



# **Estimates for Rehabilitation Liabilities: Points to Consider**

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## This presentation will cover

- Overview of NZ's accident compensation scheme
- Factors considered when making actuarial estimates of liability for rehabilitation costs:
  - Serious (i.e. catastrophic) Injury Social Rehabilitation
  - Vocational Rehabilitation



# Overview of New Zealand's accident compensation scheme

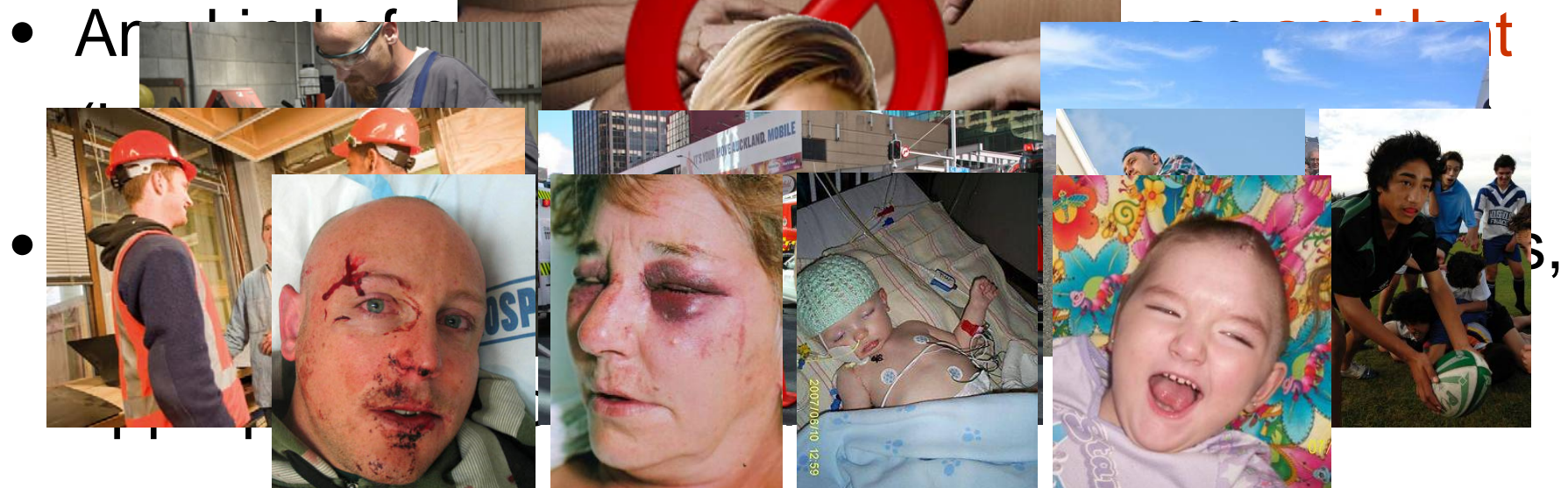


Te Kaporeihana Āwhina Hunga Whara



# NZ's accident compensation scheme

- No fault
- Everyone in New Zealand is covered, including on-workers, & tourists





# 12th Accident Compensation Seminar 2009

Rising to the Challenge

Melbourne 22nd – 24th November 2009



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36% of liabilities for rehabilitation

Rehabilitation & recovery

Lifetime support

Short term

Long term

Lifetime

Sprains & strains  
Cuts & bruises  
Broken bones



Back strain  
Multiple injuries  
Persistent pain



Traumatic brain injury  
Spinal cord injury  
Multiple amputations  
Severe burns





## What is provided

- Medical treatment and therapy
- Weekly Compensation
- Lump Sum
- Vocational Rehabilitation
- Social Rehabilitation





