



konekt

KONEKT MARKET REPORT

VOLUME 4
2017

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INTRODUCTION

The concept of big data is not new, and the rehabilitation industry has much to gain from predictive analytics informing better practice. Through the Market Report program over the past four years Konekt has significantly contributed market data and insights to our stakeholders. With a history spanning 25 years, and as the largest rehabilitation services provider with sophisticated data-capture systems, Konekt is in a unique position, and we are pleased to share our findings.

The case data tells us a great deal about the complexity of rehabilitation today, and about the opportunities to improve as an industry. There is one key message emanating from this fourth issue of the Konekt Market Report; it is a message that should be heeded as it represents opportunities to significantly lower costs and increase workforce participation.

Referrals must be made far closer to the actual injury date.

Our data indicates the average delay to referral is more than six months. The cost to society of delayed referral is enormous. Nobody benefits from the current situation of delay – not employers, injured workers, regulators, or insurers. Immediate improvements are available right now.

Konekt's Market Report is not about finding fault; it is about finding opportunity. We have identified a great many opportunities to do better – opportunities to leverage insights from data analysis to improve practices that yield better outcomes.

In this edition of the Konekt Market Report, we also share data that demonstrates the biopsychosocial impacts of a delay in return to work (RTW) – impacts that we in the industry intuitively knew, but can now quantify.

OVERVIEW

In the fourth issue of the Konekt Market Report we analyse eight years of rehabilitation services data from over 156,000 cases. This comprehensive review includes referral patterns and return-to-work outcomes across jurisdictions, organisation size and industry sectors.

More are Returning to Work

This year's trends remain relatively consistent with previous years. Our cohort was typically male, aged around 42 years and came from an average socioeconomic background. The most common injury type was musculoskeletal in origin and about 12% of the group had an identified mental health injury as their referral reason.

Most (96% in FY16) people successfully return to work after injury, and the proportion of people returning to their pre-injury work hours continues to improve (currently 89%). We are achieving these outcomes at a lower cost and in a shorter timeframe than ever before. This is outstanding news, and indicates that we at Konekt and our many customers should feel immensely proud that we are making a positive difference to Australian society every day.

Frustratingly, the average delay from injury to referral for rehabilitation was over six months, with nearly one quarter of cases presenting more than one-year post injury. This is important, as the evidence is clear – early intervention and a focus on workplace rehabilitation can reduce both human and economic costs of workplace injury.

Risk Profiling

In this edition we explore preliminary insights from data extracted from our risk-profiling approach – Konekt's method of identifying and capturing biopsychosocial factors impacting on RTW success. Konekt uses this data to inform our duration estimation and case management strategy. It is widely acknowledged that an integrated biopsychosocial approach to managing injuries can lead to better health and RTW outcomes, reduce claim duration, reduce the cost for injured people, employers and insurers, and improve the forecasting accuracy of case durations and costs.^{1,2}

Our risk-profile data offers valuable insights and informs both individual and overall case management practices. By applying a methodical approach to identifying individuals most at risk of poor outcomes, we can direct resources to ensure they are looked after effectively to reach a sustainable health and occupational outcome. The majority of risks identified are modifiable – by sharing this data, referrers know what factors contribute to the risk of poor outcomes, and can be proactive in driving successful RTW outcomes.

Insurers and Regulators Take Heed

Injuries sustained in small businesses generally have lower RTW outcomes compared with those from large organisations (88% for small business compared with 90% for large). This is commonly considered to be due to a lack of resources to manage the injured worker, a limited understanding of the responsibilities and requirements, and a lack of exposure to the compensation system.

What can insurers and regulators do to address this discrepancy? The answer from the data is quite clear – support small businesses earlier. Early access and assistance is essential to assist small businesses navigate the RTW pathway and maintain a productive workforce.

Some Shift in Mental Health Incidence

The prevalence of identified mental health claims remains consistent at 12% of all injuries, however an increase in mental health conditions from within the public sector (Comcare) was evident (currently 16%, up from 11% in FY15). The complex nature of mental health conditions means these cases are particularly challenging to manage, and early management is even more critical in these instances.

In Short

- ▶ Return-to-work rates overall have plateaued, reaching 96% in FY15 and FY16. However, compensable RTW rates continue to challenge with 90% reaching a successful outcome. The solutions to improve these results are available, with robust data analysis supporting the opportunity for improvement.
- ▶ More people are returning to pre-injury hours after a shorter duration of rehabilitation. Service durations for successful RTW referrals have decreased to an average of 12 weeks in the last two years.
- ▶ Risk profiling reveals the majority of risks injured workers present with are modifiable with appropriate rehabilitation support strategies.
- ▶ Managing psychological factors will be a significant contributor to recovery – over 48% of all biopsychosocial factors are psychological.
- ▶ One in five medical risk factors identified during case management are for inappropriate, ineffective or absent treatment planning.
- ▶ Financial and job security concerns are significant when injured, and are the second most common biopsychosocial factor.
- ▶ High-complexity cases were more likely to involve a mental health condition.
- ▶ The longer the delay to referral, the greater number of biopsychosocial factors impacting on recovery and return to work.

With a detailed understanding of emerging trends in workplace rehabilitation, and best-practice approaches to risk identification, we can make better decisions about workplace health and safety initiatives, and improve injury outcomes in Australian workplaces.

RISK PROFILE

It is well established that the longer injured workers remain out of work, the poorer their RTW outcome.^{3,4} Getting people back to work as quickly as possible after injury is in the best interests of injured people and their families, employers, health professionals and insurers. Timely, supportive and coordinated RTW rehabilitation programs are likely to reduce pain and improve functionality and quality of life, resulting in improved health and faster recovery.^{1,5} Additionally, potential benefits of RTW may be negated if the process is not managed well or evidence-based. A key component of the injury management process is assessing and addressing risk factors associated with recovery.

Early identification of risk factors across the biological, psychological and social domains is important during the assessment phase of case management – it should inform and guide treatment and rehabilitation interventions. Biopsychosocial injury management is an individual-centred model that considers the injured person, their mental and physical health state, and their social context. It is based on the identification and management of multiple factors that can affect function and participation at work, home and in the community. The biopsychosocial approach facilitates recovery and maximises independence, while minimising the risk of long-term activity limitation, restriction, or persistent pain.² The biopsychosocial injury management framework is endorsed by the World Health Organization (WHO)⁶ along with Australian Heads of Workers' Compensation Authorities⁷ and Heads of Compulsory Third Party in Australia.

Biological factors, such as serious medical complications and comorbidities (co-occurrence of one or more diseases or disorders in an individual) will often explain poor or delayed outcomes. However, psychosocial risk factors, including unhelpful beliefs about an injury, low expectations about return to work and threat to financial security equally contribute to poor outcomes.^{2,8,9}

Beliefs about persistent pain, such as 'ongoing diagnostics will identify the source of pain', or 'pain equals damage', or simply looking for someone else to 'fix' the problem are significantly related to poor outcomes when returning to work following work-related musculoskeletal pain.^{8,10} Similarly, perceptions about work-related injuries and how to effectively manage them will influence outcomes.

These unhelpful perspectives result in confusion and frustration for the injured person, particularly when there is a mismatch in advice received from different stakeholders such as employers, family and friends, health professionals, legal advisors and insurers.

Successful intervention also requires an attempt to assess and target external risks in the workplace, such as low social support from colleagues and managers, interpersonal conflict within the workplace, employer inexperience with regard to processes, the rights and responsibilities of injured workers, and insufficient alternate duties available for injured workers. Managing these risks will assist injured workers in their recovery process.

Effective injury management relies on understanding the injured person's perspectives, beliefs and social and occupational context as well as the physical component of the injury – that is, identifying, assessing and managing biopsychosocial factors. Much of the reason that it is critical to take a biopsychosocial view to injury management is because many psychosocial factors are modifiable when evidence-based strategies are implemented. Catastrophic thinking, fear of movement, perceptions of injustice and workplace conflict are psychosocial risk factors that are particularly likely to lead to a path of persistent pain, emotional distress, depression and anxiety and ultimately prolonged work disability when not identified and managed early.

Identifying and flagging risk factors in a systematic manner and developing strategies to address them supports an evidence-based approach to effective rehabilitation. An approach that will lead to improved health attained in shorter periods and for less cost.

The Konekt approach to risk profiling

Biopsychosocial injury management is an individual-centred model that considers the person, their mental and physical health, and the social context. It is not a new concept in the injury management space and in fact is quite broadly used amongst legislative authorities, insurance agents, federal government agencies and treatment providers. It is an approach based on the management of multiple factors which can impact on an injured worker's function, their participation in work, at home and in the community.

At Konekt, we have long adopted this model to create risk profiles to better understand barriers in clients' rehabilitation journeys, and to determine strategies to overcome these. This approach recognises that pain does not strictly correlate to tissue damage and body structure, and that each individual's perception of injury differs according to the influence of psychosocial factors.

Through categorising biopsychosocial factors into risk flags, we are able to better tailor rehabilitation programs to the individual's needs to ensure their best chance of maximising recovery and return-to-work outcomes.

Risk flags provide an indicator that further attention is needed on a biopsychosocial barrier to recovery, and assist with the understanding of why some people with injuries (be it physical or psychological) do not recover as expected. Risk flags are not diagnostic but signal a specific obstacle to recovery.

At Konekt we believe that establishing a risk profile for a client ensures a focus on return to normal activities including work, assists in developing early intervention and tailored programs, promotes active engagement of the injured person towards agreed goals, and informs decision-making. A client's risk profile is reviewed regularly throughout the rehabilitation process to ensure risk flags are updated as the case progresses.

As we continue to develop robust, systemised and digitised risk profiles for our clients, we are able to gather valuable data relating to risk flags seen throughout the population. This will assist in developing our services based on evidence to ensure optimal outcomes are achieved for all stakeholders. The data will also provide more evidence to support case duration estimates, as a critical input in the insurance risk management model.

The Konekt experience

Our risk profiling model was refreshed in 2016 and subsequently applied to all active and new cases in a consistent digital format. The following data relates to all active cases from July to November 2016. The total number of cases during the period was 4,935.

Cases were assessed during the first week of referral and throughout the life of the case as new barriers emerged, or existing barriers were addressed. Using client interviews, referral documentation, formalised assessment tools and clinical judgement, risk flags are identified.

Each risk flag has an allocated score and is totalled to give an overall complexity score where a higher score indicates a more complex case. Complexity scores are further categorised into low (complexity score 0-10), medium (complexity score 11-20) or high (complexity score >21).

Biopsychosocial factors are categorised into four risk flags with red the most critical flag and typically referring to physical and medical factors. Yellow flags are predominantly psychological in origin; blue flags relate to perceptions of work and the client's social environment, and black flags are factors that (when present) affect all clients equally, such as threat to financial security, employer rehabilitation policy, or extended duration of sickness absence.

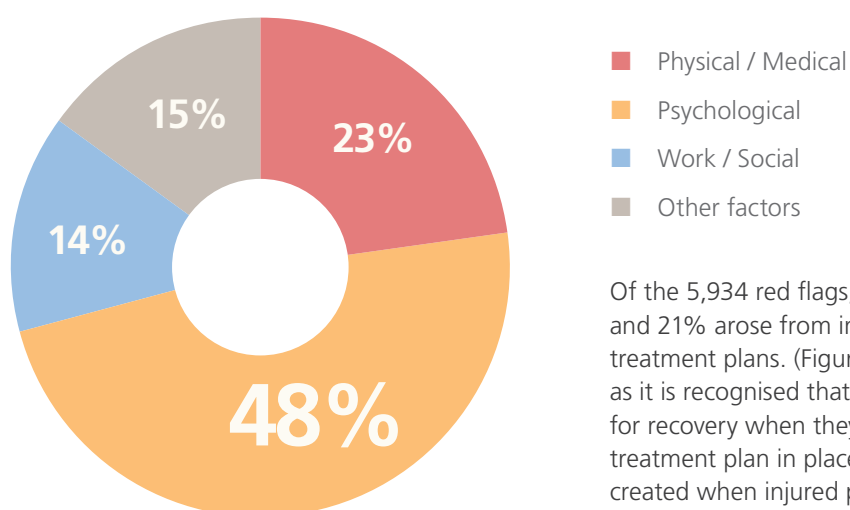
Table 1 shows the population characteristics stratified by complexity status and it can be seen that low complexity cases were more likely to be male, involve a musculoskeletal injury and have a shorter duration of time from injury to first referral. In contrast, high complexity cases were more likely to involve a mental health condition and have a longer delay from injury to referral.

Table 1 Population characteristics by case complexity status

	WHOLE GROUP (n=4935)	COMPLEXITY		
		LOW (n=2400)	MEDIUM (n=1574)	HIGH (n=961)
AGE, YEARS	38	38	38	38
GENDER, % MALES	65%	72%	70%	67%
INJURY TYPE				
FRACTURES	10%	12%	9%	7%
ILLNESS AND DISEASE	9%	9%	10%	8%
MENTAL HEALTH CONDITION	18%	13%	20%	30%
MUSCULOSKELETAL DISORDERS	58%	61%	58%	51%
OTHER INJURIES	5%	2%	1%	2%
REFERRAL TYPE				
SPECIFIC SERVICES	87%	87%	88%	86%
RTW SERVICES	13%	13%	12%	14%
WORKERS COMPENSATION	92%	92%	91%	91%
TIME FROM INJURY TO FIRST REFERRAL	76 weeks	63 weeks	87 weeks	88 weeks
AVERAGE NUMBER OF FLAGS PER CASE	5	2	5	10

A total of 23,700 flags were identified across the 4,935 cases, with approximately half the flags yellow (psychological factors), and one quarter red (physical / medical factors). (Figure 1)

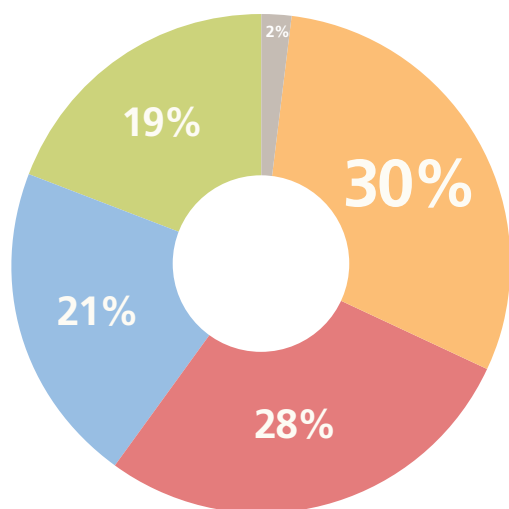
Figure 1 Flag profile of all new referrals July to November 2016



n=23,700

Of the 5,934 red flags, over 75% were physical in nature and 21% arose from inappropriate, ineffective or absent treatment plans. (Figure 2) These findings are important as it is recognised that injured people are well positioned for recovery when they have a well-developed, coordinated treatment plan in place.^{2,7,9} An ideal treatment plan is created when injured people are active participants in the outcome of their injury, where their beliefs and perceptions of recovery are addressed and their recovery goals (including participation in work) are agreed.

