

# Change • Challenge • Opportunity

## Injury & Disability Schemes Seminar

---



12 - 14 November 2017 • Sofitel • Brisbane





# Who Am I?

The next evolution of client risk identification and segmentation at the TAC

David Gifford & Cassie Citroen



# Outline

/ Strategic Context

/ Longitudinal Study

/ What's Next



# Outline

/ Strategic Context

/ Longitudinal Study

/ What's Next

# The Transport Accident Commission

- / Victoria's state owned, monopoly Compulsory Third party insurer
- / No fault treatment, support and compensation benefits
- / Common Law damages for those not at fault with a “serious injury”
- / Significant role in accident prevention
- / Approximately 18,000 claims per year



# TAC Strategic Framework

WHY?

**Our Vision**

Zero deaths & serious injuries on our roads

**Our Mission**

To be the world's leading social insurer

WHAT?

**OUTCOMES**

Towards Zero

Clients' Lives Back on Track

TOWARDS  
ZERO

RAPID  
RECOVERY

SUPPORTED  
RECOVERY

INDEPENDENCE

PEOPLE

*Strategic Objectives*

HOW?

**Approach  
Measurement  
Values**

We value life

We make every conversation count

We will find a better way, today

We make the complicated simple



1%

> Independence

**Independence clients** sustain catastrophic injuries and have a life long relationship with the TAC. They require tailored support to get their lives back on track.

19%

> Supported  
Recovery

The TAC have a group of **Recovery clients** who we know have more complex needs and are likely to benefit from active engagement and support.

80%

> Rapid Recovery

The majority of **Recovery clients** have needs which are generally simple and transactional. Most claims are low cost and short duration - with just over 50% of clients entering and exiting the scheme within 3 months.



# The 3 groups are very different

	CLAIMS PER YEAR*	ANNUAL CLAIMS COST*	LIABILITY*	AVERAGE CLAIM \$	RISKS AND OPPORTUNITIES
Independence <b>1%</b>	150	\$248m (28%)	<b>\$7.7bn</b> (73%)	<b>\$2.25m</b>	<ul style="list-style-type: none"><li>• Disability providers</li><li>• NDIS</li><li>• NIIIS</li></ul>
Supported Recovery <b>19%</b>	2,650	<b>\$547m</b> (62%)	\$2.8bn (27%)	\$175k	<ul style="list-style-type: none"><li>• Common Law</li><li>• Mental Health/ Persistant Pain</li><li>• Other complexities</li></ul>
Rapid Recovery <b>80%</b>	<b>12,700</b>	\$83m (9%)	\$0.05bn (<1%)	\$7k	<ul style="list-style-type: none"><li>• Efficient service</li><li>• No touch/low touch</li><li>• Automated/digital</li></ul>
	15,500	\$878m	\$10.7bn	\$60k	





## Supported Recovery clients have more interactions and lower LBoT scores

AT 12 MONTHS POST ACCIDENT	SUPPORTED RECOVERY		RAPID RECOVERY
Services .....	196	>	28
Phone Calls .....	25	>	5
Exceptions .....	46	>	5
Some level of pain .....	82%	>	43%
Mental Health issues .....	36%	>	19%
Cognitive Difficulties .....	43%	>	27%
Solicitor Engagement .....	27%	>	7%
Mean satisfaction with the TAC (/10) .....	8.23		8.45
Life back on track (/10) .....	6.50		8.25