# Social Rehabilitation for Serious Injury Clients



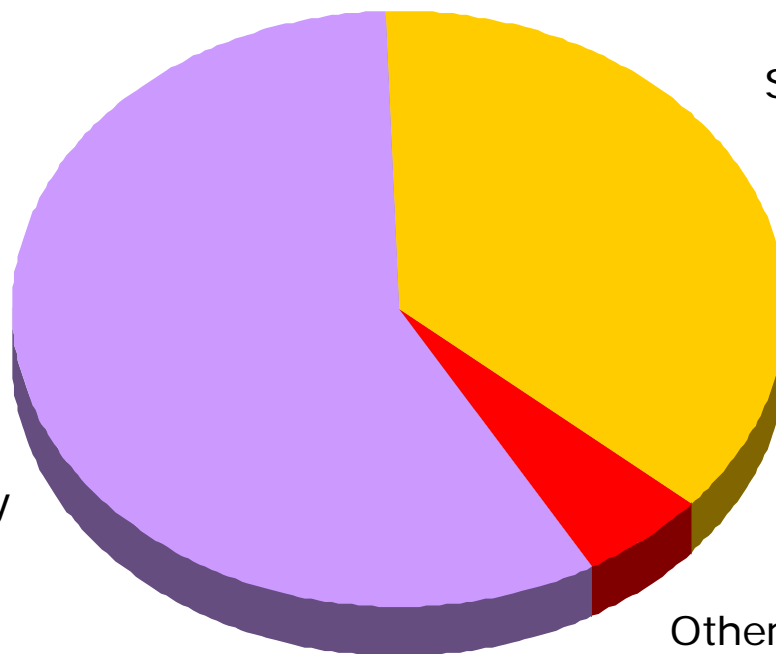




## Serious injury clients



Severe &  
moderate  
brain injury  
58%



Spinal cord  
injury  
37%



Other  
5%

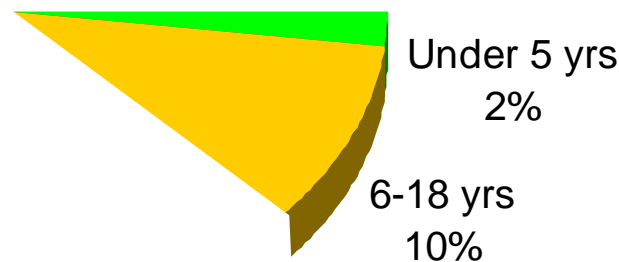






## Serious injury clients

Will get social rehabilitation support  
for many, many years





# Types of social rehabilitation benefits

- Non-capital:
  - Personal support (attendant care, home help and child care)
  - Residential support
  - Education support
  - Training for independence
  - Consumables





# Types of social rehabilitation benefits

- Capital:
  - Aids and appliances
  - Housing modifications
  - Vehicle purchase and modifications





# Uncertainty in key assumptions

- Future growth in payment per claim:
  - Hours of care
  - Types of providers
  - Care rates
  - Costs and timings of housing modifications
  - Costs and timings of vehicle purchases and modifications





## Case study 1: Jason

- Current situation
  - Jason, a 6-month baby, suffered severe brain injury after being shaken by his stepfather
  - Jason currently lives with his 73 year old grandfather Bill
  - ACC not paying for any attendant care because Jason's needs are the same as any 6-month old baby





## Case study 1: Jason *continued...*

- Future:
  - Jason's hours of attendant care will need to increase at around 2 years
  - Attendant care hours will decrease when he goes to school & gets teacher aide
  - Care hours will continue to change as he goes through different stages of his life
  - Likely to receive supported living training that may reduce hours of care





## Hours of care

- Number of hours of attendant care per client:
  - Hours of care is not static.
    - Individual client needs for attendant care vary as they pass through different life stages (e.g. adolescence) or their circumstances change
    - Assistance from SI case managers to predict hours
    - Results of further analysis to help predict hours
  - Introducing initiatives to replace hours of care:
    - Supported Living
    - Assistance Dogs
    - Supported Employment
    - (But can only allow for reduction in hours in projections if supported by evidence)





## Hours of care *continued...*

- Number of hours of attendant care per client:
  - Are we providing appropriate hours of care?
    - Use FIM score and spinal cord guideline to provide benchmark hours of care
    - To identify over- and under-servicing
    - Aim is to provide appropriate hours
      - Timing and amount reduced uncertain
      - Will work closely with case managers to monitor hours
      - To date, have achieved some success in reducing hours of care