Figure 2 Profile of red (physical / medical) flags

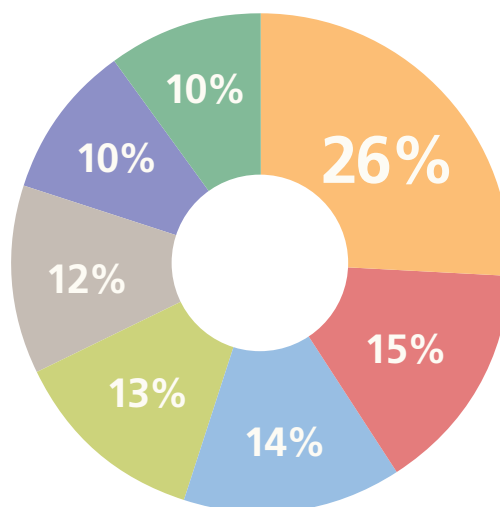


n=5,354

- Co-existence of other diseases / Conditions
- Serious pathology / Diagnosis
- Treatment issues
- Other medical / Physical factor
- Mental health specific

There were a total of 11,338 yellow flags in the cohort. Of these, 55% relate to psychological conditions, coping behaviours or attitudes and beliefs regarding injury. (Figure 3) The presence of these factors can be particularly challenging to address, however their management is critical to successful outcome. Pain is exacerbated by behavioural adaptations such as protective posturing, pain avoidance and kinesiophobia (fear of movement) and much of this maladaptive behaviour is based on the injured person's inaccurate perceptions of the severity and prognosis of their injury.¹¹⁻¹³ Additional factors, such as depression, when combined with inappropriate coping behaviours and inaccurate perceptions, may augment the vulnerability of injured people to develop a pattern of chronic injury. The presence of these behaviours, attitudes and perceptions may interfere with treatment programs, particularly those focussed on active treatments.^{11, 12}

Figure 3 Profile of yellow (psychological) flags

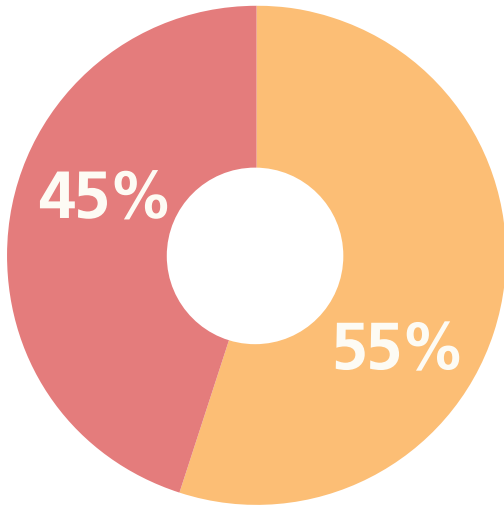


n=11,338

- Psychological conditions
- Behaviours / Coping strategies
- Attitudes and beliefs about pain and injury
- Workspace
- Other psychosocial flag
- Diagnosis and treatment
- Family / Support

Blue flags totalled 3,344 with a relatively even distribution of factors associated with perceptions about the work environment such as inflexible work schedules, disinterested employer or physically demanding work, and perceptions about work itself such as lack of job satisfaction or poor social support from work colleagues. (Figure 4)

Figure 4 Profile of blue (work / social) flags

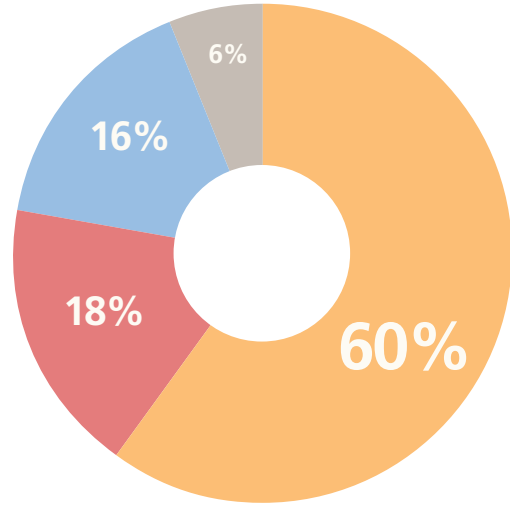


n=3,344

- Perceptions about working environment
- Perceptions about work

Finally, there were 3,644 black flags, with the majority relating to concerns about financial security.

Figure 5 Profile of black (other factors) flag

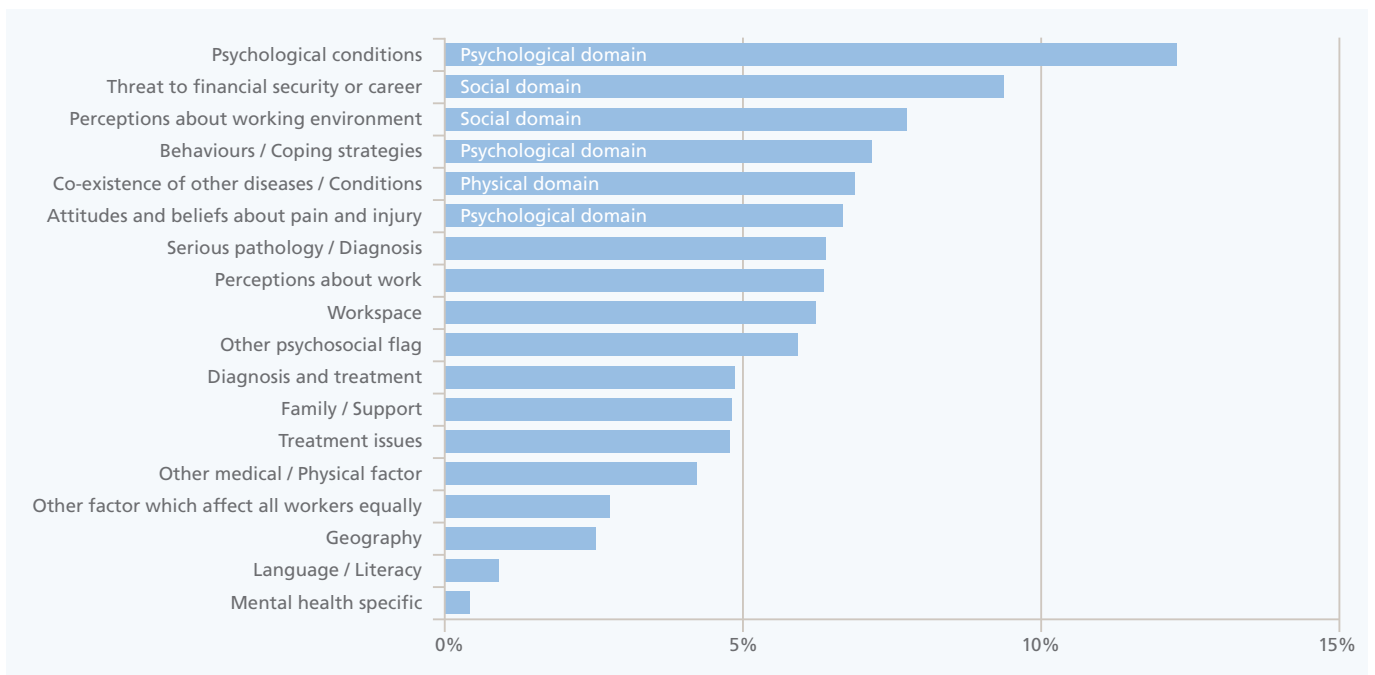


n=6,644

- Threat to financial security or career
- Other factor which affect all workers equally
- Geography
- Language / Literacy

Flags were further analysed using the biopsychosocial domains. Of the 23,700 factors, 47% were psychological, 27% physical and 26% social in nature. Of the top 6 factors, representing 50% of all factors, just one relates to a physical condition. (Figure 6)

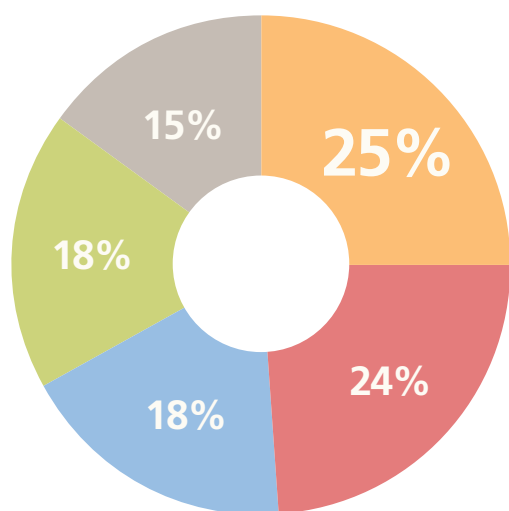
Figure 6 Sub-categories of barriers to recovery for all biopsychosocial factors



n=23,700

Of the physical factors, 36% related to issues associated with treatment planning – either absence of a formalised plan, ineffectiveness of an existing plan or an inappropriate plan. (Figure 7)

Figure 7 Physical factors contributing to recovery



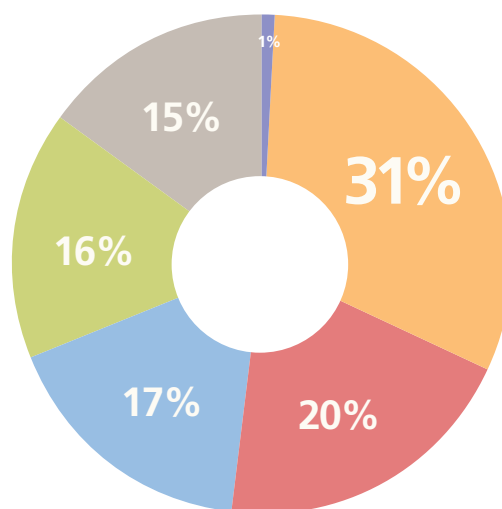
n=6,604

- Co-existence of other diseases / Conditions
- Serious pathology / Diagnosis
- Diagnosis and treatment
- Treatment issues
- Other Medical / Physical factor

Looking deeper into psychosocial factors, while one-third of the cohort's identified psychosocial flags were for anger, frustration, anxiety or depression as a result of their injury, over half the flags in this category related to perceptions about work and the work environment, and attitudes and beliefs about pain and injury, such as fear avoidance behaviours and fear of aggravating pain. (Figure 8)

Threat to financial security accounted for 35% of all social factors, and was the second most common flag factor overall. (Figure 9 and Figure 6) This highlights the importance of managing the recovery process as efficiently and sustainably as possible in order to relieve injured people of one of their greatest concerns during the recovery phase – their ongoing livelihood.

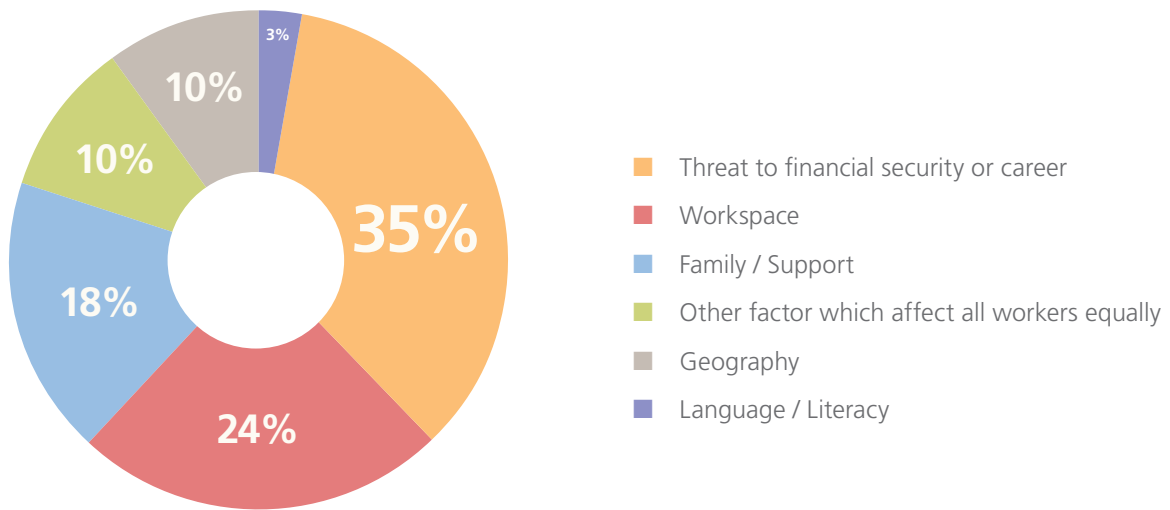
Figure 8 Psychological factors contributing to recovery



n=9,324

- Psychological conditions (anger, anxiety, frustration)
- Perceptions about working environment
- Attitudes and beliefs about pain and injury
- Perceptions about work
- Other psychosocial flag
- Mental health specific

Figure 9 Social factors contributing to recovery



n=6,275

The biopsychosocial model provides opportunity to identify and address factors that are modifiable, by adopting targeted, evidence-based strategies. Of the 76 factors that were present in the model, 66% were deemed to be modifiable. Table 2 shows the top ten factors that influenced the workplace rehabilitation program and highlights the areas where appropriate, targeted treatment strategies will have the most benefit.

Table 2 Top ten factors influencing recovery

FACTOR	% CONTRIBUTION
LACK OF RESPONSE TO TREATMENT / INEFFECTIVE TREATMENT PLAN	5.82%
EXISTENCE OF UNRELATED INJURY	4.67%
IMPACT ON CAREER / JOB PROGRESSION	4.62%
DEPRESSION FOLLOWING INJURY	4.37%
PHYSICALLY DEMANDING / UNCOMFORTABLE WORK	4.11%
ANXIETY FOLLOWING INJURY	4.07%
FEAR AVOIDANCE BEHAVIOURS	3.65%
FEAR OF AGGRAVATION AND PAIN	3.08%
EXTENDED PERIOD OF TIME OFF WORK	2.70%
INAPPROPRIATE / ABSENT TREATMENT PLAN	2.60%

The adoption of a biopsychosocial approach in the early identification of risk factors informs and guides rehabilitation and is recognised as best practice.^{6, 14} It has been shown to be effective in improving function, facilitating recovery and maximising independence. It allows us to apply a methodical structured approach to identifying those individuals most at risk of poor outcome. With this knowledge we can direct skill, clinical expertise and resources to ensure injured people are cared for efficiently and effectively to reach a sustainable health and occupational outcome.

POPULATION AND REFERRAL PROFILE TRENDS

Longitudinal perspective of Konekt Referrals

The following section provides a view of eight years of Konekt rehabilitation referrals. It explores the population profile, outcomes, costs across jurisdictions, industry and organisational size.

- ▶ The proportion of male to female injured employees was higher across all initial referrals
- ▶ 82% of initial referrals were for musculoskeletal disorders and injuries such as fractures
- ▶ 12% of initial referrals were for a mental health condition, unchanged over the past 8 years
- ▶ In FY16 RTW for compensable referrals continues to improve (95%) though remains behind the non-compensable RTW (98%)
- ▶ Average time from injury to referral is improving though still remains unacceptably high at greater than six months
- ▶ The strong relationship between delay to referral and outcome continues – the longer the delay to active treatment the greater the time to recovery
- ▶ Relationship between early referral and reduced cost and duration of service remains very evident and compelling
- ▶ Rehabilitation interventions delivered to injured workers from small businesses are more likely to have longer delays to rehabilitation and subsequently longer durations, higher costs and poorer outcomes.

The total number of referrals analysed in this report was 156,545, of which 76% (118,505) were for specific services, such as functional assessments, activities of daily living assessment, and workplace assessments, with the remainder for RTW services.

The average age of the cohort was 42 years with the majority (63%) being male. These demographics have remained consistent over the reporting period (FY09-16). Musculoskeletal injuries remain the most common type of injury (58%), with injuries to the back the most frequently reported. Consistent with prior years, mental health conditions (MHC) is the primary injury in 12% of this group.

In this report, volume 4, we include for the first time Income Protection (1%) and Road Traffic Authority / compulsory third party (1%) referrals, however workers' compensation referrals (78%) and other non-compensable cases (20%) continue to represent the largest referral types.

As expected with this size cohort, the demographic and injury mix has remained relatively stable over the reporting period. See Table 3.

Table 3 Characteristics of people referred for rehabilitation services FY09–16

POPULATION CHARACTERISTICS		
SOCIO-DEMOGRAPHIC	GENDER (% MALE)	63%
	AGE (MEAN)	42 YEARS
	SOCIOECONOMIC PROFILE (IRSD) SCORE (MEAN) ^a	996
INJURY TYPE	MUSCULOSKELETAL INJURIES	58%
	MENTAL HEALTH CONDITIONS	12%
	FRACTURES	9%
	ILLNESS AND DISEASE	5%
	OTHER INJURIES	15%
REFERRAL TYPE	SPECIFIC SERVICES	76%
	RTW SERVICES	24%
ORGANISATION SIZE ^b	LARGE ORGANISATION	52%
	MEDIUM ORGANISATION	19%
	SMALL ORGANISATION	30%
COMPENSABLE REFERRALS	WORKERS COMPENSATION	78%
JURISDICTIONS/STATES	NSW	37%
	COMCARE	24%
	VICTORIA	16%
	REMAINING STATES	23%
DELAY TO REFERRAL ^c	ALL REFERRALS, MEAN (MEDIAN)	79 WEEKS (29 WEEKS)
	RTW REFERRALS, MEAN (MEDIAN)	47 WEEKS (15 WEEKS)
	SPECIFIC SERVICE REFERRALS, MEAN (MEDIAN)	85 WEEKS (33 WEEKS)
SERVICE COST (CLOSED CASES)	ALL REFERRALS, MEAN (MEDIAN)	\$1,321 (\$809)
	RTW REFERRALS, MEAN (MEDIAN)	\$2,553 (\$1,662)
	SPECIFIC SERVICE REFERRALS, MEAN (MEDIAN)	\$1,102 (\$740)
SERVICE DURATION (CLOSED CASES)	ALL REFERRALS, MEAN (MEDIAN)	10 WEEKS (5)
	RTW REFERRALS, MEAN (MEDIAN)	22 WEEKS (16 WEEKS)
	SPECIFIC SERVICE REFERRALS, MEAN (MEDIAN)	8 WEEKS (4 WEEKS)

n=156,545

a Index of Relative Disadvantage (IRDS) score is created using information about people and households in a particular area. The score is standardised against a mean of 1000 with a standard deviation of 100. This means that the average IRDS score will be 1000 and the middle two-thirds of IRDS scores will fall between 900 and 1100 (approximately).

b Organisation size defined by number of employees: large=200+, medium=20–199 and small=0–19

c A person may be referred for multiple services over the duration of their interaction with Konekt (e.g. an initial assessment, functional capacity evaluation, vocational assessment, job-seeking service, case conference). Time from injury to first referral refers to the time from initial injury to the first of potentially many referrals; delay to referral refers to the time from injury to each individual service attended/accessed.

