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THE IMPACT OF LEGISLATIVE CHANGE ON WORKERS' COMPENSATION PROCESSES AND OUTCOMES

FINDINGS FROM THE COMPARE PROJECT

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EXECUTIVE SUMMARY

The COMPARE study's major aim is to identify policy settings that affect workers' compensation (WC) claim outcomes. The key outcomes of interest are duration of compensated time loss and, by extension, time taken to return to work. The project has previously demonstrated that scheme design and management likely have an impact on the duration of time loss. In the next stage of analysis, presented here, we explore how major policy changes can affect claim processes and outcomes.

The first part of this report documents legislative changes to WC legislation in Australia over the period time covered by the COMPARE dataset (2004 to 2015). We identified 60 legislative changes across the nine major WC schemes, an average of five per year, with around 20% being classified as major. There were at least five major changes which could be evaluated using COMPARE study data. The next step was to statistically determine the impact of some of these changes on claim outcomes.

The second part of this report covers a study of the impact of employer financial incentives to report work injuries sooner. This section also introduces the interrupted time series (ITS) analysis, a powerful quasi-experimental study design. In 2009 and 2010, two Australian WC jurisdictions, South Australia and Tasmania, introduced early reporting incentives (ERIs) to encourage employers to report worker injury to their insurer within a few days of becoming aware of it. We evaluated their impact on the timeliness of different stages of the claim lodgement process, which was calculated by using dates in the COMPARE dataset.

The findings suggest that ERIs were moderately successful. Median claim reporting time decreased by 2.3 days in South Australia and 5.9 days in Tasmania. In South Australia, worker reporting time decreased 4.5 days, but the ERI target, employer reporting time, did not change significantly (similar analysis was not possible in Tasmania). Insurer decision time increased by 5.0 days in Tasmania. While insurer decision time did not significantly increase in South Australia, there were indications that other aspects of the legislative changes introduced at other times had an effect. Total time in the claim lodgement process, from injury/illness to insurer decision, did not change significantly, though both jurisdictions had a significant trend change, down one-third a day per month.

In the third part of the report, we then applied the ITS approach to a package of changes that was introduced in Tasmania on 1 July 2010. The outcomes of interest for this analysis were the number of claims and the duration of compensated time loss. With this analyses we aimed to evaluate one of the major objectives of the legislative amendment, which was to improve return to work outcomes.

We observed that the number of claims lodged before and after legislative amendment did not change significantly in Tasmania. For all time loss claims, Tasmanian workers were compensated for slightly more time loss than those in the rest of Australia. Following the legislative amendment, there was a significant increase in the trend, demonstrating a gradually increasing rate of time loss in Tasmania of 0.1 days per quarter, relative to the rest of Australia. For less severe claims (those with less than 13 weeks' time loss), Tasmania had significantly greater time loss than Australian claims, yet this did not change significantly after 1 July 2010. For more severe claims (greater than or equal to 13 weeks' time loss), Tasmania had significantly less time loss than the rest of Australia, yet this did not change significant following introduction of the legislation.

This study has identified that changes to WC legislation are common in Australia, that ITS is a powerful and feasible technique for evaluating the impact of these legislative amendments in Australian WC jurisdictions. The study builds on the existing evidence around the impact of policy change, and legislative amendments in particular, as methods for altering processes and outcomes in workers' compensation systems. Future studies will aim to utilise the ITS approach to evaluate the impact of other legislative amendments identified.

PURPOSE

The major aim of the COMPARE study is to identify policy settings that affect workers' compensation (WC) claim outcomes, with the major outcomes of interest being duration of time loss and return to work. To date the study has produced evidence that duration of time loss varies substantially between Australian workers' compensation jurisdictions, and that this cannot be accounted for by workers, job or workplace factors [1]. This finding suggests that scheme design and management is having an independent impact on duration of time loss.

To examine this more closely, the research team proposed to the study advisory group analysis of the impact of legislative changes to determine how large-scale policy changes affect claim outcomes. This proposal was endorsed by the study advisory group in August 2016.

This report presents the approach taken by the research team to (a) identify and categorise legislative changes and (b) determine the impact of these changes on claim processes and outcomes.

The specific objectives of this component of the project were to:

1. Document and characterise changes to workers' compensation legislation in Australia over the period 2004 to 2015 (the period covered by the COMPARE study database)
2. Determine the feasibility of using Interrupted Time Series (ITS) analysis to assess the impact of legislative change using data from the COMPARE study database
3. Assess the impact of legislative changes in two jurisdictions on claim processes and outcomes.

The report is in three parts. First, we present the approach taken to identifying and characterise changes in workers' compensation legislation. Second, we present the findings from analysis of legislative changes in South Australia (2009) and Tasmania (2010) on the claim lodgement process. Third, we present the findings from analysis of legislative changes in Tasmania (2010) on claim outcomes.

POLICY REVIEW

BACKGROUND

There is substantial published research evidence, both in Australia and internationally, that injury compensation scheme design and management affects the experiences and outcomes of workers, employers, healthcare providers, insurers and others involved in return to work processes.

Qualitative studies in Australia have shown that while access to healthcare and income compensation is considered positively, in some workers scheme processes can contribute to the onset or exacerbation of mental health condition[2], delayed recovery and return to work[2], financial stress[3] and reluctance to treat compensable patients by General Practitioners[4].

Quantitative studies have shown that more than third of injured people report scheme processes as stressful[5] and this influences long-term disability[5]. No-fault injury schemes are considered fairer than common law schemes and this has been associated with better health post injury[6]. Changes in legislation in motor vehicle accident compensation schemes have been shown to impact on duration of time of work[7] and health outcomes[8]. The first stage of the COMPARE project identified that jurisdiction of claim had a significant and independent impact on duration of time loss, after accounting for worker, workplace and job characteristics[9]. The magnitude of this jurisdiction effect was as substantial as that attributable to injury type, age and gender.

There have been several examples of transformative legislative change in Australian workers' compensation systems in recent years, including for example the South Australian changes in 2014 and the New South Wales legislative changes in 2012. The impact of such changes are typically subject to close scrutiny within the jurisdiction in which they occur, but are rarely the subject of research studies. There is much to learn from these population based 'natural experiments'. With appropriate national data, comparisons can be made of scheme performance before and after the change with comparator jurisdictions in which no changes occurred. However, to our knowledge there are no such studies have been published in Australian workers' compensation environment.

METHODS

A three step process was undertaken to identify and characterize changes to workers' compensation legislation in Australia.

First, we searched multiple information sources to document legislative change over the period for which we have national claims data (2004 to 2015). Three major information sources were searched to identify unique instances of legislative change. These were:

1. The comprehensive list of acts of parliament across the commonwealth, states and territories hosted by the Australian Legal Information Institute (AustLII);

2. The websites of state and territory workers' compensation and occupational health and safety regulator; and

3. Documentation produced by SafeWork Australia, including the annual Comparison of Workers' Compensation Arrangements and other online resources.

These documentary sources were cross-referenced to ensure complete capture of all potential instances of legislative change. We then applied a set of inclusion and exclusion criteria developed a priori to identify acts that specifically affected workers' compensation schemes. We defined these as acts of parliament where the primary purpose was to amend or introduce schemes for compensation and/or rehabilitation of workers for

work-related injury or illness. We excluded changes to policy other than legislative changes, such as regulations or changes to claims management models that were not captured in acts of parliament. We also excluded legislative changes in related areas that may otherwise impact worker and employer outcomes, including industrial relations legislation, health legislation, employment legislation and occupational health and safety legislation. The inclusion and exclusion criteria are summarised in Table 1.

TABLE 1. INCLUSION AND EXCLUSION CRITERIA FOR REVIEW OF LEGISLATION

Included Legislation
• Amendments to, or introduction of, legislation passed by an Act of parliament • Acts whose primary purpose is to amend or introduce schemes for compensation and/or rehabilitation of workers for work-related injury or illness (workers' compensation) • Time period 2004 to 2015 • Six states, two territory and one commonwealth jurisdiction
Excluded Legislation
• Changes to policy other than legislation (e.g., regulations) • Changes to, or introduction of, legislation in areas related to workers' compensation such as occupational health and safety or industrial relations.

Second, we sought to identify major changes in legislation that were likely to affect claim outcomes such as duration of time loss. We used three data sources to characterise the degree of change:

1. Members of the COMPARE study advisory group nominated three representatives and the research team forwarded to each representative a list of identified legislative changes in their jurisdiction. We asked each representative to indicate which of the identified changes had impacted on claim outcomes and to indicate the degree of impact (none, minor, major);

2. We reviewed legislation in detail and categorised each identified instance of legislative change according to the definition outlined in Table 2. This sought to describe the degree of change by examining the policy intent, scope and characteristics of the legislation. Changes were characterised as limited, moderate or extensive (see Table 2).

3. Finally, we reviewed contemporaneous documents such as scheme reviews and information posted on regulator websites. Our primary objective with this data source was to determine if the objective of the change was to impact on claim outcomes at a whole of scheme level, which would indicate an intended major change.