## Case study 1: Jason *continued...*

- Future:
  - Jason's hours of attendant care will need to increase at around 2 years
  - Attendant care hours will decrease when he goes to school & gets teacher aide
  - Care hours will continue to change as he goes through different stages of his life
  - Likely to receive supported living training that may reduce hours of care
  - Bill may not be able to provide care in the future due to ageing or poor health - care most likely to be provided by agency





## Types of providers

- Two types of personal care providers:
  - Contracted providers (more expensive)
  - Informal providers
    - Family members (yes, we pay family members to provide attendant care)
    - Private carers (friends, extended family, privately arranged care givers)



## Types of providers *continued...*

- Difficult to predict the mix of types of providers
  - Mix of providers has big impact on care costs
  - Young clients – more likely to be cared for by family members
  - As they grow older, expected to move to agency care, especially if they move out of the family home
  - However, ACC payments could be the primary source of income so family may want the client to continue to live at home
  - Ageing of care providers may have an impact on mix of providers
  - Other changes may affect the mix, eg implementation of withholding tax



## Care rates

- Factors affecting future growth in care rates
  - ACC is a minority purchaser of home support services (Ministry of Health is a much bigger purchaser & sets the price)
  - Ministry of Health depends on funding from Government, and takes into account price pressure from providers – over the long term should move with Future Funding Track (FFT)
    - FFT - about 35% CPI and 65% LCI
  - Supply and demand of care providers – including aging of providers
  - Informal care providers – based on minimum wage
    - Use same growth rate as for contracted providers





## Case study 2: John

- Background

- Injured when 15 years old in motor vehicle crash, paraplegic plus mild brain injury
- Now aged 21, has full-time job at auto parts warehouse (30 hrs/week), lives in rented accessible apartment
- Wants to buy own home & live with his girlfriend, current employer is moving premises (adding a further 12 kms to current commute)





## Case study 2: John *continued...*

- Housing & transport needs
  - Past:
    - Family home was modified to accommodate wheelchair – widening of hall-way, ramp, shower rail, bed hoist, wheelchair
    - Travelled to school in family car
  - Currently:
    - Rented accessible apartment - no modifications needed
    - Uses mobility taxi for commuting to work (paid by ACC)





## Case study 2: John *continued...*

- Housing & transport needs
  - Future:
    - If move into own home when he starts a family, ACC will provide modifications to his home (again)
    - If family expands, may move house, so need more housing modifications
    - Self-drive vehicle as alternative to mobility taxis
    - Equipment: power chair to replace manual chair as John reaches his 40s to avoid further deterioration in arm joints





## Housing modifications

- Housing modifications to assist client to live as independently as practicable
- Extent of modifications depends on
  - Type of house living in and conditions of clients
    - needs wheelchair and lives in a 2 storey house
- Frequency of modifications depend on frequency of moving house
  - No contribution from clients in subsequent modifications





# Vehicle purchase & modifications

- Types of vehicles depends
  - Self-drive or not
  - If not self-drive, front seat passenger or not





## Summary

- Need assumptions for:
  - Hours of care
  - Mix of types of providers
  - Care rates
  - Costs and timings of housing modifications
  - Costs and timings of vehicle purchases and modifications

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## Vocational Rehabilitation





## Client mix

### Rehabilitation & recovery

### Lifetime support

#### Short term

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Cuts & bruises  
Broken bones



