

# Comparison of Return to Work Practices and Outcomes in Self-Insured and Scheme-Insured Organisations.

COMPARE Project Team

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- The above organisations are all represented on the project advisory group, in addition to the Australian Council of Trade Unions and the AiGroup.
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- The views expressed in this document are those of the authors and do not necessarily represent those of the project funders, data providers or members of the project advisory group.

- Employers who self-insure take responsibility for underwriting and managing their own workers' compensation claims, and for the return to work (RTW) process. In Australia self-insured organisations are predominantly large employers who have the capacity to manage their own claims.
  
- Some previous international research has demonstrated that self-insurers have different injury profiles and return to work outcomes than organisations who insure through government/state workers compensation systems.
  - Seabury et al (2012) found that injured workers from self-insurers were more likely to be employed up to 5 years after their injury.
  - Asfaw & Pan-Cryan (2009) analysed data from 46 US state workers' compensation schemes and found that self-insurers had a lower incidence of reported injury.
  
- There is little research in Australia on how self-insurers manage WC claims, and on claim and RTW outcomes. This report compares the management and outcomes of work-related injury claims in self-insured and scheme insured employers within Australian workers' compensation systems.

This project sought to answer the following questions:

1. Are there differences between self and scheme insured organisations in the demographics and injury types of workers' compensation claimants?
2. Are claims management and return to work practices different between self and scheme insured organisations?
3. Are the duration of time loss and return to work outcomes different between self and scheme insured organisations?

## National Dataset of Compensation Statistics

### Data Overview

- Administrative claims data
- Derived from workers' compensation datasets
- Data from 2004 to 2016

### Outcomes

- Percentage of claims by gender, age and injury type
- Insurer decision making time
- Duration of time loss

## National Return to Work Survey

### Data Overview

- Survey data
- Derived from interviews with injured workers
- Data from 2013, 2014, 2016

### Outcomes

- Worker perceptions of employer support & employer response to injury
- Presence of RTW plan
- Return to work status

The two data sources enabled us to examine a range of indicators related to the study questions including the type of injury/disease occurring, return to work and claims management processes, and return to work outcomes.

- Inclusion and exclusion criteria were designed to establish comparable datasets of claims from self-insured employers and scheme-insured employers, by focussing on large employers in industries where self insurance is common.
  
- In both datasets, cases were only included if they met both of the following criteria:
  - Were from a large employer (defined in the NDS as having >200 employees, and in the NRTWS as having >\$20 million in remuneration).
  - From an industry in which at least 25% of large employers in the NDS were self-insured (industries for both data sets were selected using the NDS due to insufficient sample size in the NRTWS).
  
- Cases were then excluded if the following criteria were met:
  - Employer type (self insured, scheme insured) data missing.
  - Employer size data missing and scheme-insured employer (self-insurer claims missing employer size data were assumed to have large employers and included).
  - From jurisdictions with a large amount of missing employer type and employer size data.

# Jurisdictions and Industries Included in Final Samples

Jurisdiction	National Dataset of Compensation Statistics		National Return to Work Survey	
	Scheme-Insurers	Self-Insurers	Scheme-Insurers	Self-Insurers
NSW	243,465	203,430	517	214
VIC	NA	NA	898	89
WA	114,230	41,664	NA	NA
SA	19,130	82,962	463	320
TAS	13,304	12,119	363	30
Comcare	NA	NA	419	748
<b>Total</b>	<b>390,129</b>	<b>340,175</b>	<b>2760</b>	<b>1401</b>

Industry	National Dataset of Compensation Statistics		National Return to Work Survey	
	Scheme-Insurers	Self-Insurers	Scheme-Insurers	Self-Insurers
Manufacturing	101,061	47,455	417	62
Retail Trade	39,098	102,816	178	143
Health Care and Social Assistance	82,209	34,445	675	72
Transport, Postal and Warehousing	39,001	50,224	240	619
Public Administration and Safety	22,751	38,290	533	172
Education and Training	36,765	21,108	342	139
Construction	35,216	13,229	203	30
Electricity, Gas, Water and Waste Services	11,527	14,180	53	61
Financial and Insurance Services	13,823	9,023	34	88
Arts and Recreation Services	8,678	9,405	85	15
<b>Total</b>	<b>390,129</b>	<b>340,175</b>	<b>2760</b>	<b>1401</b>

Q1) Are there differences between self and scheme insured organisations in the demographics and injury types of workers' compensation claimants?