TABLE 2. GUIDING DEFINITIONS TO DETERMINE THE DEGREE OF CHANGE

Degree of change	Definition
Limited	Amendments restricted to a single domain or multiple minor amendments to specific provisions in the legislation. Policy intent is focused on those aspects of legislation being amended and not necessarily related to altering the performance of the entire scheme. Amendments are isolated to the workers' compensation legislation and would only rarely require amendment to related legislation.
Moderate	Substantial changes that cross multiple domains. Policy intent is to improve the performance of the workers' compensation scheme. May or may not follow a scheme review. May require amendments to related legislation.

Extensive	Major changes to coverage, entitlements, operation or governance of the compensation scheme. The policy intent is to transform the workers compensation scheme to achieve substantial and lasting changes in performance. Enacted amendments cross multiple domains and often follow a significant system review. May be enacted at a single point in time or multiple time-points. Often requires concurrent amendments to related legislation such as industrial relations or occupational health and safety. May involve introduction of entirely new workers' compensation legislation.

Findings from each of these exercises were compared and individual instances of legislative change were categorised as either major or other.

Third and finally, for each of the identified major changes, we sought to determine whether the study database had sufficient baseline (pre-change) data and follow up (post-change) data. Our intended ITS analysis requires at least 12 months of baseline and 12 months of follow-up data. We also made a judgement regarding whether the number of claims within the affected jurisdiction was likely to be sufficient to provide statistical power to detect pre-post changes in outcome. We rated each of the major changes according to these three criteria (baseline data, follow-up data, N cases).

Through this process we were able to identify major changes in workers' compensation legislation that were intended to impact on claim outcomes, and for which we had sufficient data to perform statistical analysis.

RESULTS

We identified a total of sixty instances of workers' compensation legislative change over the period 2004 to 2015 that met inclusion and exclusion criterion. These range from very large 'scheme transformations' following major reviews to very minor changes. In the process of examining workers' compensation legislation, many instances of legislative change in aligned areas were identified and excluded. For example changes in occupational health or industrial relations legislation. Such changes in aligned areas may also impact on workers' compensation outcomes but were not the focus of this study.

The changes were relatively evenly distributed across the nine jurisdictions (Table 3). The Australian Capital Territory and Victoria had the most changes at eight each, while Western Australia recorded the least at five.

TABLE 3. NUMBER OF LEGISLATIVE CHANGES BY JURISDICTION (2004 TO 2015)

Jurisdiction	N
Commonwealth	7
New South Wales	6
Victoria	8
Queensland	7
Western Australia	5
South Australia	6
Tasmania	6
Northern Territory	7
Australian Capital Territory	8
Total	60

Legislative changes were most common in 2004 and least common in 2008. At least two changes were recorded in every year studied, with up to nine changes observed in one year (Table 4).

TABLE 4. NUMBER OF LEGISLATIVE CHANGES BY YEAR

Year	N
2004	9
2005	3
2006	6
2007	7
2008	2
2009	4
2010	4
2011	5
2012	4
2013	7
2014	2
2015	7
Total	60

A total of twelve instances of legislative change (or 20% of the 60 total identified) were categorised as major changes. These are summarised in Table 5. These included changes in eight of the nine major workers' compensation jurisdictions, with the exception being the ACT. The Comcare, NSW, SA and VIC jurisdictions all recorded two instances of legislative change categorised as major.

The earliest major change occurred in 2004 in WA, with the most recent major change being the 2015 amendments to the NSW workers' compensation scheme, which repealed some of the earlier major 2012 changes in that same jurisdiction. In eight instances we hold sufficient baseline and follow-up data in the COMPARE study database to enable a pre-post change comparison. This is indicated by the Y (Yes) symbols in Table 5. Of these eight instances, we consider that five occur in jurisdictions with sufficient volume of cases to provide statistical power to detect changes in outcomes before and after legislative change. In addition there are two instances (the 2007 and 2010 Comcare changes) in which there may be sufficient cases to enable statistical comparison.

TABLE 5. SUMMARY OF MAJOR LEGISLATIVE CHANGES

			Data Requirements		
Year	Jurisdiction	Act	Baseline	Follow-up	N cases
2007	CTH	Safety, Rehabilitation Compensation and Other Legislation Amendment Act 2007	Y	Y	?
2010	CTH	Safety Rehabilitation and Compensation Amendment Act 2010	Y	Y	?
2012	NSW	Workers Compensation Legislation Amendment Act 2012	Y	Y	Y
2015	NSW	Workers Compensation Amendment Act 2015	Y	N	Y
2012	NT	Workers' Rehabilitation and Compensation Legislation Amendment Act 2012	Y	Y	N
2013	QLD	Workers' Compensation and Rehabilitation and Other Legislation Amendment Act 2013	Y	N	Y
2008	SA	Workers Rehabilitation and Compensation (Scheme Review) Amendment Act 2008	Y	Y	Y
2014	SA	Return to Work Act 2014	Y	N	Y

2009	TAS	Workers' Rehabilitation and Compensation Amendment Act 2009	Y	Y	Y
2006	VIC	Accident Compensation and Other Legislation (Amendment) Act 2006	Y	Y	Y
2010	VIC	Accident Compensation Amendment Act 2010	Y	Y	Y
2004	WA	Workers' Compensation Reform Act 2004	N	Y	Y

In summary, this policy analysis has identified at least five instances of major changes to workers' compensation legislation since 2004 that we are able to evaluate using COMPARE study data. The next phase of the project was to apply an interrupted time series (ITS) analysis to examine the impact of these changes on claim outcomes.

DISCUSSION & IMPLICATIONS

This policy analysis demonstrates that changes to workers' compensation legislation are common in Australia. We identified a total of sixty such changes across the nine major Australian jurisdictions over a 12 year time period – representing an average of 5 changes per annum. Of these we identified that 20% could be characterised as major changes, with a clear policy intent to modify worker outcomes including return to work.

This policy review focused only on legislative changes. It was not intended to characterise other policy changes. Neither was it intended to characterise changes in claims practice or process, which have also been shown to have impact on claim outcomes (Kilgour et al, 2015a). However the findings make clear that legislation is an instrument that is regularly used by governments across Australia to modify scheme performance.

Importantly for the COMPARE study, the analysis identified at least five instances of major changes in legislation for which the research team holds sufficient data within the COMPARE dataset to evaluate the impact of these changes on claim outcomes. We next sought to statistically determine the impact of some of these changes on claim processes and outcomes.

STATISTICAL ANALYSIS – CLAIM PROCESS

BACKGROUND

Delays in the claim lodgement process increase long-term disability and claim costs and worsen mental health [5 10]. Similarly, statutory waiting and retroactive periods, which prescribe a minimum amount of time before an injured worker can access wage replacement and medical services, increase time off work and claim medical costs [11]. Earlier intervention can reduce these while also increasing the likelihood of return to work [12 13].

One approach to reduce delay between injury and WC services is to target the time employers take to report worker injury to insurers [10 14-16]. In 2009 and 2010, two Australian jurisdictions, South Australia (SA) and Tasmania (TAS), introduced early reporting incentives (ERIs) to encourage employers to report worker injury within a few days of becoming aware of it [17 18]. Policy differences such as incentives for reporting may be a major source of variation in injured worker outcomes [11 19]. However, attributing outcomes to specific policies is difficult due to the complex array of policy settings in modern workers' compensation systems. One approach is to use an interrupted time series (ITS) design, which compares outcomes before and after a known event while accounting for secular, or pre-existing, trends [20-22]. We use this approach to investigate the impact of ERIs on timeliness of the claim lodgement process.

METHODS

The claim lodgement process study evaluates the impact of early reporting incentives in SA and TAS. The incentives took the form of financial incentives to encourage employers to report work injuries more quickly, thereby reducing the time between injury and treatment. The goal was to improve injured worker outcomes via earlier intervention, such as wage replacement, medical costs, and rehabilitation services [14 16]. For more detail on how SA and TAS implemented ERIs, see Appendix A.

STUDY DESIGN

To evaluate the impact of policy changes, we used an interrupted time series (ITS) design to analyse administrative WC claims data. ITS is considered one of the most powerful quasi-experimental designs for evaluation of natural experiments like policy change or community interventions where data have been collected at regular intervals both before and after an event [20-24]. Unlike other before-and-after analytical techniques such as difference-in-differences, ITS accounts for secular trends, or the pre-event slope, minimising the likelihood that significant changes are mistakenly attributed to the event rather than forces already at work [25-27]. For instance, reanalysis of an intervention for cardiovascular patients found that previous significant findings became non-significant when adjusting for improvements attributable to the secular trend [25]. ITS also detects trend changes, such as the progressive reduction of a surgical procedure following publication of evidence that it was ineffective [28].

DATA

The data were derived from the National Dataset for Compensation-based Statistics (NDS), which consists of case-level WC claims data from each Australian WC jurisdiction. The NDS is compiled by Safe Work Australia, to whom each jurisdiction supplies its claims data using a standardized format [29]. The NDS has been modified from its original form by cleaning and creating new variables and has been used previously for cross-jurisdictional evaluations of WC policy impact [19].

Claims were limited to those lodged between 1 July 2006 and 30 June 2012. Changes were evaluated against a comparator, which was an amalgamation of other Australian WC jurisdictions. For process analysis, the comparator consisted of New South Wales, Victoria, Western Australia, Northern Territory, and Comcare.