#### Long term

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#### Lifetime

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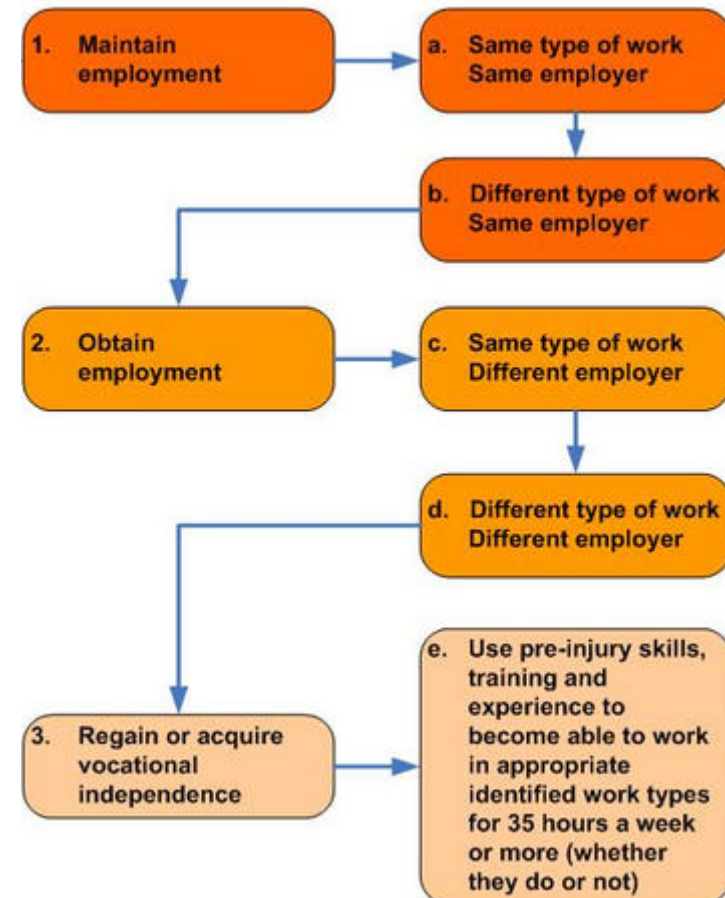






# Why provide vocational rehabilitation?

- Restore client to pre-injury employment status
- Reduce time receiving weekly compensation payments





# Uncertainty around key assumptions

- Legislation history
- Market maturity
- Operational processes
- Impact of new initiatives
- Historical payments trends



## Legislation



- IPRC Act 2001 specifies:
  - Vocational rehabilitation = provision of activities or equipment that assist in the maintaining or obtaining of employment
  - Assistance must be cost-effective (capped at 3 years initially) & likely to reduce costs of entitlements
  - Independent medical, occupational, and vocational independence assessments required



## Legislation



- Subsequent amendments in 2008:
  - Vocational independence: must consider level of earnings pre-injury in decision process *(optional under the 2009 amendment)*
  - 3-year cap on assistance removed (at ACC's discretion)
  - Eligibility extended to those receiving National Superannuation





## Market maturation

- Legislation → changes require new skills in the market nationwide
- Service providers paid for number of services provided → less emphasis on outcomes
- Small size & immaturity of NZ market → proliferation of providers for different services



## Current operational process

- **Uncertainties:**

- Will costs be incurred at every step, for all clients?
- If not, when does vocational rehabilitation stop?
- Do any steps get repeated?
- Rates paid to different providers at each step

The current vocational rehabilitation process has the following steps:

1. Gather information, set outcome expectations, assess current & future needs
2. Arrange for a workplace assessment
3. Review workplace assessment
4. Arrange Graduated Return to Work (GRTW) - if alternative duties available
5. Arrange Employment Maintenance Programme (EMP) if no alternative duties available, fit for selected work
6. Receive report & monitor
7. Determine if client has returned to pre-injury employment
8. Arrange Initial Occupational Assessment (IOA)
9. Receive IOA report
10. Arrange functional capacity evaluation
11. Arrange Initial Medical Assessment (IMA)
12. Decide if client to return to identified work
13. Arrange work preparation programme
14. Arrange work ready programme
15. Review report
16. Review support required



## Impact of new initiatives

- **Uncertainties:**

- How will this change costs of providing vocational rehabilitation?
- How will this change other costs such as weekly compensation?