- Descriptive statistics of the percentage of claims by gender, age and injury type with statistical tests (t test and Wilcoxon-type test for trend) performed to test for significant differences (NDS).

Q2) Are claims management and return to work practices different between self and scheme insured organisations?

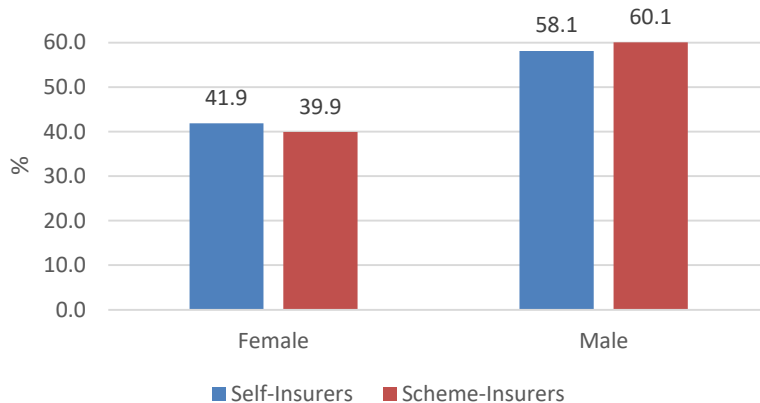
- Cox regression with insurer decision time (date of lodgement to date of decision) as outcome (NDS).
- Ordinal logistic regression with employer support for submitting a claim and employer support during the claim as outcomes (NRTWS).
- Binary logistic regression with RTW plan as the outcome (NRTWS).

Q3) Are the duration of time loss and return to work outcomes different between self and scheme insured organisations?

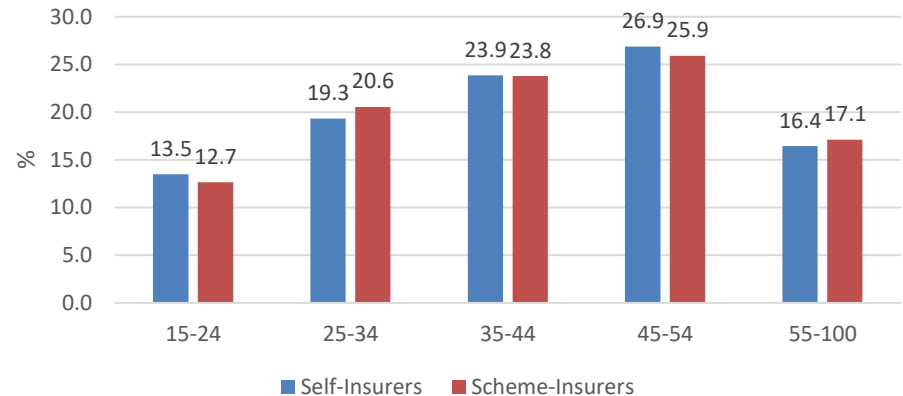
- Cox regression with duration of time loss as the outcome (NDS).
- Binary logistic regression with RTW status and time taken to RTW as the outcomes (NRTWS).