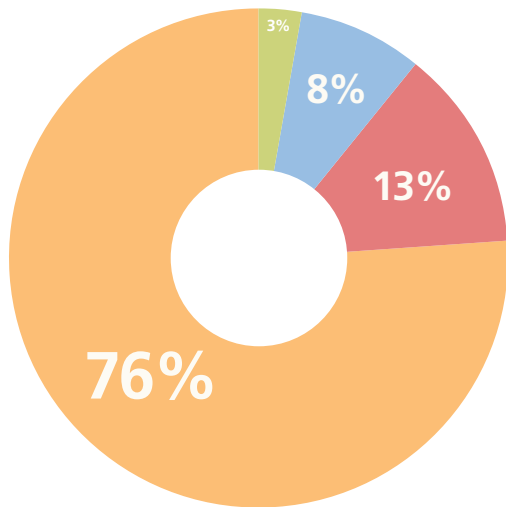
Referrals by service type

Of the 156,545 referrals analysed, 122,644 (78%) were referrals related to workers' compensation cases and 38,639 (25%) were referrals directly from an employer.

Of the total number of referrals, 76% were for specific services such as functional assessments, activities of daily living assessments and workplace assessments, and 24% for RTW support and assistance.

RTW referrals typically originate from an employer seeking assistance to support an injured worker on their journey to recovery. Central to the RTW service is the recognition that work is good for health and social wellbeing and for most people work participation is an important part of participating in life. Key components of the RTW service are to establish work capacity, understand the individual's desire to work and the barriers associated with continuing or returning to work.

Figure 10 Referrals by service type – all referrals FY09–16



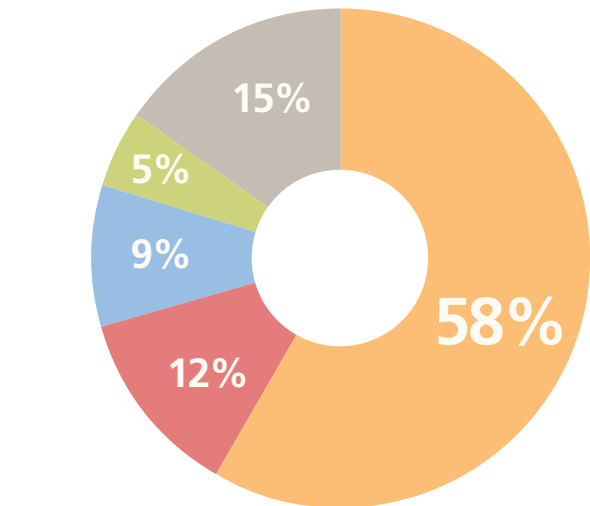
n=156,545

- Specific services
- RTW services
- RTW same employer
- RTW different employer

Referrals by injury type

Musculoskeletal (MSK) injuries remain the most common type of injury (58%), which is consistent with data from Safe Work Australia,¹⁵ and previous volumes of the Konekt Market Report. MSK conditions affect young and older people, they vary in duration, severity, complications and associated disability, and can severely impact on a person's health and quality of life. This places a substantial burden on the community, including through the use of hospital and other health services and lost productivity due to pain and disability.

Figure 11 Referrals by injury type – all referrals FY09–16



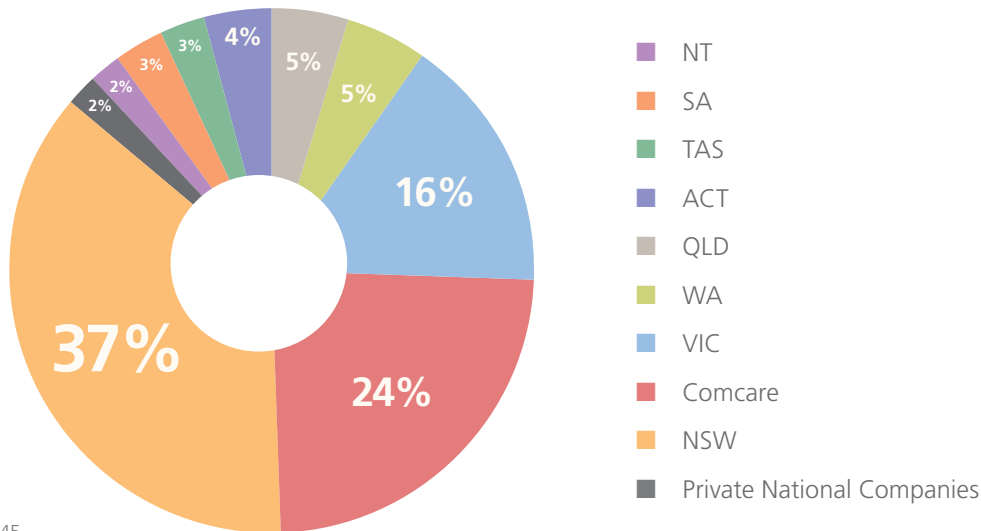
n=146,476

- Musculoskeletal injuries
- Mental health conditions
- Fractures
- Illness and disease
- Other injuries

Referrals by jurisdiction

All Australian states and workers' compensation jurisdictions, including national self-insured private companies were represented in the data; the majority of workers' compensation referrals were from NSW (37%), followed by Comcare (24%).

Figure 12 Referrals by jurisdiction – all referrals FY09–16



Referrals by socioeconomic profile

The socio-economic profile of referrals remains largely unchanged. We continue to observe an over-representation of referrals in the lower socioeconomic bands and under-representation in the higher bands.

This information is important as research has consistently demonstrated an association between socio-economic disadvantage and health. It is often hypothesised that a number of interrelated factors including education, place of residence, health beliefs and behaviour, occupation, income and access to health services determine the socio-economic disadvantage and health.¹⁶

The role of the rehabilitation provider in assisting injured people navigate the health system, providing motivational counselling and education on treatment options and outcomes, as well as holding healthcare providers accountable to treatment plans on behalf of the injured person are all crucial services that can be particularly beneficial to people from disadvantaged backgrounds.

Figure 13 Socioeconomic profile of referrals FY16



IEO Index of Education and Occupation
 IRSD Index of Relative Socio-economic Disadvantage

The IRSD measures relative social disadvantage. Social disadvantage is typically associated with low income, high unemployment and low levels of education. Since this index only summarises variables that indicate disadvantage, a low score/decile indicates that an area has many low income families, people with little training and working in unskilled occupations and may be considered as disadvantaged relative to other collection districts. The Index of Education and Occupation (IEO) is designed to reflect the educational and occupational level of communities. The education variables in this index show either the level of qualification achieved or whether further education is being undertaken. The occupation variables classify the workforce into the major groups and skill levels of the Australian and New Zealand Standard Classification of Occupations (ANZSCO) and the unemployed. This index does not include any income variables. A low score indicates relatively lower education and occupation status of people in the area in general.

n=100,694

Service costs, durations and outcomes for RTW referrals

Encouraging employers, workers and injured people to access rehabilitation services early following injury continues to be challenging. The impact of early intervention on injury outcomes is consistent – the earlier an injured person seeks rehabilitation the greater their chance of recovery. These findings are evident in our own eight-year historical data where it is shown that those people who present greater than six months’ post injury report longer durations of rehabilitation, higher service costs and lower RTW success. See Table 4

Table 4 Impact of time from injury to referral on cost, duration and outcome for RTW referrals

DELAY TO REFERRAL	OF RTW REFERRALS	DURATION OF SERVICE IN WEEKS MEAN (MEDIAN)	SERVICE COST MEAN (MEDIAN)	SUCCESSFUL RTW
0–2 WEEKS	8%	19 (12)	\$2,487 (\$1,635)	96%
3–6 WEEKS	17%	21 (14)	\$2,468 (\$1,607)	96%
7–13 WEEKS	20%	21 (15)	\$2,397 (\$1,635)	95%
14–26 WEEKS	16%	22 (17)	\$2,589 (\$1,785)	93%
27–52 WEEKS	15%	23 (17)	\$2,644 (\$1,756)	90%
53–104 WEEKS	12%	25 (19)	\$2,831 (\$1,838)	86%
>104 WEEKS	12%	27 (20)	\$3,100 (\$1,938)	74%

n=19,157

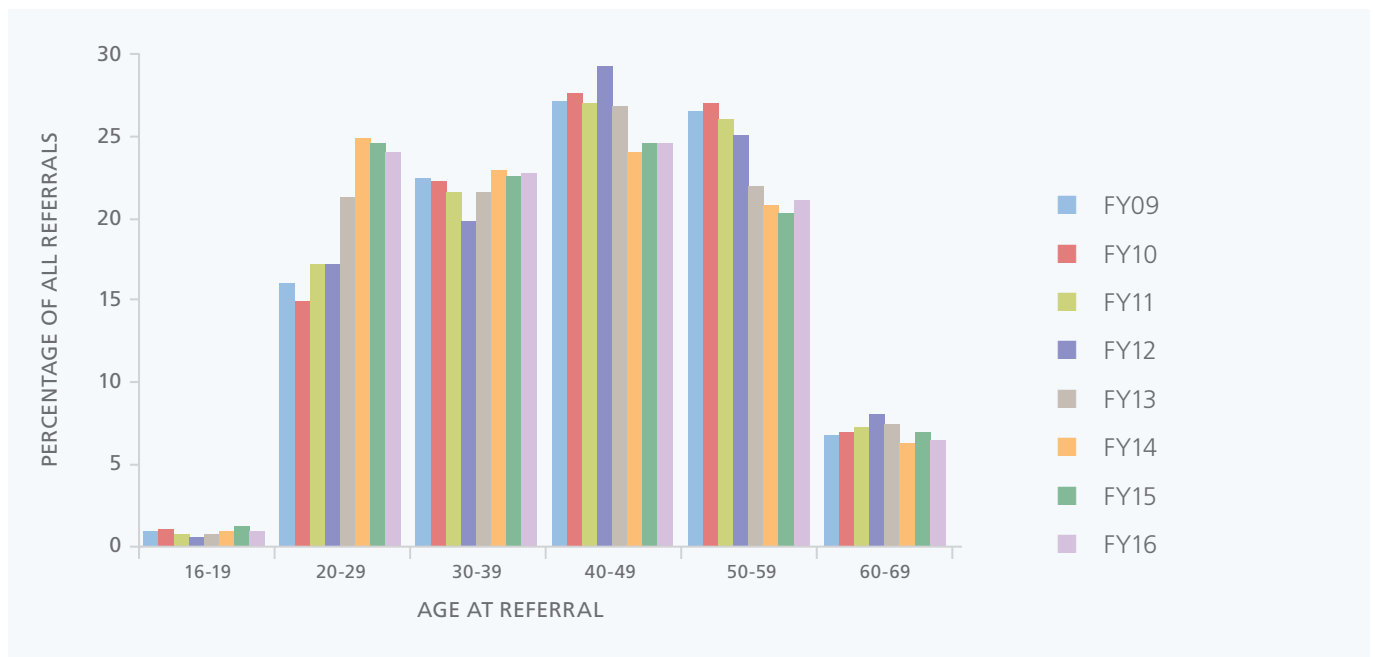
While the delay from injury to referral is slowly improving, on average it is greater than 6 months, and 24% of referrals occur more than 18 months from injury. With the improved delay to referral, a corresponding decrease in the duration of the service is observed. This reinforces that the earlier rehabilitation is commenced, the better the outcome. Konekt’s guidance to regulators, employers and insurers is clear on this matter – refer earlier. There is more improvement to be made, and enormous gains to be realised through such a shift.

Table 5 Referral numbers, cost and duration over time (all referrals)

FINANCIAL YEAR	NUMBER OF ALL REFERRALS	% OF ALL REFERRALS	SERVICE COST OF ALL REFERRALS MEAN (MEDIAN)	DELAY TO REFERRAL IN WEEKS OF ALL REFERRALS MEAN (MEDIAN)	DURATION OF SERVICE IN WEEKS OF ALL REFERRALS MEAN (MEDIAN)
FY09	18,358	12%	\$1,517 (\$798)	87 (28)	12 (5)
FY10	19,289	12%	\$1,446 (\$776)	82 (30)	10 (4)
FY11	20,921	13%	\$1,156 (\$705)	69 (25)	9 (4)
FY12	19,452	13%	\$1,163 (\$742)	78 (28)	10 (5)
FY13	17,450	11%	\$1,436 (\$838)	93 (34)	13 (6)
FY14	18,922	12%	\$1,419 (\$863)	71 (24)	12 (5)
FY15	19,688	13%	\$1,366 (\$904)	77 (27)	7 (4)
FY16	22,465	14%	\$1,090 (\$859)	77 (30)	8 (5)
TOTAL	156,545	100%	\$1,322 (\$809)	80 (29)	10 (5)

The distribution of age at referral has settled somewhat in recent years. Over the last 3 years we have observed a higher proportion of younger people accessing services compared with those aged greater than 50 years. The trend is consistent with ABS data, which shows a higher representation of younger people reporting a work-related injury.¹⁷

Figure 14 Age groups by year of referral

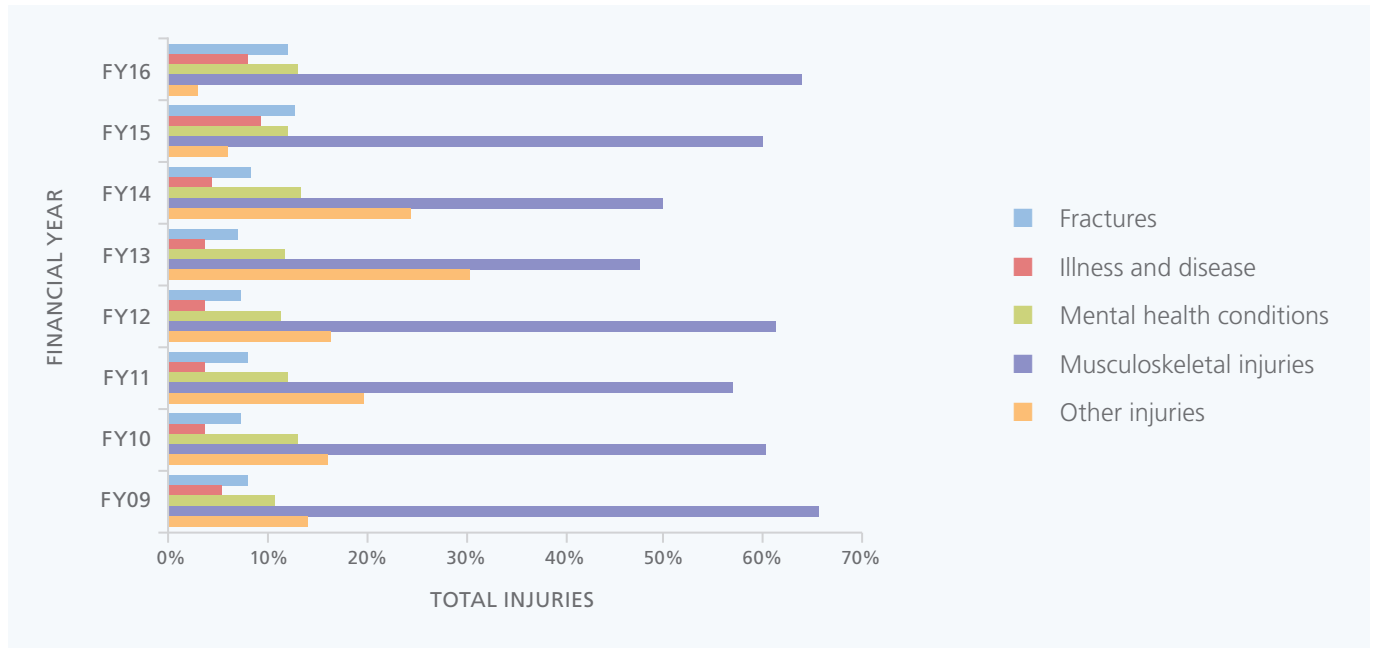


n=119,873

Referrals by injury type over time

Musculoskeletal injuries remain the most frequently reported injury, occurring on average at twice the rate of other injuries. This is consistent with data from Australia Bureau of Statistics¹⁸ and SafeWork Australia.¹⁹ Evidence suggests that, for work-related musculoskeletal injuries, early mobilisation associated with RTW programs can prevent or mitigate the negative consequences of injury and facilitate a return to normal activity, further supporting the call for early referral for rehabilitation.

