

Overview of the COMPARE Project

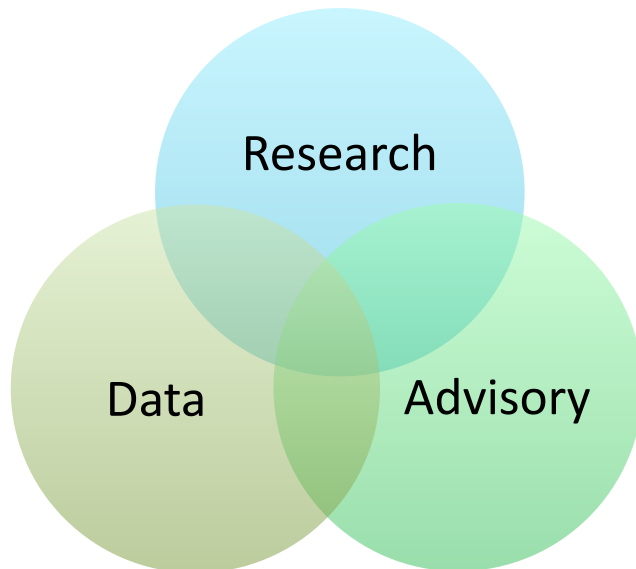
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“We exist to improve the health of all workers and the sustainability of the systems that insure them.”

Activities & Services



Partners & Clients

Workers Compensation Regulators & Insurers
CTP Regulators & Insurers
Life Insurers
Employers
Occupational Rehabilitation Providers
Govt Social Services & Health

Funding

The COMPARE Project is supported by funding from (1) WorkSafe Victoria through the Institute for Safety Compensation and Recovery Research; and (2) Safe Work Australia.

Data

The data used in the COMPARE Project is provided by (1) Comcare and by the following organisations via SafeWork Australia: (2) WorkSafe Victoria (3) WorkCover Tasmania (4) WorkCover WA (5) ReturnToWork SA, (6) State Insurance Regulatory Authority of NSW (7) Office of Industrial Relations, QLD Govt (8) ACT Government and (9) NT WorkSafe.