### **New service delivery model**

- Holistic – one provider delivers

### **Triage**

- Early identification of clients at high risk of difficult RTW

### **Stay at work**

### **Obtain employment**

- Specific focus on obtaining permanent full-time employment
- One provider delivers all services

### **Job subsidies**

- Last resort after all other options exhausted
- For permanent work only
- Capped at 50% of weekly wage or \$380/week



## Example: Impacts of Previous Changes

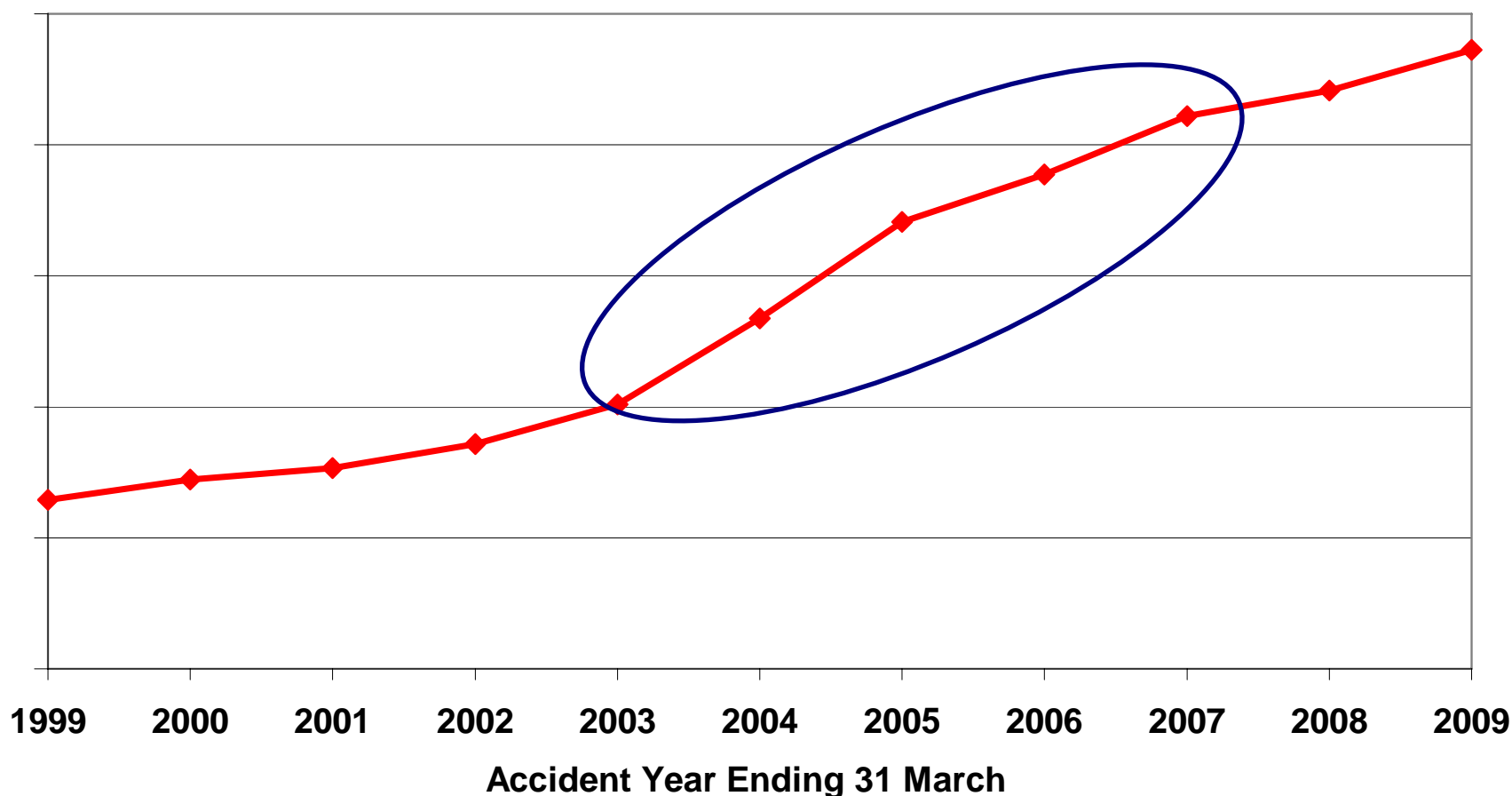
- Legislative
- Market Maturity
- Operational
- How have these impacted on vocational rehabilitation costs?
- .....weekly compensation costs?