# Characteristics of Self and Scheme Insured Claimants (from NDS data)

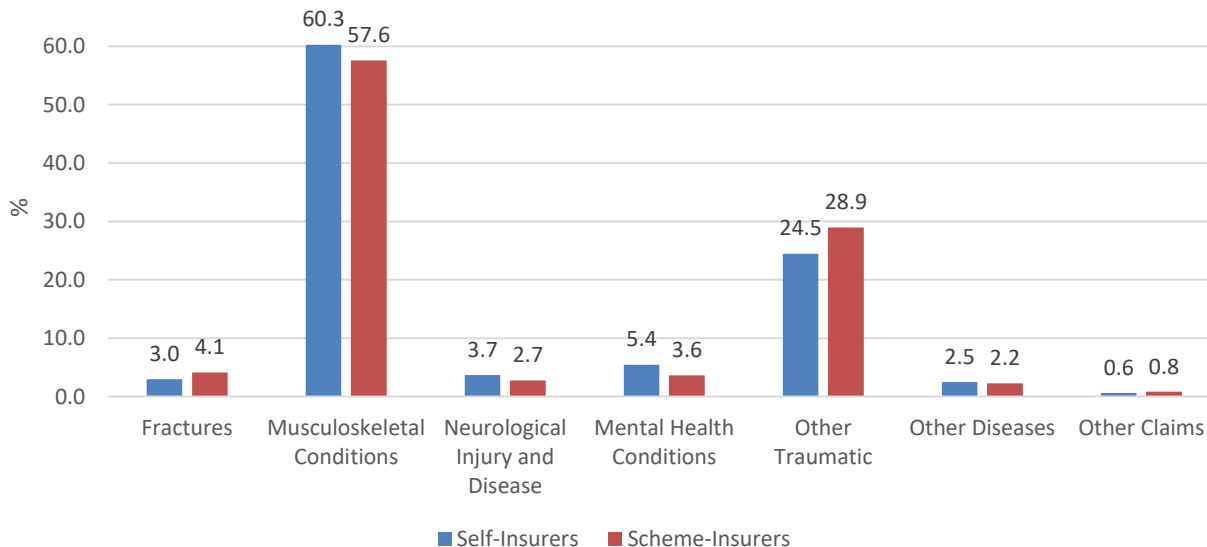
## Gender



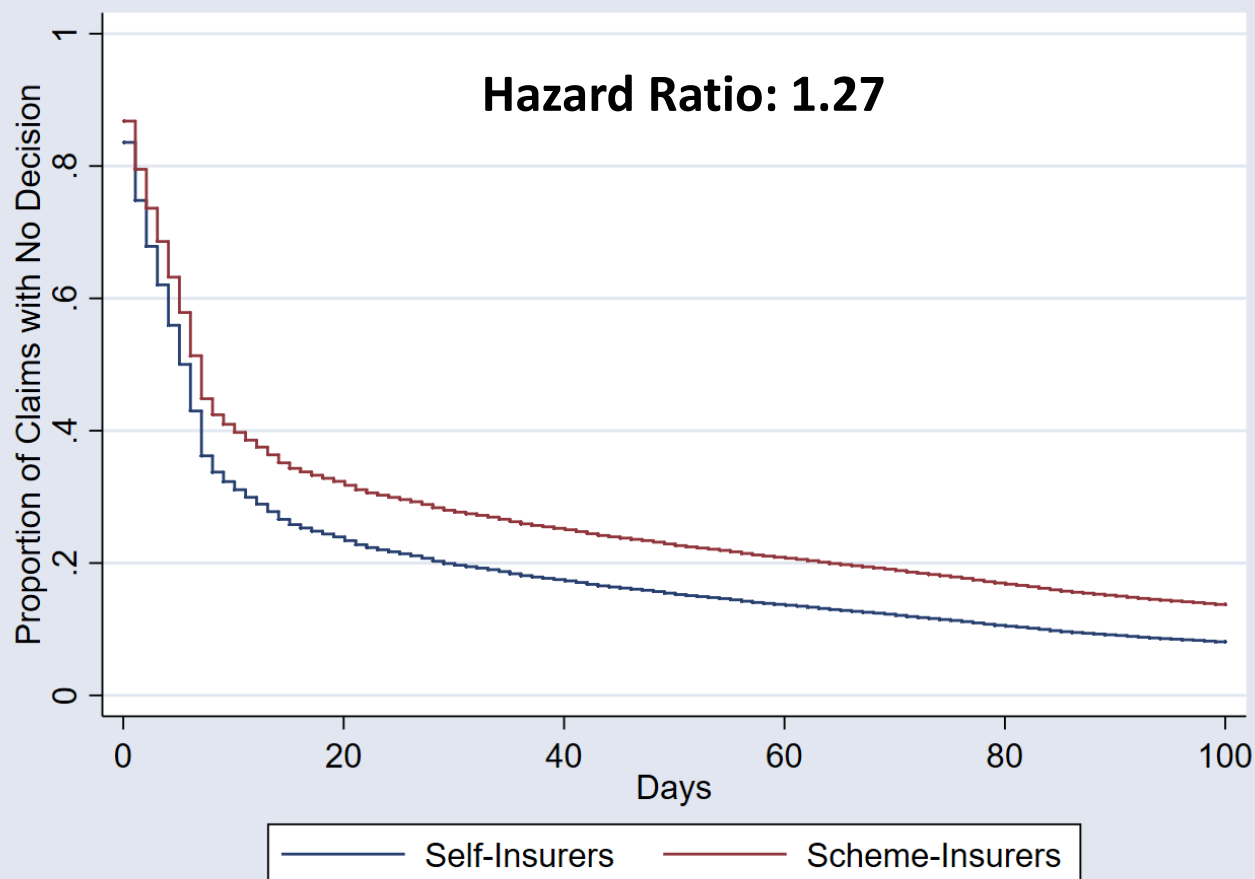
## Age



## Injury Type



- Self-insurers had a small but significantly larger proportion of female workers.
- A test for trend across the age groups showed no significant difference in age between insurer types.
- There were significant differences between self and scheme insurers for all injury types. Largest differences were in musculoskeletal, mental health and other traumatic conditions.