Queensland and the Australian Capital Territory were excluded since they had not adhered to the most up-to-date coding standards for the duration of the study period.

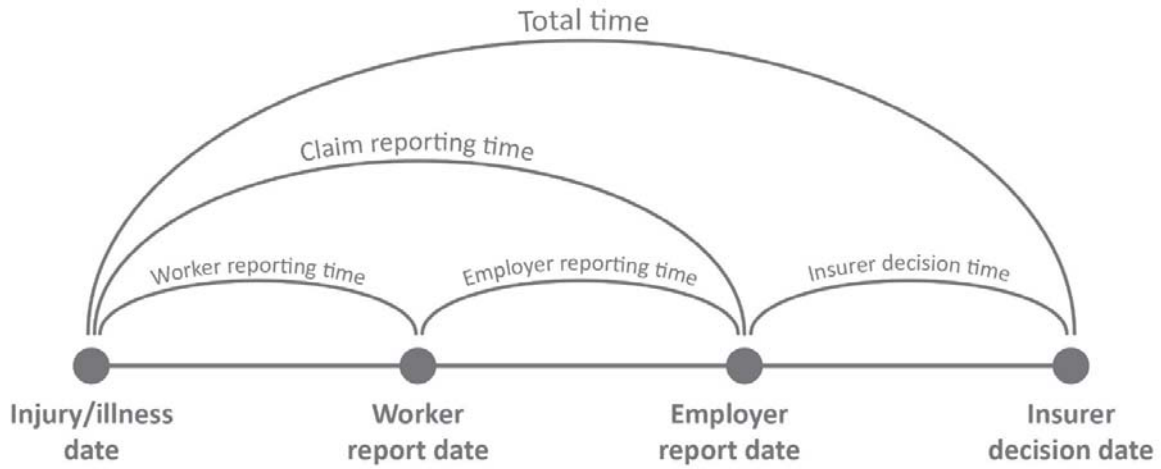
Claims data were aggregated into monthly median for each outcome (described below), providing 72 data points for each group. The smallest number of pre-incentive data points was 30 for SA (July 2006 to December 2009) and the smallest post-incentive was 24 for TAS (July 2010 to June 2012), permitting ample data to adjust for monthly season trends, recommended to be at least 24 when using monthly data [24].

OUTCOMES

We evaluated the impact of early reporting incentives on the duration of time periods between key events in the claim lodgement process, illustrated in Figure 1. For the purposes of this report, we define the claim lodgement process as the initial period between work injury/illness and insurer acceptance of liability. The process was divided into time periods based on four sequential dates in the NDS [29], which we used to create our outcomes: (1) onset of injury or illness; (2) worker reports injury/illness to their employer; (3) employer notifies or lodges workers' compensation claim with insurer; and (4) insurer makes a decision on claim liability.

Our primary outcome was claim reporting time (injury/illness to employer report). In SA, it was possible to evaluate the two time periods within claim reporting time: worker reporting time (injury/illness to worker report dates) and employer reporting time (worker to employer report dates). Secondary outcomes were total time (injury/illness to insurer decision dates) and insurer decision time (employer report to insurer decision dates). Key events and time period outcomes are illustrated in Figure 1.

FIGURE 1. KEY EVENTS AND TIME PERIODS IN THE CLAIM LODGEMENT PROCESS



ANALYSIS

The first set of analyses were descriptive, summarising median and interquartile range (IQR) of days for each outcome pre- and post-ERI. In the second set of analyses, we evaluated time lags using a segmented least-squares regression within an ITS design. After identifying substantial changes to the upper range of the IQR in some outcomes, and following a finding in Tasmania's scheme review that nearly 25% of claims exceeded the statutory five-day reporting period [14], we also conducted supplementary analyses of the 75th percentile of time lags.

We plotted seasonally-adjusted ITS trend lines over monthly data points for each jurisdiction. Each set of time period outcomes has one plot displaying all three groups. To simplify plotting, trend lines for SA and Tasmania

reflect regression models without reference to the comparator, while the trend line for the comparator includes both ERI event interruptions.

Analyses were conducted in R (version 3.3.2) [30] using RStudio (version 1.0.44) [31].

RESULTS

Results from claim lodgement process analyses are summarized in Table 6 and illustrated in Figure 2.

CRUDE BEFORE-AND-AFTER COMPARISONS

In pre-incentive SA, median claim reporting time was 13 days, falling to 7 in the post-incentive period. Employer reporting time decreased marginally from 2 to 1 days, while worker reporting time decreased sharply, falling from 7 to 1 days. Insurer decision time rose from 7 to 8 days. Total time decreased slightly, from 25 to 23 days.

In TAS's pre-incentive period, median claim reporting time was 13 days, falling to 9 days in its post-incentive period. Unlike SA, there was a substantial increase in median insurer decision time, from 2 to 6 days. Total time decreased slightly, from 19 to 17 days.

CLAIM VOLUMES

Following implementation of early reporting incentives in SA, there was a level decrease of 107.22 claims (95% CI: -182.25 to -32.19) and a trend increase of 13.73 claims per month (9.88 to 17.57). In TAS, there was a level increase of 72.07 claims (22.49 to 121.65), while trend was not significantly affected. As a proportion of the pre-incentive median monthly claim volume, these changes were a 4.3% decrease in SA and 9.8% increase in TAS. There were several significant changes to the comparator as well: at SA implementation, there was a level decrease of 1,340.78 (-2,134.11 to -547.44), or 7.2% of pre-incentive median, and a trend decrease of 70.63 (6.84 to 134.41). At TAS implementation, trend decreased by 86.04 claims per month (-154.65 to -17.43).

TOTAL TIME

In neither SA nor TAS was there a level change to total time in the claim lodgement process. However, there were significant trend decreases of one-third of a day per month in both jurisdictions (95% CI SA: -0.36, -0.65 to -0.08; TAS: -0.37, -0.53 to -0.22).

CLAIM REPORTING TIMES

In both SA and Tasmania, there was a significant level decrease in claim reporting time. In SA, median time decreased 2.30 days (-2.96 to -1.65). Worker reporting time decreased by 4.51 days (-5.46 to -3.55), though there was no significant change to employer reporting time. In Tasmania, median claim reporting time decreased by 5.86 days (-7.49 to -4.24).

INSURER DECISION TIME

Insurer decision time did not change significantly in SA. However, the variation in monthly data points suggests that other factors were affecting this outcome. There was a substantial increase in insurer decision time six months prior to ERI implementation, coinciding with the first wave of SA's WC amendments. In the year prior to implementation, the range of median insurer decision days was 6-7, which increased to 8-9 from July to December (see Figure 2). Around mid-2010, there was another increase and greater variability in

insurer decision time. While flat at 7 days from January 2009 to April 2010, from May onwards the range fluctuated between 7 and 12 days.

In TAS, median insurer decision time increased by 5.03 days (4.84 to 5.22). Trend decreased slightly but significantly (0.01 days per month, -0.03 to -0.00).

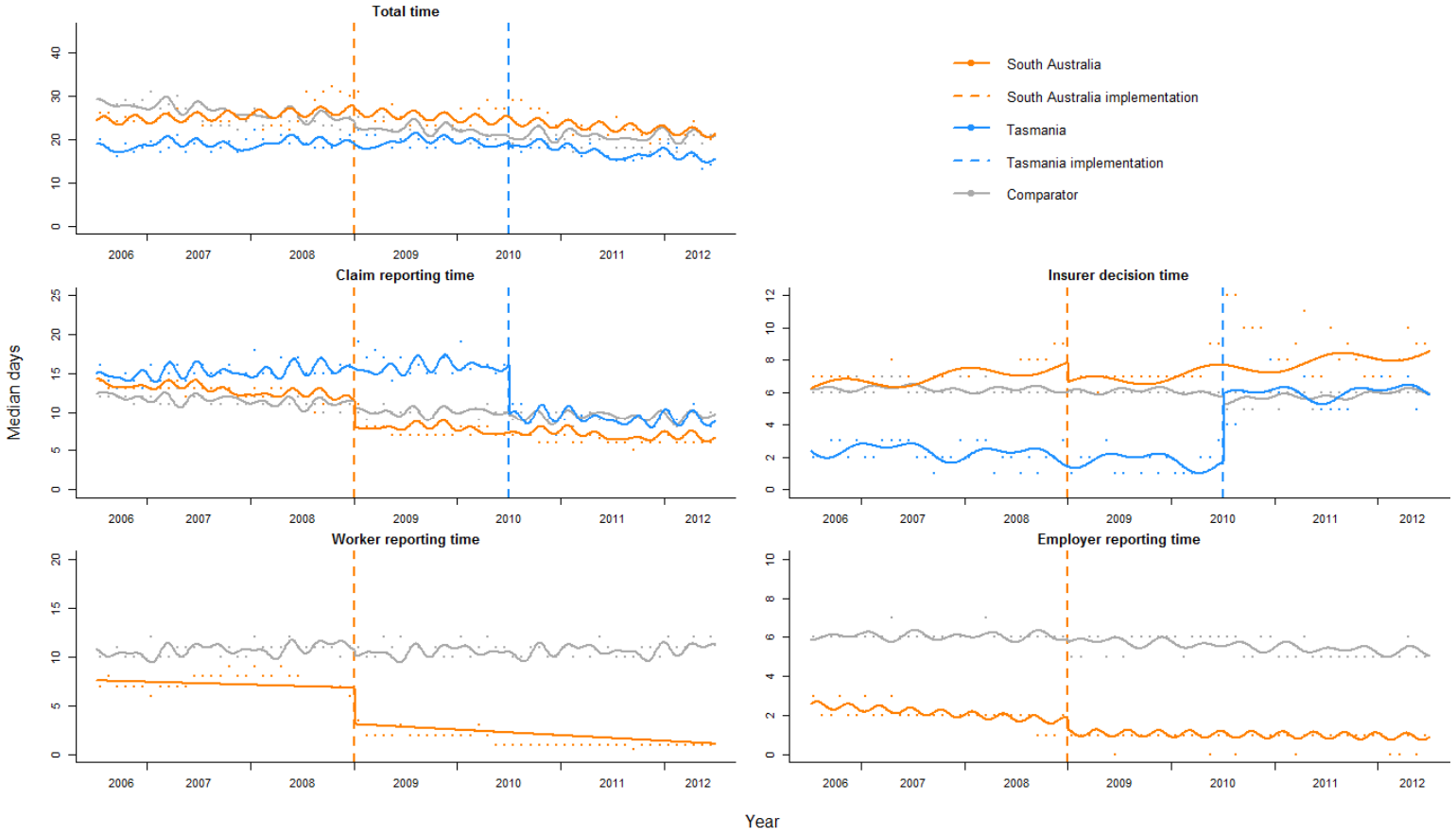
TABLE 6. CRUDE BEFORE-AND-AFTER AND INTERRUPTED TIME SERIES COMPARISONS.

