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Return to Work After Work Injury: A Comparative Policy Effectiveness Study

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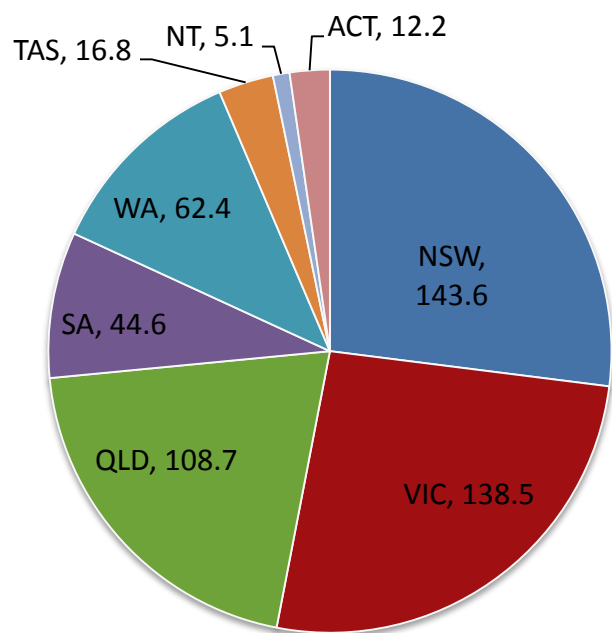
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 - Workcover WA
 - ReturnToWork SA
 - NT WorkSafe
 - ACT government

Work Injury Globally

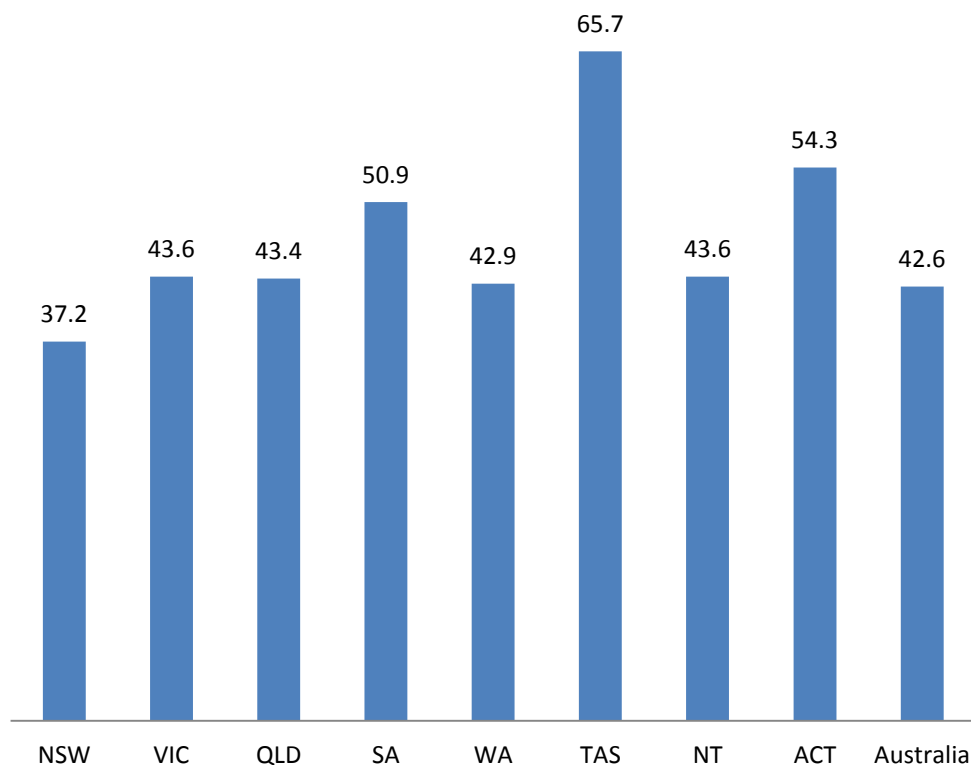
- 2.3 million work-related deaths annually
- 313 million work-related accidents annually
- Every 15 minutes:
 - 1 worker dies
 - 153 have accidents
- www.ilo.org (International Labour Organisation)

Work Injury in Australia – 2013/14



N injured workers ('000)

Rate of work-related injury per 1000 persons



Work Injury in Australia

- Common work-related conditions (back pain, MSK, neck pain) are 3 of the 5 leading causes of disability.
- Among working age people, these conditions create the greatest burden of disability.
- Est 532,000 work related injuries in 2013/14 (one per minute).
- Work-related injury impacts:
 - physical and mental health
 - workplace productivity
 - family and social relationships
 - economic security of the worker
 - potential for intergenerational effects of long-term worklessness
- Efficient and effective return to work policy is very important for society.

Workers' Compensation in Australia

- 10 major systems (6 State, 2 Territory, 2 Commonwealth)
- Common objectives
 - Return to work
 - Financial sustainability
- Common funding model:
 - Funded by employer premiums
 - Insurance model seeks to balance cost to society with benefits
- But, substantial differences in how the schemes seek to achieve their objectives:
 - System design
 - Macro to micro level policy and practice
- A natural experiment (?!)