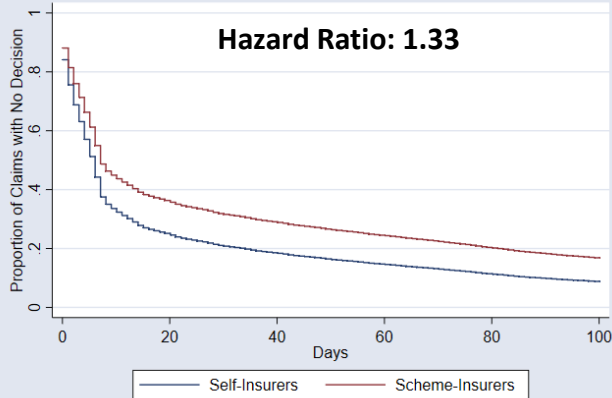
- Self-insurers made significantly faster decisions on workers claims than scheme-insurers.
- At any time point, a worker employed by a self-insurer was 27% more likely to have a decision made than a worker employed by a scheme-insurer.

Explanation: The graph shows a survival plot for the time between claim lodgement and claim decision. Steeper curves indicate faster decisions. A hazard ratio greater than 1 indicates that a worker with a self-insured employer is more likely than a worker from a scheme-insured employer to have a decision made on their claim at any given time point. Hazard ratios are statistically adjusted for the influence of other factors including age, gender, jurisdiction and injury type.

# Insurer Decision Time in Each Jurisdiction

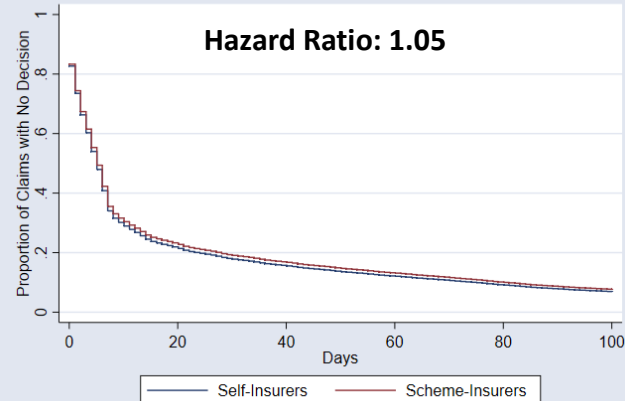
New South Wales

**Hazard Ratio: 1.33**



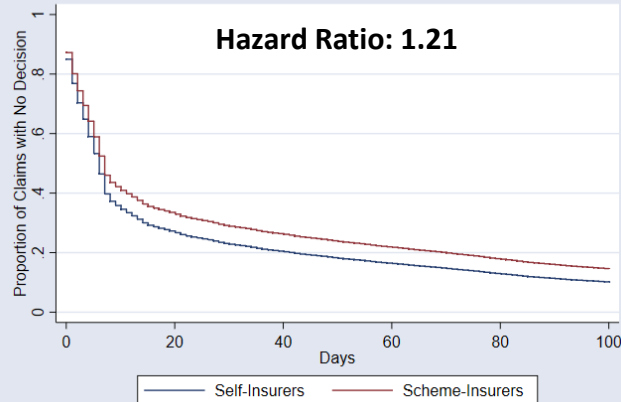
Western Australia

**Hazard Ratio: 1.05**



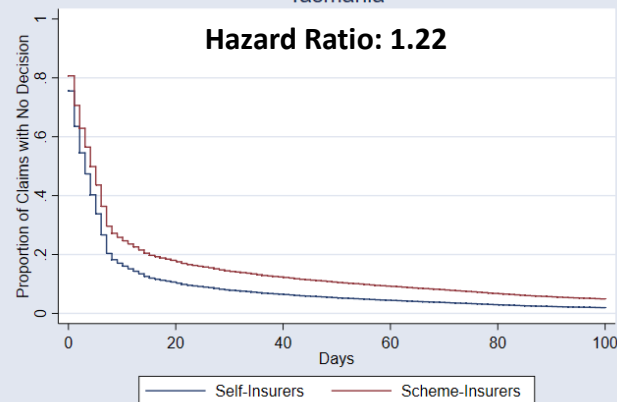
South Australia

**Hazard Ratio: 1.21**



Tasmania

**Hazard Ratio: 1.22**



- The relationship between insurer type and decision time varied by jurisdiction.
- Workers from self-insured employers in NSW, TAS and SA were statistically more likely to have a faster claim decision time than workers from scheme-insured companies.
- There was a significant but small difference in claim decision time between insurer types in WA.