# Corporate Measurement Framework.

## Outcomes

### TOWARDS ZERO

- Lives Lost
- Serious Injuries

### CLIENTS' LIVES BACK ON TRACK

- Client Health & Independence Outcomes
- Client Experience & Service

## Sustainability

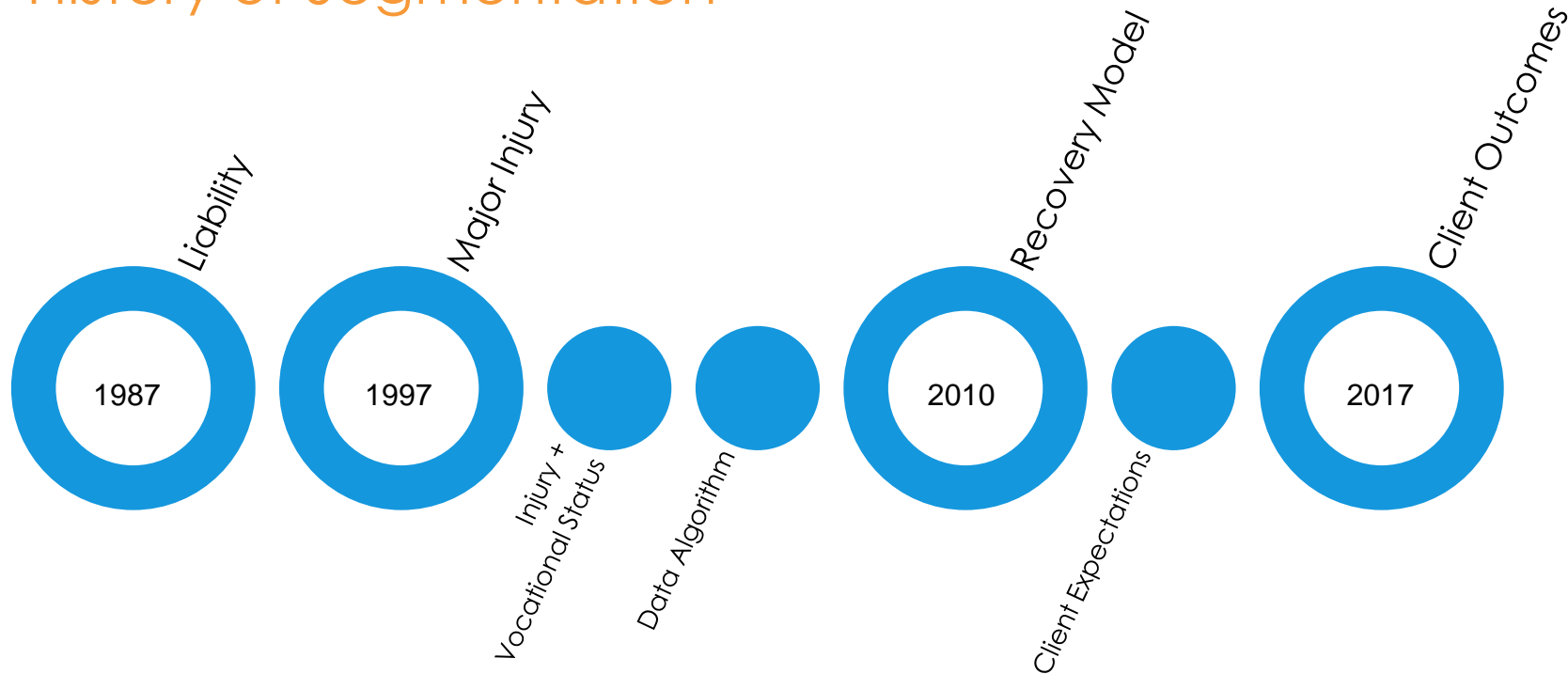
### FINANCIAL

- PFIO (liability movement)
- Administrative Ratio
- Funding Ratio

### PEOPLE

- Sustainable Engagement

## History of Segmentation





# Outline

/ Strategic Context

/ Longitudinal Study

/ What's Next

## Longitudinal Study, Research Objectives

The TAC Longitudinal Study follows Recovery clients as they journey through the TAC scheme on their return to health and work following a transport accident.

### Three Primary Research Goals:

1. To measure primary **outcomes** of TAC clients across health, vocational and client experience at the acute, acute, rehabilitation, adaptation and stability phases of recovery from injury.
2. To identify **predictors** of outcomes following injury, and how these predictors impact the recovery trajectories of TAC clients.
3. To determine the **extent to which TAC can influence outcomes** across health, vocational and client experience, and identify the factors that the TAC may be able to utilise in claims management to improve client outcomes.