Compensation Policy And Return to Work Effectiveness (ComPARE) Study

- Research questions
 - Does compensation system policy and practice have an impact on RTW outcomes?
 - If so, what are effective and ineffective policy and practice settings?
- Comparative effectiveness study



Study data

- Primary dataset (used for most analyses)
 - National dataset of compensation based statistics
 - ~3.54 million claims over a 10 year period 2003/4 to 2012/13
- Secondary datasets (used for some analyses)
 - Australian Bureau of Statistics Work Related Injury Survey 2013/14
 - SafeWork Australia National RTW Survey
 - Victorian Compensation Research Database (WorkSafe Victoria only)
- Future dataset (to be established)
 - National Comparable Claims Database (multiple Australian jurisdictions)

Can we use the NDS to examine RTW
outcomes?

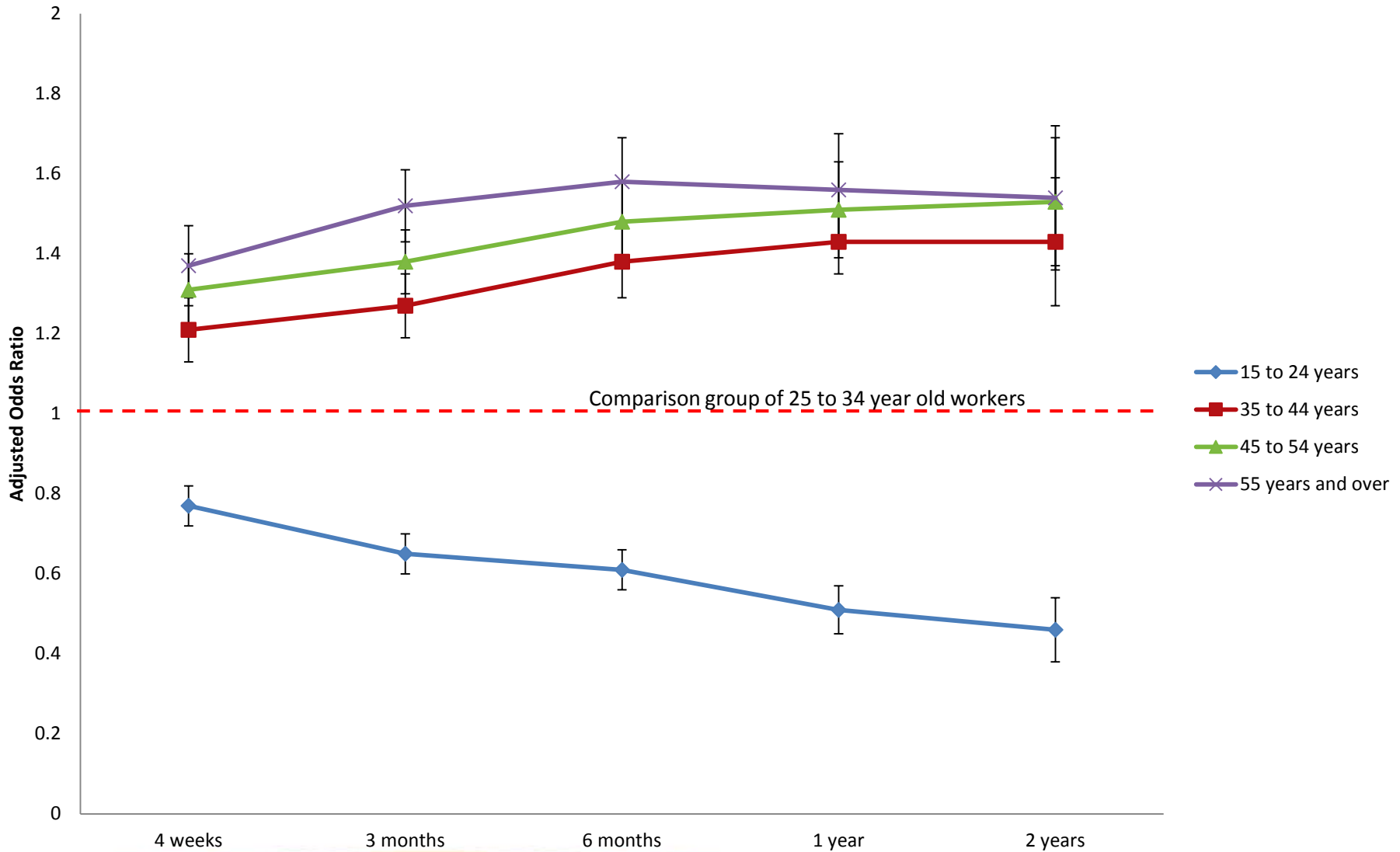
A note on measuring RTW

- There are many potential RTW outcomes measures across 3 broad categories:
 - Self-report / survey
 - Administrative data / benefit payments
 - Work function / Work-ability
- None are perfect
- Cumulative duration of time loss considered best RTW estimate when data source is administrative / claims data (Krause et al, 1999).