Explanation: The graph shows survival plots for the time between claim lodgement and claim decision in four jurisdictions. Steeper curves indicate faster decisions. A hazard ratio greater than 1 indicates that a worker with a self-insured employer is more likely than a worker from a scheme-insured employer to have a decision made on their claim at any given time point. Hazard ratios are statistically adjusted for the influence of other factors including age, gender and injury type.

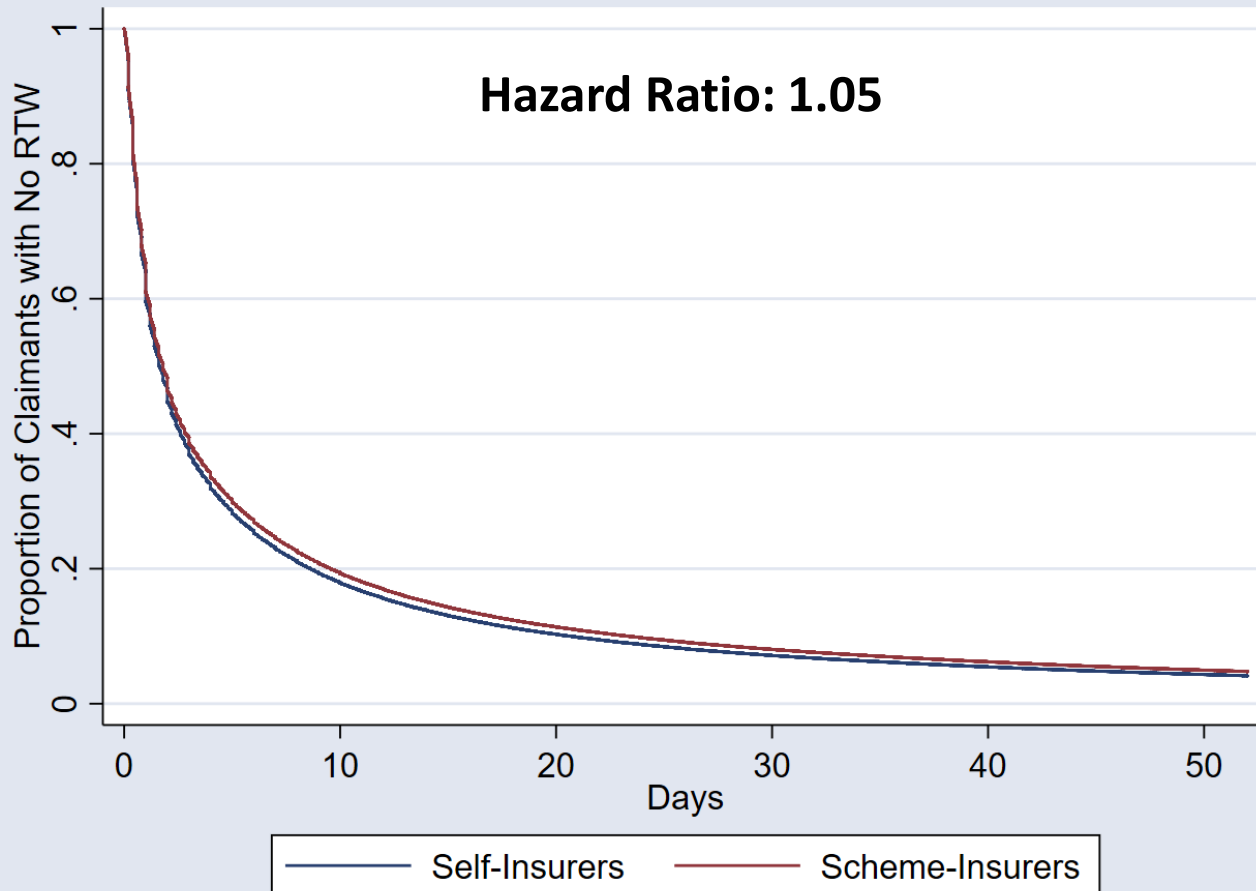


- Workers with self-insured employers felt more supported in making a claim.

