PSYCHOSOCIAL FACTORS AND THEIR IMPORTANCE

The biopsychosocial approach to injury and illness recognises that the course and outcome of any health problem is influenced by biological, psychological and social factors.[14] The distinction between a biomedical and a biopsychosocial approach is important. The biomedical model focuses on diagnosis and treatment to suit the type, location and severity of the illness. In contrast, the biopsychosocial approach takes a multi-layered, interconnected view, recognising that each component (bio + psych + social) contributes barriers and enablers to recovery, and that there are interrelationships between the components. Unhelpful psychosocial responses can trigger biological processes that increase pain, distress and disability. It is these biological processes that are unique to the 'bio' in biopsychosocial.[44,45]

Below are outlined some of the key psychological and social (i.e. psychosocial) influences on recovery and RTW outcomes for workers who claim workers' compensation.[46] It should be remembered that biopsychosocial constructs are not discrete – they interact and overlap, and their cumulative influence is a more effective prognostic indicator than scores on individual scales.[47]

Compensation system psychosocial factors include:

- Perceptions of fairness.
- Disputes and claim investigations (e.g. surveillance).
- Poorly managed or excessive independent medical examinations (IMEs).
- Delays.
- Loss of control.

Workplace psychosocial factors include:

- Unsupportive supervisors or co-workers.
- Low job satisfaction.
- Disputes.
- Availability of modified duties.
- The stigma and consequences of lodging a claim.
- Poor work design and management, as when there is:
    - work overload,
    - unreasonable time pressure,
    - lack of role clarity,
    - high demands, low control, and/or

- hazardous relationships at work.

Personal psychosocial factors include:

- Unhelpful beliefs about pain and illness.
- Poor health literacy.
- Recovery expectations.
- Anxiety, depression or post-traumatic stress disorder (PTSD).
- Fear avoidance beliefs/behaviours.
- Poor or passive coping, feelings of helplessness.
- Catastrophising.
- Active coping and self-efficacy.
- Loss of self-identify due to role loss.
- Views of family members and significant others.
- Cultural factors.
- History of adverse childhood experiences[48].
- Personal stressful life events, such as divorce or relationship breakdown, the death or illness of a loved one, etc.

The terms ‘biopsychosocial’ and ‘psychosocial’, used throughout this paper, should at no time be seen as pejorative or judgemental. They reflect that the impact of our circumstances, beliefs and behaviours have a greater bearing on recovery from illness and RTW, and therefore rehabilitation practice, than biomedical concepts alone.

Consequences of poorly managed psychosocial factors

Delays, poor communication, a sense of unfairness, uncertainty, adversarial attitudes, a lack of empathy and a lack of support cause problems throughout the compensation process – in the workplace, in healthcare, in interactions with insurers and during dispute resolution processes. Unmanaged personal psychosocial risks (e.g. unhelpful beliefs and fears) have been shown to worsen outcomes too.

Increased work disability

Negative psychosocial factors are barriers to RTW, substantially increasing the risk of long-term disability. A study of negative psychosocial factors, as measured by the short-form Orebro musculoskeletal pain questionnaire, found that for every one point increase in the score (out of 100), the chance of RTW reduced by 4%.[49] Workers classified as high risk (those with a score greater than 50/100) had over three times as many days off work as the low-risk group, shown graphically in Figure 1 below.