# Longitudinal Study, Study design and participation



*Time points*



*Recovery Clients*



*Participated at  
first 4 time points*



*Participated at  
48 month time point*

Time 1 3 months			Time 2 6 months	Time 3 12 months	Time 4 24 months	Time 5 48 months
Pre-accident Phase	Accident Phase	Acute Phase	Rehab Phase	Adaption Phase	Stable Phase	Extended Stable Phase
Health	Accident Circumstances	Psycho-Social				
Vocational	Injury Characteristics	Health				
Personal Factors		Vocational				
		Scheme Experience				
		Environment				
					Legal Processes	



## Longitudinal Study

**What are the major barriers to Getting Life Back on Track?**

# Longitudinal Study, Analysis: Domains of Complexity

Statistical analysis was used to understand the relationship between early client reported factors and poor Life Back on Track at 12 months post accident.

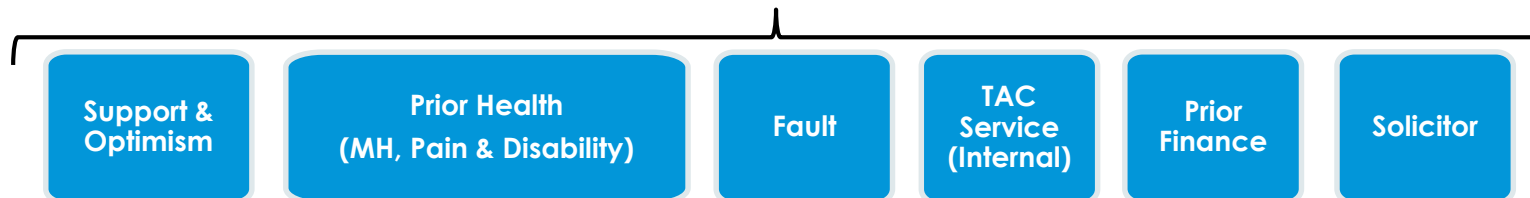
## Results:

### 'Big 6' Domains



Strongest relationship to outcomes up to 2 years post accident

### Supplementary Domains

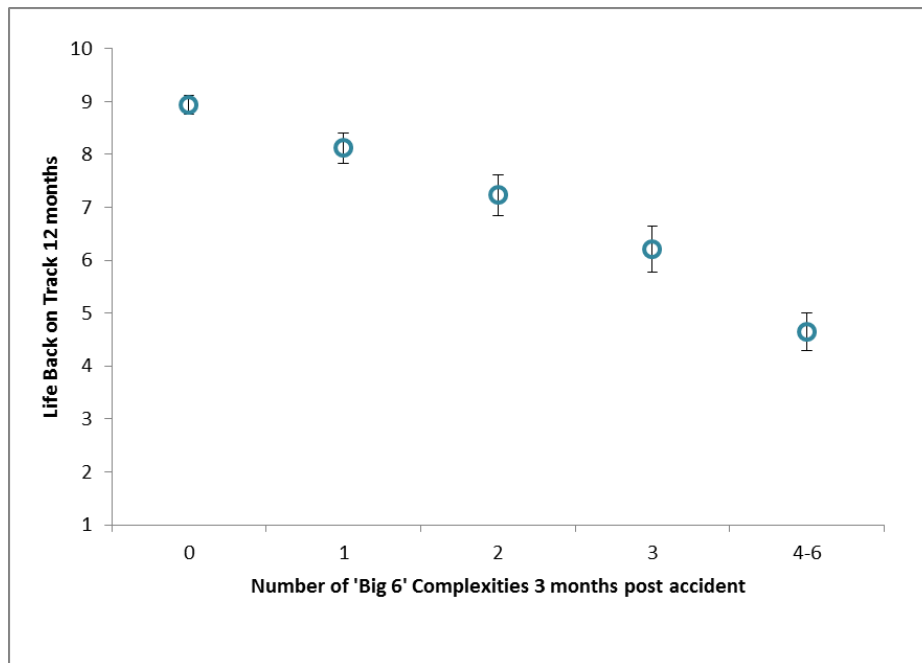


Reasonably strong individually, less important in combination with the "Big 6"