Figure 15 Injury referral profile for all injuries over time



n=146,476

Referrals for RTW assistance over time

Referrals for RTW services continue to rise; in FY16 nearly one-third of all referrals were for RTW services. The steady increase in successful RTW outcomes over the reporting period continues with 95% success rate for overall RTW in recent years; and 89% returning to full-time work.

This steady increase in the number of people returning to full-time work is both encouraging and a reflection of the improved service offering in recent years.

Table 6 Number referred for RTW assistance by financial year

FINANCIAL YEAR	NO. OF RTW REFERRALS	% OF ALL REFERRALS
FY09	4,972	27%
FY10	4,917	26%
FY11	4,665	22%
FY12	3,607	19%
FY13	3,693	21%
FY14	4,781	25%
FY15	4,522	23%
FY16	6,883	31%
TOTAL	38,084	24%

Table 7 RTW referral outcomes by financial year

FINANCIAL YEAR	NO. OF RTW OUTCOMES	% SUCCESSFUL RTW FULL HOURS	% SUCCESSFUL RTW PARTIAL HOURS	OVERALL % SUCCESSFUL RTW
FY09	3,361	79%	11%	90%
FY10	3,239	75%	13%	88%
FY11	3,167	77%	11%	88%
FY12	2,560	78%	10%	88%
FY13	2,412	81%	7%	88%
FY14	3,604	89%	5%	94%
FY15	1,942	88%	7%	95%
FY16	2,424	89%	6%	95%

n=22,709

Compensable and non-compensable RTW outcomes over time

Overall the proportion of non-compensable cases with successful RTW is 94% and compensable cases 90%. The finding is consistent with current literature showing people with non-compensable injuries have improved health outcomes compared with those in non-compensable environments. 20-22 Pleasingly our data demonstrates in recent years the success rate for compensable cases has increased (88% in FY11 to 95% FY16). This is encouraging and again reflects the increasing level of industry expertise in effectively referring and managing these sometimes complex cases.

Table 8 RTW outcomes by compensation status for all RTW referrals

FINANCIAL YEAR	SUCCESSFUL RTW NON-COMPENSABLE N=2,784	SUCCESSFUL RTW COMPENSABLE N=19,925
FY09	96%	89%
FY10	92%	87%
FY11	95%	88%
FY12	93%	87%
FY13	93%	89%
FY14	90%	94%
FY15	93%	95%
FY16	98%	95%
AVERAGE	94%	90%

Profile of RTW outcome

The impact of early referral is evident in RTW success where the median time from injury to referral in successful outcomes is 13 weeks, compared with 47 weeks for the unsuccessful RTW group. The flow-on effect is observed in service costs and durations for each group.

Additionally, there is a higher proportion of mental health conditions in the unsuccessful group, which is consistent with research demonstrating that mental health conditions are associated with a worse outcome.

In terms of demographic, successful RTW is associated with younger age and male gender. These trends have remained consistent over the reporting period (FY09-16).

Table 9 Profile of successful versus unsuccessful RTW outcomes

	SUCCESSFUL RTW N=20,611	UNSUCCESSFUL RTW N=2,098
GENDER - MALE	65%	63%
AGE	38 YEARS	42 YEARS
MEAN SERVICE COST	\$2,470	\$3,377
MEDIAN SERVICE COST	\$1,617	\$2,248
MEAN DELAY TO REFERRAL (WEEKS)	41 WEEKS	107 WEEKS
MEDIAN DELAY TO REFERRAL (WEEKS)	13 WEEKS	47 WEEKS
MEAN SERVICE DURATION (WEEKS)	21 WEEKS	28 WEEKS
MEDIAN SERVICE DURATION (WEEKS)	15 WEEKS	20 WEEKS
% OF INITIAL REFERRALS FOR MENTAL HEALTH CONDITIONS	13%	21%
% OF INITIAL REFERRALS COMPENSABLE	87%	91%

Table 10 Successful RTW outcomes over time

FINANCIAL YEAR	% OF RTW REFERRALS	AVERAGE AGE (YEARS)	SERVICE COST MEAN (MEDIAN)	DELAY TO REFERRAL IN WEEKS MEAN (MEDIAN)	DURATION OF SERVICE IN WEEKS MEAN (MEDIAN)
FY09	90%	39	\$2,995 (\$2,064)	31 (9)	24 (18)
FY10	88%	41	\$2,863 (\$1,986)	38 (12)	22 (16)
FY11	89%	40	\$2,597 (\$1,636)	38 (12)	23 (16)
FY12	88%	40	\$2,579 (\$1,622)	39 (14)	23 (17)
FY13	90%	37	\$2,892 (\$1,870)	71 (21)	27 (19)
FY14	95%	37	\$2,309 (\$1,567)	36 (13)	22 (15)
FY15	95%	34	\$1,777 (\$1,299)	31 (12)	15 (13)
FY16	96%	38	\$1,439 (\$1,039)	51 (20)	13 (11)

n=20,611

Table 11 Unsuccessful RTW outcomes over time

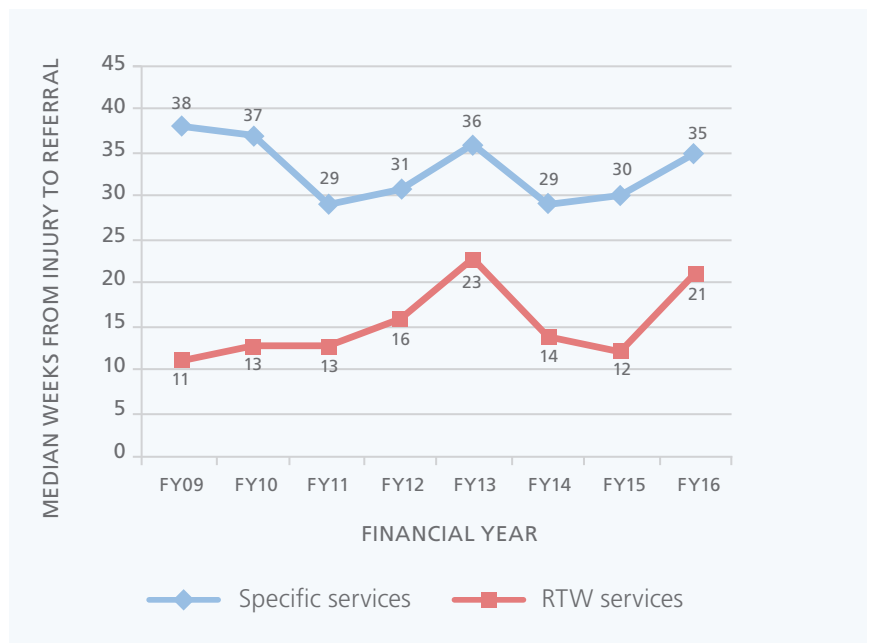
FINANCIAL YEAR	% OF RTW REFERRALS	AGE YEARS MEAN	SERVICE COST MEAN (MEDIAN)	DELAY TO REFERRAL IN WEEKS MEAN (MEDIAN)	DURATION OF SERVICE IN WEEKS MEAN (MEDIAN)
FY09	10	42	\$3,975 (\$2,796)	101 (36)	30 (23)
FY10	12	42	\$3,627 (\$2,356)	116 (60)	28 (20)
FY11	11	43	\$3,258 (\$2,099)	97 (34)	28 (19)
FY12	12	42	\$3,647 (\$2,265)	124 (59)	32 (25)
FY13	10	42	\$3,362 (\$2,329)	115 (74)	30 (23)
FY14	5	39	\$3,093 (\$1,913)	93 (42)	25 (18)
FY15	5	43	\$2,256 (\$1,442)	85 (30)	19 (16)
FY16	4	41	\$1,761 (\$1,217)	114 (49)	15 (12)

n=2,098

Delay to referral for specific services versus RTW services

Time from injury to referral is trending downwards for both referral types and remains considerably lower for RTW services compared with specific services. This is to be expected given that overall claims management is being managed outside Konekt for specific services. Specific services are utilised for varying purposes throughout the life of a case, and therefore will and should be referred at any time either before or after the injured person has returned to work. As an example, early in the life of a case, an individual may be referred for a Workplace Assessment, to support the employer to develop their suitable duties plan. Some months later, Konekt may be asked to undertake a Functional Capacity Assessment as that same injured person seeks to return to work post-surgery. As a result, the delay to referral data fluctuates far more widely, and means are shifted later. This does not negate the value and importance of earlier referral for this group of Services – earlier referral still results in lower cost and duration.

Figure 16 Median delay from injury to referral by type of service over time

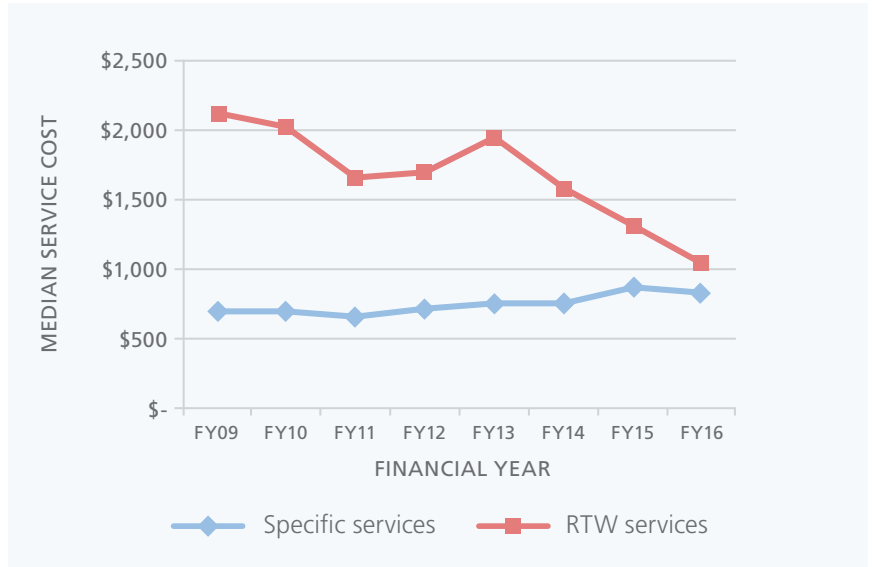


n=131,504

Rehabilitation service costs and duration over time

As we hypothesised last year, targeted expenditure is delivering RTW outcomes for less cost. The downward trend in RTW services costs coupled with shorter service duration continues in FY16. Specific services costs and durations remain relatively steady. Particularly pleasing is the continuing decline in service duration – indicating that more injured people are returning to work earlier. This is good news for injured people, employers, insurers, regulators and the Australian economy. This shift demonstrates that the pathway taken by the industry, shifting to more evidence-based and discrete interventions, is paying dividends.

Figure 17 Median service costs over time



n=150,200

Figure 18 Median service duration (weeks) over time



n=137,130

JURISDICTIONAL COMPARISONS

Jurisdictional comparisons at a glance

- ▶ Comcare, NSW and Victoria represent 82% of all referrals and 86% of all compensable referrals
- ▶ Comcare population are on average 10 years younger and come from a higher socioeconomic profile compared to the other jurisdictions
- ▶ As a proportion of injuries within jurisdiction, Comcare has a higher referral rate for mental health conditions
- ▶ As a proportion of all referrals within jurisdiction, Comcare has the highest proportion of RTW referrals
- ▶ Duration of service is similar across jurisdictions and costs of service are lowest in Victoria
- ▶ Comcare has the shortest delay to referral and the highest RTW rate at 95%.

Profile of cases by jurisdiction

Note Only compensable referrals (workers' compensation, road traffic/CTP and income protection) are represented in this analysis and cross-jurisdictional differences observed may relate to specific legislation or guidelines.

The total number of compensation cases is 125,295. Of this group, NSW has the highest proportion of referrals (38%), followed by Comcare (30%) and Victoria (14%). The other states and territories and some national self-insured companies account for the remaining 18 percent.

Comcare shows the highest (and increasing) proportion of mental health condition (16%, up from 11%) and RTW referrals.

Table 12 Demographics and compensable referral patterns by jurisdiction

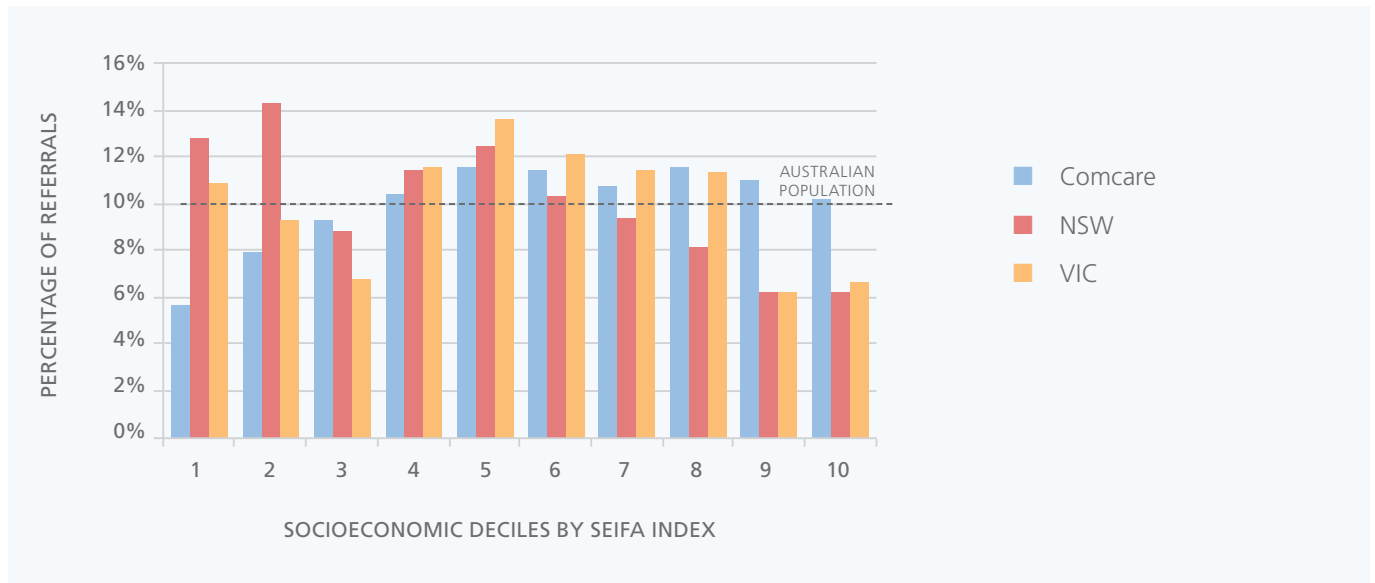
CHARACTERISTICS	COMCARE N= 37,566	NSW N= 47,883	VIC N= 17,774
AGE (YEARS)	36	44	46
GENDER - MALE	76%	65%	62%
REFERRAL FOR MENTAL HEALTH CONDITIONS	16%	6%	10%
REFERRED TO RTW SERVICE	35%	17%	25%
SERVICE COSTA MEAN (MEDIAN)	\$1,672 (\$988)	\$1,368 (\$862)	\$1,130 (\$754)
DURATION OF SERVICE (WEEKS) ^a MEAN (MEDIAN)	13 (5)	11 (6)	10 (5)
DELAY TO REFERRAL ^a (WEEKS) MEAN (MEDIAN)	83 (19)	99 (42)	105 (65)

^a Closed cases only (n=98,360)

Socioeconomic profile by jurisdiction

Comcare, with its high proportion of professional workers, has a greater proportion of people in higher socioeconomic profiles compared with NSW and Victoria. NSW has the highest proportion with the lowest socioeconomic profile where 27% of referrals are in the lowest 2 disadvantage deciles.

Figure 19 Socioeconomic index by jurisdiction



n=73,321

Jurisdictional RTW service costs, referral delays service durations for successful outcomes

Early intervention is again highlighted, with Comcare showing the shortest delay to referral and the highest RTW success. While age and socio-economic profile are likely contributors to the high RTW rate and earlier referrals observed in Comcare, they may in part be due to the large cohort of self-insured organisations that operate within the Comcare scheme and work directly with Konekt. These organisations are particularly proactive with respect to early referral resulting in better RTW outcomes.

Table 13 jurisdictional RTW service costs, referral delays service durations for successful outcomes

JURISDICTION	NO. OF RTW OUTCOMES	SUCCESSFUL RTW	SERVICE COST MEAN (MEDIAN)	DELAY TO REFERRAL IN WEEKS MEAN (MEDIAN)	DURATION OF SERVICE IN WEEKS MEAN (MEDIAN)
COMCARE	7,870	95%	\$2,319 (\$1,452)	54 (14)	25 (18)
NSW	5,448	86%	\$3,164 (\$2,118)	57 (17)	20 (15)
VIC	2,407	88%	\$2,177 (\$1,856)	56 (31)	21 (19)

INDUSTRY PROFILES

Industry Profile at a Glance

- ▶ Highest number of referrals from Public Administration and Safety sector
- ▶ Highest proportion of fractures in the Construction sector
- ▶ Longest delay to referral in Manufacturing
- ▶ Highest proportion of compensable referrals from the Construction sector
- ▶ Lowest proportion of RTW service referrals in the Financial and Insurance Services, Administrative and Support Services
- ▶ Highest proportion of successful RTW outcomes in the Public Administration and Safety.