- The difference between self and scheme insured workers in support given by the employer during the claim was non-significant.

- Workers with self-insured employers were significantly more likely to report having had a RTW Plan.

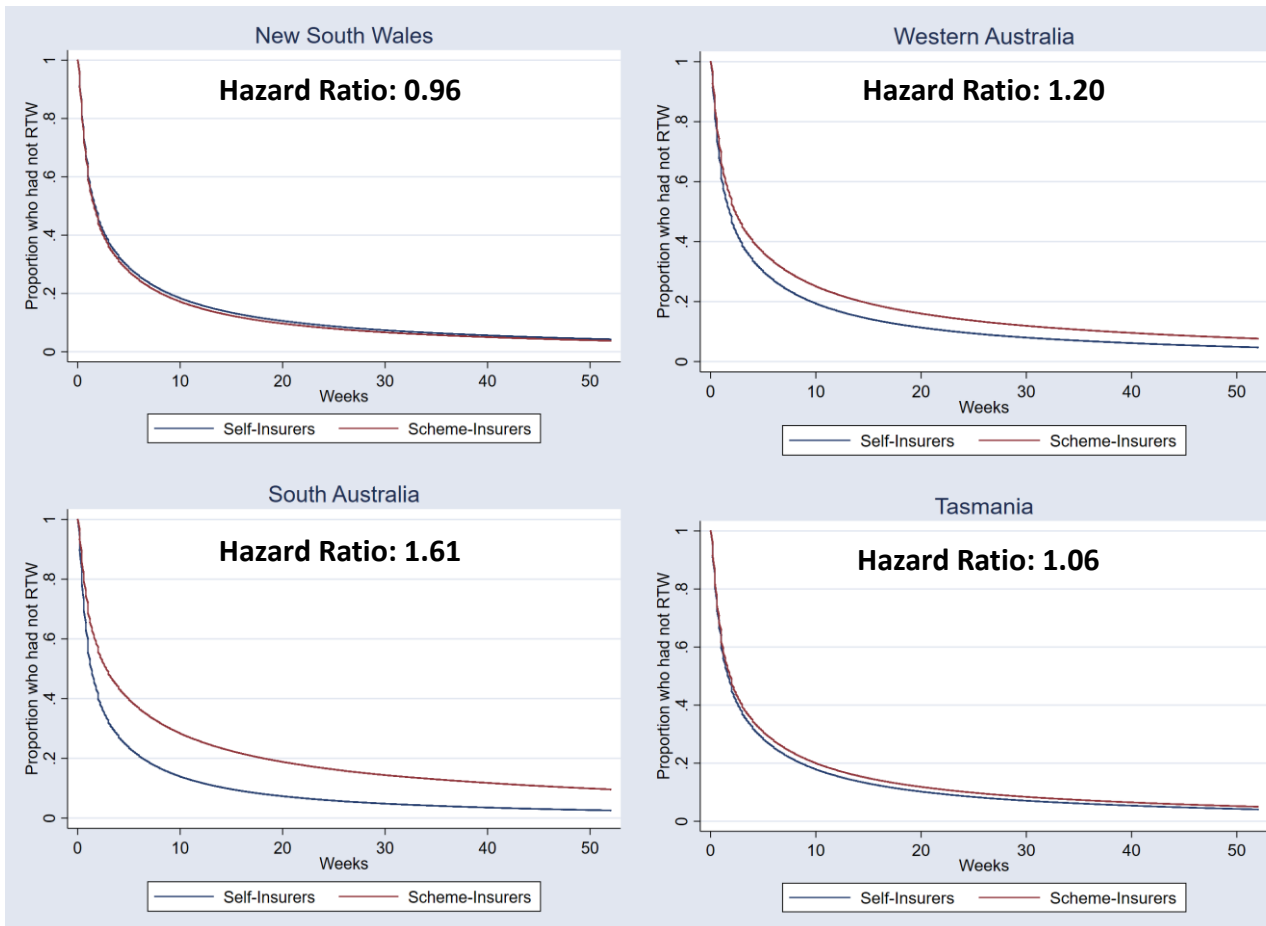
Explanation: The graph shows the results of regression models comparing self insurers to scheme insurers on three measures of employer support. An odds ratio greater than 1 indicates that a worker with a self-insured employer is more likely than a worker from a scheme-insured employer to have concerns about making a claim, feeling supported by their employer or having a RTW plan. All odds ratios are statistically adjusted for the influence of other factors including age, gender, injury type, jurisdiction, self-rated health, claim duration, year of interview, employer type and time from injury to claim lodgement.