Advisory Group

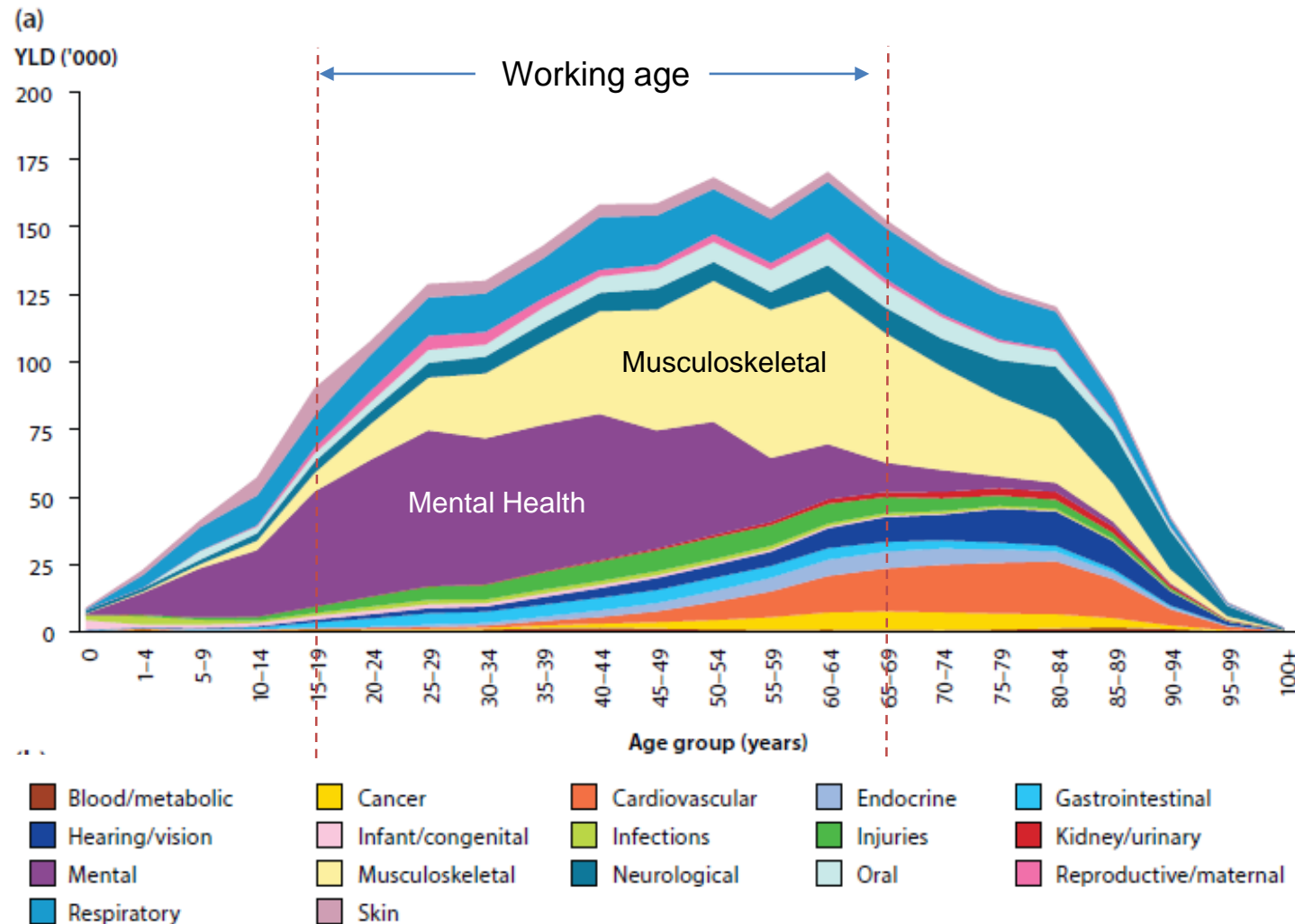
The project advisory group includes representatives from the above organisations plus (1) the Australian Industry Group; and (2) the Australian Council of Trade Unions.

Collaborators

The project has academic collaborators from the University of British Columbia in Vancouver, Canada; the Institute of Work and Health in Toronto, Canada; and the University of Melbourne.

- Australian labour force = 11.5 million workers
- Nine major workers' comp schemes = 10.8 million workers (SafeWork Australia, 2015)
- Self-reported work-related injury = 532,000 (est) (Australian Bureau of Statistics, 2015)
- Accepted workers' compensation claims = ~242,000 (Lane T, et al, 2016)
- Annual cost estimated at \$61.8B or 4.1% of GDP (SafeWork Australia, 2015)