Referrals by industry

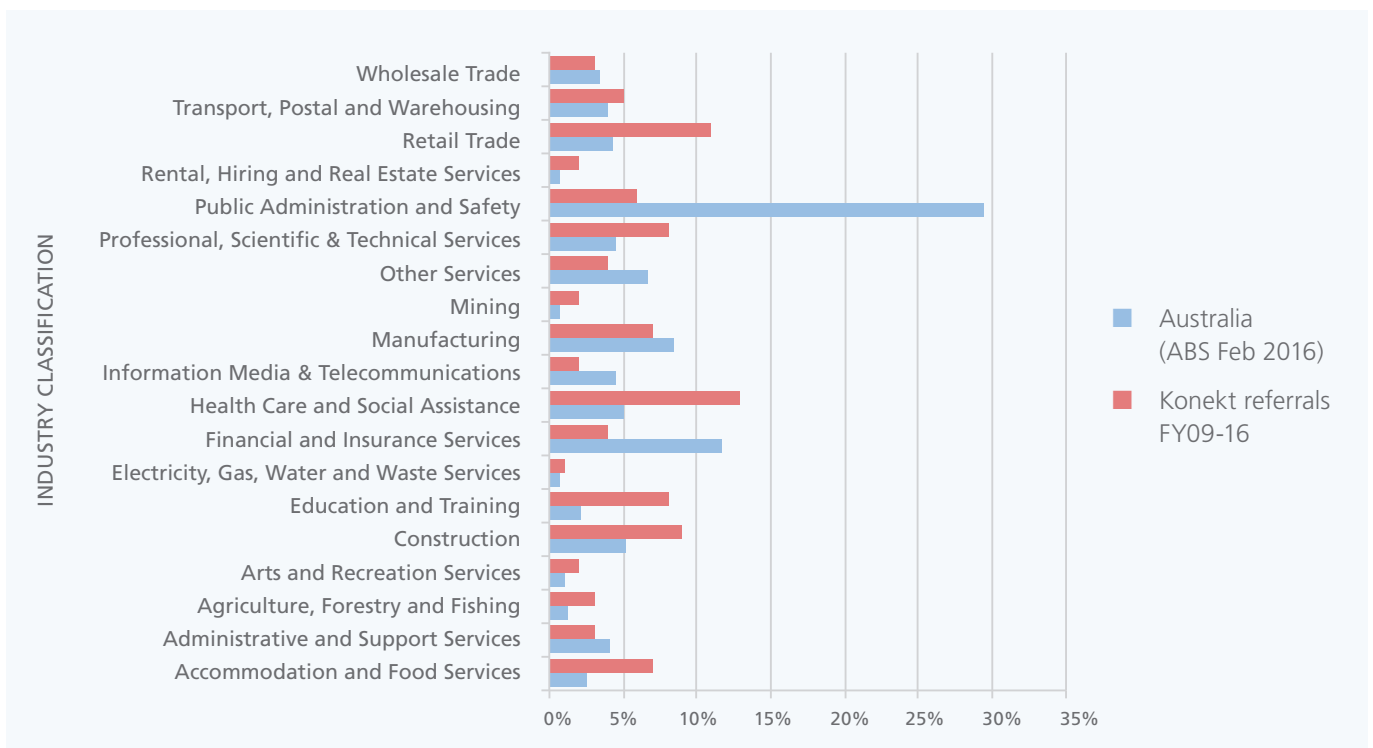
Many factors contribute to the differences in referrals, costs and durations observed across industry, including:

- ▶ **The type of injury sustained**
the construction industry has a higher proportion of fractures which typically result in higher costs and longer durations
- ▶ **The capacity to offer alternative duties (RTW) within an organisation**
there may be greater opportunity for a Public Administration injured worker to find suitable duties within their organisation compared with a worker from the Construction industry

Of the referrals 30% were from the Public Administration and Safety sector, Financial and Insurance Services (12%) and Manufacturing (8%) and Construction (5%) were the next largest sectors (Figure 20). These results differ from Australian population data where Manufacturing, Transport, Postal and Warehousing, and Agriculture, Forestry and Fishing industries have the highest work-related injury or illness rates.²³

It is important to recognise that Konekt data are over-represented in Public Administration and Safety, and Financial and Insurance Services; while Health Care and Social Assistance, Retail Trade, and Education and Training are under-represented. These differences should be considered when interpreting the industry data.

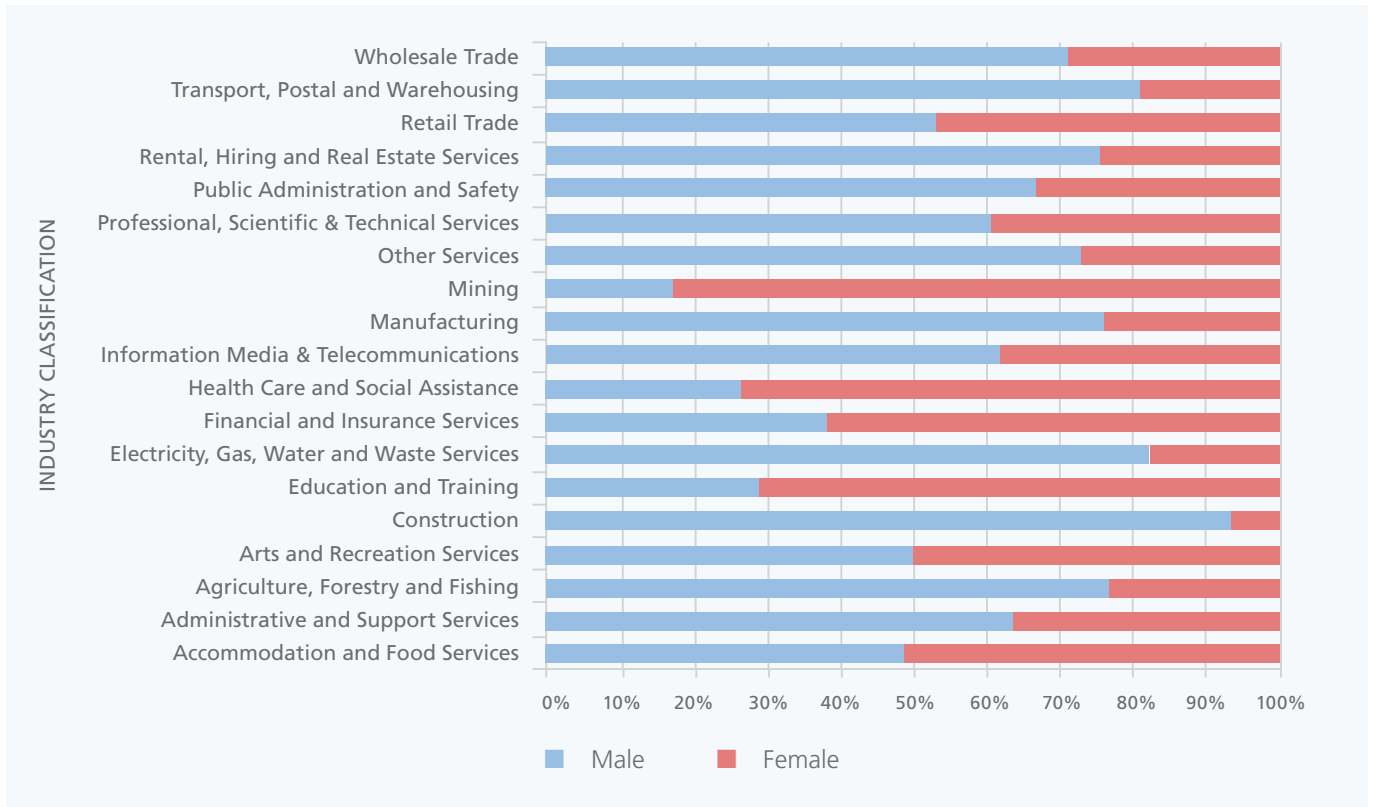
Figure 20 Industry proportion of Australians employed and Konekt referrals



Gender distribution by industry

As expected, there is a higher proportion of males being referred for a RTW case in the Construction and Manufacturing sectors; and a higher number of females being referred for a RTW case in the Education and Training, and Accommodation and Food Services sectors. Figure 21 shows a disproportionate number of females in the mining sector (83%), where we would typically expect to see a greater proportion of males.

Figure 21 Gender by industry classification

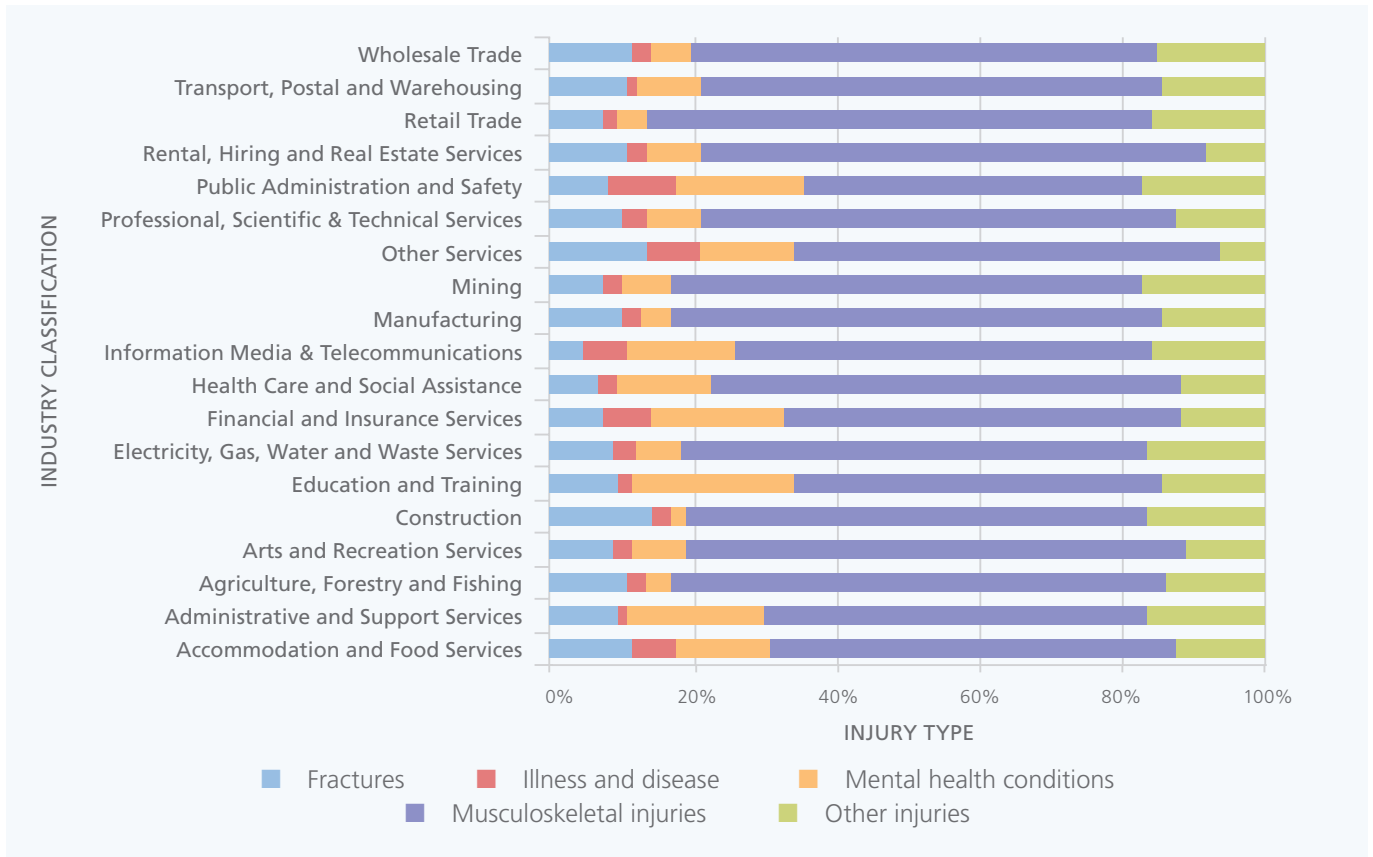


n=109,582

Injury type by industry

Musculoskeletal injury as a proportion of all injuries across industry is broadly consistent, demonstrating the non-discriminatory nature of the injury. In contrast, the proportion of initial mental health referrals is highest in Education and Training (23%), Financial and Insurance Services (19%) and Public Administration and Safety (18%), and lowest in Construction (3%) and Manufacturing (4%). A higher proportion of Fractures (14%) were seen in the Construction industry.

Figure 22 Injury type by industry classification

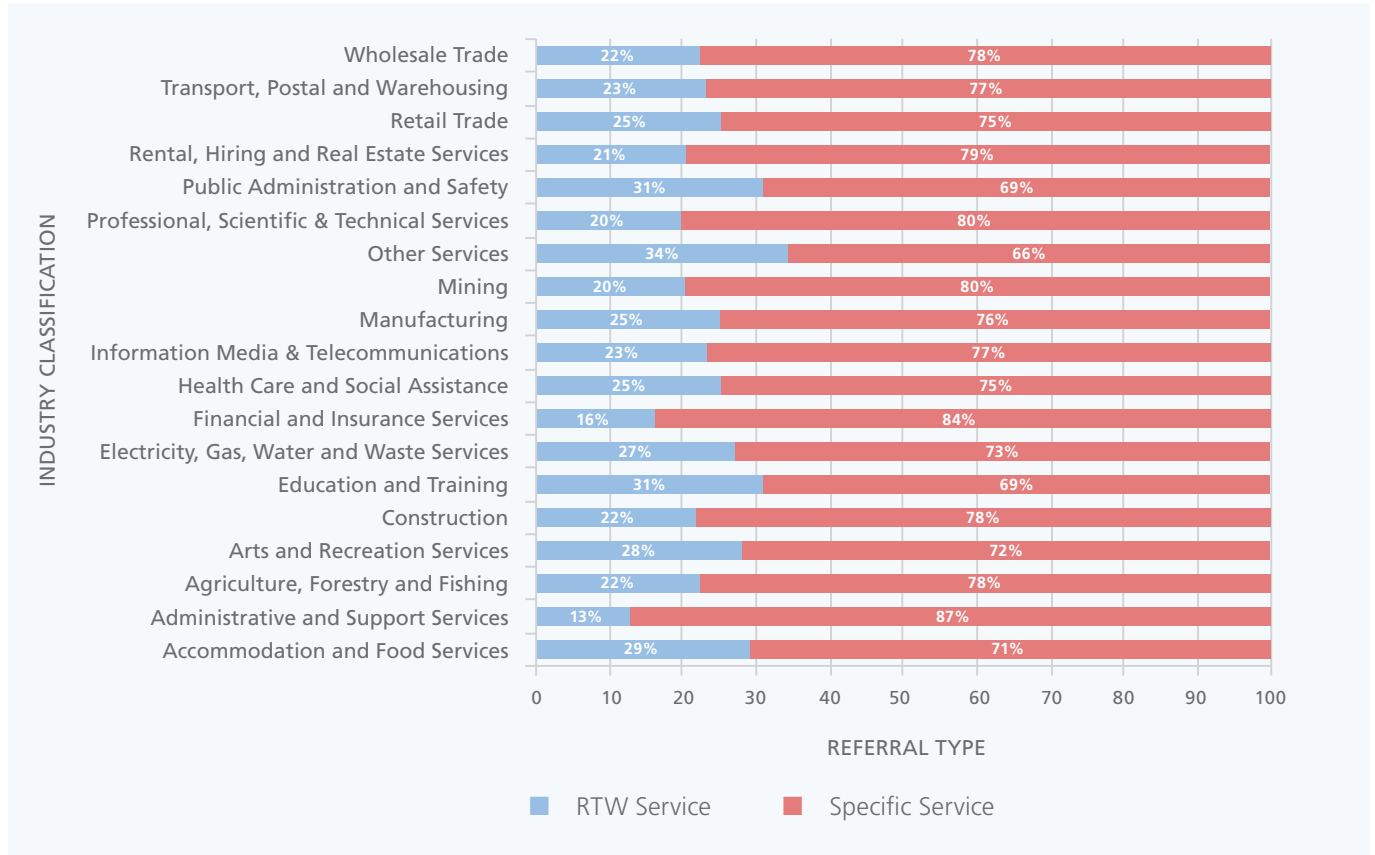


n=115,511

Referral type by industry

Public Administration and Safety had the highest proportion of RTW referrals versus Specific Services; Financial and Insurance Services and Administrative and Support Services the lowest proportion.