- Employees of self-insurers were significantly more likely to have a shorter claim than employees of scheme-employers, although the difference was small.
- At any point during the claim, a worker employed by a self-insurer was 5% more likely to RTW than a worker employed by a scheme insurer.

Explanation: The graph shows survival plots for duration of time loss between self-insurers and scheme insurers. Steeper curves indicate shorter duration. A hazard ratio greater than 1 indicates that a worker with a self-insured employer is more likely than a worker from a scheme-insured employer to have a shorter duration of time loss at any given time point. Hazard ratios are statistically adjusted for the influence of other factors including age, gender, jurisdiction and injury type.

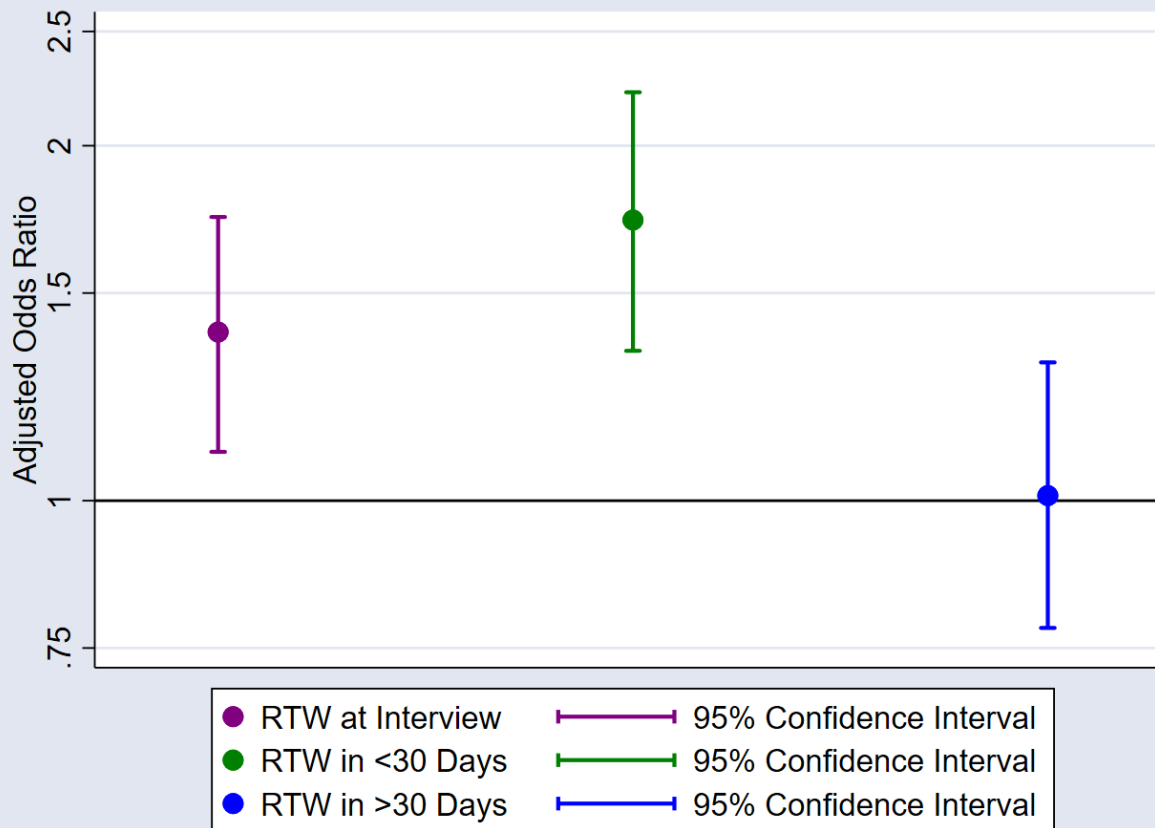
# Median Duration of Time Loss in each Jurisdiction



- The relationship between insurer type and duration of time loss varied by jurisdiction.
- Workers from self-insured employers in SA and WA were statistically more likely to have a shorter claim than workers from scheme-insured employers.
- There were significant but small differences in claim duration between insurer types in NSW and TAS.