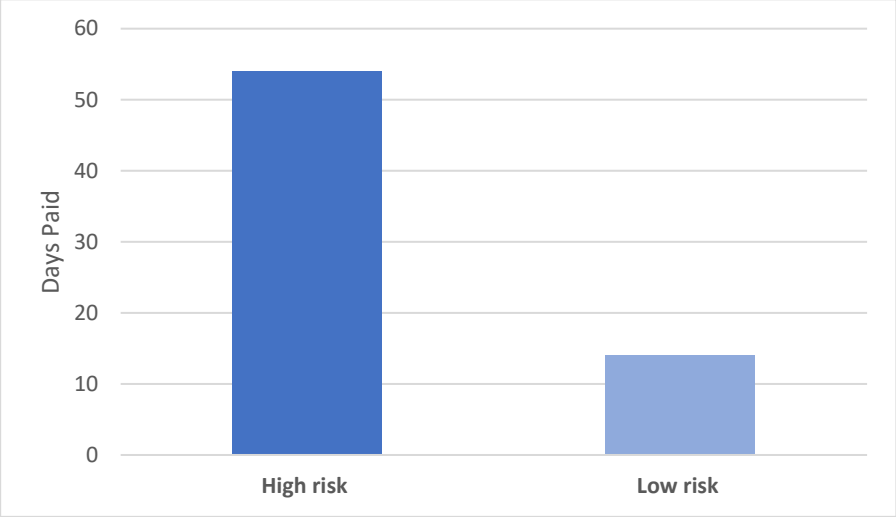


Figure 1. Average days of wage reimbursement per claim by risk categorisation

Reprinted from "Work Injury Screening and Early Intervention (WISE) study. Preliminary outcomes," by M. Nicholas, G. Pearce, M. Gleeson, R. Pinto, and D. Costa. 2015; November 30. Presentation to Rehabilitation Psychologists' Interest Group.

An analysis of data from the 2013 and 2014 National RTW Survey (in which 9,377 workers were surveyed over two years) demonstrates the real-world impact of psychosocial factors on RTW outcomes in Australia. Table 1 below shows the percentage increase in RTW rates for workers who described positive psychosocial experiences compared to those who described negative psychosocial experiences.[19] Physical and psychological claims are shown separately.

Table 1. RTW by injury type and key influencing factors

Key influencing factors	**Physical injury** Total claims: 8736 (93.2%)	**Psychological injury** Total claims: 575 (6.1%)
Positive employer response to injury	43%	52%
Early contact from workplace versus no workplace contact	26%	45%
Employer assistance provided before the claim was lodged	18%	33%
Absence of disagreements/disputes	22%	24%
Low levels of concern about lodging a claim	24%	29%
A positive interaction with system/claims organisation	25%	13%
Workplace culture prior to injury	25%	2%

Reprinted from "Return to work: A comparison of psychological and physical injury claims: Analysis of the Return to Work Survey Results," by M. Wyatt and T. Lane T. 2017, Safe Work Australia.

When the employer's response to a worker's injury report was positive or constructive, the RTW rate was 43% higher in physical injury cases. In psychological injury cases, the RTW result was 52% higher when there was a positive employer response.

When interactions with the case manager and the system in general were positive, the injured worker was 25% more likely to RTW from a physical injury and 13% more likely for a psychological claim.

According to its 2019 annual report, Aotearoa New Zealand's ACC has seen an increase in client satisfaction and an improvement in health outcomes.[50]

Issues such as the employer's response to injury, time taken to contact, pre-claim assistance, disputes, and frustrations in dealing with the claim's organisation, can have major impacts on RTW. It is worth repeating that these are modifiable risk factors.

The more psychosocial risk factors that are present, the more likely recovery will be delayed. Figure 2 below uses the term 'yellow flags' to denote personal psychosocial risks. As the number of psychosocial risks increase, so too does the cumulative probability that a worker will not recover from their injury or illness.

