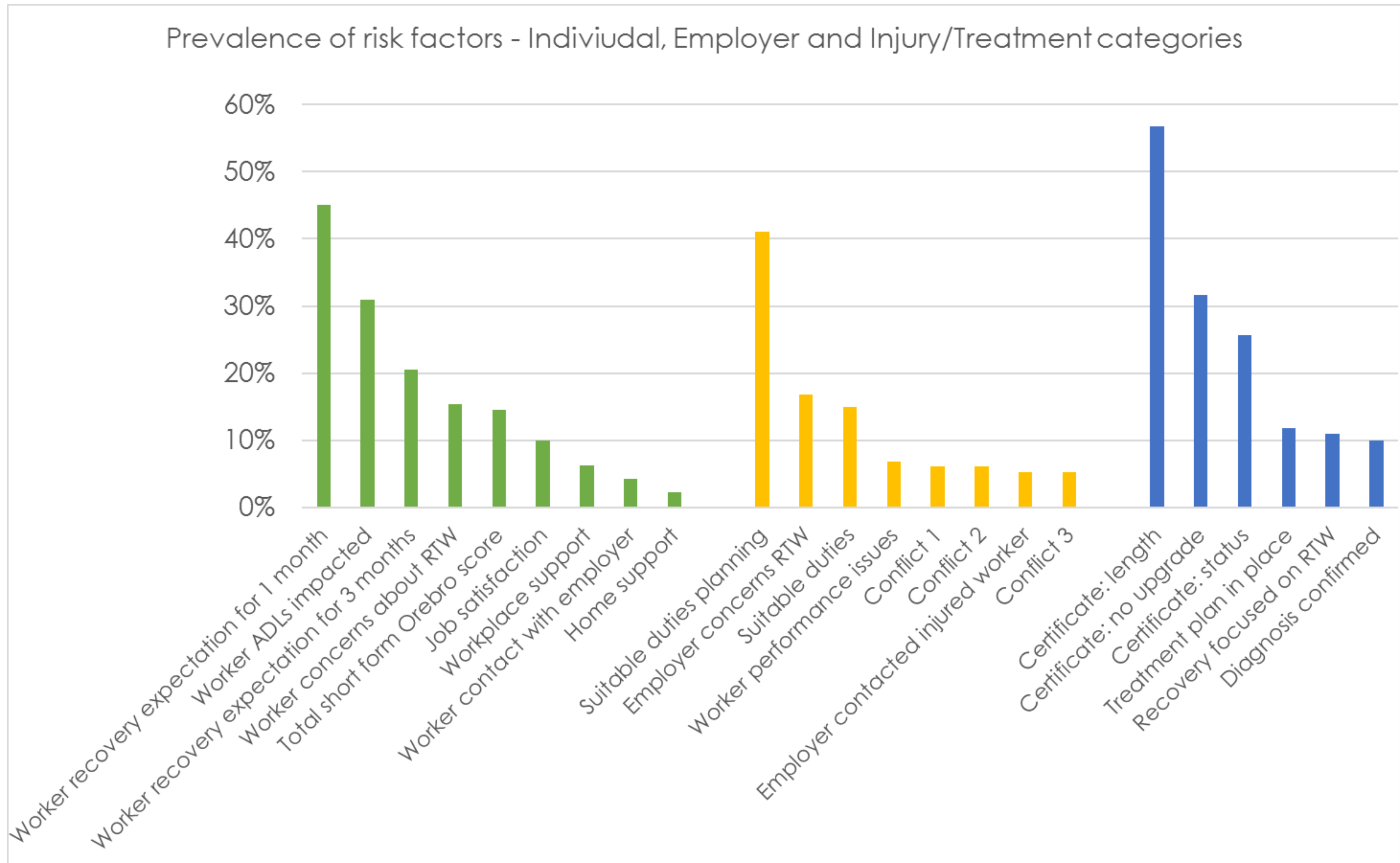


Figure 1: Prevalence of risk factors : Individual factors in green, Employer factors in yellow, Injury/treatment factors in blue