# Longitudinal Study, Compounding Effect

Clients can experience substantial difficulty in more than one domain



# Longitudinal Study, Emerging insights

**Early findings informed the development of an initial screen for mental health / persistent pain. The screen has been used over 3000 times since mid 2014. Initial findings:**

- The screen has been used immediately following a transport accident
- The screen provides strongly graduated differentiation across a range of outcome-related claim measures
- The screen provides additional differentiation within profiles
- Action is being taken as a result of the screen
- The TAC can identify need and potentially influence client and provider behaviour

**Screening  
questions**

Cognition

Resilience

Social  
supports

Pre-existing  
mental  
health

# Longitudinal Study, Emerging insights

## Likelihood of claim active

		Service usage profile		
Screen questions		Low	High	All
	0	29%	51%	44%
	1	39%	58%	52%
	2+	56%	79%	70%
	all	37%	58%	51%

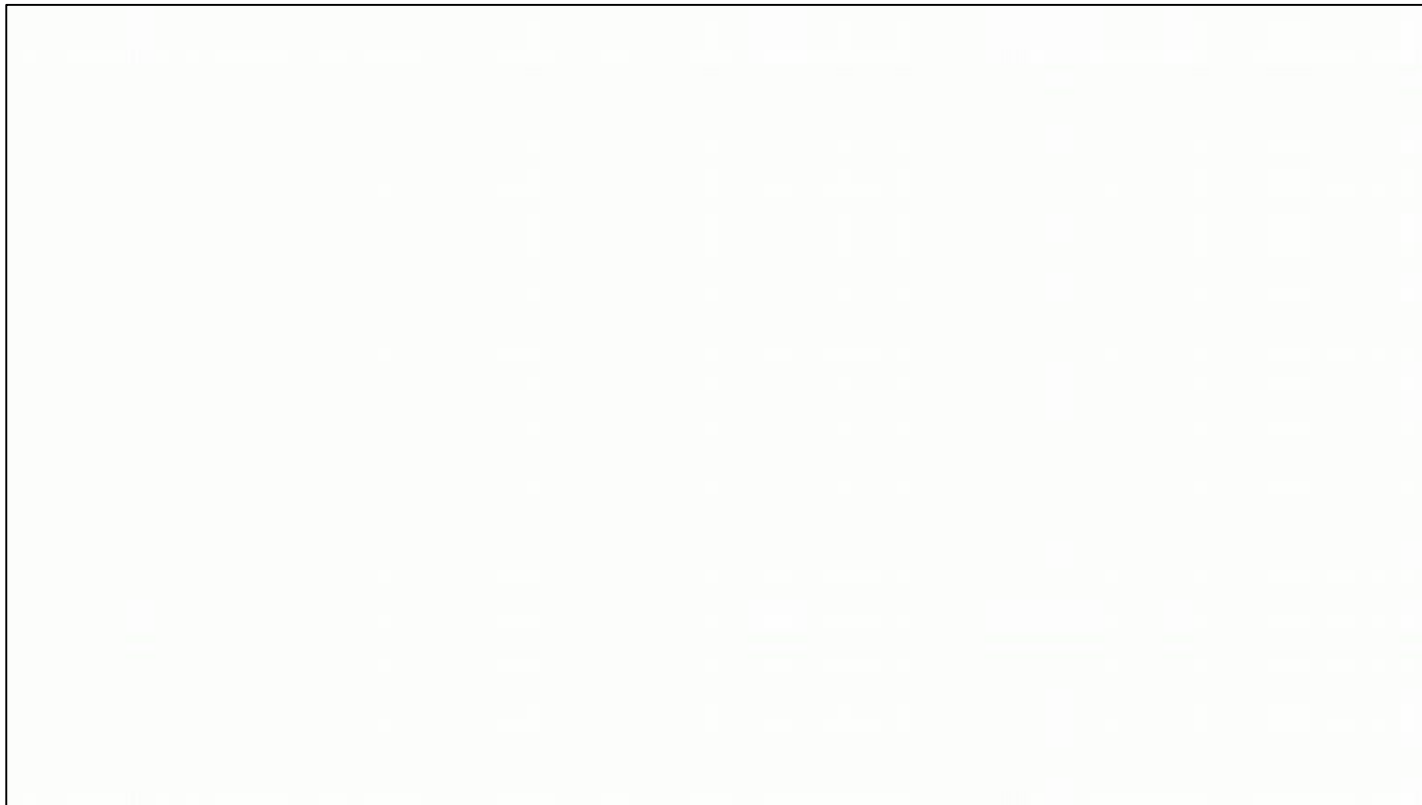
## Likelihood of psych support

		Service usage profile		
Screen questions		Low	High	All
	0	3%	9%	7%
	1	14%	20%	18%
	2+	34%	46%	42%
	all	12%	18%	16%



# Change • Challenge • Opportunity

## Injury & Disability Schemes Seminar





# Outline

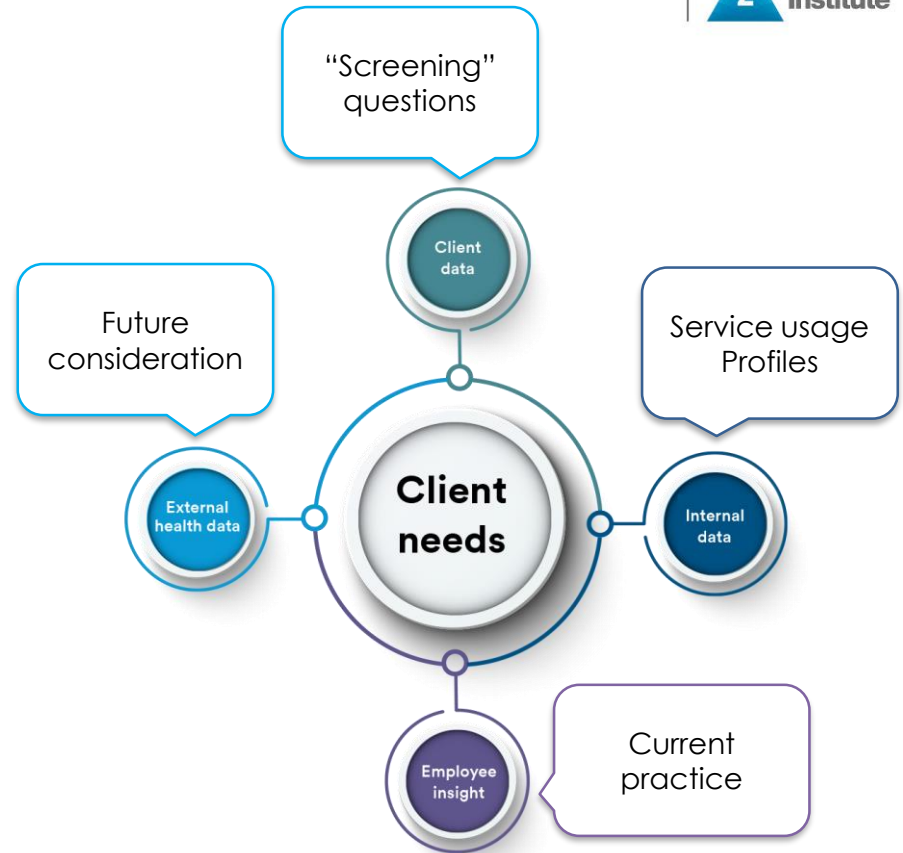
/ Strategic Context

/ Longitudinal Study

/ What's Next

## Needs Identification

Across the organisation, how we understand our clients is fundamental to how we support them to get their lives back on track.