	Median days (IQR)		Post-incentive change adjusting for comparator and secular trend	
	Pre-Early Reporting Incentive	Post-Early Reporting Incentive	Level (days)	Trend (days per month)
Total time				
South Australia	25 (14 - 65)	23 (10 - 79)	-0.32 (-4.37 - 3.72)	-0.36* (-0.65 - -0.08)
Comparator	26 (11 - 71)	20 (9 - 59)	-	-
Tasmania	19 (12 - 35)	17 (9 - 38)	-1.00 (-3.26 - 1.26)	-0.37*** (-0.53 - -0.22)
Comparator	24 (10 - 69)	19 (8 - 55)	-	-
Claim reporting time				
South Australia	13 (7 - 28)	7 (2 - 19)	-2.30*** (-2.96 - -1.65)	0.02 (-0.02 - 0.05)
Comparator	11 (5 - 27)	9 (4 - 25)	-	-
Tasmania	15 (9 - 29)	9 (4 - 21)	-5.86*** (-7.49 - -4.24)	0.27 (-0.39 - -0.14)
Comparator	11 (4 - 27)	9 (3 - 25)	-	-
Insurer decision time				
South Australia	7 (3 - 22)	8 (4 - 45)	-1.53 (-3.33 - 0.26)	0.00 (-0.12 - 0.12)
Comparator	6 (2 - 27)	6 (2 - 21)	-	-
Tasmania	2 (1 - 4)	6 (2 - 12)	5.03*** (4.84 - 5.22)	-0.01* (-0.03 - -0.00)
Comparator	6 (2 - 21)	6 (2 - 17)	-	-
Employee reporting time				
South Australia	7 (2 - 20)	1 (0 - 8)	-4.51*** (-5.46 - -3.55)	-0.03 (-0.08 - 0.02)
Comparator	11 (4 - 28)	11 (4 - 29)	-	-
Employer reporting time				
South Australia	2 (1 - 6)	1 (0 - 6)	-0.35 (-0.83 - 0.14)	0.05*** (0.02 - 0.07)
Comparator	6 (2 - 10)	5 (2 - 10)	-	-

*** $p < .001$, ** $p < .01$, * $p < .05$

Note: The time periods were separated by the jurisdictions' early reporting incentive implementation date. In SA, this was 1 January 2009. In TAS, this was 1 July 2010.

FIGURE 2. SEASONALLY-ADJUSTED TREND IN MONTHLY MEDIAN CLAIM PROCESSING TIMES. Data is shown for South Australia, Tasmania and Comparator jurisdictions. The red dotted line represents the date at which the early reporting incentive was introduced in South Australia. The blue dotted line represents the date on which the incentive was introduce in Tasmania.



DISCUSSION AND IMPLICATIONS

South Australia and Tasmania introduced legislated employer early reporting incentives in an attempt to enable earlier provision of services and thus improve injured worker outcomes. The proposed mechanism was a reduction in employer reporting time [14]. Our findings suggest in both jurisdictions, median claim reporting times decreased significantly and there were trend reductions in total time.

In South Australia we were able to assess employer reporting time and observed no changes in responses to the new legislation. This means that the incentives did not appear to impact on employer behaviour, at least in SA. One possible explanation is that the early reporting incentives were introduced as part of a package of legislative changes, including changes to provisional liability. These other changes may have impacted on employer's behaviour in ways that obviated any impact of early reporting incentives. In Tasmania we were unable to analyse employer reporting time and worker reporting time, and thus cannot attribute the observed reduction in claims reporting time to changes in employer or worker behaviour.

We observed an increase in insurer decision time in Tasmania that corresponded with the reduction in claim reporting time. As provisional liability in Tasmania grants prospective claimants access to wage replacement, treatment costs, and rehabilitation services from the date of claim lodgement, and total time in the claim lodgement process did not increase, the increase in insurer decision time may not have presented a barrier to service access. However, increased insurer decision time may still have negative effects, as it has been associated with poorer long-term physical and mental health[5]. It was unclear why insurer decision time in Tasmania increased. Early reporting incentives in Tasmania were enforced via the transfer of responsibility for wage replacement payments from insurers to employers. This may have increased the administrative burden for insurers (e.g., to monitor reporting dates and ensure employers cover wage replacement for each day they are responsible), in addition to whatever burden resulted from the other amendments coming into effect at the same time[32]. Tasmania also disperses claims management across seven insurers and there was a significant increase in monthly claim volumes in TAS. These factors may have impacted on the insurer decision times.

In SA, there appeared to be an increase in insurer decision time that coincided with the first wave of legislative amendments (though this did not include ERIs). The second increase in insurer decision time observed in mid-2010 may be due to the introduction of a new IT system for WorkCoverSA in late April 2010 [33].

We were unable to identify other studies of policy impact on claim lodgement process, though we found a parliament-commissioned review of SA's amendments that included an assessment of ERIs [34]. The report's authors found slight improvement in claim reporting times, which corresponded with our findings. Using a graph provided by WorkCover SA (SA's WC compensation authority at the time), the authors reported reductions in insurer decision time, which they attributed to ERIs and provisional liability. However, this time series began in the quarter ending June 2008, which according to our data was the start of a period of increased insurer decision time. The authors thus started at a higher baseline and this may have affected their interpretation of the impact of the legislative amendments..

The findings demonstrate that the ITS analysis can be applied to study the impact of changes in workers' compensation legislation using the COMPARE study dataset. The use of comparator jurisdictions in which no substantial changes were observed adds credibility to the assertion that scheme processes were impacted by the implementation of legislative changes. The findings suggest that the introduction of early reporting incentives impacted on claims processing time (time from injury/illness to claim lodgement), however the precise mechanism for this effect is difficult to determine, and we are unable to attribute the observed reduction in claims processing time to changes in employer behaviour.

STATISTICAL ANALYSIS – CLAIM OUTCOMES

BACKGROUND

The claim process analysis demonstrated that it is feasible to use the national compensation database to examine changes in claim processes following legislative amendment. The policy analysis identified at least five major changes in workers' compensation legislation in Australia over the study period which had an explicit intent to change scheme wide outcomes.

There have been multiple studies internationally examining the impact on claim duration of changes in injury compensation scheme legislation. For example Cassidy and colleagues[7] reported substantial reduction in claim duration following the introduction of no-fault motor vehicle accident compensation legislation in Saskatchewan. Changes to the New South Wales motor vehicle accident compensation legislation were evaluated by Cameron and colleagues[8] who identified improvements in health outcomes following introduction of a package of amendments.

To our knowledge no such research studies have been published in the Australian workers' compensation environment, despite there being several examples of transformative legislative change in Australian workers' compensation systems in recent years. The impact of such changes are typically subject to close scrutiny within the jurisdiction in which they occur, but are rarely the subject of research studies. There is much to learn from these population based 'natural experiments'. With appropriate national data, comparisons can be made of scheme performance before and after the change with comparator jurisdictions in which no changes occurred.

METHODS

SETTING

The second study evaluates the impact of a package of legislative changes in Tasmania that were introduced 1 July 2010. These changes were intended to provide "fair and appropriate compensation to workers and their dependents for workplace injuries" and provide "prompt and effective management of workplace injuries in a manner that promotes and assists the return to work of injured workers as soon as possible" [33]. Changes largely focus on the return to work and injury management model (RTWIMM). For further details on this package of changes, see Appendix B.

DATA

The study utilised the same database described for the claims process analysis.