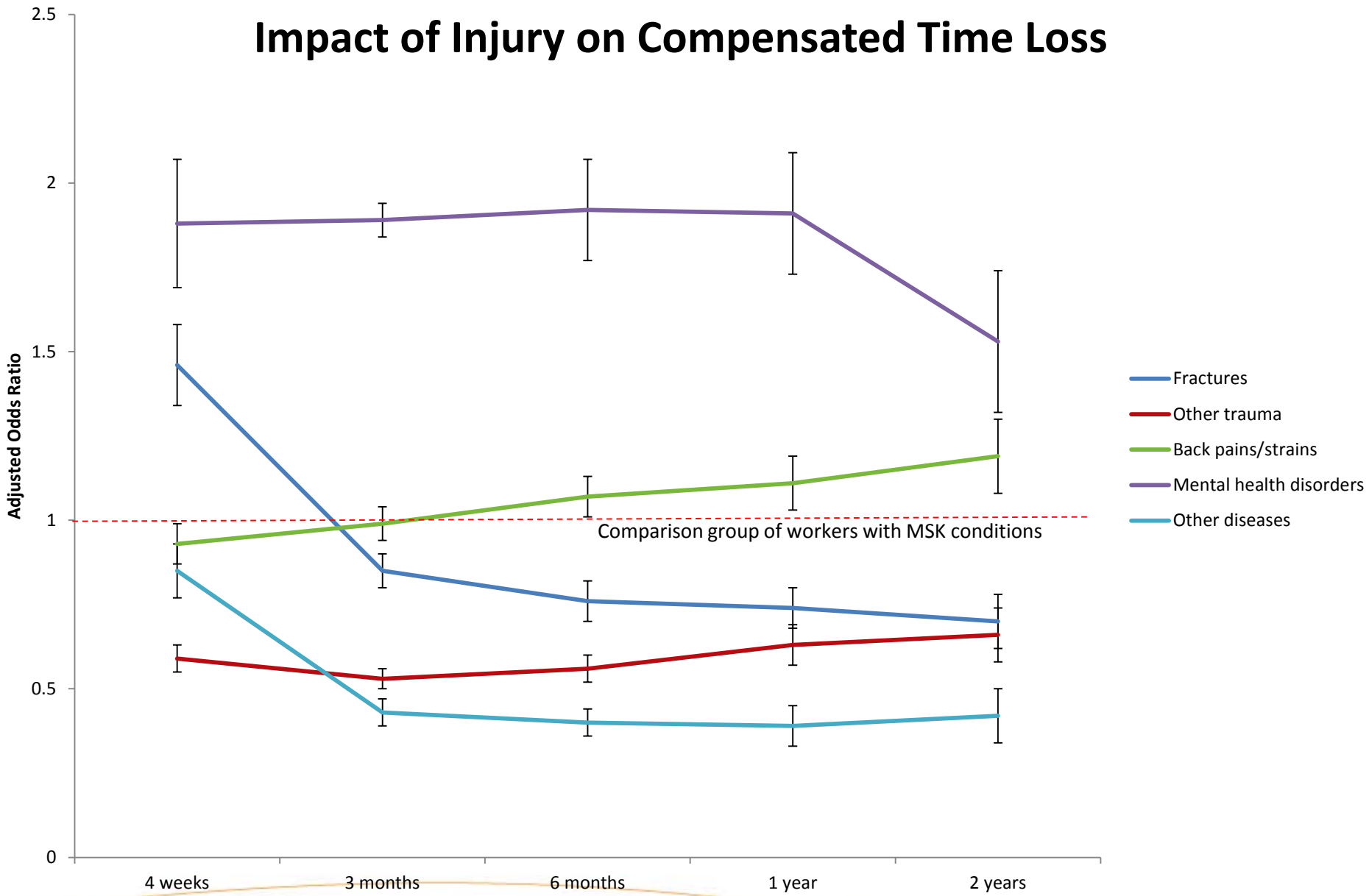
Cumulative time lost

- National Dataset of Compensation based Statistics (NDS) includes measures of:
 - Number of hours income compensation paid in follow-up period
 - Number of hours normally worked prior to injury
- Outcome = cumulative compensated weekly time loss = $\frac{N \text{ hours paid}}{N \text{ hours normally worked}}$