YEARS LOST TO DISABILITY IN AUSTRALIA

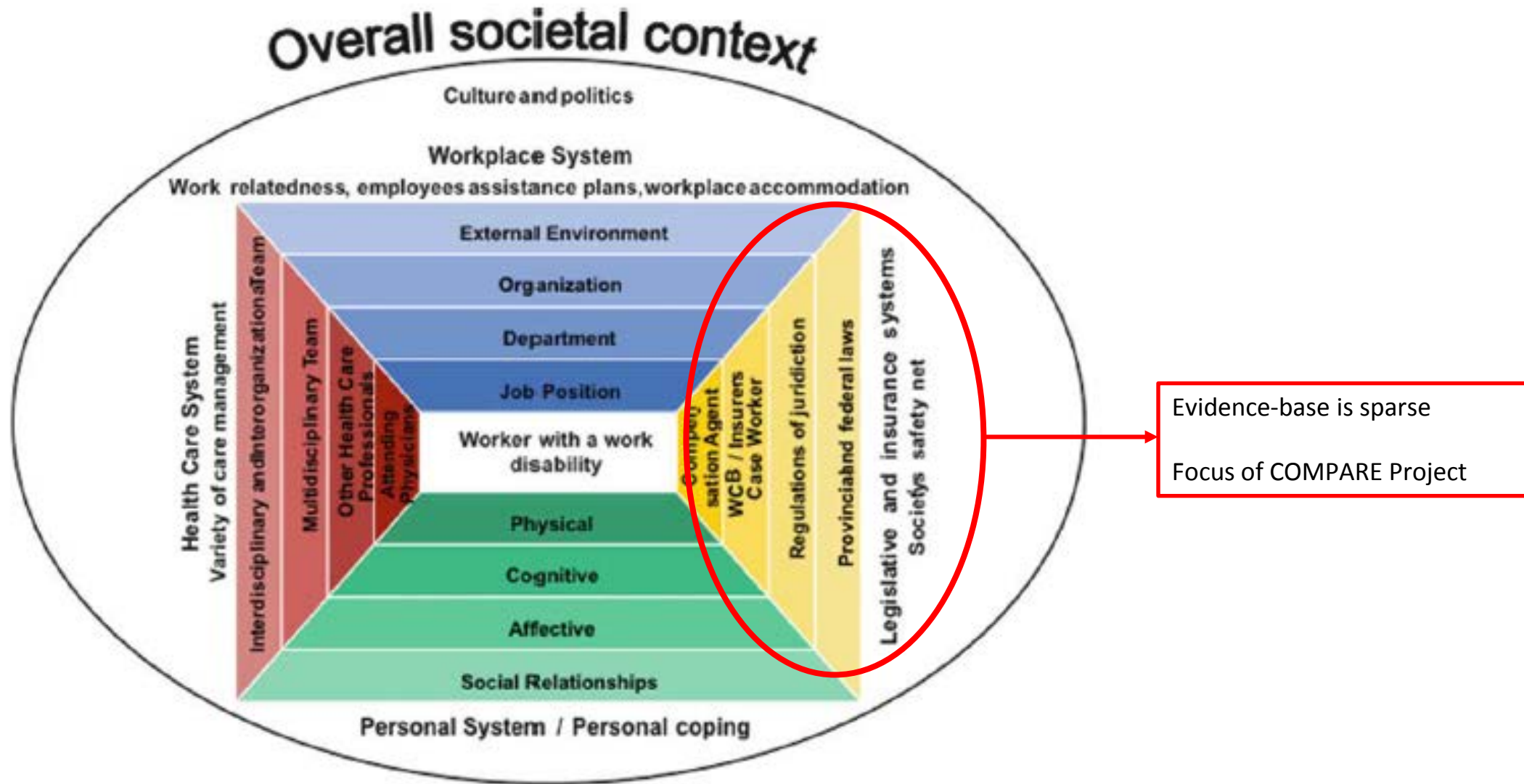


Musculoskeletal disorders and mental health conditions are common in workers' compensation schemes.

These two conditions are responsible for the largest burden of years lost to disability in working age Australians.