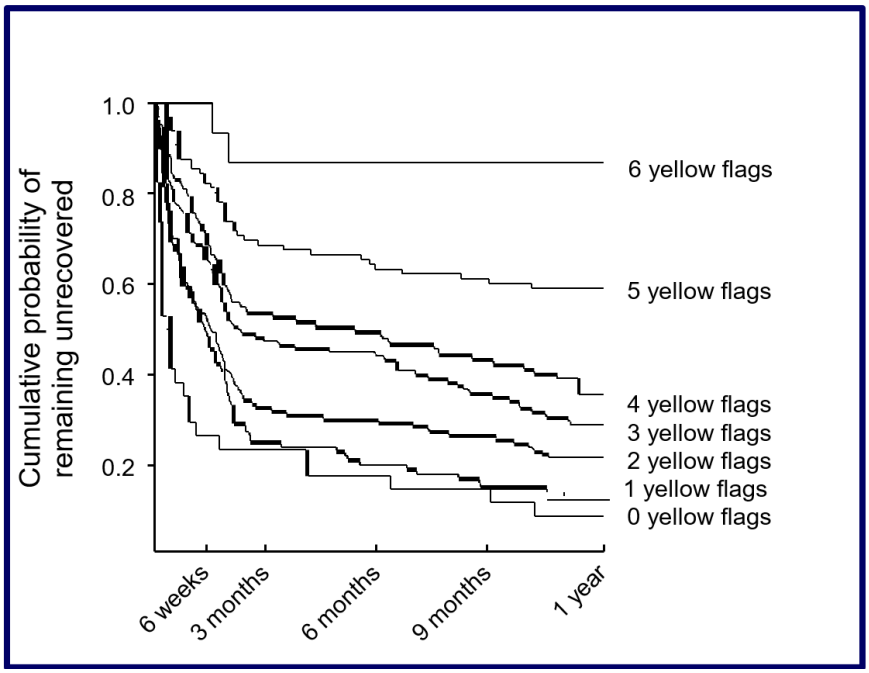


Figure 2. Likelihood of recovery and number of psychosocial risk factors

Reprinted from "Prognosis in patients with recent onset low back pain in Australian primary care: inception cohort study,"by N. Henschke, C.G. Maher, K.M. Refshauge, R.D. Herbert, R.G. Cumming, J. Bleasel, J. York, A. Das, and J.H. McAuley. 2008 BMJ, Jul 7;337(7662):a171. doi: 10.1136/bmj.a171.

Deterioration in physical and mental health

Health outcomes are worse. When an injury or medical condition occurs in a compensable setting, the chance of a poor health outcome is about four times that of the same condition in a non-compensable setting.[3,6] This holds true for all health conditions studied (e.g. back strain, a disc prolapse requiring surgery, a shoulder rotator cuff tear, carpal tunnel, tennis elbow). The increased risk of a poor health outcome is even greater for workers who have claimed for psychological injury.[7] It is likely that unaddressed psychosocial factors account for much of the difference in outcomes.

Being out of work long term damages health. *Realising the Health Benefits of Work*[9] reported the negative health consequences of being out of work for more than six months as follows:

- Increased rates of overall mortality, and specifically increased mortality from cardiovascular disease, and suicide;
- Poorer general health;
- Poorer physical health, including increased rates of cardiovascular disease, lung cancer, susceptibility to respiratory infections;
- Poorer mental health and psychological well-being;
- Somatic complaints;
- Long-standing illness;
- Disability;
- Higher rates of medical consultation, medication consumption and hospital admission.

Worklessness can challenge a person's core identity, taking away a sense of being a provider at home and of contributing to the workplace.

Dealing with a claim is linked to higher psychological distress. An analysis of the Australian data in the 2018 RTW Survey found that 38% of those with a claim for musculoskeletal disorders had moderate or severe psychological distress. This compares to around 11% in the broader population.[51]

Secondary depression. This area has not been well studied and rates of secondary depression are not included in national datasets. A systematic review of international literature found that injured workers often reported secondary psychological consequences as a result of their involvement in workers' compensation systems.[52] It is understood that those with physical injuries who develop secondary depression have even lower rates of RTW that those with a primary psychological problem.

Workers' compensation systems are hardest on those with mental health claims. An analysis of the Australian data of the RTW Survey of 2013–14 shows that workers with a psychological claim were less than half as likely as workers with a physical claim to report helpful approaches from their employer and the scheme (Table 2).

Table 2. Employee responses to questions about employer by injury type

Questions	**Physical Injury** Total claims: 8736 (93.2%)	**Psychological Injury** Total claims: 575 (6.1%)
Your employer did what they could to support you	75%	27%
Employer made an effort to find suitable employment for you	72%	34%
Employer provided enough information on rights and responsibilities	68%	32%
Your employer helped you with your recovery	67%	23%
Your employer treated you fairly DURING the claims process	79%	30%
Your employer treated you fairly AFTER the claims process	79%	35%

Reprinted from "Return to work: A comparison of psychological and physical injury claims: Analysis of the Return to Work Survey Results," by M. Wyatt and T. Lane T. 2017, Safe Work Australia.

Poorer experiences for workers with psychological injury were also noted in relation to disputes and interactions with the claims system. Addressing psychosocial factors is vital to assist those with mental health claims.

In Aotearoa New Zealand, the ACC can provide cover for 'mental injury' arising from sexual abuse (sensitive claims), a covered physical injury, a work-related traumatic accident or a treatment injury. There are strict criteria; for example, the physical injury must be shown to be a material cause of the mental injury.[53] Between 1 January 2016 and 31 December 2016, of 7,778 mental injury claims, 5,741 (74%) were declined.[54] However, the 2019 annual report noted that clients accessing support through mental health services had risen by 25% over the last year, ensuring that those in need receive the services they require.[50]

Greater costs to businesses and the community

Long-term cases are costly and cause employers' insurance premiums to rise. On the other hand, reducing work disability reduces employer costs and the time demands of complex cases.

