



Institute of Actuaries of Australia

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Development of a Standardised Measure of Return-to-Work in Workers' Compensation

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Overview

- Introduction
- History of measuring Return to Work (RTW)
- Defining full recovery and Time to Stable Health (TTSH)
- The ideal TTSH measure
- Data sources and modelling
- Anticipated challenges

Introduction

- No standard measure exists – Affects quality of decision-making and policy setting
- Need for a standard. Long overdue
- TTSH :
 - Measures claimant's recovery, not just RTW outcome
 - Consistent across schemes → Standardisation
- Provide different angle to analysing data
- A discussion of ideas → awaiting data

History of measuring RTW

- Duration of work disability :
 - Measuring first RTW until Butler et al (1995)
 - Supplementation of data using claimant surveys
- Durable RTW :
 - Focuses on continuous employment post-RTW
 - Key challenge is to adopt standard definition

Development towards measuring recovery

- Recognition of the need to capture stakeholder (government, insurers, rehabilitation providers and general public) benefits (Melles et al, 1995)
- Social and emotional costs
- Lifestyle outcomes (health, social and mental)

The Australian & NZ RTW Monitor

- Published annually by Campbell Research
- Bi-annual survey on claimants across all state schemes and the NZ scheme
- Uses DRTW and considers post-RTW employer and duties
- Covers some psychosocial factors
- Simple analysis and easy-to-interpret results
- Not perfect but provides good starting point

RTW does not tell the full story

- Recent studies point to work status being a poor indicator of success
- Some incorporate outcomes besides claimant's work status
- Diversity of outcome definitions hinder analysis and comparison across schemes

Defining full recovery

- Resuming of duties at original capacity
- No further relapses of injury
- Physical, mental and social well-being
- Measuring time to claimant achieving stable health → TTSH

Difficulties in measuring TTSH

- Censoring. Claimants still off work or working while still recovering
- Relapses of injuries do occur
- Partial work capacity or change of job duties
- Health and lifestyle factors
- No standard exists in analysing claims :
 - Varying sampling and exclusion criteria
 - Non-uniform approach to implementing surveys

The ideal TTSH measure

- Practical :
 - Data can be collected
 - Focuses on social costs as well as claims cost
- Incorporates important features :
 - Stability of RTW
 - Post RTW work capacity and employer
- Comparable over time, across schemes, medical factors and interventions
- Enables more effective government policy setting

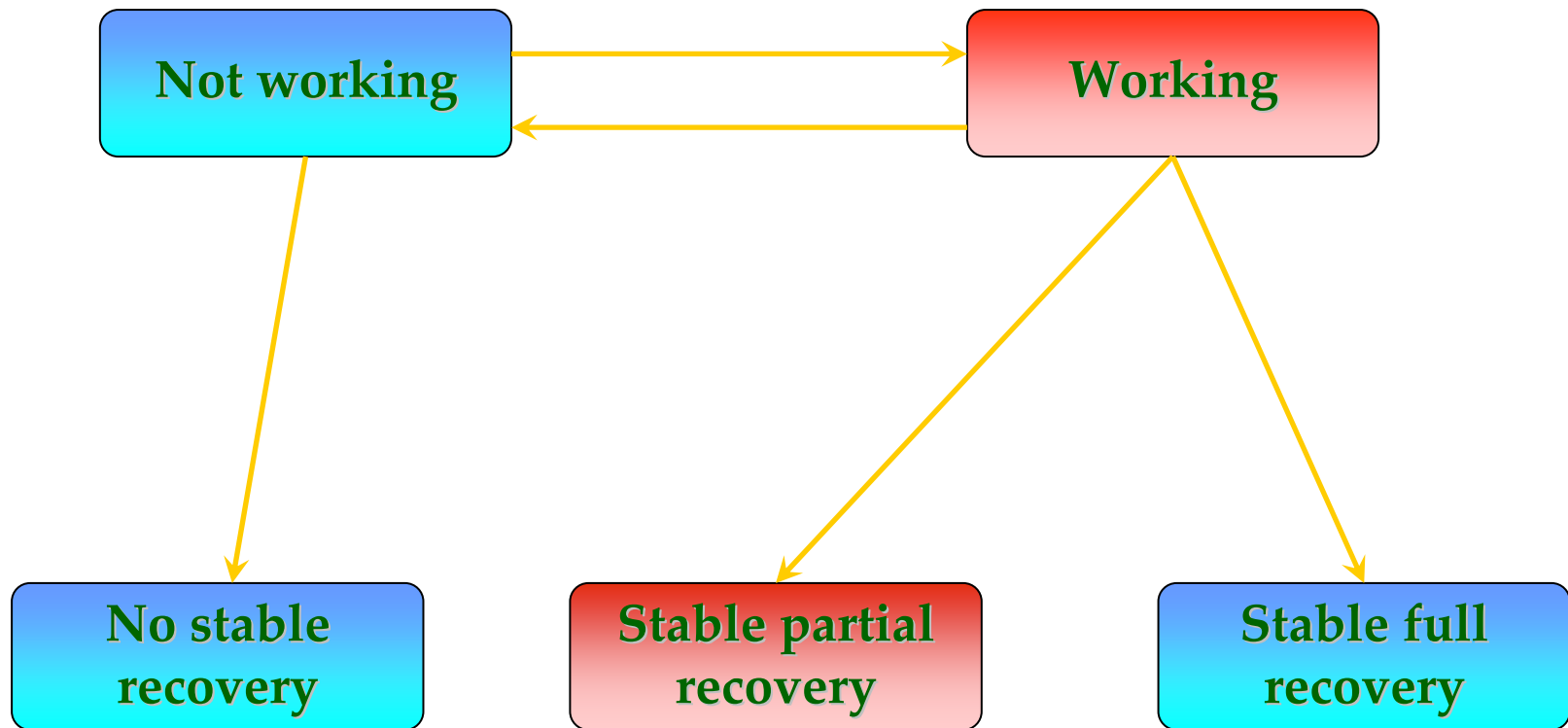
Operationalising the ideal TTSH measure

- Stability of RTW outcome based on level of benefits and medical status
- Ordinal measure for partial RTW
- Psychosocial factors :
 - Myriad factors and surveying instruments
 - Further review required
- Standardisation:
 - Group claimants by age, gender, injury type, etc.
 - Adjust outcome measures by group

Data sources

- Combination of claims data with surveys
- Claimant surveys focus on functional capacity and lifestyle/health outcomes
- Employer payroll data for dates of absences?

Possible model



Modelling

- Multiple state survival model
- 3 final/stable recovery outcomes :
 - Full recovery, partial recovery and no recovery
- Temporary recovery treated as “Working”
- “Working” and “Stable partial recovery” are not single states
- Accounts for full RTW history
- Parameters fitted using regression models

TTSH measure

- Measures extent of recovery and the time taken to achieve it
- Recovery level is a ranked outcomes index
- Claimant's outcome is ranked against claimants with similar characteristics
- Calculate ranked outcome for each significant characteristic
- Comparable across schemes, industries and injury types

Anticipated challenges

- Data reliability and relevance :
 - Claims data incomplete → limited information
 - Survey data can be unreliable and error-prone
- Comparison across schemes :
 - Standardising coding and outcome measures
 - Adjusting for different legislation
 - Difficult!!
- Accuracy and practicality tradeoff
- Psychosocial factors → Medical experts?

Comments and questions