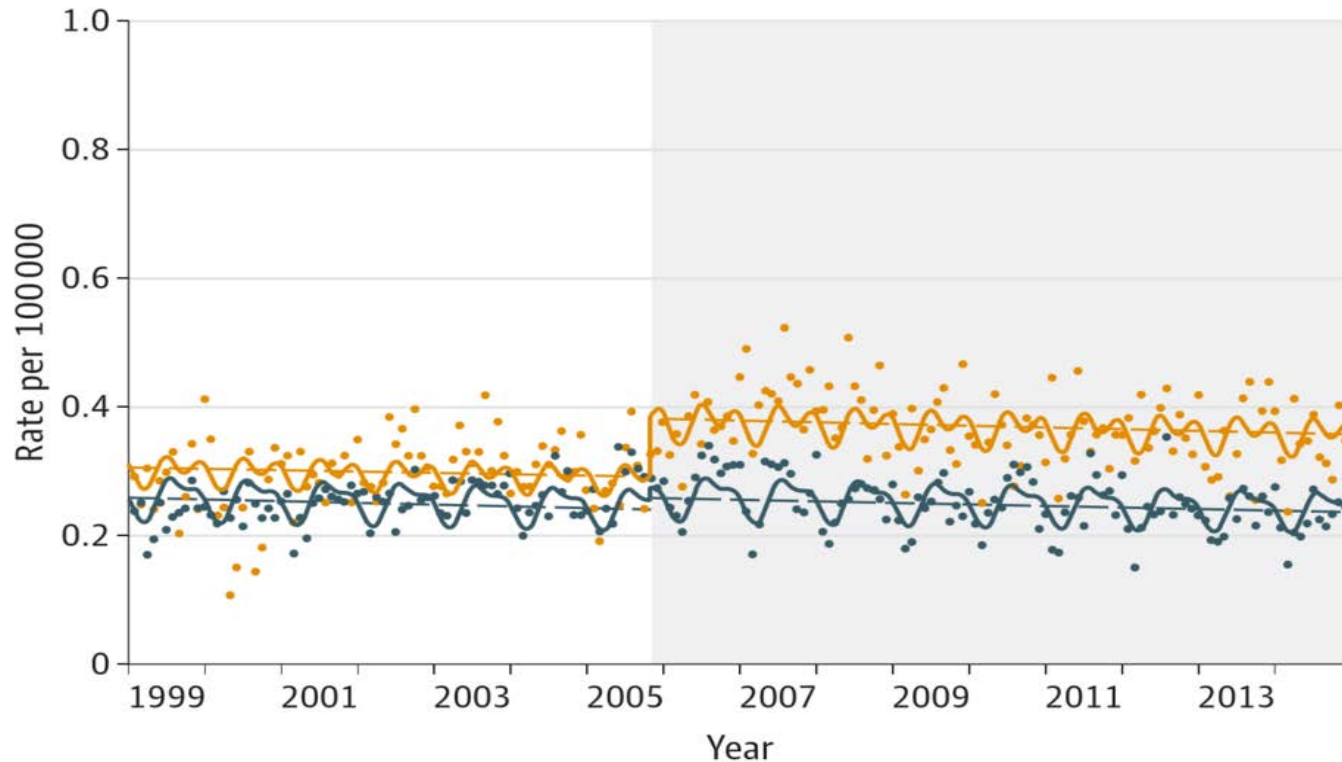
Effective prevention and rehabilitation / RTW has potential to dramatically improve population health.