Safe Work Australia reports that workers and the community bear a significant proportion of the costs of work injuries.[55] In Australia, most workers who develop a long-term disability and

eventually lose access to workers' compensation benefits may transition to Commonwealth payments such as Disability Support or JobSeeker.

While the frequency of claims has declined steadily in Australia, with a reduction of 17% in the number of serious claims between 2000-01 and 2017-18,[56] over the same period the median time lost from work and compensation costs (adjusted for wage inflation) escalated, as shown in Figure 3. Between 2015 and 2019, the cost of active claims increased by approximately 20%.

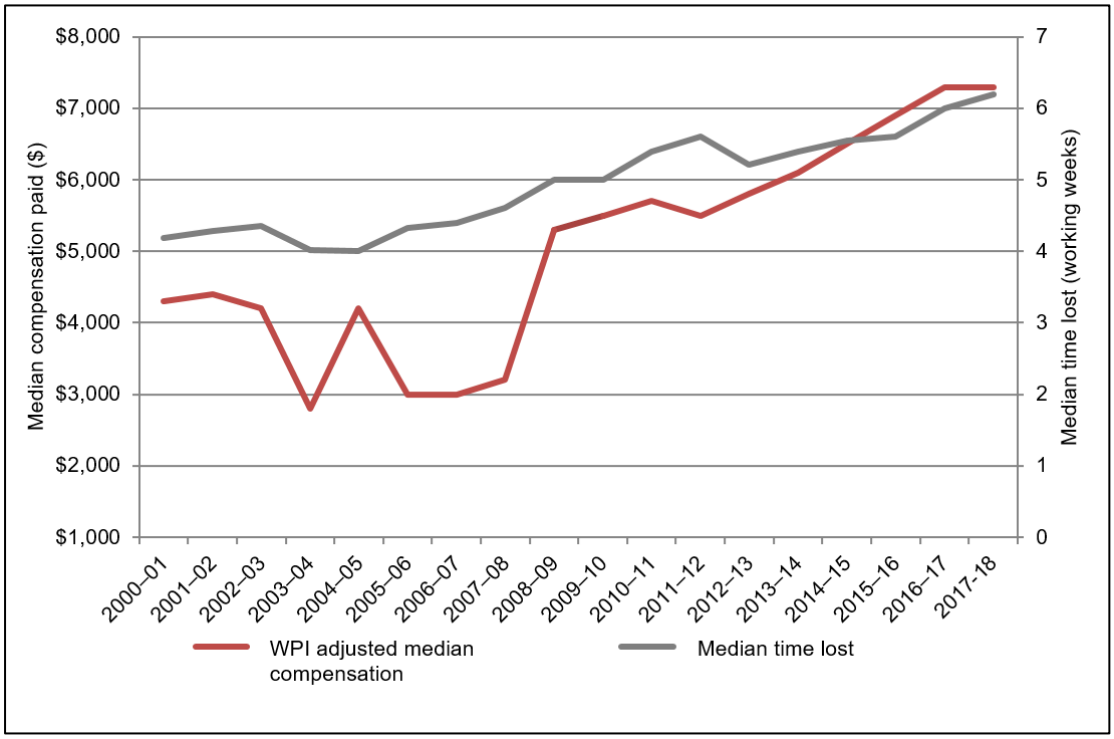


Figure 3. Median time lost and adjusted median compensation paid, Australia, 2000-01 to 2017-18

Reprinted from "Australian Workers' Compensation Statistics 2018-19," by Safe Work Australia, 2019, Canberra.

In Aotearoa New Zealand, RTW rates have been in decline over the last four years, with a commensurate increase in the growth of long-term cases and costs, as shown in Figure 4 and Table 3 below. Between 2015 and 2019, the cost of active claims increased by approximately 20%.