Claims were selected if their lodgement date fell between 1 July 2008 and 30 June 2012, allowing two years both before and after the 1 July 2010 legislative change. These were grouped by quarter (e.g. 2008 Q1 was from 1 July 2008 to 30 September 2008) to enable larger claim volumes, allowing eight time periods either side of the legislative change. This was necessary given the smaller volume of claims in Tasmania than in other states. Further, claims from Tasmania were separated from claims from all other major jurisdictions, named herein as Australia, which was used as the comparator for all analyses.

OUTCOMES

The aims of these analyses were to determine whether the Tasmanian legislative change on 1 July 2010 impacted on both the volume of claims and the duration of compensated time loss. The outcomes of interest are the volume of claims and the median number of weeks spent on compensation. Only claims that resulted in some compensated time loss were included (i.e., medical-only claims were excluded). Initially, all time loss claims were examined. Following this, cases were separated into short duration (< 13 weeks total time loss) and longer duration (> 13 weeks total time loss) claims, and in each of these groups median compensated

time loss was calculated. Finally, the proportion of all claims receiving compensation at 13 weeks were calculated for each quarter and analysed.

ANALYSIS

Descriptive analyses were completed to determine the number of all and time loss claims per period in each of Tasmania and Australia, as well as the median ages and gender of the claimants. Median time loss was calculated for each period of time loss only claims. In an attempt to control for co-occurring events, the rest of Australia was used as the comparator for all analyses.

For each outcome (volume of claims, time loss, proportion), segmented regression analysis of interrupted time series was completed, using a generalised least squares model. There were eight quarters in each of the pre- and post-legislation change periods. In order to counteract autocorrelation, harmonic terms were added to the model (two each of sine and cosine terms for quarterly data), with only those statistically significant retained for the final model. The data were also fitted to an autoregressive-moving average (ARMA) model where necessary. Coefficients and their 95% confidence intervals were reported and their degree of statistical significance noted.

For volume of claims, a seasonally-adjusted trend line was fitted atop the raw data points for both Tasmania and Australia. A vertical dotted line to indicate the timing of the legislation change was added. All time loss-related graphs showed the raw data points for both Tasmania and Australia as well as fitted linear lines for periods before and after the legislation change. Further, dotted linear lines were added to the post-legislation change period to represent the counterfactual, or the path that the results were likely to take should no change have occurred.

RESULTS

DESCRIPTIVE STATISTICS

In Tasmania, there were 17,943 claims in the pre-legislative change period with an average of 2,243 claims per quarter, and 18,044 claims in the post-legislative change period with an average of 2,256 claims per quarter. There were 589,362 in the rest of Australia prior to the legislative change and 587,841 following this, averaging 73,670 and 73,480 claims per quarter respectively.

Half of all claims in Tasmania in the pre-legislative period resulted in time loss, compared with 46.1% in the post period (Table 8). This proportion was higher in the rest of Australia, with 61.4% and 61.3% of claims resulting in time loss in the pre- and post-legislative periods. Median ages for both all claims and time loss claims were between 40 and 42 years, and around 35-40% of claims were from females.

TABLE 8. DESCRIPTIVE STATISTICS OF TASMANIA AND AUSTRALIA PRE- AND POST-LEGISLATIVE CHANGE

		Pre-legislative change	Post-legislative change	Total period
All claims				
Tasmania	Number of claims	17943	18044	35987
	Female (%)	35.5	36.5	36.0
	Age* (years)	40 (28-49)	41 (29-51)	40 (29-50)
Australia	Number of claims	589362	587841	1177203
	Female (%)	34.4	35.4	34.9
	Age* (years)	40 (29-50)	41 (29-51)	41 (29-51)
Total number of claims		607305	605885	1213190
Time loss claims				
Tasmania	Number of claims	9008	8318	17326
	Female (%)	38.0	40.1	39.0
	Age* (years)	41 (30-50)	42 (30-51)	41 (30-51)
	Time loss* (weeks)	2.5 (1.0-8.0)	2.9 (1.0-9.3)	2.7 (1.0-8.6)
Australia	Number of claims	361852	360221	722073
	Female (%)	36.3	37.7	37.0
	Age* (years)	40 (29-50)	41 (29-51)	41 (29-51)
	Time loss* (weeks)	2.2 (0.7-9.5)	2.4 (0.8-10.4)	2.3 (0.7-10.0)
Total number of claims		370860	368539	739399

Note: Pre-legislative change period 1 July 2008 to 30 June 2010; post-legislative change period 1 July 2010 to 30 June 2012.
*Median (interquartile range)

VOLUME OF CLAIMS

There were significant differences in both the volume of claims and the trend in the pre-legislative change period between Tasmania and Australia (Table 9). There was a significant increase in the volume of claims in Australia following the legislative change of 3,827 claims. There was no significant change in the trend in the volume of claims per quarter in Tasmania, relative to Australia. There was, however, a statistically significant decrease in the volume of claims following the legislative change in Tasmania relative to Australia.

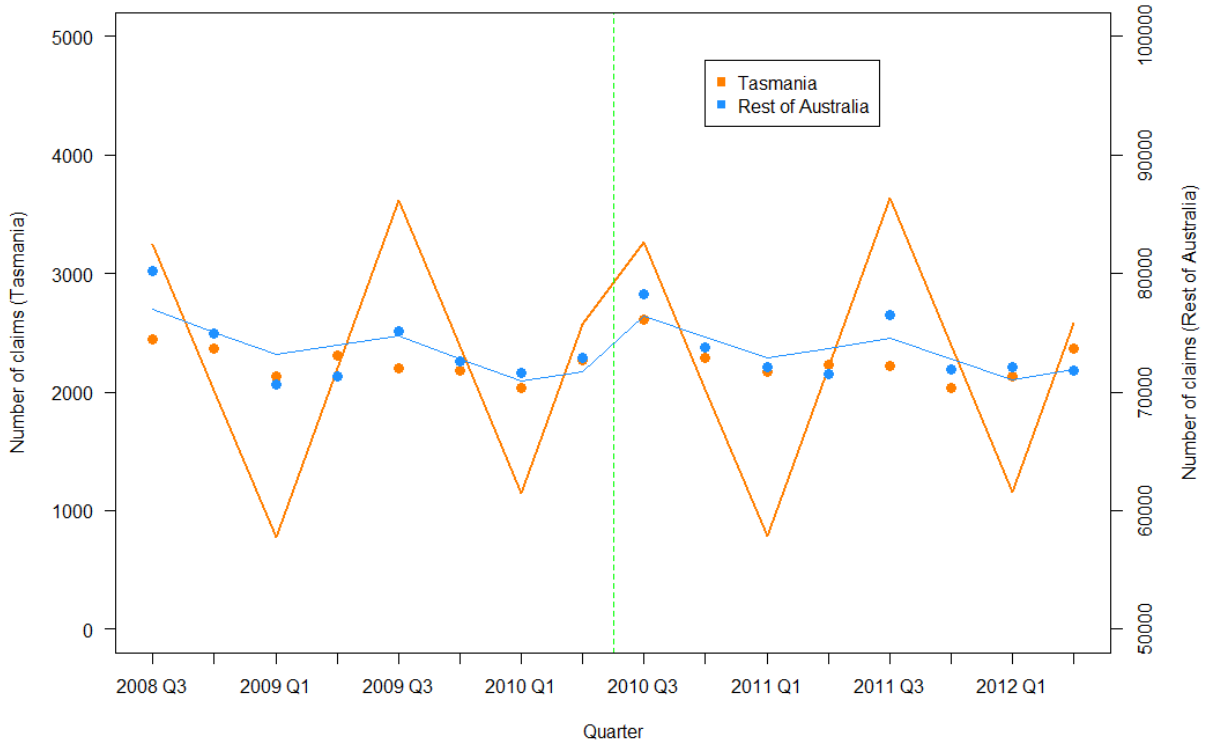
Given the large discrepancy between the volume of claims in Tasmania to Australia, ITS analysis was repeated for Tasmania without comparison with the control group, Australia. In this analysis, there were no significant changes in the volume of claims or the trend in the volume of claims from pre-legislative change period to post.