## Needs Identification Model – initial version

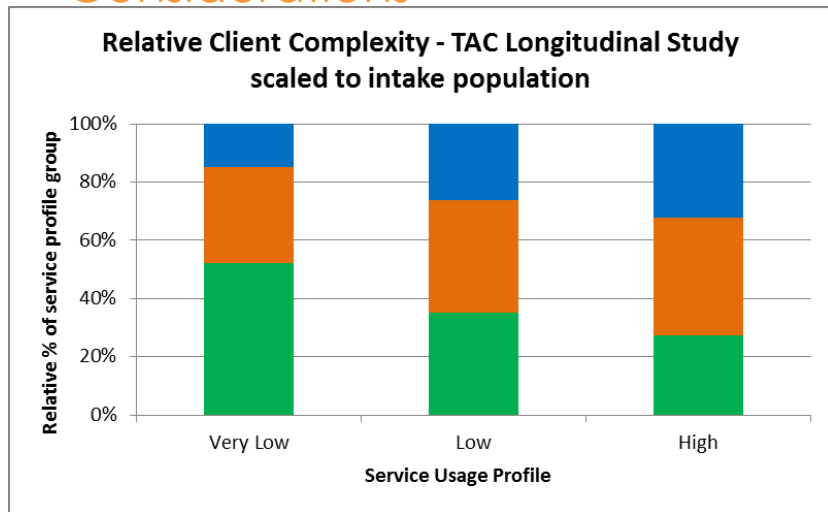
### Service Usage Profiles

- Targeting level and duration of services (i.e. cost)
- Cluster Analysis and Machine Learning algorithm
- Built using “internal data”

### Client Complexities (Screening Questions)

- Targeting Life Back on Track (LBOT) score
- PCA and Regression Analysis
- Built using “client data”

## Initial Needs Identification, Considerations

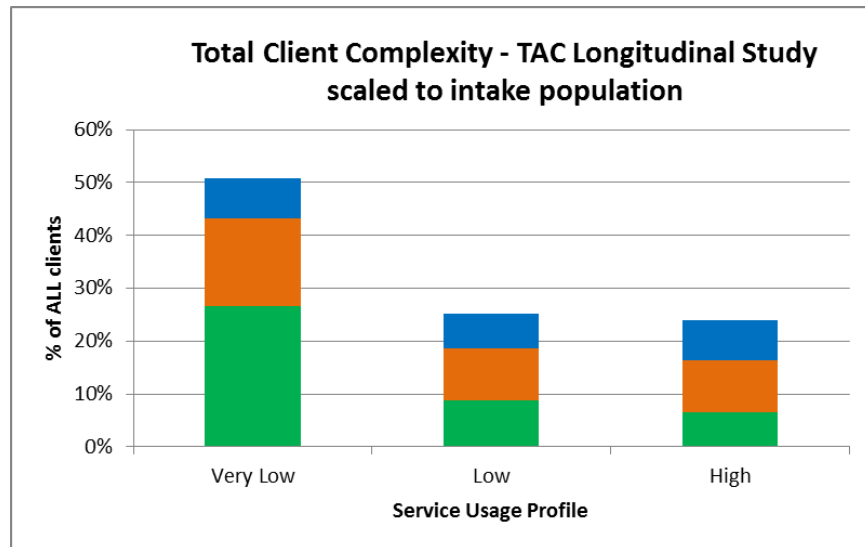


### Client Complexity

■ Low (0-1) ■ Moderate (2-3) ■ High (4-6)