FACTORS AFFECTING RETURN TO WORK



AN EXAMPLE OF POLICY IMPACT – “STAND YOUR GROUND” GUN LAWS IN THE STATE OF FLORIDA

B Homicide by firearm rates in Florida and comparison states

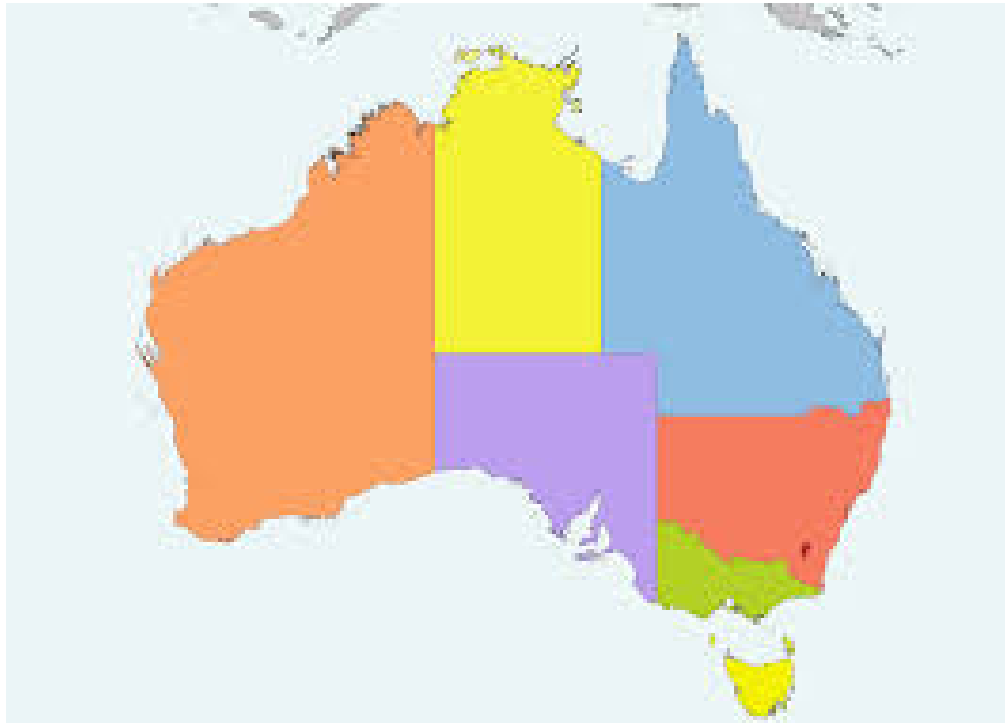


Rates of homicide by firearm in Florida increased at the same time that relaxed gun laws were introduced.

Effect = ~20 additional homicides per month.

The same change was not observed in four comparison states.

- Policy effects can be:
 - Large
 - Population wide
 - Immediate
 - Long-lasting
 - Multi-dimensional
- Policy can have unintended consequences
- WHO Health in All Policies framework
<http://www.who.int/healthpromotion/frameworkforcountryaction/en/>



Nine major variations on workers' compensation policy.

Regular changes in rules governing scheme activity (legislation, regulation, policy, practice).

A national minimum database of workers' compensation data with a long time series.

A national return to work survey of injured workers covering all workers compensation jurisdictions.

➤ A natural experiment!

1. To determine the impact of workers' compensation scheme policy on return to work and duration of time loss.
2. To identify policies that have positive and negative impact on return to work and duration of time loss.

1. To develop a national workers' compensation research data platform.
2. To extract insights and value from two existing national datasets.
3. To develop and test methods for assessing the impact of policy and policy change in Australian workers' compensation systems.
4. To develop a research/industry collaboration that enables two-way knowledge exchange.
5. To build national capability in workers' compensation and return to work research.

1. Compare outcomes **between groups**

- Between workers' compensation jurisdictions
- Between occupations, age groups, injury types etc...

2. Compare outcomes **before-and-after** an event

1. Before-and-after legislative amendment

- We attempt to isolate effects of policy by accounting for other factors
 - Data / cohort selection
 - Statistically

1. National Dataset of Compensation Statistics

- 2003/4 to 2015/16
- 4,363,267 cases
- NSW, VIC, QLD, WA, TAS, SA, NT, ACT & CTH schemes
- Standardised coding for type of condition, occupation, industry.
- ABS estimate of covered workers
- Outcomes
 - Number and incidence of claims
 - Duration of claims
 - Claim processing times
- Updated annually

2. National RTW Survey

- 2013, 2014 & 2016
- 14,501 cases @ ~4 to 24 months post claim
- NSW, VIC, QLD, WA, TAS, SA, NT, ACT & CTH schemes
- Standardised coding for type of condition and industry
- Self-reported RTW outcomes + health, employer, claim and other measures
- Outcomes
 - RTW at time of interview
 - Sustainable RTW
 - Time taken to RTW
 - Relapses

Strengths

- Very large datasets. Population coverage in case of NDS.
- All major workers' compensation jurisdictions represented.
- Multiple worker, injury, demographic, claim and employer factors recorded.
- Standard coding schemas.
- Multiple RTW outcomes.
- Time-series.
- Denominator data for most groups.

Limitations

- NDS is administrative data (time loss \neq RTW)
- Data gaps (claims process, healthcare, psychosocial factors)
- Denominator data missing for some groups.
- NRTWS is point-in-time / cross-sectional.
- Coding differences between jurisdictions.
- Quality of data entry for NDS - ??