TABLE 9. RESULTS FROM INTERRUPTED TIME SERIES ANALYSIS OF CLAIM VOLUME

	Coefficient	95% Confidence interval	
		Lower bound	Upper bound
Pre-existing trend in Australia	-562.40*	-1025.34	-99.47
Difference in groups at t = 0	-74374.50***	-77637.86	-71111.14
Differential trend pre-legislative change	654.92	8.68	1301.16
Level change in Australia post-legislative change	3827.02*	772.40	6881.64
Trend change in Australia post-legislative change	107.13	-539.11	753.37
Differential level change in Tasmania relative to Australia	-4551.87*	-8789.56	-314.18
Differential trend change in Tasmania relative to Australia	-107.71	-1021.64	806.21

*** $p < .001$, ** $p < .01$, * $p < .05$

FIGURE 4. SEASONALLY-ADJUSTED TREND IN QUARTERLY CLAIM VOLUMES, 1 JULY 2008 TO 30 JUNE 2012



ALL TIME LOSS CLAIMS

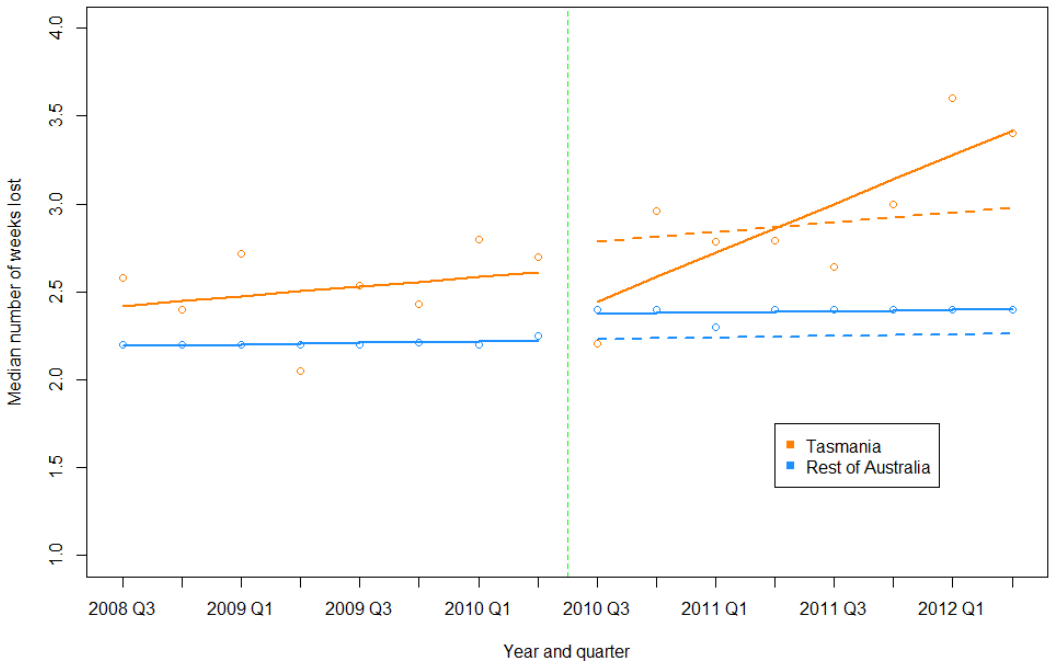
In the pre-legislative change period, there were no significant differences between the median number of weeks lost in Tasmania and Australia. Following the legislative change, there was a decrease in the median number of weeks lost in Tasmania, however this was not significant. Relative to the rest of Australia, there was a significant increase in the trend in Tasmania of 0.11 weeks per quarter.

TABLE 10. RESULTS FROM INTERRUPTED TIME SERIES ANALYSIS OF ALL TIME LOSS CLAIMS (IN MEDIAN WEEKS)

	Coefficient	95% Confidence interval	
		Lower bound	Upper bound
Pre-existing trend in Australia	0.005	-0.042	0.051
Difference in groups at t = 0	0.204	-0.128	0.536
Differential trend pre-legislative change	0.023	-0.043	0.089
Level change in Australia post-legislative change	0.147	-0.167	0.460
Trend change in Australia post-legislative change	-0.001	-0.065	0.064
Differential level change in Tasmania relative to Australia	-0.453	-0.896	-0.010
Differential trend change in Tasmania relative to Australia	0.111*	0.020	0.203

*** $p < .001$, ** $p < .01$, * $p < .05$

FIGURE 5. MEDIAN WEEKS' TIME LOST PER QUARTER FOR ALL TIME LOSS CLAIMS, OBSERVED AND EXPECTED



Note: the dotted line represents the counterfactual (expected trend should no intervention have occurred) and the green midline represents the time the intervention occurred.

TIME LOSS LESS THAN 13 WEEKS

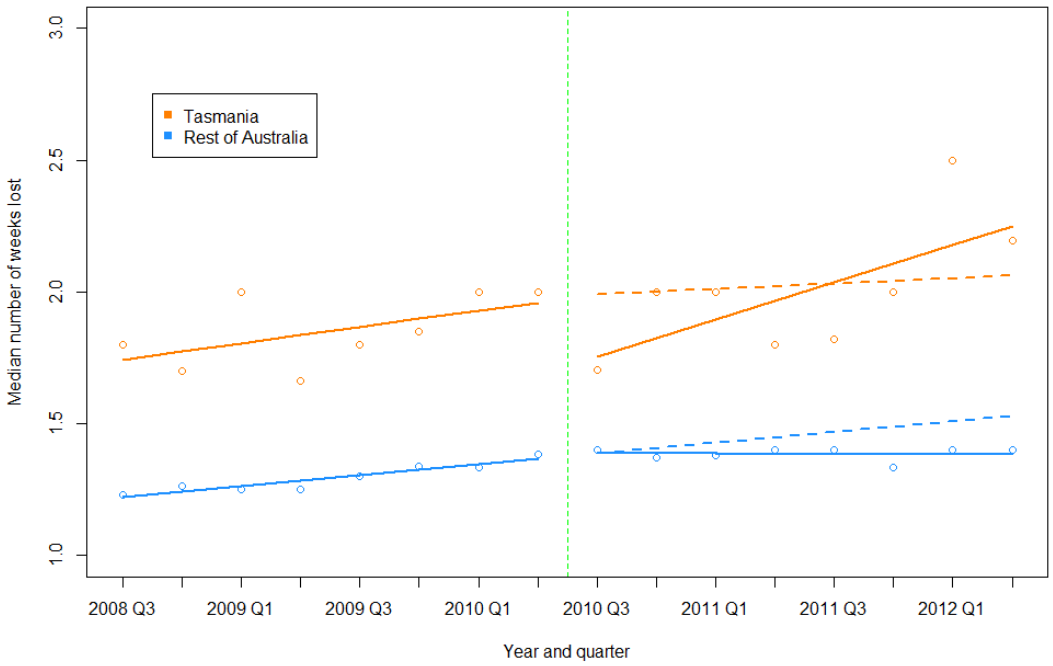
There was a significant difference in the median number of weeks lost prior to the legislative change between Tasmania and Australia. Following the legislative change, there were no significant changes in Tasmania to the median number of weeks lost, nor the trend over time, relative to Australia.

TABLE 11. RESULTS FROM INTERRUPTED TIME SERIES ANALYSIS OF TIME LOSS LESS THAN 13 WEEKS (IN MEDIAN WEEKS)

	Coefficient	95% Confidence interval	
		Lower bound	Upper bound
Pre-existing trend in Australia	0.02	-0.02	0.06
Difference in groups at t = 0	0.51*	0.26	0.77
Differential trend pre-legislative change	0.01	-0.04	0.06
Level change in Australia post-legislative change	0.02	-0.21	0.25
Trend change in Australia post-legislative change	-0.02	-0.07	0.03
Differential level change in Tasmania relative to Australia	-0.30	-0.63	0.03
Differential trend change in Tasmania relative to Australia	0.06	-0.01	0.13

*** $p < .001$, ** $p < .01$, * $p < .05$

FIGURE 6. MEDIAN WEEKS' TIME LOST PER QUARTER FOR CLAIMS WITH LESS THAN 13 WEEKS' TIME LOSS, OBSERVED AND EXPECTED



Note: the dotted line represents the counterfactual (expected trend should no intervention have occurred) and the green midline represents the time the intervention occurred.

TIME LOSS GREATER THAN OR EQUAL TO 13 WEEKS

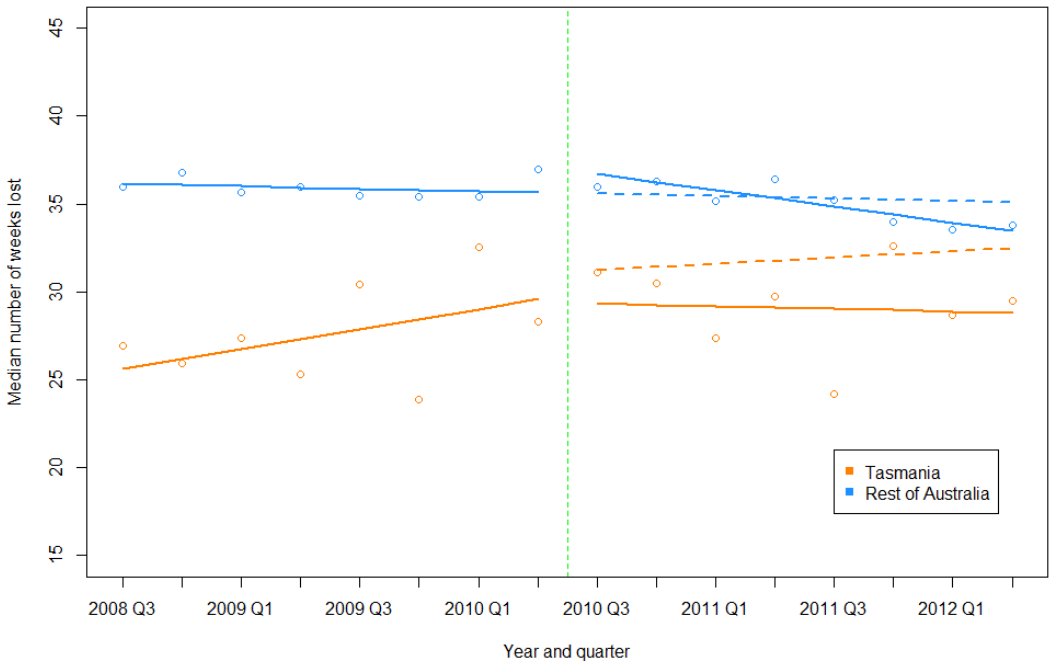
In the period before the legislative change, there were significant differences in the median number of weeks lost and the differential trend between the groups. Initially, the number of weeks lost in Australia was 11.1 weeks higher than Tasmania, and Tasmania had an increasing trend of 0.6 weeks per quarter. Following the legislative changes, there were no significant changes in the median number of weeks lost or the trend over time in Tasmania relative to Australia.