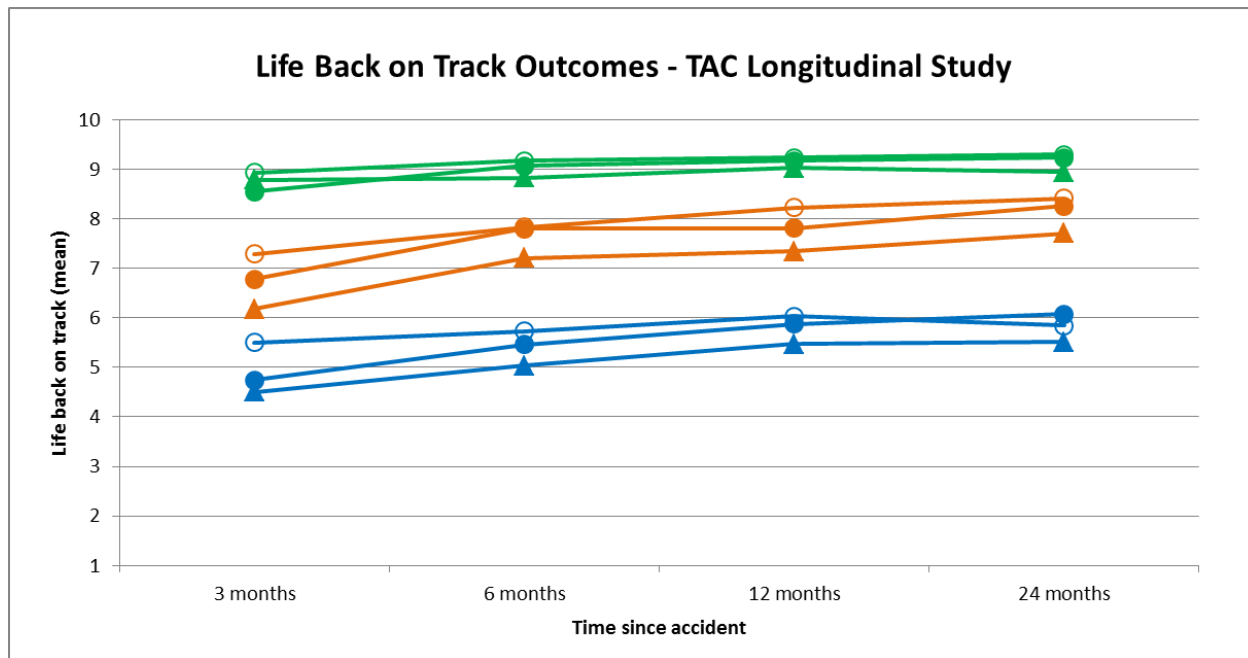
Based on the relative mix of clients, the very low profile group has fewer vulnerable clients (High 4-6) compared to both the low and high profile groups.

However, since the very low profile contains half the population of clients its most vulnerable clients (High 4-6) contribute a third to the overall population of vulnerable clients.





## Initial Needs Identification, Considerations



### Client Complexity

- Low (0-1)
- Moderate (2-3)
- High (4-6)

### Service Usage Profile

- Very Low
- Low
- High

Regardless of service profile group the most vulnerable clients (high 4-6) have demonstrably poorer life back on track outcomes over time.

# What are we doing?, Needs Identification Screening

## Trial 1

Aim: Use screening to **triage clients** between the Rapid Recovery and Supported Recovery Divisions

## Trial 2

Aim: Early **targeted identification of need** within the Supported Recovery Division

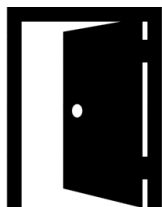
## What are we doing?, ISCRR recommendations

- Trialed our own identification approach and in the process of evaluation ✓
- Applied a combined approach to identification ✓
- Applied a simple approach to identification ✓
- Incorporated flexibility and staff judgement ✓
- Considered solution integration ✓
- Stakeholder engagement and partnership ?
- Staff skills required, training and support ?
- Clear referral pathways ?
- Screen timing and client communication needs ?

# Needs Identification Model

Aim: Get every client managed in the right division based on their needs at that point in time. That is, clients' needs will be identified and aligned to the appropriate business division and response.

This will be achieved via three sub models and accompanying Client Movement Model.



**Initial** Needs  
Identification Model  
New clients



**Ongoing** Needs  
Identification Model  
New and Existing Clients



Needs Identification  
**Migration** Model  
Existing Clients



Client **Movement** Model

## Reflections

- The link between the organisation's strategic goals and segmentation is critical
- Findings in a research setting can be successfully translated into claims management practice
- The balance between different inputs is key
- Segmentation (identification of need) is only (a small!) part of the story – the response to those needs is key
- When targeting client outcomes, what clients tell you will almost certainly be the most important information



“Abandon the urge to simplify everything, to look for formulas and easy answers, and to begin to think multidimensionally, to glory in the mystery and paradoxes of life, not to be dismayed by the multitude of causes and consequences that are inherent in each experience -- to appreciate the fact that life is complex.”

M. Scott Peck