Figure 23 Referral type by industry classification

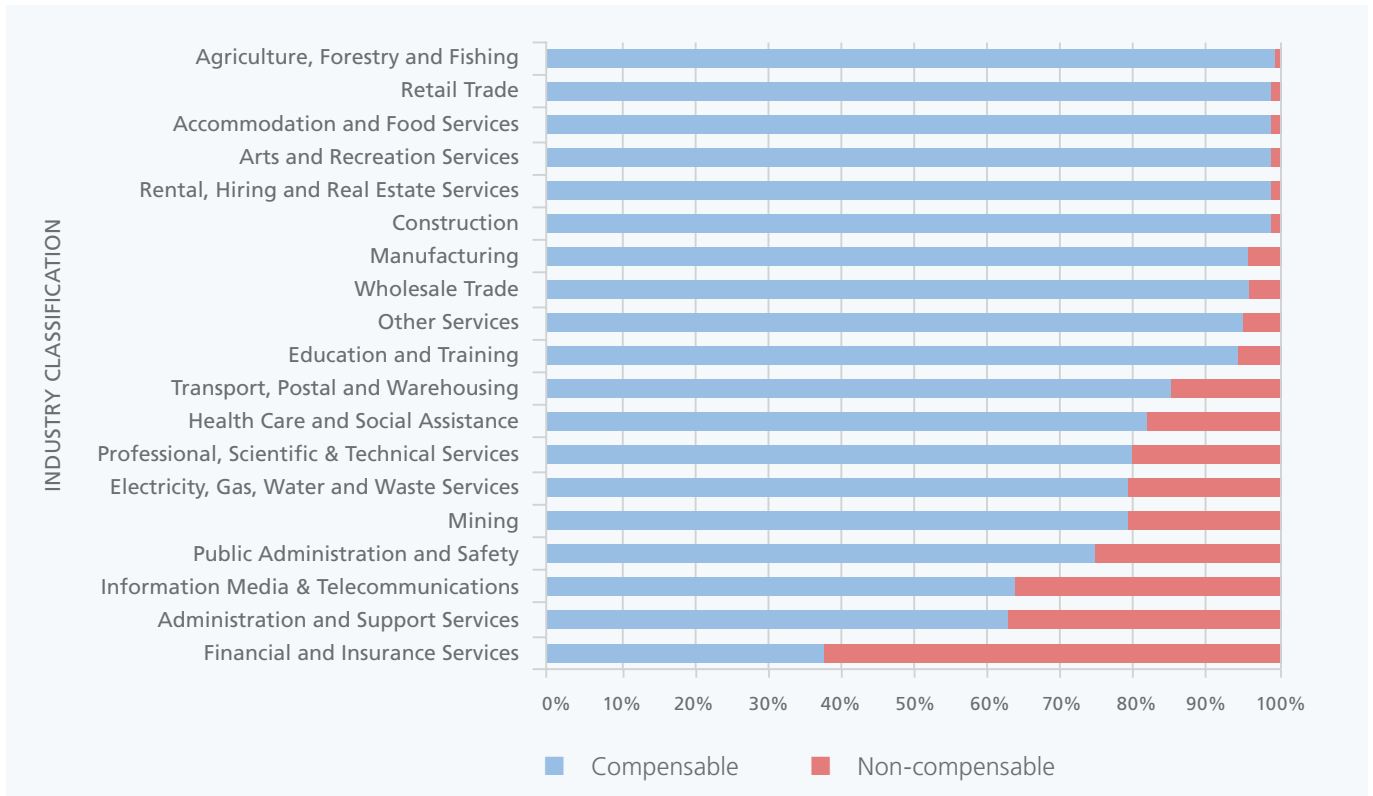


n=123,424

Compensable referrals by industry

Construction shows a comparatively large proportion of compensable referrals (98%) while the Financial and Insurance Services sector has the lowest (38%). From Konekt's experience, the Financial and Insurance Services sector provides comprehensive early-intervention and non-compensation support services, which has flow-on benefits of reducing claims, improving RTW outcomes, reducing case costs and duration.

Figure 24 Referral compensation status within industry classification

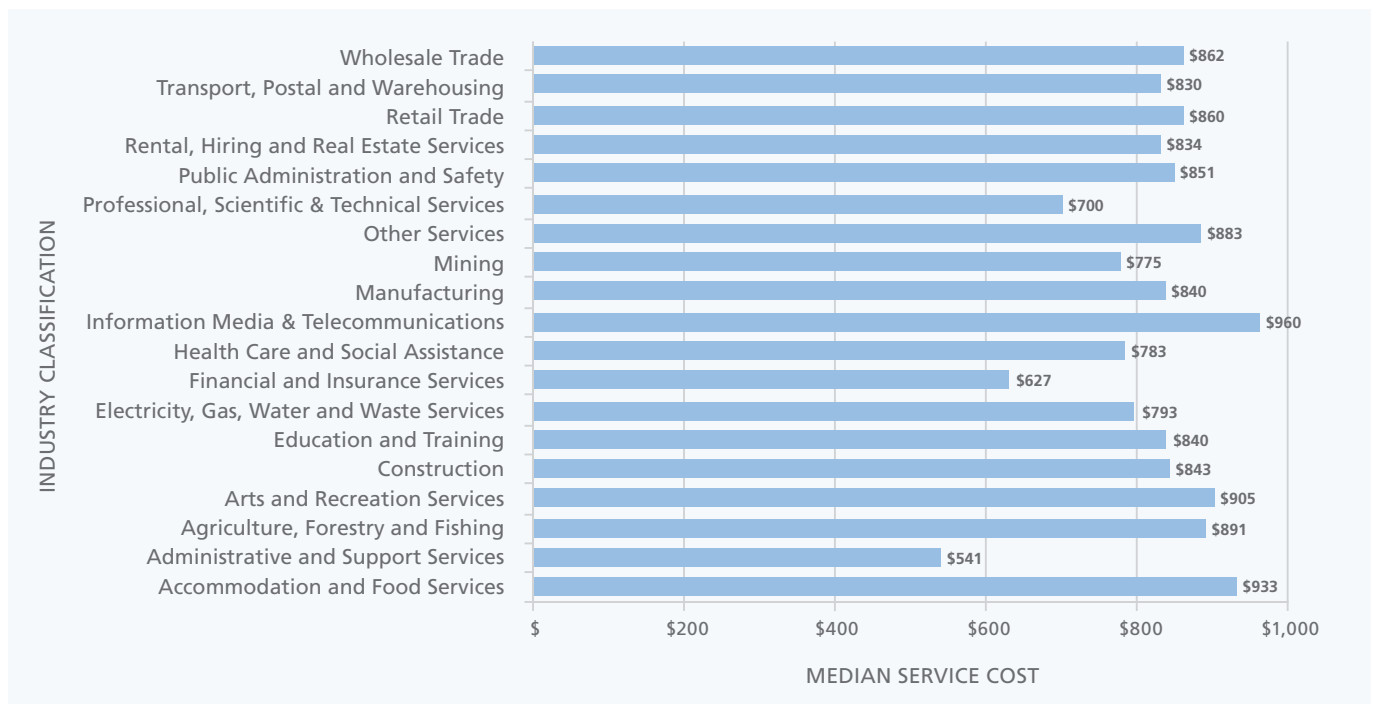


n=123,424

Service costs by industry

Administrative and Support Services, and Financial and Insurance Services and Professional, Scientific and Technical Services have the lowest average service costs; this is most likely driven by the higher proportion of Specific services within these classifications.

Figure 25 Median service cost by industry classification

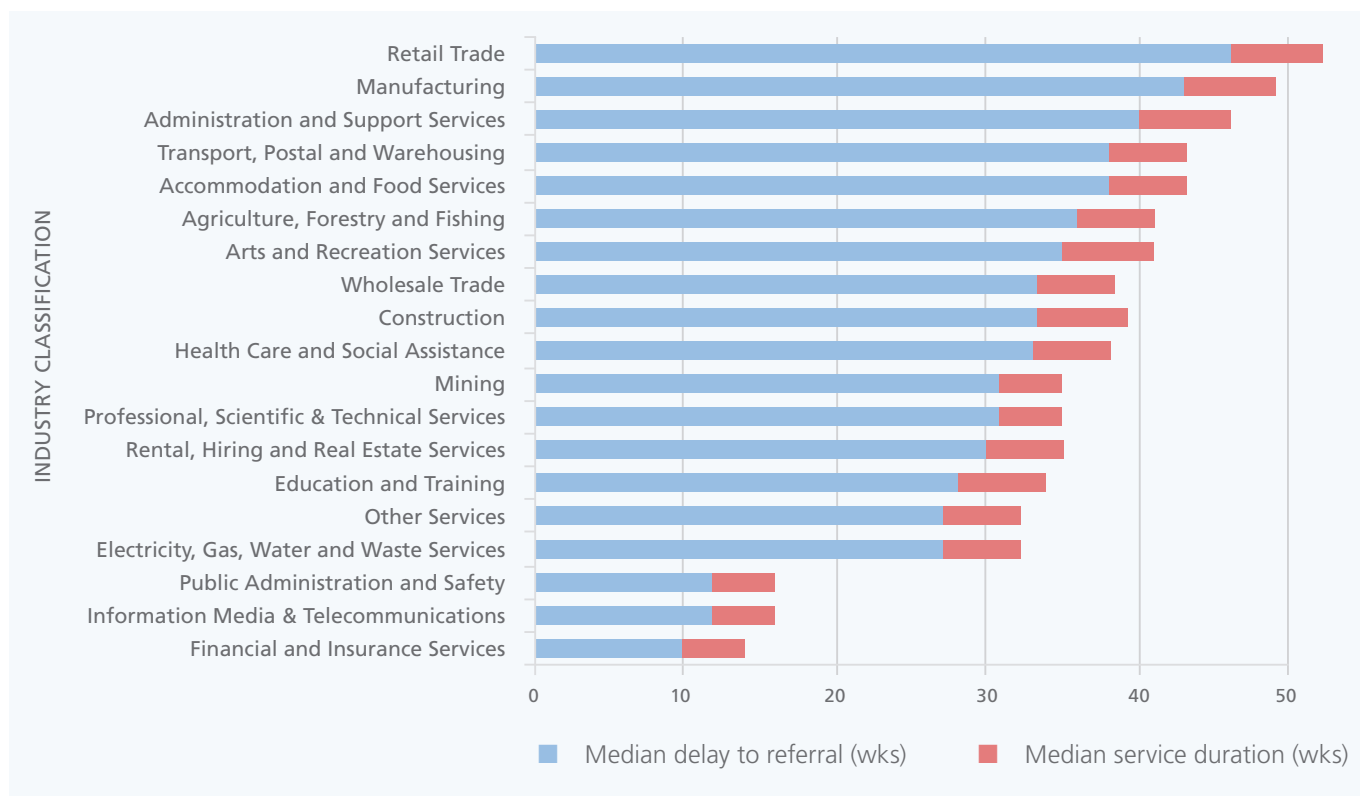


n=117,915

Delay to referral and service duration by industry

Manufacturing had the highest mean time from injury to referral which is likely to be driven by the high proportion of small organisations in that sector. Manufacturing also demonstrated the longest service duration, which Konekt contends is the result of the lag to referral, and the greater severity of injuries seen in this group.

Figure 26 Median delay to referral and service duration by industry classification

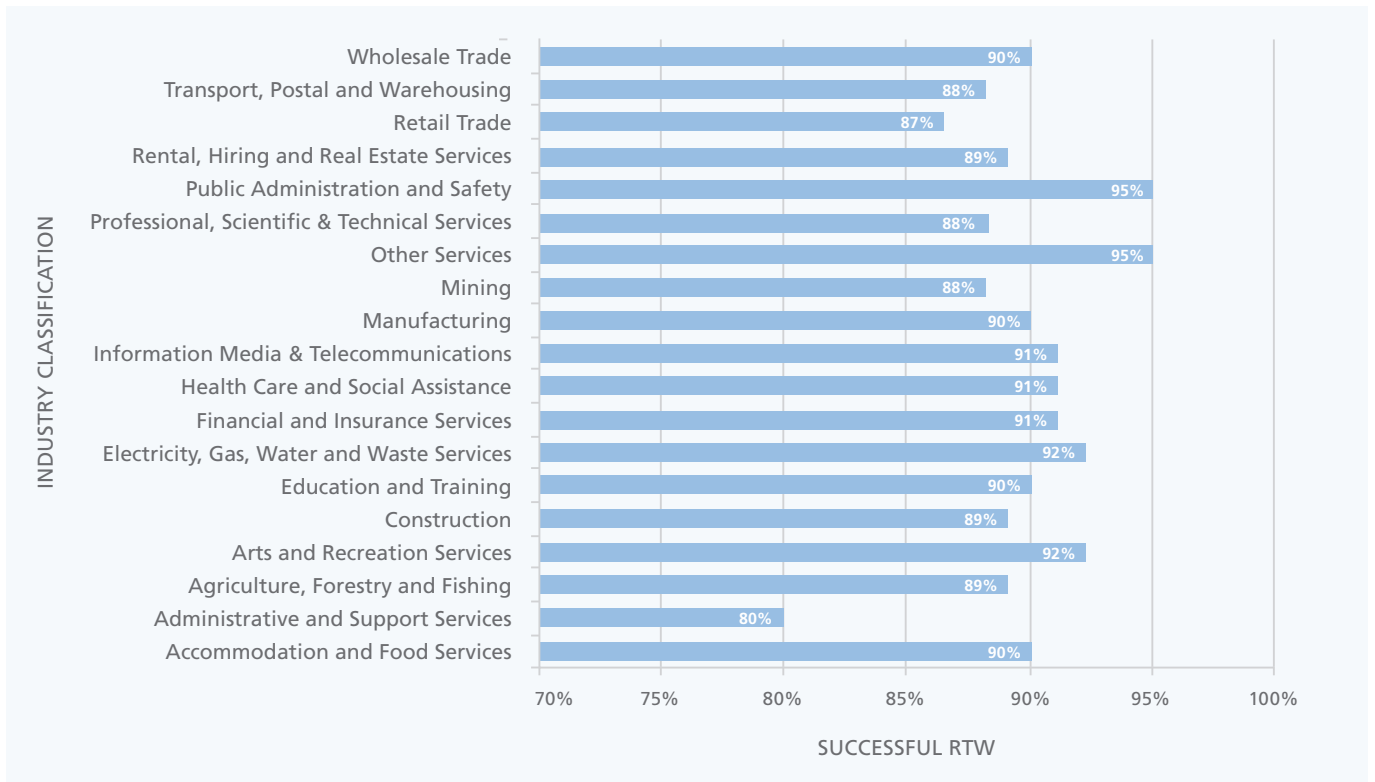


n=116,118
closed cases only

RTW outcomes by industry

Public Administration and Safety and Financial and Insurance Services had the highest proportion of successful RTW (Figure 27). They also had the lowest delay to referrals reinforcing the importance of early intervention in injury management (Table 14). Administrative and Support Services had a relatively lower RTW rate, which can be explained by the inclusion of labour hire in this industry category.

Figure 27 Proportion of successful RTW outcomes by industry classification



n=22,709

RTW service costs, referral delays and service durations by industry

Table 14 RTW service costs, referral delays and service durations by industry

INDUSTRY CLASSIFICATION	SERVICE COST MEAN (MEDIAN)	DELAY TO REFERRAL IN WEEKS MEAN (MEDIAN)	DURATION OF SERVICE IN WEEKS MEAN (MEDIAN)
ACCOMMODATION AND FOOD SERVICES	\$2,790 (\$1,858)	346 (21)	20 (16)
ADMINISTRATIVE AND SUPPORT SERVICES	\$2,914 (\$1,866)	39 (18)	20 (16)
AGRICULTURE, FORESTRY AND FISHING	\$2,796 (\$1,810)	45 (15)	20 (14)
ARTS AND RECREATION SERVICES	\$2,643 (\$1,905)	35 (16)	19 (14)
CONSTRUCTION	\$2,608 (\$1,884)	39 (14)	20 (14)
EDUCATION AND TRAINING	\$3,140 (\$2,130)	40 (15)	24 (18)
ELECTRICITY, GAS, WATER AND WASTE SERVICES	\$2,509 (\$1,745)	29 (11)	19 (15)
FINANCIAL AND INSURANCE SERVICES	\$1,885 (\$1,242)	29 (11)	16 (11)
HEALTH CARE AND SOCIAL ASSISTANCE	\$2,791 (\$1,795)	48 (16)	22 (16)
INFORMATION MEDIA & TELECOMMUNICATIONS	\$3,145 (\$2,045)	38 (13)	26 (19)
MANUFACTURING	\$2,666 (\$1,858)	54 (21)	21 (16)
MINING	\$3,640 (\$2,723)	41 (19)	25 (18)
OTHER SERVICES	\$1,757 (\$1,164)	53 (18)	15 (12)
PROFESSIONAL, SCIENTIFIC & TECHNICAL SERVICES	\$2,619 (\$1,906)	43 (18)	20 (15)
PUBLIC ADMINISTRATION AND SAFETY	\$2,261 (\$1,464)	45 (11)	24 (18)
RENTAL, HIRING AND REAL ESTATE SERVICES	\$2,966 (\$1,706)	44 (16)	18 (11)
RETAIL TRADE	\$2,741 (\$1,917)	51 (20)	20 (15)
TRANSPORT, POSTAL AND WAREHOUSING	\$2,568 (\$1,908)	45 (19)	20 (16)
WHOLESALE TRADE	\$2,956 (\$2,076)	38 (14)	21 (16)

n=18,592

ORGANISATION SIZE PROFILE

Organisation Size Profile at a Glance

- ▶ Similar gender referral distribution across large organisations; Higher proportion of referrals from males within smaller organisation
- ▶ Mental health condition referrals higher for large organisations; Fractures for small organisations
- ▶ Lower socio-economic profile within small and medium organisations
- ▶ Construction industry more likely a smaller organisation; Public Administration and Safety are larger organisations
- ▶ RTW outcomes less successful in smaller organisations
- ▶ Smaller proportion of compensable referrals in large organisations.