## Historical payments trends

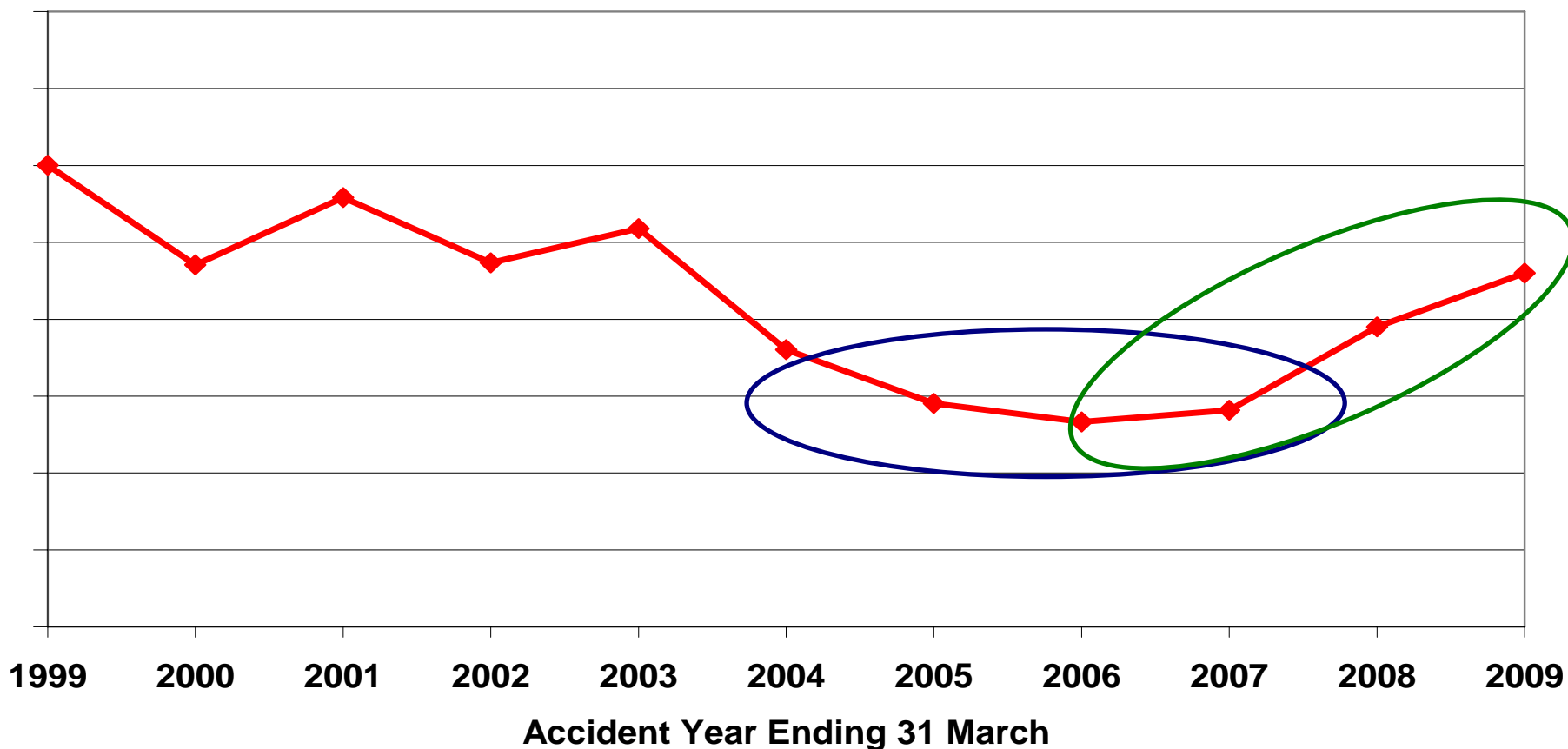
Proportion of clients on Weekly Compensation receiving Vocational Rehabilitation