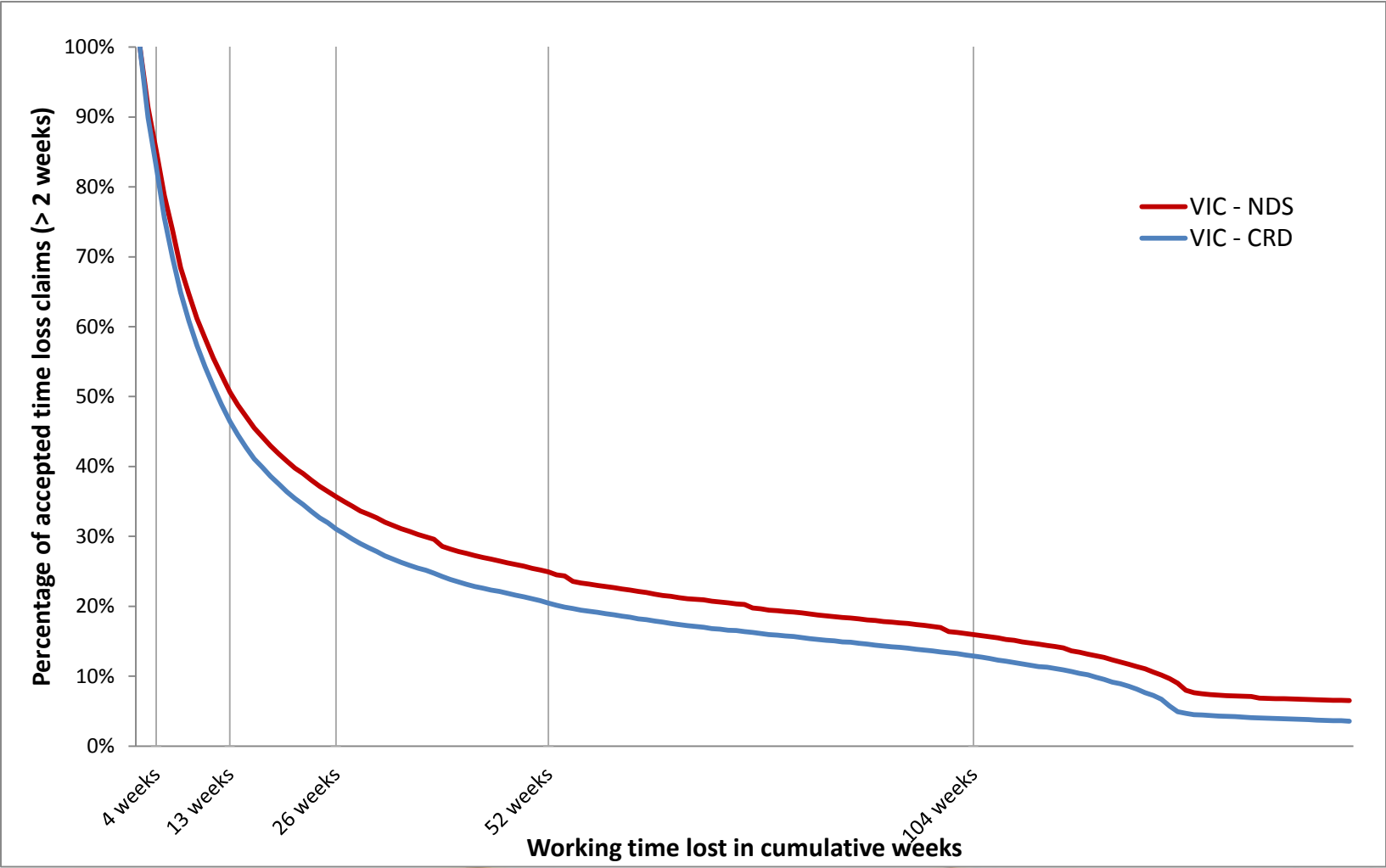
Impact of Age on Compensated Time Loss



Impact of Injury on Compensated Time Loss



VIC recovery curve using 2 different data sources