Profile of cases by organisation size

Organisation size data were available for 73,599 (47%) referrals. The ABS definition of organisation size was used for these analyses²⁴, where a large organisation is defined as one with more than 200 employees; medium organisation those with 20 – 199 employees, and a small organisation as less than 20 employees.

As expected given the Konekt client base, over half the referrals were from large organisations such as government agencies and large corporates; and one quarter from small, privately owned businesses (Figure 28).

Age distribution was similar across organisation size, while a higher proportion of males were from smaller organisations. (Figure 29 and Figure 30). The imbalances in gender distribution across organisation size are likely due to the corresponding industry classifications (small organisations in Construction; large in Public Administration and Safety). There were a higher proportion of referrals from lower socioeconomic backgrounds in small and medium size businesses, consistent with the pattern in industry classifications. (Figure 31)

The proportion of people referred with mental health conditions (16%) and illness and disease (5%) were highest in large organisations; while small organisations has a greater representation of fractures (13%). (Figure 32)

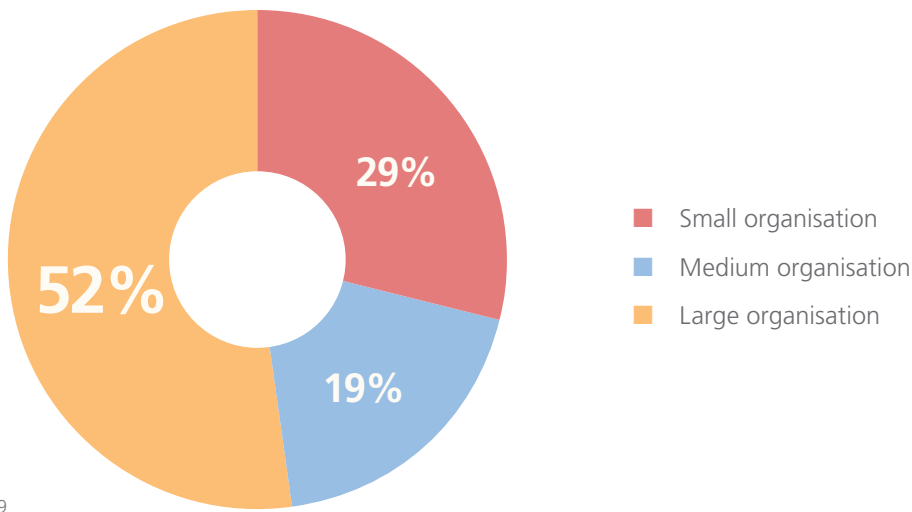
Large organisations were represented by Information Media and Telecommunications (96%), and Public Administration and Safety (82%); small organisations were more likely to operate in the Construction (66%), Accommodation and Food Services (60%) and Agriculture, Forestry and Fishing (58%) sectors.

There were no differences in the proportion of referrals for RTW Services across industry size, however RTW success was more likely to be achieved in large organisations (90%) compared with small organisations (86%). (Figure 34 and Figure 36)

Costs are lowest for large organisations, with corresponding shortest delay from injury to referral suggesting that large organisations are more responsive when managing injured workers. The lower RTW rates observed may be attributed to the longer duration from injury to referral and subsequent higher associated service costs compared to large organisations (Table 15)

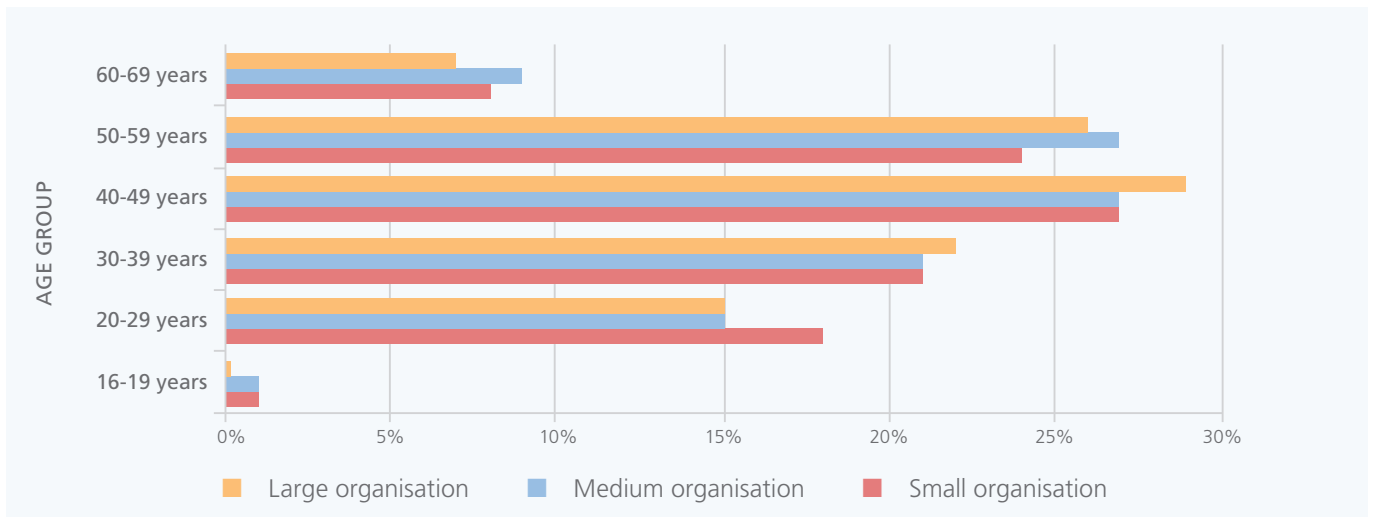
In recognition of the limited resources small businesses often have to assist injured workers, many Australian workers' compensation jurisdictions require employers to access the services of a rehabilitation provider in the early stages of a claim. These strategies aim to improve health outcome of people from this population.

Figure 28 Proportion of referrals by organisation size



n=73,599

Figure 29 Age distribution by organisation size

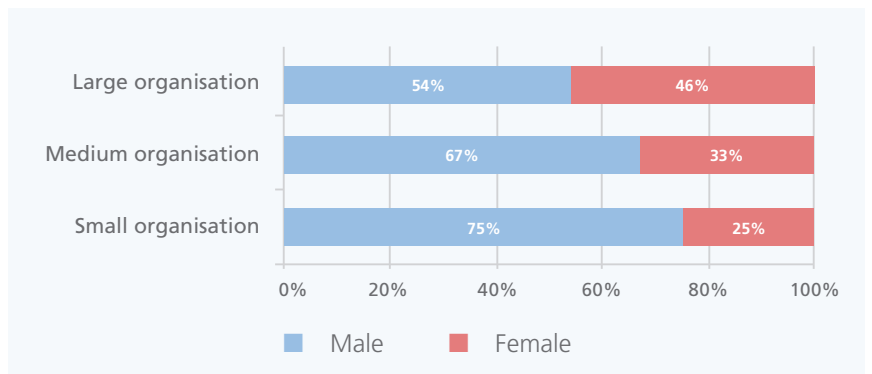


n=54,522

Gender distribution by organisation size

Imbalances observed in gender distribution across organisation size are likely due to the type of industry within each segment.

Figure 30 Gender distribution by organisation size

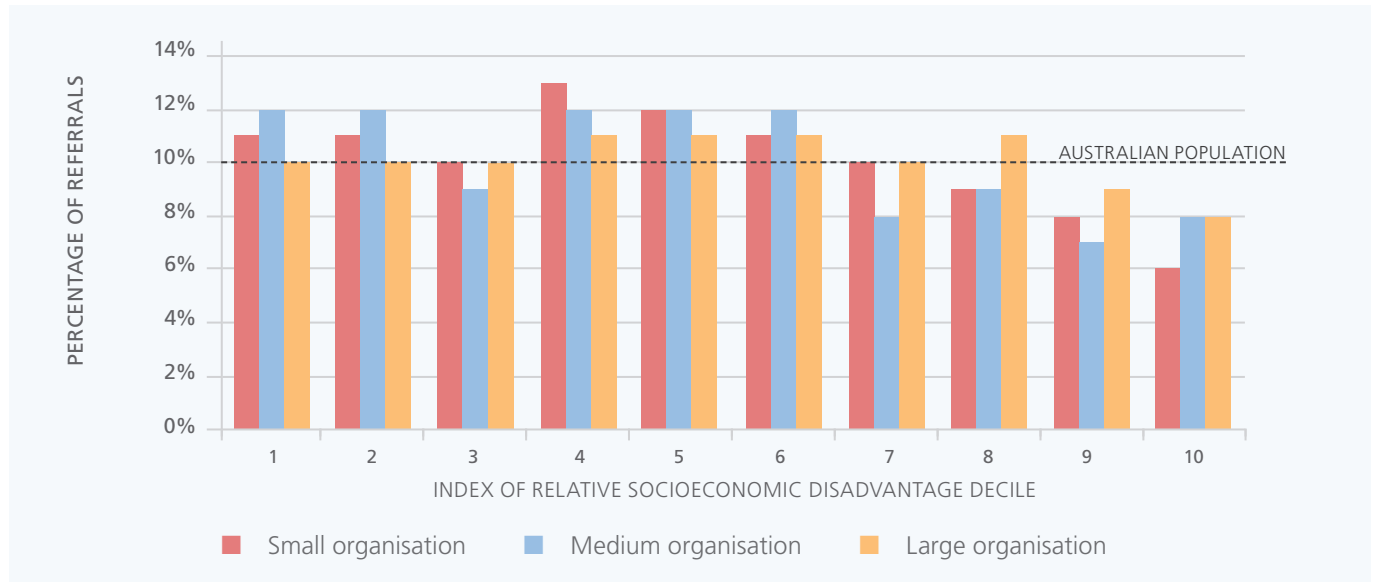


n= 64,811

Socioeconomic profile by organisation size

Small and medium organisation referrals were more likely to come from lower socioeconomic backgrounds, whereas half the large organisations referrals were from more affluent areas.

Figure 31 Socio-demographics by organisation size

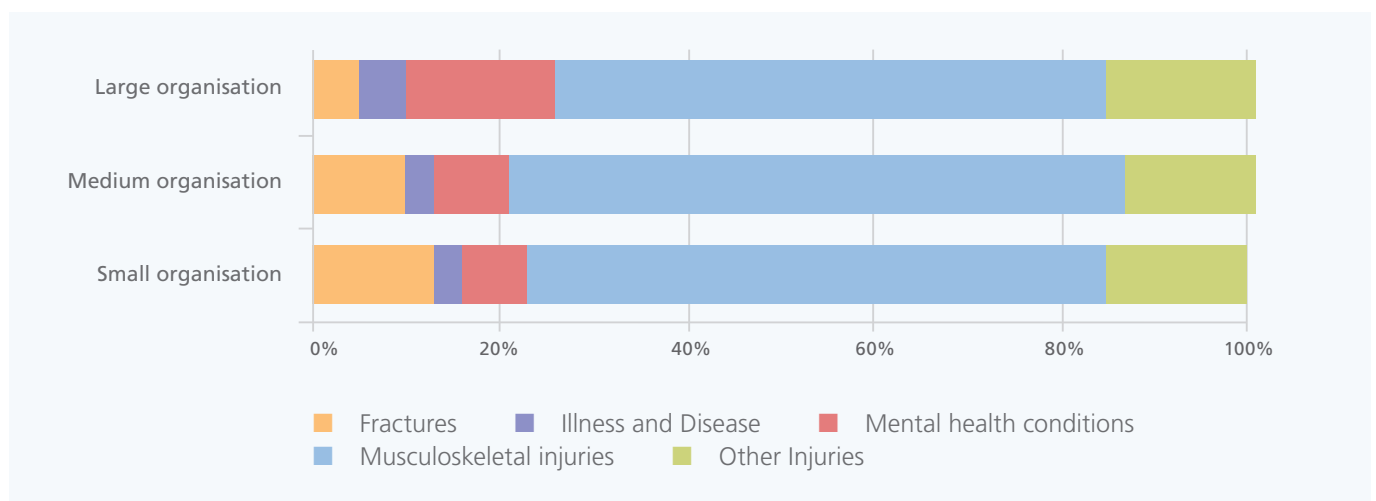


n=52,473

Injury type by organisation size

Medium size organisations had the greatest proportion of referrals for musculoskeletal injuries; while fractures were more common in small organisations. The prevalence of fractures in the small organisation group provides challenges for small business; this type of injury often demonstrates a longer duration and in Konekt’s experience the opportunity to return an injured worker to alternate duties is often limited.

Figure 32 Injury type by organisation size

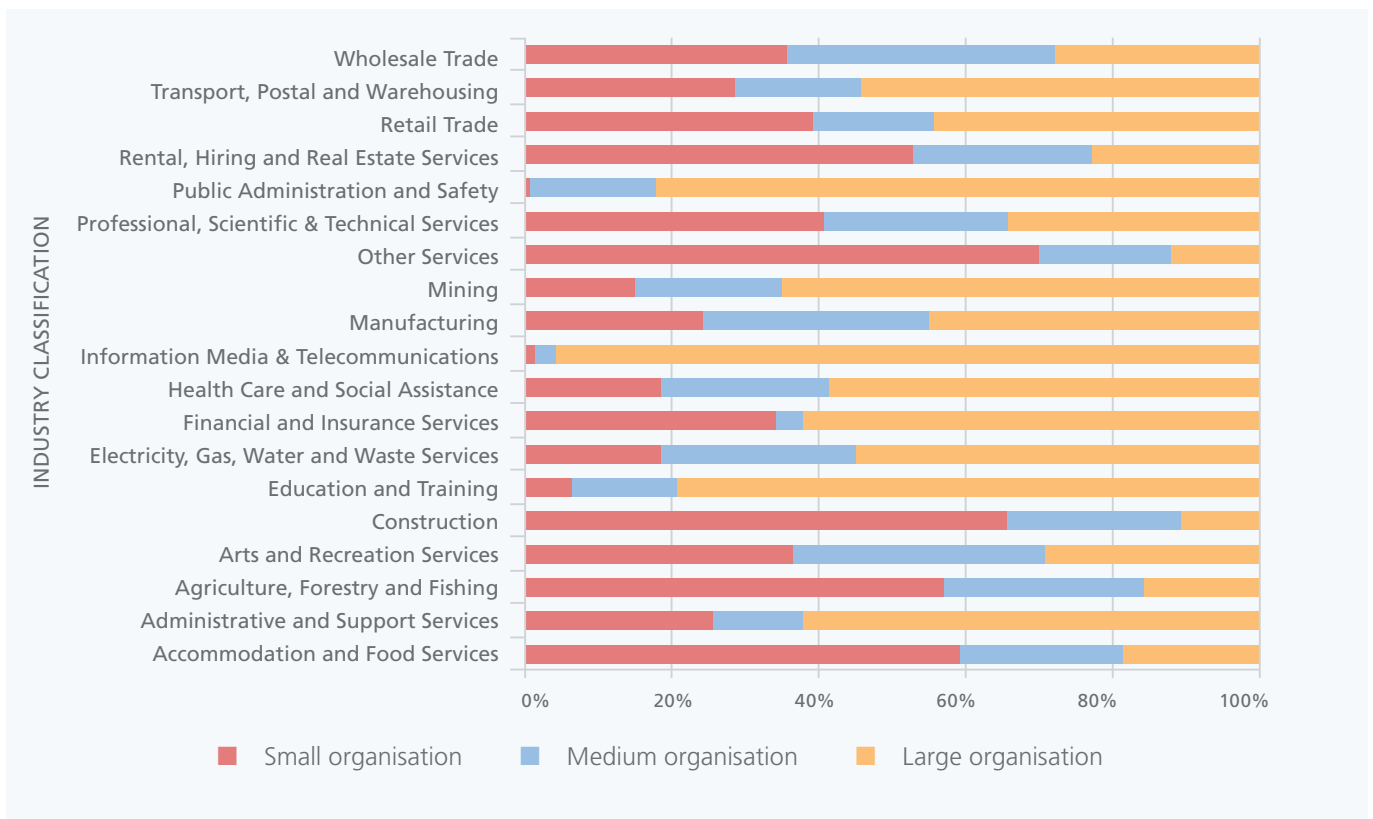


n=67,514

Industry classification by organisation size

Large organisations have higher proportions of referrals from Public Administration and Safety. These will be predominantly government agencies. The high proportion of referrals from the Information Media and Telecommunications is driven by large private sector organisations.