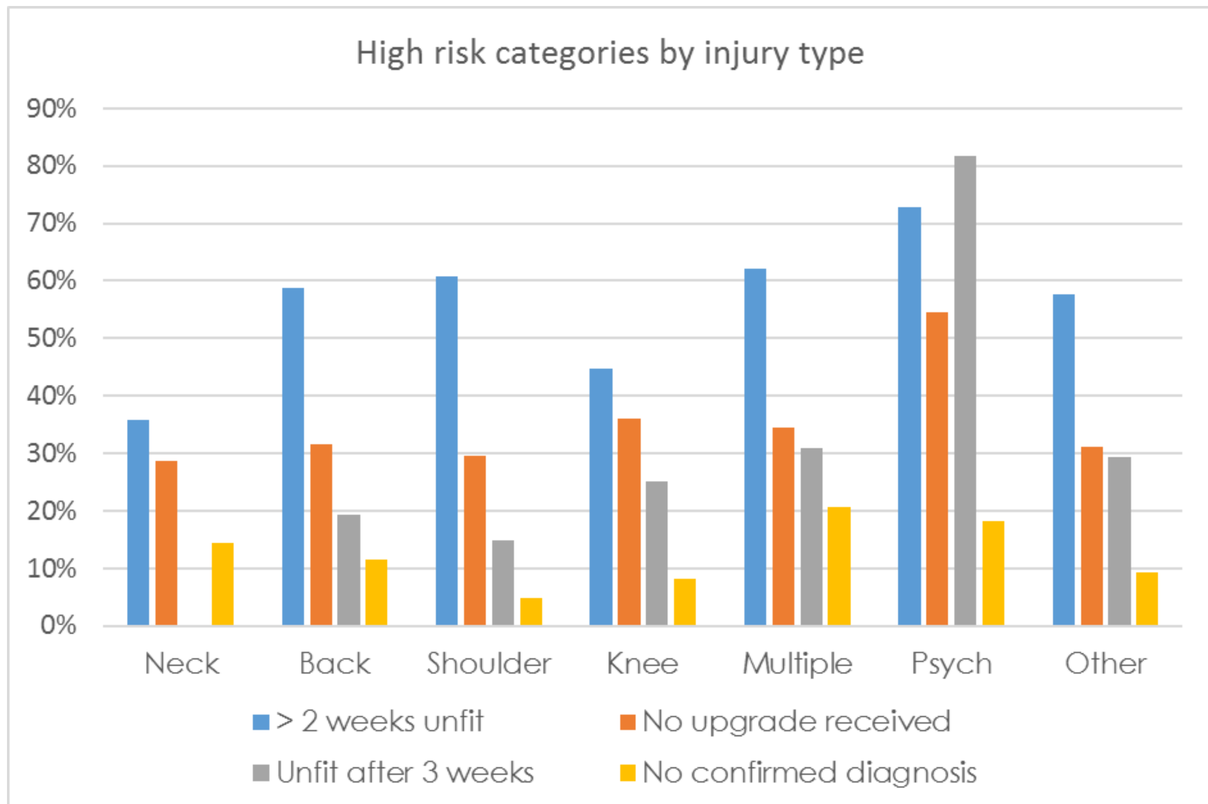
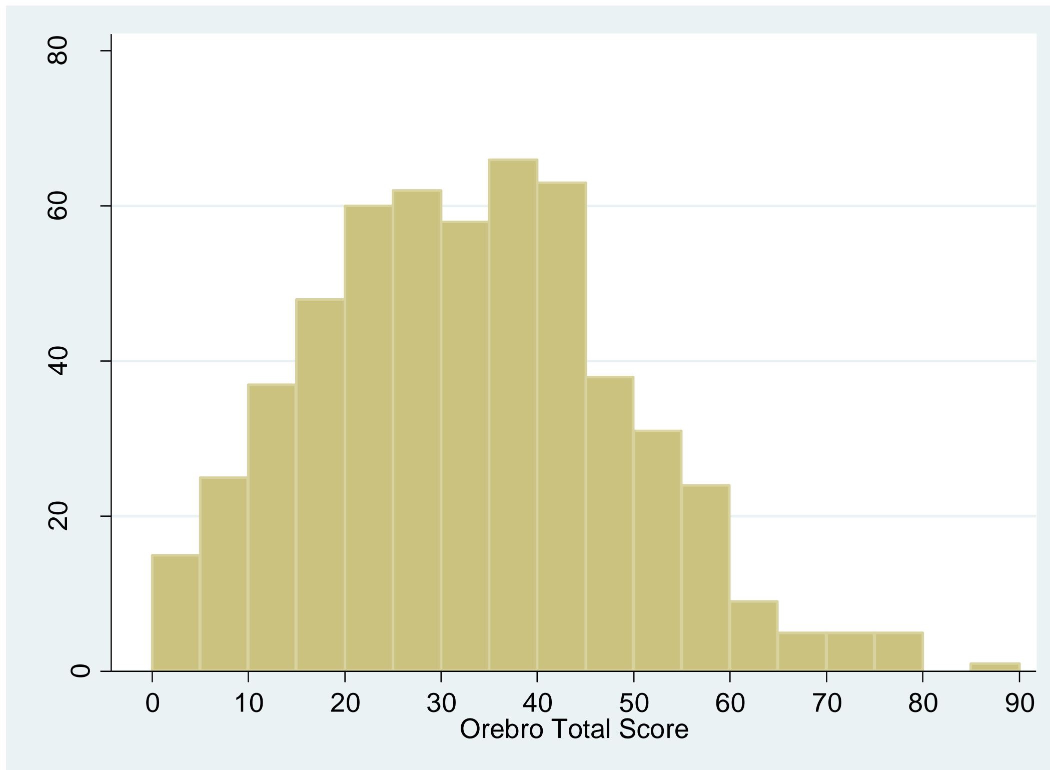