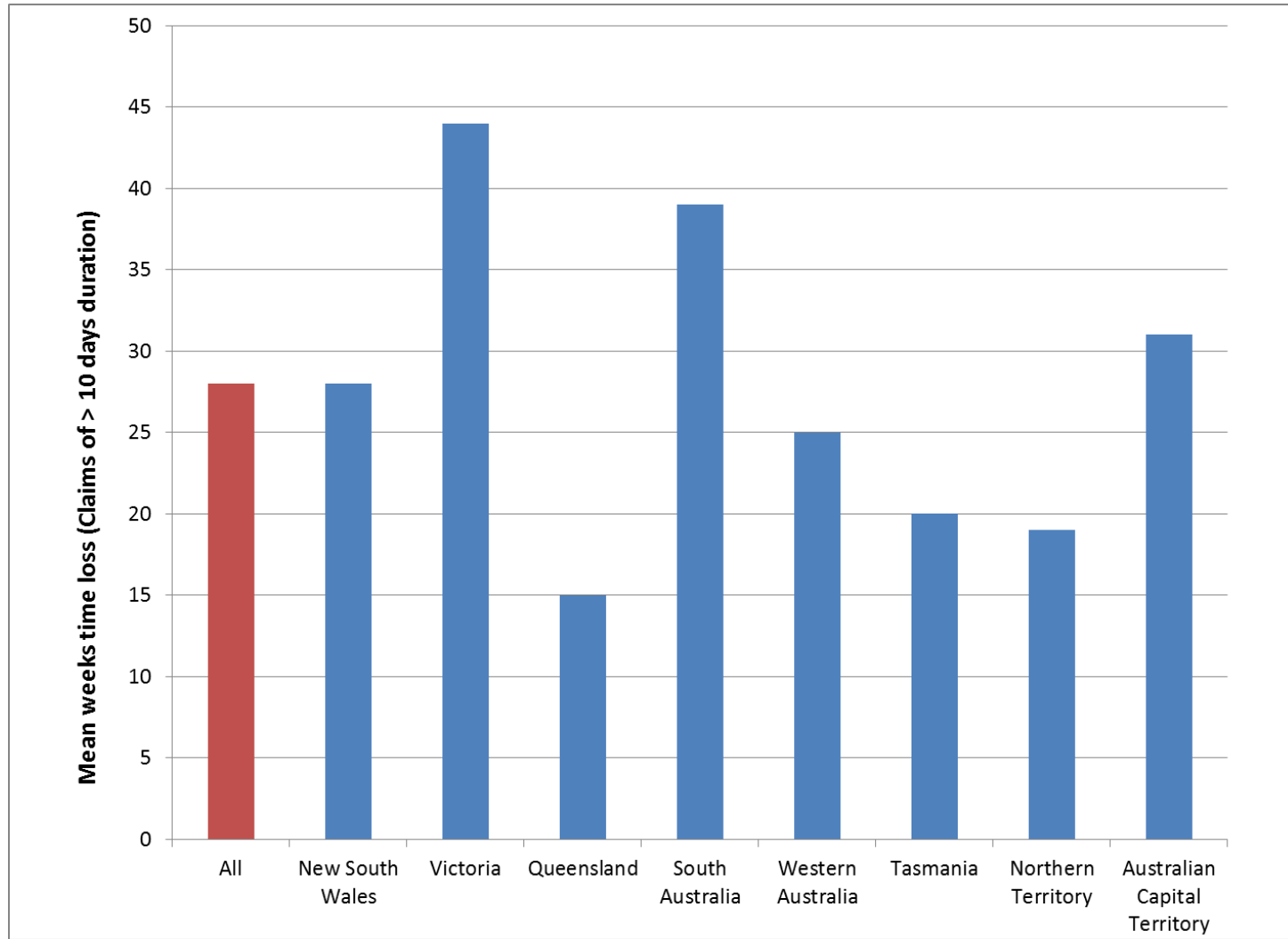


Summary

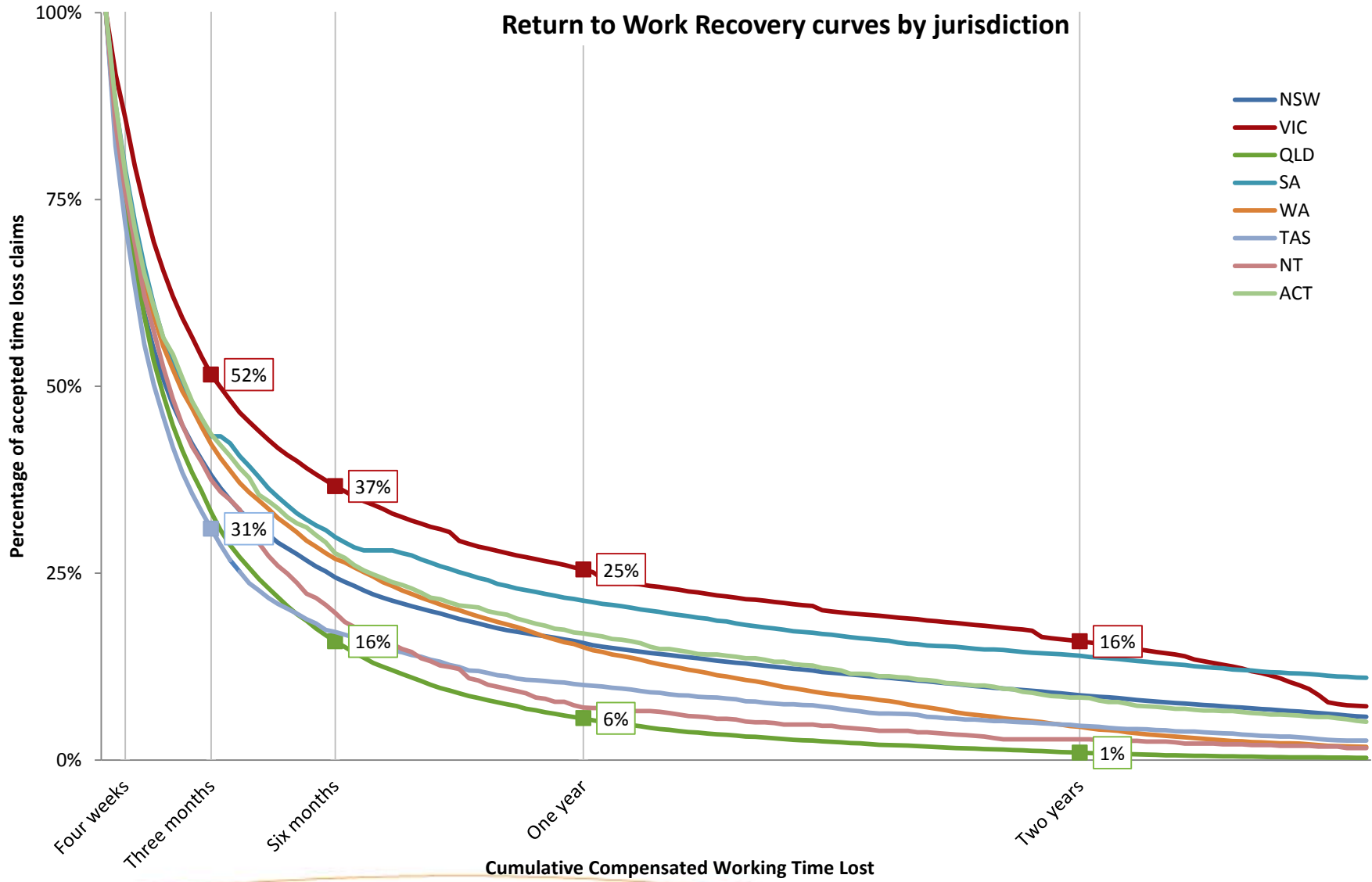
- The NDS is a valid dataset for evaluating compensated time loss.
- We can use the NDS for the next phase of analyses.