Figure 33 Industry classification by organisation size

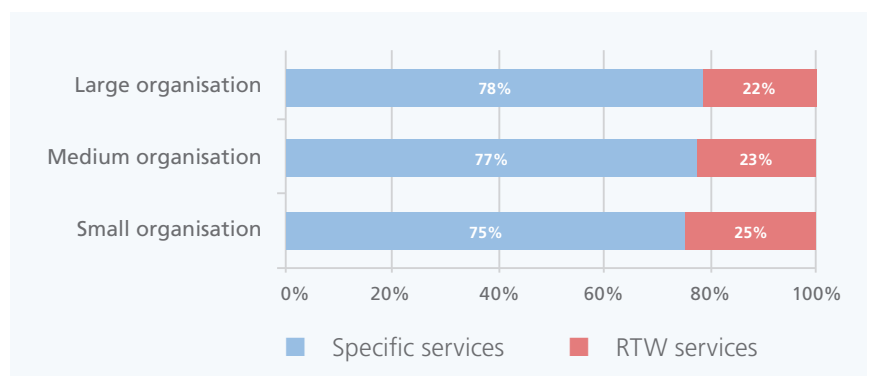


n=73,477

Referral type by organisation size

Referral for Specific services such as workplace assessments, vocational assessments and ergonomic assessments are similar across organisation size.

Figure 34 Referral type by organisation size

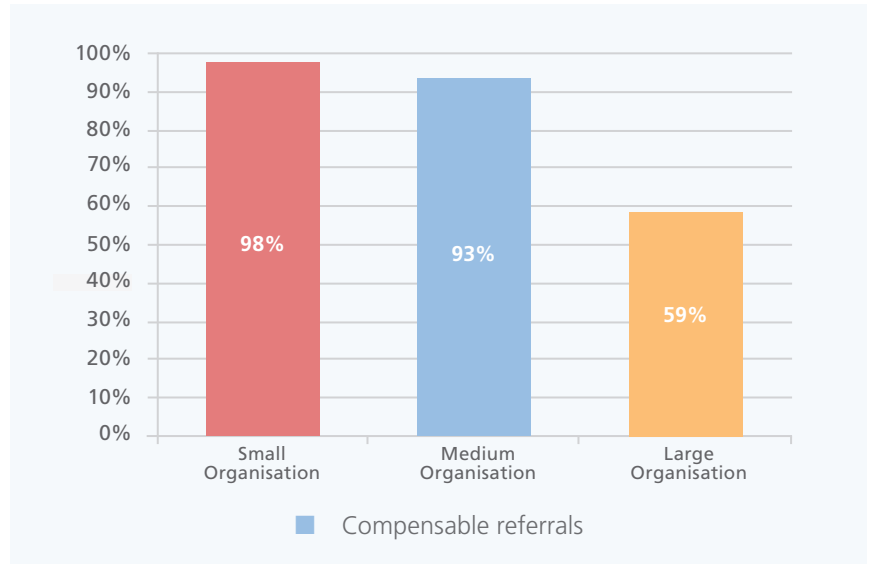


n=73,599

Compensable referrals by organisation size

Small and medium organisations had significantly higher proportions of compensable referrals, suggesting the focus for supporting injured workers in these organisations is limited to those cases where the injury occurred at work and funding is provided through the local compensation scheme or insurer. As a general rule, smaller organisations do not have the ability or the desire to fund early intervention programs, and the result is longer delays to intervention and poorer outcomes. A number of regulators and insurers have recently set up specialist programs to support earlier intervention for smaller employers, which are showing good results and being expanded more widely.

Figure 35 Proportion of compensable referrals by organisation size

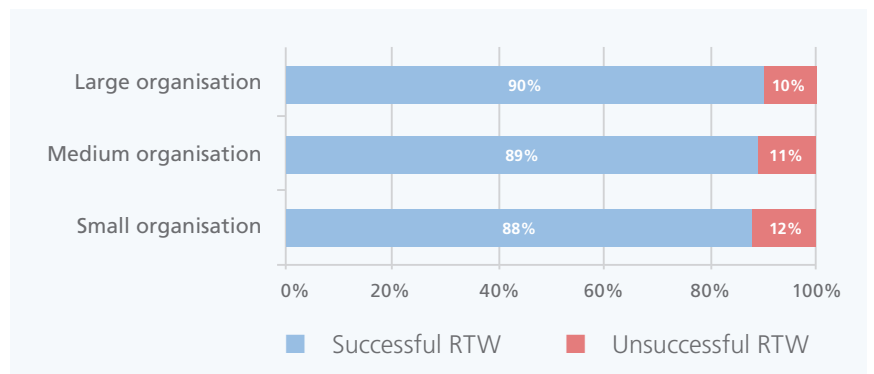


n=73,599

RTW outcomes by organisation size

Large organisations had greater proportions of successful RTW outcomes. The organisational culture, systems and processes to support injured people may contribute to these outcomes.

Figure 36 RTW outcomes by organisation size



n=10,111

RTW service costs, referral delays and service durations by organisation size

In FY16 costs are lowest for large organisations with corresponding shortest delay from injury to referral suggesting that large organisations are more responsive to managing injured people.

Table 15 RTW service costs, referral delays and service durations by organisation size FY16

	SERVICE COST MEAN (MEDIAN)	DELAY TO REFERRAL IN WEEKS MEAN (MEDIAN)	SERVICE DURATION IN WEEKS MEAN (MEDIAN)
SMALL ORGANISATION	\$2,571 (\$1,713)	47 (18)	20 (15)
MEDIUM ORGANISATION	\$2,818 (\$2,003)	45 (17)	20 (15)
LARGE ORGANISATION	\$2,802 (\$1,788)	46 (14)	22 (16)

n=10,110

WHAT YOU NEED TO KNOW ABOUT THE DATA

Data was extracted from the Konekt case management database Konektiva. All referrals opened between 1 July 2008 and 30 June 2016 were analysed. The total population was 156,545 referrals. A referral represents an episode of service an individual received, for example, workplace assessment, case conference or functional assessment. Therefore, an individual may receive multiple service referrals. All data presented is based on episodes of service rather than individuals.

Referrals included open and closed cases, with data presented in previous Konekt Market Reports updated in the current report to include case closure information. Variations from previous Konekt Market Reports are likely due to updating closed cases and exclusion of invalid data. The variations will be more obvious when the parameter under examination has small numbers (minimal data points).

When analysing RTW outcome data, only closed cases (referrals) are used. Due to prior year closed data being updated, variation may be seen across measures reported in previous Konekt Market Reports. For example, length of service duration and case cost information will differ.

Several external data sources are used to supplement the Konekt data:

Data published by the Australian Bureau of Statistics (ABS) was used to measure socioeconomic status. The Socio-Economic Indexes for Areas (SEIFA) summarises census variables, at the Census District (CD) level and in the analysis the Index of Relative Socio-economic Disadvantage (IRSD) and the Index of Education and Occupation (IEO) were used (ABS).²⁵

The Australian and New Zealand Standard Industrial Classification (ANZSIC) classifies groupings of businesses which carry out similar economic activities. Each grouping defines an industry and the similar economic activities which characterise the businesses concerned are referred to as activities primary to that industry. This is referred to as the primary ANZSIC code of which there are 19. All 19 ANZSIC Divisions (A – S) are represented in the data.²⁶ The data were appended to the Konekt database by Dun & Bradstreet.

Employer size was categorised using ABS definitions; with small employers defined as businesses with less than 20 employees, medium employers as businesses with 20 – 199 employees and large employers as those with more than 200 employees.²⁴ Number of employee data were appended to the Konekt database by Dun & Bradstreet.

Where data is unevenly distributed (e.g. high numbers of large values and outliers) both mean and median scores are reported. Mean score refers to the average of all data points and median is the middle point of the data, in which half the numbers are above the median and half are below.

An important consideration when reviewing this report is the nature of the data on which the number of cases is based for each analysis. The number reported is influenced by available data for a particular parameter. For example, employment data (both industry classification and organisation size) were not available for all cases, therefore the number (*n*) reported in employment analyses vary from the total population *n*. To assist the reader, *n*'s are reported in all figures and tables.

Where population numbers (*n*) are reported in figures and tables they refer to the category under examination (e.g. RTW referrals, employer size, jurisdiction). The number may vary within each variable; for example, service costs may not be available for every record. Therefore, the *n* will differ from that reported for the category. A **Note** is made where numbers within a variable or factor of interest are low.

Some results reported in this document will differ from prior reports due to a change in the manner in which data has been collected by the business. The following variables have been affected by the changes:

Date of birth

Records with a date of birth recorded as 01/01/1900 (system default) have been removed when analysing *age*

Date of injury

Records with a date of injury recorded as 01/01/2000 (system default) have been removed when analysing *delay to referral and service duration*

Delay to referral is calculated for all referrals within a case. That is, a person may be referred to many services over a period of time. The delay to referral is calculated for each referral; not just the first referral.

Finally, all data presented are representative of the Konekt client base and as such may differ from the general population. The information presented in this report is descriptive only in nature; causal inferences should not be drawn.

GLOSSARY OF FREQUENTLY USED TERMS AND DEFINITIONS

Abbreviations

ABS	Australian Bureau of Statistics
CTP	Compulsory Third Party Compulsory Third party insurance provides the driver of an insured (registered) vehicle cover for any legal liability for injury and death as a result of an accident for which the insured is responsible.
IEO	Index of Education and Occupation This measure reflects the educational and occupational level of communities. A low score indicates relatively lower education and occupation status of people in the area in general. A high score indicates relatively higher education and occupation status of people in the area in general.
IRSD	Index of Relative Socio-economic Disadvantage This measure summarises a range of information about the economic and social conditions of people and households within an area. A low score indicates relatively greater disadvantage in general. A high score indicates a relative lack of disadvantage in general.
MHC	Mental Health Condition Work-related mental health conditions include anxiety, depression, stress disorder and post-traumatic stress disorder.
MSK	Musculoskeletal Musculoskeletal injuries include injury/trauma to muscles, ligaments, joints to any body part (including disorders to spinal vertebrae and intervertebral discs), strains and strains.
PWC	PricewaterhouseCoopers
ROI	Return On Investment
RTW	Return To Work In this report RTW may be full or partial hours.
SEIFA	Socio-economic Indexes for Areas This measure ranks areas in Australia according to relative socio-economic advantage and disadvantage. The indexes are based on information from the five-yearly Australian Census. The SEIFA score is created using information about people and households in a particular area. This score is standardised against a mean of 1000 with a standard deviation of 100. This means that the average SEIFA score will be 1000 and the middle two-thirds of SEIFA scores will fall between 900 and 1100 (approximately).

Terms

Compensable

A case (referral) arising from a compensation claim. In this report, compensable cases refer specifically to claims for workers compensation.

High-complexity cases

Cases where biopsychosocial risk factors have been identified.

Konektiva

Konekt case management database

Mean

The sum of all the numbers in a set, divided by the amount of numbers in the set. Sometimes referred to as the average. It is used when describing the centre point of 'normally distributed' data.

Median

The middle point of a number set, in which half the numbers are above the median and half are below. Used when describing the centre point of non-normal or asymptotic data (e.g. large tails, skewed, or multiple outliers).

Non-compensable

A case (referral) that is not associated with a claim for compensation. Typically these referrals are made by employers.

Organisation size

Organisation size uses the ABS definition and is based on the number of employees; 'Small' business is defined as 0 – 19 employees, 'medium' 20 – 199 employees, and 'large' greater than 200 employees.

RTW service

A term used to describe the type of service provided to a referral. Return To Work (RTW) services form part of a RTW program. The RTW program may be centred on returning the individual to their pre-injury employer or a different employer. A RTW program may include services such as a workplace assessment, functional assessment, case management services, and RTW suitable duties plans.

Specific service

A term used to describe the type of service provided to a referral. Specific services include workplace assessments, vocational assessments and ergonomic assessments. Specific services may or may not be part of a comprehensive RTW program being managed by the insurer or employer. In these instances the employer or insurer may choose to engage Konekt to perform certain elements of the RTW program which we refer to as 'specific services.'

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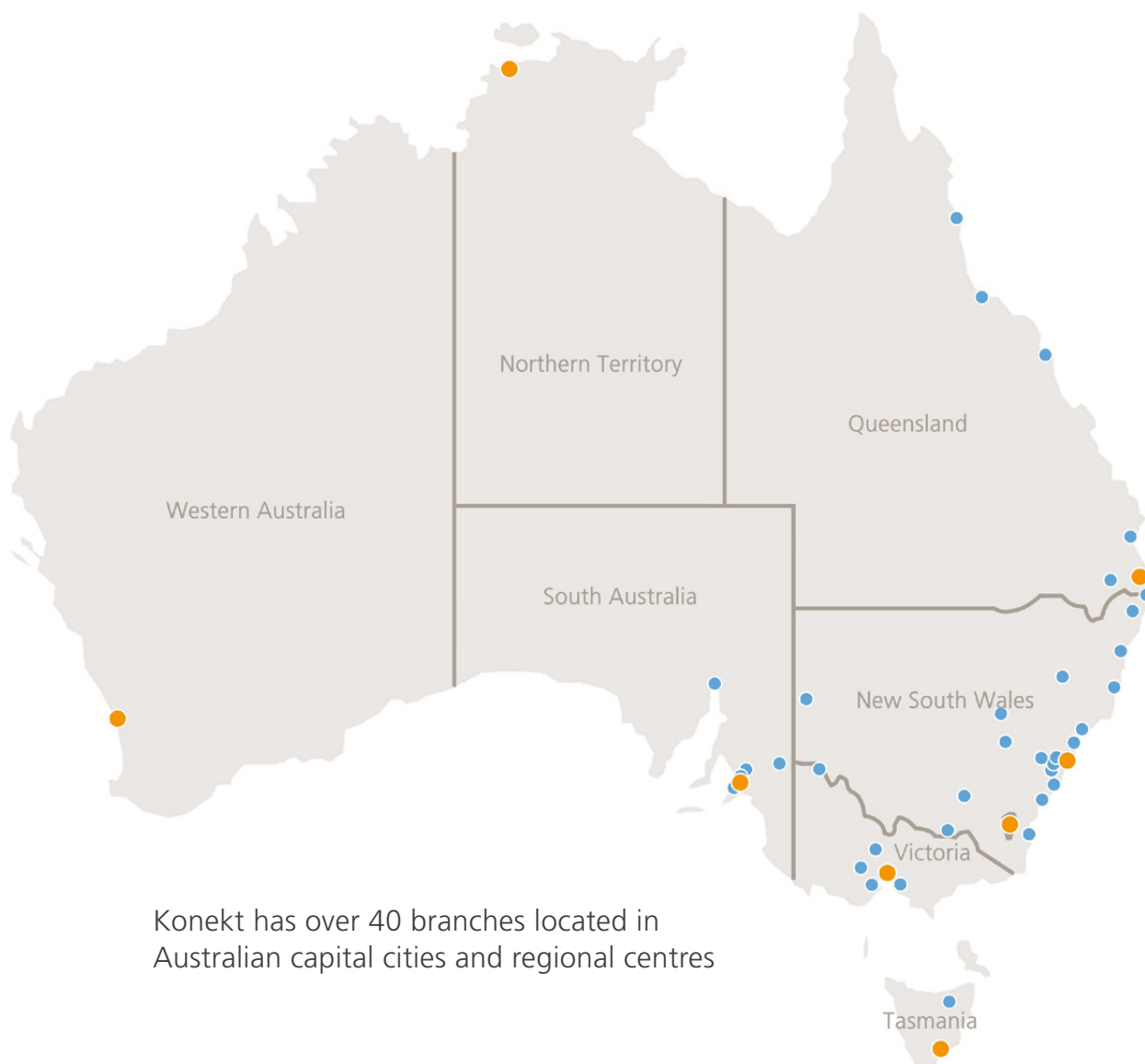
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