Figure 2: High risk certification and diagnosis categories by injury type

The short-form Orebro, a psychosocial risk screening tool, was a key part of the PACE tool. The short form Orebro consists of 10 questions, each on a 10-point scale. Scores can range from 0-100, with a higher score indicating a higher risk of psychosoclal complications, such as anxiety, depression or unhelpful beliefs related to recovery. A score of 50 or greater is considered a high level of risk and assessment by an appropriately trained professional (e.g. psychologist) is recommended to further diagnose and treat psychological aspects of recovery. Given the high emphasis on psychosocial screening in delayed RTW, the spread of scores across the short form Orebro is provided in Figure 3.



Discussion

This preliminary analysis describes the prevalence of different risk factors in workers compensation claimants yet to return to pre-injury duties two weeks after submitting a claim. In each category of Individual, Employer and Injury related risks there was a leading risk factor clearly more prevalent than other factors captured by the tool. The individual factor of low recovery expectations and employer factor requiring assistance are both readily addressed through case manager action. While certification as unfit for more than two weeks may be appropriate in some claims (further analysis is required to determine the proportion of claims where this is the case), case conferencing with the certifying practitioner is an appropriate strategy to ensure correct certification practices. It is encouraging that the most prevalent risk factors identified are amenable to case manager intervention. Further analysis of the PACE protocol will shed light on whether recommending specific intervention strategies to case managers upon completion of the PACE tool leads to improved outcomes.

Risks related to the individual, commonly referred to as biopsychosocial factors, were identified in only a small proportion of included claims. A high Orebro score, an indication of high risk of development of psychosocial complications such as

depression and anxiety, was identified in just under 15% of included claims. In contrast to recovery expectations where case managers can be equipped to provide front line intervention, action in response to a high Orebro score requires an assessment by a psychologist, as specialised skills are required to diagnose and determine appropriate intervention. A common barrier to providing this intervention is refusal of the service offered, despite sensitive attempts to communicate the need and value in exploring issues around coping with the injury with an appropriately trained professional. Further complicating the issue is the relatively high number of scores just below the high risk threshold, and further analysis may indicate that intervention may also be appropriate for scores falling just below the high risk threshold. Analysis of the outcomes of applying the PACE protocol may emphasise the importance of providing support for those identified with a high Orebro score in achieving good RTW outcomes.

Analysis of the risks related to certification and diagnosis according to injury type confirms the high risk nature of psychological injuries. Despite this type of injury forming a small part of the sample, certification practices initially appear quite different to other high risk injury types. Further investigation is required to determine whether this is appropriate for the injury type or a reflection of certifying practitioners' ability to manage mental health conditions. It is also of note that back injuries were certified unfit for more than two weeks, when best practice guidelines recommend advice to remain active and return to usual activities as soon as pain and disability allows.

The PACE dataset allows the investigation of the prevalence of a large number of risk factors not routinely collected and analysed in a relatively large cohort of claims. This preliminary analysis sheds light on how commonly risk factors present when claims reach two weeks without return to pre injury duties. Further analysis to be conducted includes cluster analysis to identify common patterns of risk factors, as well as the ability of risk factors to predict claim costs and RTW at three and six months.

A key goal of this project is to link the risk information captured in the PACE protocol to claim outcomes, including time off work and costs of claim. The study design allows comparison of a control group who conducted the PACE screening but received no specific guidance on intervention, with an intervention group who conducted screening and received recommendations on matched interventions to address the risk factors identified. This study design enables the identification of the true impact of risk screening and intervention in a case management setting. Current research provides a single example of research enabling this level of evaluation, which was conducted outside the worker's compensation context. The

preliminary findings of this further analysis will be presented at the IDSS conference in November.

Conclusion

The most prevalent risk factors in the categories of Individual, Employer and Injury related factors appear amenable to case management intervention. A number of risks commonly proposed to influence RTW outcomes are only present in a small proportion of claims. Further analysis will identify important combinations of risk factors and their impact on claim outcomes.