TABLE 12. RESULTS FROM INTERRUPTED TIME SERIES ANALYSIS OF TIME LOSS GREATER THAN OR EQUAL TO 13 WEEKS (IN MEDIAN WEEKS)

	Coefficient	95% Confidence interval	
		Lower bound	Upper bound
Pre-existing trend in Australia	-0.07	-0.38	0.25
Difference in groups at t = 0	-11.15***	-13.38	-8.92
Differential trend pre-legislative change	0.63**	0.19	1.08
Level change in Australia post-legislative change	1.50	-0.60	3.61
Trend change in Australia post-legislative change	-0.39	-0.82	0.03
Differential level change in Tasmania relative to Australia	-1.67	-4.64	1.31
Differential trend change in Tasmania relative to Australia	-0.25	-0.85	0.35

*** $p < .001$, ** $p < .01$, * $p < .05$

FIGURE 7. MEDIAN WEEKS' TIME LOST PER QUARTER FOR CLAIMS WITH GREATER THAN OR EQUAL TO 13 WEEKS' TIME LOSS, OBSERVED AND EXPECTED



Note: the dotted line represents the counterfactual (expected trend should no intervention have occurred) and the green midline represents the time the intervention occurred.

PROPORTION ON BENEFITS AT 13 WEEKS

The pre-existing difference between the groups was significant, with Tasmania having 2.9% fewer claimants still on benefits at 13 weeks than the rest of Australia. There was no significant change in the proportion off work at 13 weeks following the legislative change.

TABLE 13. RESULTS FROM INTERRUPTED TIME SERIES ANALYSIS OF THE PROPORTION OF THOSE ON BENEFITS AT 13 WEEKS

	Coefficient	95% Confidence interval	
		Lower bound	Upper bound
Pre-existing trend in Australia	0.05	-0.167	0.28
Difference in groups at t = 0	-2.92**	-4.49	-1.35
Differential trend pre-legislative change	-0.20	-0.51	0.11
Level change in Australia post-legislative change	0.95	-0.52	2.42
Trend change in Australia post-legislative change	-0.05	-0.36	0.26
Differential level change in Tasmania relative to Australia	0.94	-1.15	3.02
Differential trend change in Tasmania relative to Australia	0.43	-0.01	0.86

*** $p < .001$, ** $p < .01$, * $p < .05$

FIGURE 8. PROPORTION ON BENEFITS AT 13 WEEKS PER QUARTER, OBSERVED AND EXPECTED

Note: the dotted line represents the counterfactual (expected trend should no intervention have occurred) and the green midline represents the time the intervention occurred.

DISCUSSION AND IMPLICATIONS

Tasmania introduced a package of legislative changes with the aim of providing fairer compensation to injured/ill workers and their dependents, and more effective management of workplace injuries to enable earlier and more effective return to work outcomes. Findings from this study suggest that these changes had little significant impact on both the volume of claims and their time spent on compensation. This study did not evaluate changes to the fairness of the compensation process.

There was a statistically significant decrease in the volume of claims following the legislative change in Tasmania when compared with Australia, however this was not significant when analysis focused on Tasmania alone. This could be due to the large discrepancy between claim volumes in Tasmania and Australia, and therefore to better determine any considerable changes a more appropriate comparator should be determined. When examining crude volumes before and after the legislative change, there are no substantial changes.

In general for all time loss claims, the median number of weeks spent on compensation was higher in Tasmania compared with Australia. For claims lodged after 1 July 2010, there was an initial (but not statistically significant) decrease in time loss in Tasmania, yet there was a significant increasing trend. This finding suggests that the legislative amendments did not achieve their stated objective of improving return to work outcomes, and may have contributed to a gradual increase in the time spent on compensation among Tasmanian WC claimants.

For less severe claims (resulting in less than 13 weeks' time loss), Tasmania recorded significantly greater median time loss than the rest of Australia. There was no significant change in time loss following the legislative change, which suggests either that the RTWIMM was not as effective at returning injured workers to work as predicted, or that there is insufficient statistical power to detect changes.

One of the legislative amendments introduce in the Tasmanian changes was a change to the timing of step-downs in the income benefits. Previously, after 13 weeks on the scheme, compensation dropped from 100% to 85% of the weekly payment [35]. Following the legislative change, this did not occur until 26 weeks [33]. In theory this change reduces the financial incentive for injured workers to return to work in the post change period, as there is no financial disadvantage to staying on compensation after between 13 and 26 weeks. More severe claims (resulting in 13 or more weeks' time loss) spent less time on compensation in Tasmania than the rest of Australia, the opposite pattern to that observed for less severe claims. Further, there were a greater proportion of claims that reach 13 weeks' time loss in Australia than in Tasmania. There were no significant changes in the median number of weeks lost following the legislative change. Despite an increase in both the proportion of claims that reach 13 weeks' time loss and increasing trend following the legislative change in Tasmania, these were not statistically significant. This suggests that the delays to step-downs did not have a statistically significant impact, or that other factors were operating to minimise any such impact.

Whilst the time spent on compensation did not change significantly in Tasmania following the legislative amendments, other outcomes not able to be measured through the COMPARE database may have been affected. For example, it is possible that workers were provided with greater levels of support or had a different experience, and/or that their health status was improved. These outcomes are not able to be using the COMPARE dataset, and this is one limitation of the study.

The package of changes introduced in Tasmania sought to improve return to work outcomes by providing more effective injury management and greater support, and provide a fairer and more appropriate system to those who were more severely injured. Tasmania introduced legislation that sought to reduce the time spent on compensation, yet increase the level of compensation provided to workers whose time loss exceeded 13 weeks. The overall effects on time loss, which showed a significant increase in trend in the median number of

weeks lost, are difficult to attribute to any single element of the package of changes introduced in Tasmania in July 2010, however they do demonstrate a potentially unanticipated negative impact of the legislative amendments. The impact of other factors beyond the legislative amendments cannot be discounted, and these have not been specifically assessed in this study.

SUMMARY AND CONCLUSIONS

This study developed a method to identify and characterise changes in workers compensation legislation. We identified a total of sixty such changes across the nine major Australian jurisdictions over a 12 year time period – representing an average of 5 changes per annum. Of these we identified that 20% could be characterised as major changes, with a clear policy intent to modify worker outcomes including return to work. In at least five instances we hold sufficient data within the COMPARE dataset to evaluate the impact of these changes on claim outcomes.

Evaluation of employer financial reporting incentives in South Australia and Tasmania suggest that early reporting incentives reduce claim reporting time. However, there were possible indirect effects on insurer decision time, which may have been due to the early reporting incentives being implemented as part of a larger package of amendments. Further, the lack of effect of the incentive target, employer reporting time, in South Australia raises questions about the mechanism by which the time savings were achieved.

Evaluation of the package of legislative amendments introduced in Tasmania in July 2010 demonstrated little impact on claim volume, and a small but statistically significant increase in the trend of time loss. This increase amounted to 0.1 additional days of compensated time loss per quarter after the legislative amendment, compared with the rest of Australia. Injured Tasmanian workers with less severe injuries have significantly greater time on compensation than those in the rest of Australia, yet those with more severe injuries have less time. We did not evaluate the impact of the Tasmanian changes on worker experiences.

The study has demonstrated that ITS analysis can be applied to national workers' compensation data and can be used to evaluate the impact of legislative amendments on system relevant outcomes. The study also developed some markers of claims processes (claim lodgement processing time) in addition to the existing COMPARE study outcomes of compensated time lost and claim counts.

STRENGTHS AND LIMITATIONS

One of this study's main strengths was the use of a powerful quasi-experimental research design, the ITS, on population-based datasets, incorporation of multiple baselines, a comparator, and adjustments for seasonality and autocorrelation. The number of observations exceeded most recommended minimums and allowed for greater certainty about seasonal and autocorrelation adjustments. For the claim process analysis, we evaluated several time periods within the claim lodgement process, exploring both the early reporting incentive target, claim and employer reporting times, and areas that could have been indirectly affected. We also evaluated several outcomes relative to claim duration, including median weeks' time lost, and shorter and longer duration claims.

The study had several limitations. For the claim process analysis, the early reporting incentives were part of larger legislative packages, meaning there were numerous co-occurring events specific to both states that likely affected aspects of the claim lodgement process. While the comparator controlled for co-occurring events with Australian-wide impacts such as the GFC, it was unable to control for these local events. The staggered introduction of South Australia's amendments appears to have confounded insurer decision time, as did the introduction of a new IT system. Similarly the Tasmanian changes in 2010 included multiple co-occurring events which makes it difficult to attribute any observed changes in claim outcomes to a specific policy setting. Completion of multiple before-and-after analyses in multiple jurisdictions may provide more useful information on the impact of specific policy settings. Methods such as cross-case analysis may enable identification and isolation of positive and negative policy settings for claims duration.