# Historical payments trends

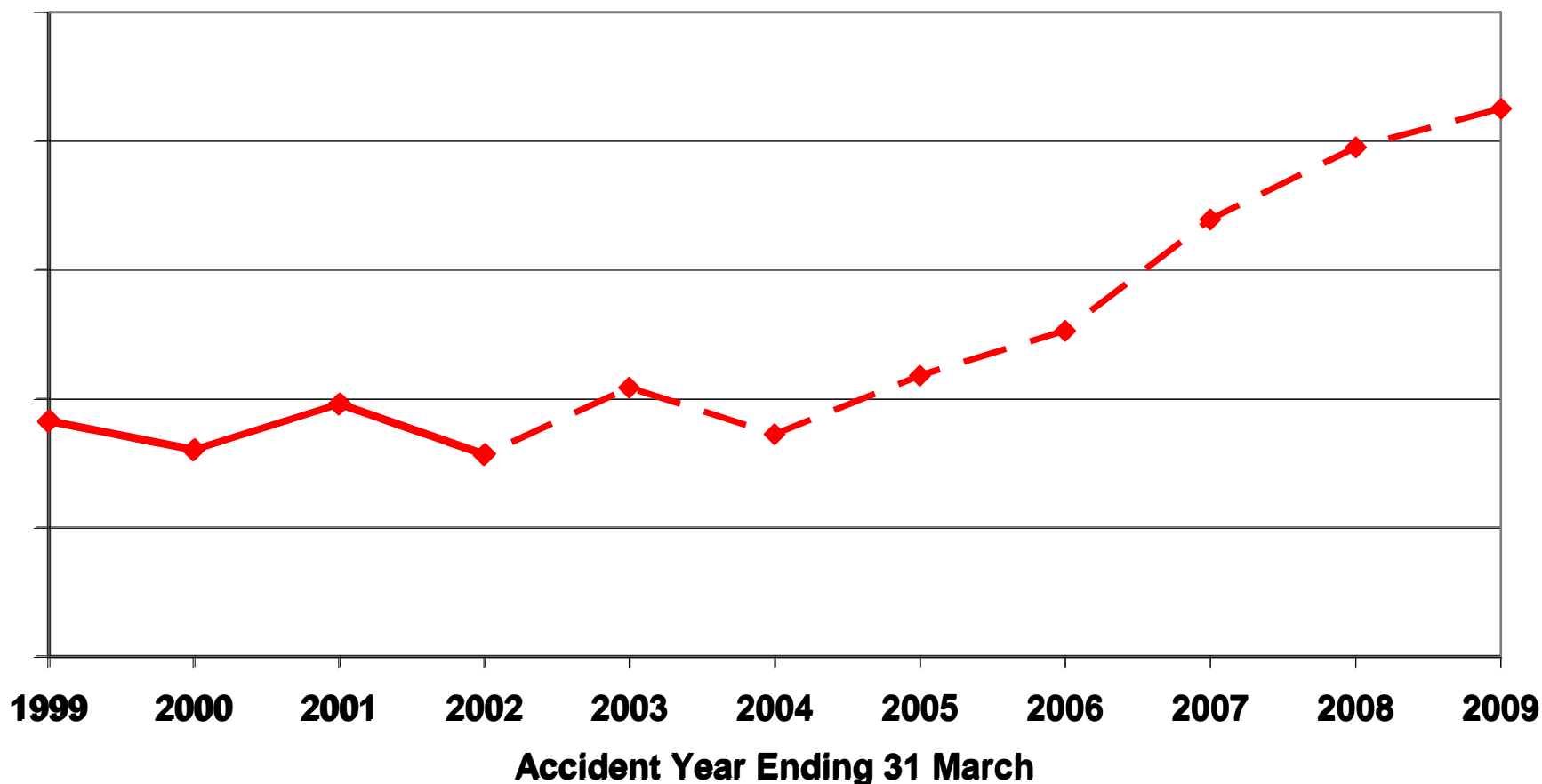
## Estimated Average Vocational Rehabilitation Cost per Claim





# Historical payments trends

**Estimated Average Weekly Compensation Cost per Claim**





## Summary

- Estimating liabilities for rehabilitation services
  - Complex
  - Subject to uncertainties arising from:
    - Long duration of some claims
    - Legislative changes
    - Operational changes
- Past experience less reliable guide to setting assumptions