Explanation: The graph shows survival plots for duration of time loss between self-insurers and scheme insurers in four jurisdictions. Steeper curves indicate shorter duration. A hazard ratio greater than 1 indicates that a worker with a self-insured employer is more likely than a worker from a scheme-insured employer to have a shorter duration of time loss at any given time point. Hazard ratios are statistically adjusted for the influence of other factors including age, gender and injury type.

# Self-Reported Return to Work Status



- Employees of self-insurers had 39% higher odds of working at the time of their interview than employees of scheme-insurers.

- Employees of self-insurers had 73% higher odds of RTW within 30 days of injury than employees of scheme-insurers.

- There was no difference between self and scheme insurers in reporting RTW after an absence of more than 30 days.

Explanation: The graph shows the results of regression models comparing self insurers to scheme insurers on three employer self-reported RTW outcomes from the NRTWS. An odds ratio greater than 1 indicates that a worker with a self-insured employer is more likely than a worker from a scheme-insured employer to report RTW, report RTW in <30 days or report RTW > 30 days. All odds ratios are statistically adjusted for the influence of other factors including age, gender, injury type, jurisdiction, self-rated health, claim duration, year of interview, employer type and time from injury to claim lodgement.

- There are multiple significant differences in claims management, return to work processes and outcomes between workers employed by self insured and scheme insured organisations.
- In summary, compared to workers employed by scheme insured organisations, injured workers employed by self-insured organisations were:
  - More likely to make claims for musculoskeletal conditions and mental health conditions;
  - More likely to have a shorter time between claim lodgement and decision to accept a claim;
  - More likely to report having a return to work plan;
  - More likely to feel supported in making a workers compensation claim;
  - More likely to have a shorter duration of compensated time loss; and
  - More likely to report having returned to work.
- Some of these effects did not apply uniformly across jurisdictions. Although self-insurers had slightly faster RTW nationally, in SA this was more pronounced, while in NSW scheme-insurers had slightly faster RTW.
- There were no significant differences between workers employed by self and scheme insured organisations in:
  - The age distribution of the groups; and
  - The worker's perception of employer support in the return to work process.

- This report presents novel Australian research that analyses differences in workers' compensation claims management, return to work and claim outcomes between injured workers employed by self and scheme insured organisations, across multiple jurisdictions.
- The findings suggest that workers employed by self-insured organisations generally experience more rapid claims processing, are more supported by their employer when making a claim and have faster return to work outcomes.
- Further investigation of the specific attributes and practices of self-insured organisations that contribute to these positive effects is warranted. This may enable adoption of some positive practices and processes within scheme insured organisations.
- The jurisdictional differences observed on some measures also demonstrate that these effects are not universal. This finding also suggests that jurisdiction level approaches to self-insurance may moderate the impacts of self-insurance on claim processing and return to work outcomes.

## Strengths

- The study uses two large national datasets with consistent data collection methods.
- Samples include workers from multiple jurisdictions with a range of mild to moderate injury and illness typical in a workers' compensation environment.
- Multiple worker, injury, demographic, claim and employer factors are recorded in each dataset.

## Limitations

- There was substantial missing data for some variables (e.g. employer size) which meant that some Australian jurisdictions were excluded from analyses.
- Matching self-insured organisations to 'equivalent' scheme insured organisations is difficult. Our approach was to develop cohorts based primarily on employer size and industry, however employer level 'case-matching' was not possible.
- The sample size in the NRTWS was not sufficient to analyse self-insurers by jurisdiction.

- Asfaw, A., & Pana-Cryan, R. (2009). The impact of self-insuring for workers' compensation on the incidence rates of worker injury and illness. *J Occup Environ Med*, 51(12), 1466-1473. doi: 10.1097/JOM.0b013e3181c16373  
<https://www.ncbi.nlm.nih.gov/pubmed/19952789>
- Seabury, S. A., McLaren, C. F., Reville, R., Neuhauser, F., & Mendeloff, J. (2012). Workers' Compensation Experience Rating and Return to Work. *Policy and Practice in Health and Safety*, 10(1), 97-115. doi: 10.1080/14774003.2012.11667771  
<https://www.tandfonline.com/doi/abs/10.1080/14774003.2012.11667771>

- More detailed data tables can be accessed through contacting the first author Luke Sheehan ([luke.sheehan@monash.edu](mailto:luke.sheehan@monash.edu) or 03 9903 0794).