1. Quality Assurance

- Completeness / missing-ness
- Logic checks
- Outlier analysis
- Re-coding

2. Derive variables

- Socio-economic status
- Remoteness
- Modified injury/condition types
- Outcome measure
- Study specific

3. Analytic Approaches

- Descriptive statistics
- Survival models (time to event)
- Interrupted time series
- Regression of different types

Reports (complete)

1. **Introductory Report.**
2. Work-related injury and illness in Australia.
3. Mental health related workers compensation claims in Australia.
4. **The impact of legislative change on workers comp claims and outcomes.**
5. Workers' compensation claims among nurses and ambulance officers.

Reports (underway)

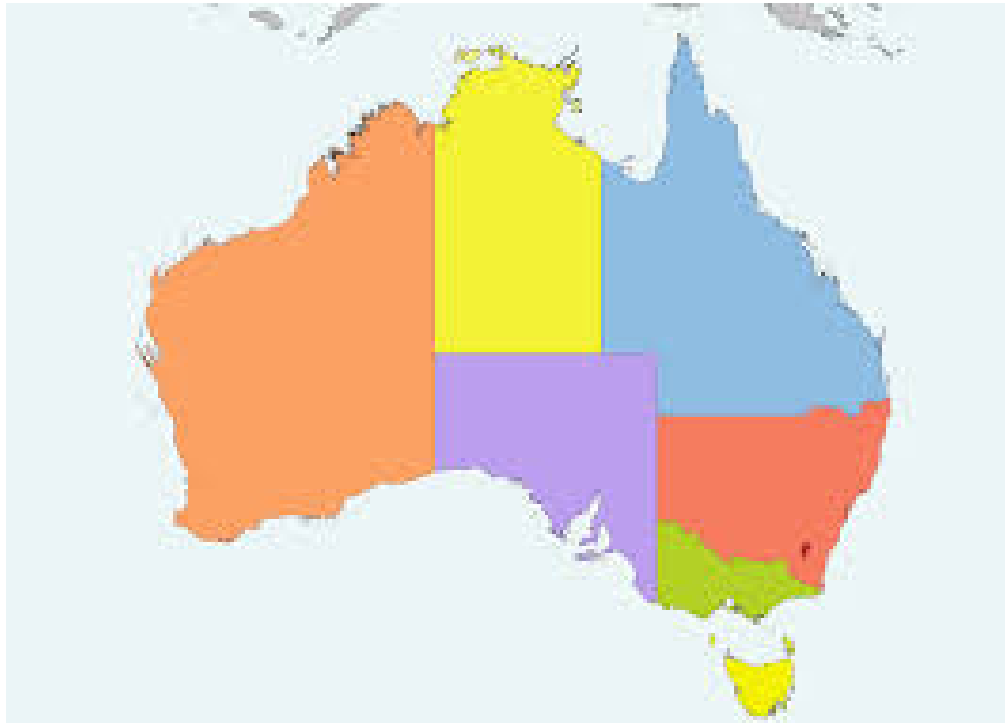
1. **Employer RTW plans return to work.**
2. Employer response to injury and return to work.
3. **Employer support for worker and return to work.**
4. Impact of claims processing times on duration of time loss.
5. **Long-tail workers' compensation claims.**
6. Claims experience of injured Australian workers & association with return to work.
7. Workers compensation claims among government sector employees.
8. Impact of changing the wage replacement cap on duration of time loss.
9. Evaluation of the 2012 NSW legislative amendment.

Academic Journal Articles (published)

1. **Does time off work vary after injury? A comparison of eight Australian workers compensation jurisdictions.**
2. **Effectiveness of employer financial incentives in reducing time to report worker injury: an interrupted time series study of two Australian workers' compensation jurisdictions**
3. **The nature and burden of occupational injury among first responder occupations: A retrospective cohort study in Australian workers.**

Academic Journal Articles (submitted)

1. **The impact of legislative amendments on duration of time loss following work injury: An interrupted time series analysis.**
2. Sex, age, and the changing burden of work-related disability in Canada and Australia.
3. Comparing time off work after work-related mental health conditions across Australian workers' compensation systems: a retrospective cohort study.