NEXT STEPS

Having established a method for using national claims data to evaluate the impact of legislative changes in single or multiple jurisdictions, the research team plans to extend this analysis to the remaining identified major legislative changes. This will involve analysis of the changes in New South Wales in 2012, Victoria in 2006 and 2010, and South Australian in 2008. We will explore the potential to evaluate the impact of the change in the Comcare jurisdiction in 2007 and 2010.

Completion of these analyses will provide a set of findings that combined, will provide a unique insight into the impact of policy change on claim processes and outcomes. The research team will seek input from the jurisdictions to assist in the interpretation of study findings. We intend to use cross-case comparison (a case study method that will involve comparing findings from each of the various 'cases' or examples of legislative change) will be used to identify common factors that impact on outcomes and/or differences contributing to unique, jurisdiction specific outcomes. Findings will be presented back to participating jurisdictions initially through the study advisory group.

APPENDIX

A: EARLY REPORTING INCENTIVES

In SA, ERIs came into effect on 1 January 2009 as part of a broader set of WC amendments under the Workers Rehabilitation and Compensation (Scheme Review) Amendment Act 2008 [17]. From this date, employers who lodged a WC claim within two working days of becoming aware of an injury were given a rebate on their excess [17], which could amount to the first 14 calendar days of wage loss payments, or up to $2,335.60 per week for two weeks [36]. As implemented in SA, ERIs were intended as a bonus to employers who performed better than the minimum required [14 16]. The statutory five-day period to lodge a WC claim, enforced with a fine of up to AUD $1,000 for late lodgement [37], remained in place. At the time, WC claims in SA were managed by one private claims agent [36].

Eighteen months later, TAS implemented a similar set of ERIs as part of the Workers Rehabilitation and Compensation Amendment Act 2009 [18]. From 1 July 2010, employers were required to report an injury to their WC insurer within three days of receipt of a claim or notification of injury. For each day exceeding this, employers would become responsible for wage replacement payments [18]. In TAS, ERIs were suggested partly in response to a growing proportion of claims that were reported outside the existing statutory five-day period. By 2005/06, nearly one-quarter of claims took six days or longer to report [14]. TAS retained a statutory five day period to lodge a claim [18]. At the time, WC claims in TAS were managed by seven private insurers [36].

In both jurisdictions, ERIs were part of a larger package of WC legislative amendments. TAS implemented all legislative amendments at one time, while SA implemented them over the course of two years in five stages beginning 1 July 2008, six months prior to ERIs coming into effect.

TABLE 14. DESCRIPTION OF EARLY REPORTING INCENTIVES IN SOUTH AUSTRALIA [17] AND TASMANIA [18]

	South Australia	Tasmania
Date passed parliament	19 June 2008	17 December 2009
Date effective	1 January 2009	1 July 2010
Incentive format	Rebate on employer excess (first 14 calendar days of wage replacement) if employer lodges claim within two days of employee notification of injury	Employer becomes responsible for worker wage replacement payments for every day after three days they fail to report a work injury to their insurer.
Coinciding changes in legislation (not exhaustive)	– Provisional liability, effective same day as early lodgement incentives, granting injured workers up to 13 weeks of compensation if a liability decision is not made within 7 days of the employee's notification – Changes to dispute resolute system – Cap on lawyers can charge in dispute and change of pay structure to remove financial incentives for lawyers to perpetuate claims – Requirements for employers to have rehabilitation and return to work coordinators.	– Payments for counselling for families of deceased workers – Payments for medical and other expenses for up to 12 months after the cessation of income replacement – Increase in maximum lump sum for permanent impairment – Extension of weekly payments for workers based on whole-person impairment – Increases in income replacement rates and delays in step-downs – Exempt claimants from step-downs provided they have returned to work for at least 50% of pre-injury hours or duties or where employer refused or is unable to provide alternative duties – Reduce whole-person impairment thresholds for access to common law damages – Requirements for return to work and injury management plans
Non-coinciding changes in legislation (not exhaustive)	– 1 July 2008: Reductions to income-replacement rates. Notice periods before benefit reduction or cessation. Code of workers' rights. Establishment of WorkCover ombudsman. Return to Work Inspectorate. Permitting weekly payments in case of disputes. – 1 April 2009: Changes to work capacity reviews for claimants seeking income replacement beyond 130 weeks (2.5 years). Introduction of 5% impairment threshold for permanent injury payments in physical injury cases. Increase of pain and suffering payments to $400,000. Establishing independent medical panels for decisions on medical questions. – 1 July 2009: Restrictions on use of redemptions (one-off payments) to finalise claims with injury date on or after 1 July 2006. – 1 July 2010: Restrictions on use of redemptions (one-off payments) to finalise claims for all claims.	None

B: TASMANIAN 2010 LEGISLATIVE CHANGES

Change	Justification
1. Introduced a statement of scheme goals (key principles that underpin the Return to Work and Injury Management Model)	To promote and support the effective injury management of injured workers, Tasmania introduced a framework for improving and streamlining the management of workplace injuries and illness to deliver better health and return to work outcomes for injured workers with lower costs to employers and the workers compensation system.
2. Encourage early reporting by holding the employers liable for claims expenses until the claim is reported	This was intended to ensure injury management starts as soon as possible to improve workers' chances of recovering from the injury or illness and returning to work. A consistent finding from research literature is that early reporting of claims leads to more effective claims and injury management and enhanced return to work outcomes. Furthermore, late reporting has a demonstrable impact upon claim costs [38]. (Later the reporting, higher the cost) Prior to 1 July 2010: Worker must notify employer of an injury "as soon as practicable after suffering an injury", once received the employer must complete a workers' compensation form and send to the insurer within FIVE working days. Since 1 July 2010: Once an employer has been notified, they have THREE working days to notify their insurer.
3. Provide for the payment of counselling services for families of deceased workers	Provided to help family members cope with the psychological impact of the death of a worker.
4. Provide for the payment of medical and other expenses for up to 12 months after a worker ceases to be entitled to weekly compensation (with the possibility of extension on application to the Tribunal)	Introduced to provide a fairer compensation system.
5. Increase the maximum lump sum payable to a dependent on the death of a worker to 415 units ($266,376.05 at July 1, 2010 - indexed annually)	Introduced to provide a fairer compensation system.
6. Increase weekly payments payable to a dependent child of a deceased worker from 10% basic salary to 15% basic salary	Introduced to provide a fairer compensation system.
7. Increase the maximum lump sum payable for permanent impairment to 415 units ($266,376.05 at July 1, 2010 - indexed annually)	Introduced to improve the level of compensation payable to more seriously injured workers.

8. Provide for the extension of weekly payments from nine years to 12 years for workers with a WPI between 15 per cent and 19 per cent; to 20 years for workers with a WPI of between 20 per cent and 29 per cent and until the age of retirement for workers with a WPI of 30 per cent or more	Introduced to provide a fairer system and to improve the level of compensation payable to more seriously injured workers.
9. Amend the first step-down to 90 per cent of normal weekly earnings rather than 85 per cent of normal weekly earnings	To provide a fairer compensation system and to improve the level of compensation payable to more seriously injured workers.
10. Delay the operation of the first step-down, so that it comes into effect at 26 weeks of incapacity rather than 13 weeks	To provide a fairer compensation system and to improve the level of compensation payable to more seriously injured workers.
11. Provide that the step-downs are not to apply where a worker has returned to work for at least 50 per cent of his or her pre-injury hours or duties	Introduced to not discourage returning to work or penalise those who have returned to work, even if part time.
12. Provide that the step-downs are to be discounted in circumstances where an employer refuses or is unable to provide suitable alternative duties	Introduced to not penalise the worker for a situation that is likely out of their control and to ensure the system is fair.
13. Reduce the threshold for access to common law damages from 30 per cent whole person impairment to 20 per cent whole person impairment	Introduced to make the system fairer and to improve the level of compensation payable to those who are more seriously injured.
14. Repeal section 138AB requiring a worker to make an election to pursue common law damaged	
15. Other measures to support WorkCover RTW and Injury Management Model: i. requirements for RTW and injury management plans ii. obligations on employers to encourage early reporting of injuries and claims iii. providing an entitlement to the payment of limited medical costs before the claim is accepted, and iv. introduction of an injury management coordinator to oversee the injury management process.	To promote and support the effective injury management of injured workers, Tasmania introduced a framework for improving and streamlining the management of workplace injuries and illness to deliver better health and return to work outcomes for injured workers with lower costs to employers and the workers compensation system. Research suggests that communication is key throughout the injury management and return to work process. Any confusion or misunderstanding has the potential to create barriers to return to work and can result in unnecessary delays. Injury management and return to work plans provide a highly effective communication tool that ensures consistent and agreed understanding of what will occur and what to expect during the recovery process.

Note: These amendments affect claims in respect of injuries occurring on or after 1 July 2010. These amendments do apply to claims prior to 1 July 2010 only in respect of the return to work and injury management processes detailed in section 143L (Injured worker's position to be held open for worker) and 143M (Employer to provide suitable duties after injury) of the Act (http://www.workerscomp.tas.gov.au/).

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