Does workers' compensation scheme design
and management have an impact on RTW
outcomes?

Mean Time Loss by Jurisdiction

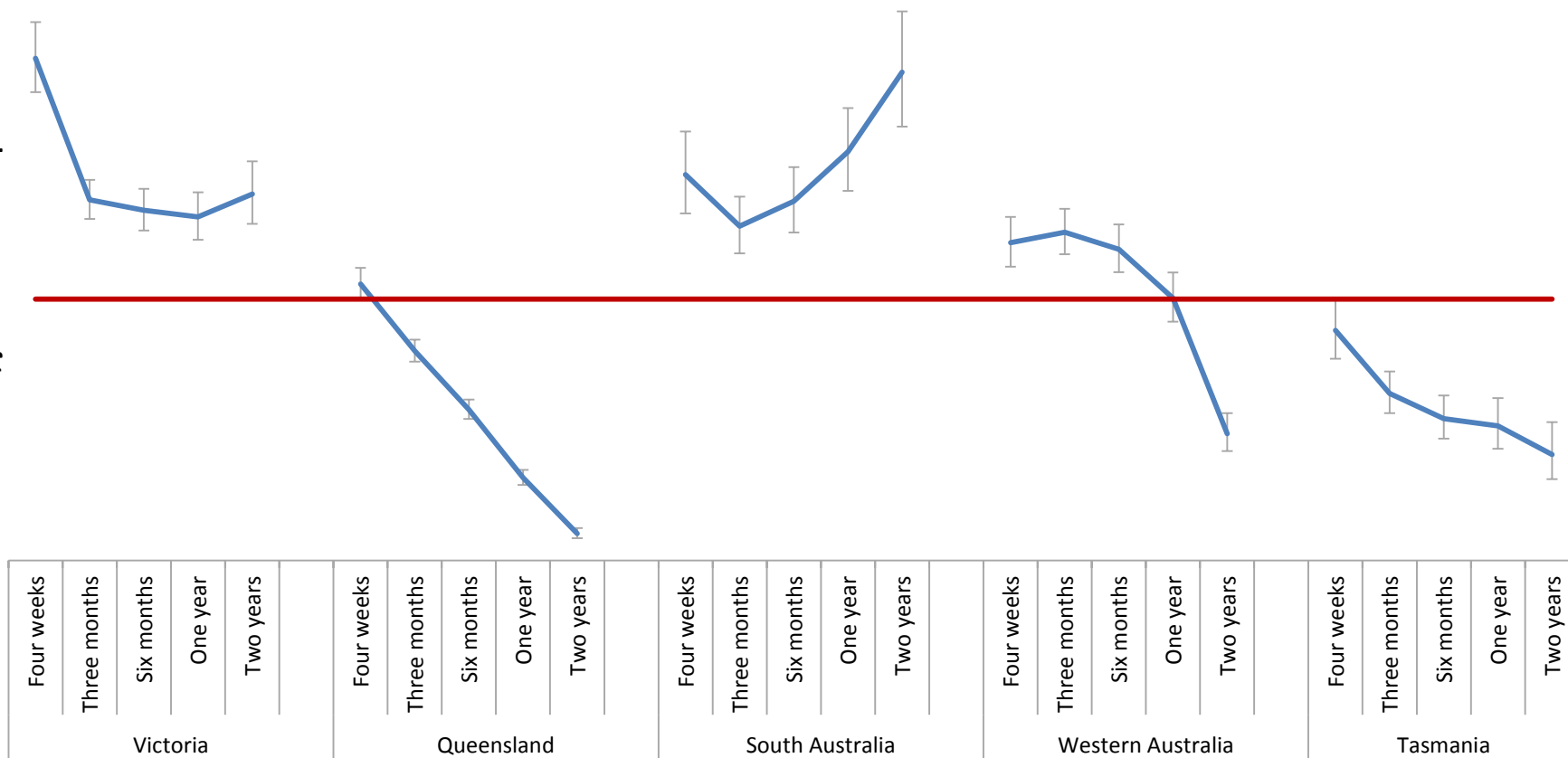


Return to Work Recovery curves by jurisdiction



Adjusted Odds Ratio (99% CI), working time lost by jurisdiction

Odds Ratio, jurisdictions compared to New South Wales

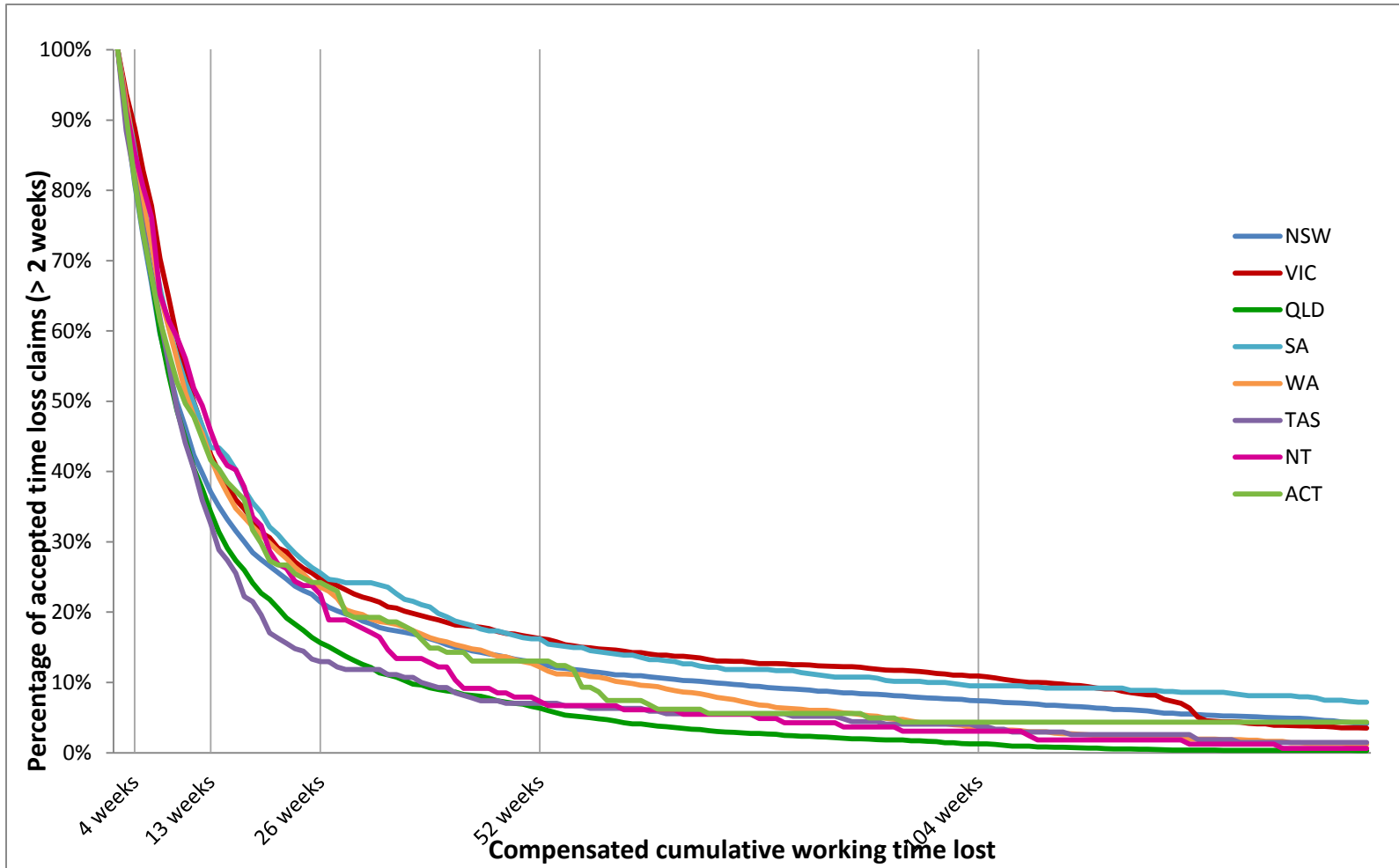


Summary of regression analyses

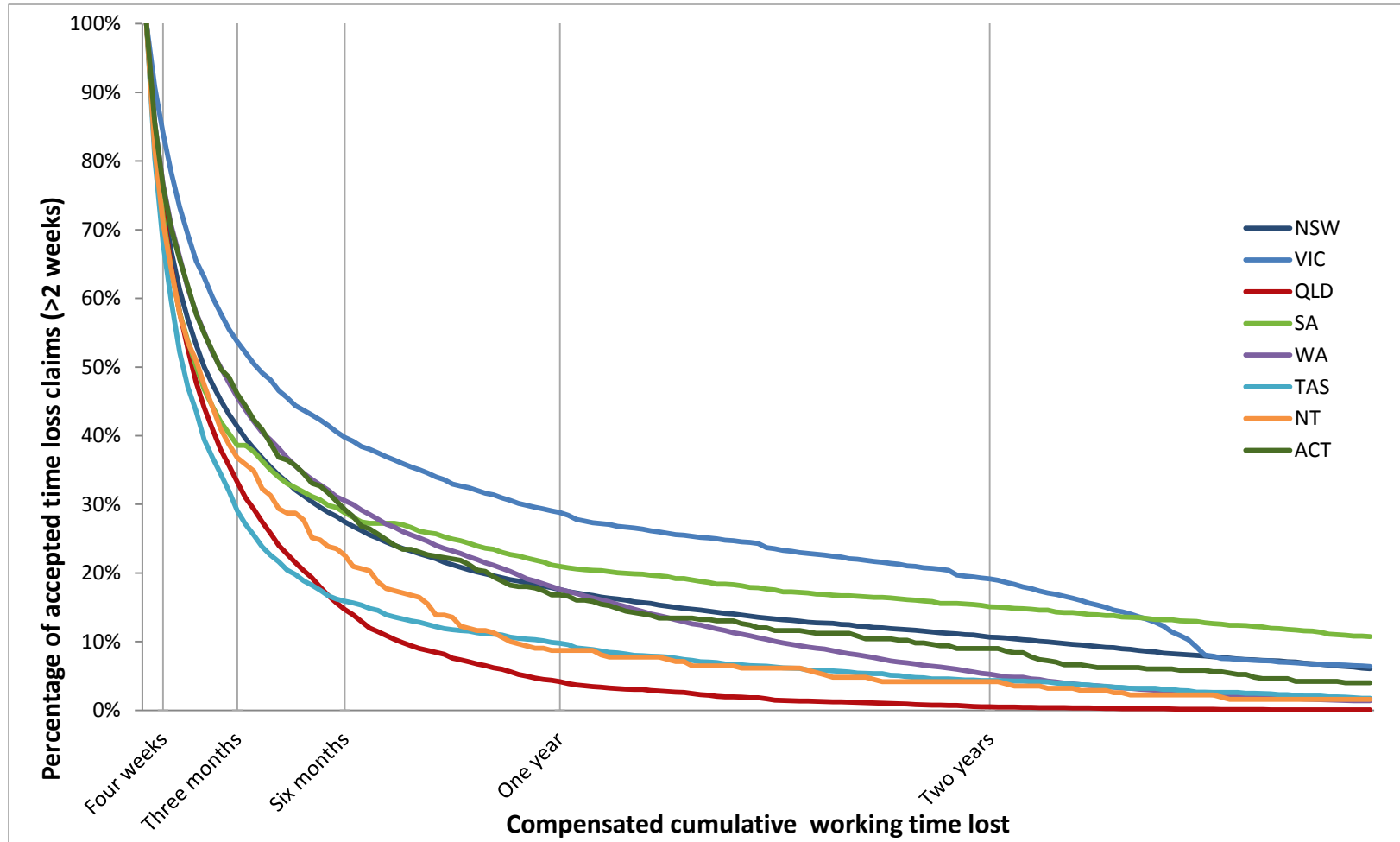
- After adjusting for age, gender, injury type, occupation, industry, socio-economic status, remoteness and work status (part or full time).....
- State or territory of claim had a significant impact on duration of compensated time loss.
- The magnitude of this effect was as large or larger than that associated with other factors.
- The effect appeared to become stronger in longer duration claims.
- Scheme design and management (policy and practice) have a major impact on time loss duration / RTW.

Are jurisdictional effects consistent across
worker cohorts?

Fractures



Mental health conditions



Conclusions

- There are highly significant differences in compensated time away from work between Australian workers' compensation jurisdictions; and
- These differences appear to be a result of scheme design and management (policy & practice)
 - The differences remain after taking into account the impact of other factors known to influence duration of time loss.
- The magnitude of the effect is as or more substantial as that associated with factors commonly considered to result in longer duration compensation claims (e.g., mental health claims).

Implications

- Some factors affecting duration of time loss are not modifiable or are very difficult to modify
 - age, gender, injury type, social circumstances of injured person
- Scheme design and management are modifiable AND have a large impact on duration of time off work.
- Changing scheme policy and practice is the best option for improving RTW outcomes.
- Next step = determine which macro level policy settings are important for RTW outcomes.



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