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STUDY 1 – DOES POLICY IMPACT ON DURATION OF TIME LOSS?

Standardised national cohort of 10 day + claims.

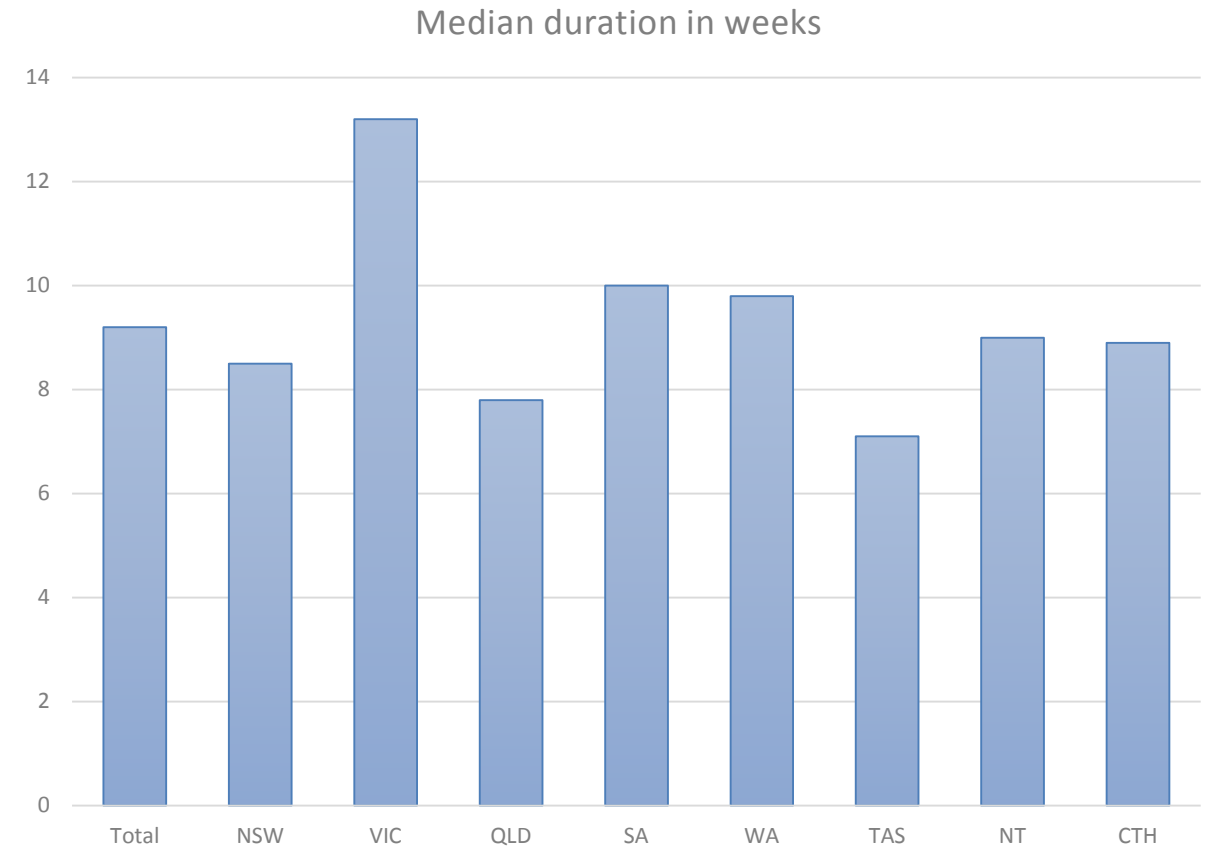
Unadjusted data.

Large variation in median duration of time lost between jurisdictions.

Range from 7.8 weeks to 13.2 weeks

National average = 9.2 weeks

Is that statistically significant? Is it meaningful?



Data adjusted for worker, job and workplace factors.

Large variation in survival patterns by jurisdiction.

Effect is as large as that observed for injury type.

- Jurisdiction of claim has a significant impact on duration.
- Strongly suggests policy variation between jurisdiction is important.

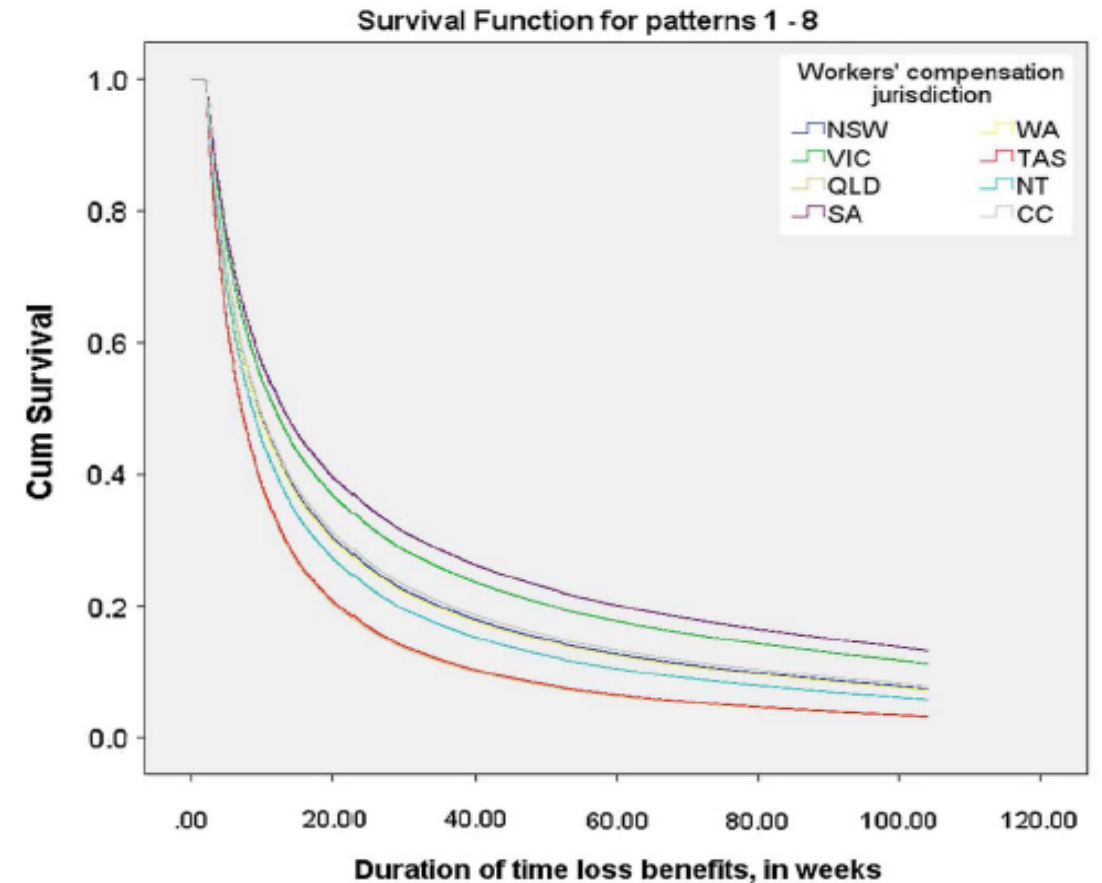


Figure 1 Adjusted survival plots for duration of time loss (weeks) by jurisdiction.

- We reviewed all amendments to workers' compensation legislation passed by an Act of parliament.
- Time period 2004 and 2015. Excluded regulation and legislation in related areas (e.g., OHS).
- Total of 60 changes. Minimum of 5 per jurisdiction. Some years with greater activity than others.

Jurisdiction	N
CTH	7
NSW	6
VIC	8
QLD	7
WA	5
SA	6
TAS	6
NT	7
ACT	8
Total	60

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

Thank you!

Please feel free to make contact
with our research group or view our
website.



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