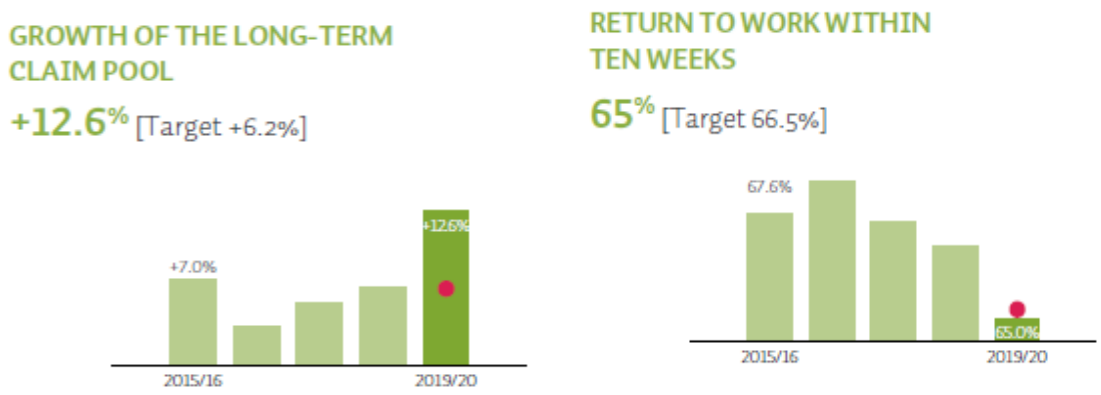


Figure 4. RTW within 10 weeks and long-term claims, Aotearoa New Zealand, 2015-16 to 2019-20

Reprinted from “Annual Report” by the Accident Compensation Corporation, 2020, Purongo-a-tau New Zealand.

Table 3. Work-related injury claims and costs by year in Aotearoa New Zealand

Year	New claims	Active claims	Cost of active claims
2015	196,627	275,373	$684,782,674
2016	200,270	280,689	$702,796,103
2017	204,430	286,257	$723,840,335
2018	210,831	295,864	$781,674,441
2019	209,541	299,754	$825,797,467

Reprinted from "Work injury statistics," by the Accident Compensation Corporation, 2020, https://www.acc.co.nz/newsroom/media-resources/work-injury-statistics/ (accessed 2021).

Can we make a difference?

Evidence shows psychosocial factors affect recovery and RTW outcomes. Evidence also shows that lowering psychosocial barriers promotes recovery and reduces costs. In other words, workers' compensation arrangements can be improved by well-designed psychosocial interventions.

Below three interventions are described that successfully reduced psychosocial barriers to recovery and RTW. These interventions took contrasting approaches and had different entry points into the system (e.g. regulator-led versus organisation-led). However, the focus on addressing known psychosocial negatives (e.g. fear and delays) and promoting known psychosocial positives (e.g. good communication practices and individual self-efficacy) was consistent, as were the positive outcomes.

Public health system intervention, New South Wales, Australia

A major Australian study demonstrated the effectiveness of addressing psychosocial factors via improvements to case management within the public health system.[15] Workers from public hospitals in New South Wales were screened for psychosocial risk factors one week after injury. Those identified as high risk were provided with extra support. They were offered consultations with a psychologist and approximately 50% took up the offer. Work capacity was identified by an injury medical consultant and communicated to the employee's GP. A case conference with the employee and GP was arranged if needed. The hospital RTW coordinator provided regular support via face-to-face meetings with the employee.

The provision of extra support for those at high risk significantly reduced time off work and claims costs. Average time off work was more than halved in the support group compared to hospital workers who received standard care (23 days versus 67). Almost all (94%) of the workers in the support group were back at work after three months, compared to 81% of those who received standard care. A 30% reduction in claims costs occurred in the intervention group. Importantly, costs in the intervention group plateaued at 10 to 11 months, whereas in the control group, costs continued to rise over time.

At the completion of the study, all the hospitals that participated (both control and intervention) implemented the new approach.

Multi-industry intervention, Victoria, Australia

In Victoria, an intervention provided professional case management support across businesses and industries. For purposes of comparison, some companies had access to specialised case management services, while similar companies received usual care. Claims outcomes were then compared.[12]

The specialised case management system had no formal screening for high-risk cases. Instead, skilled case managers were expected to draw on their own experience and familiarity with early warning signs to identify workers who might be at risk of delayed RTW.

The case manager's role was to work with the worker and others to overcome psychosocial obstacles, including workplace psychosocial barriers. The establishment of trusting, supportive relationships was a priority. Common issues that were tackled included overreliance on treatment and 'sticking points' at work. Administrative delays were avoided and prompt access to treatment facilitated. There was support for treating medical practitioners and case managers regularly followed up with individual workers and their supervisors. Senior managers were engaged via education on the cost-benefit analysis of early supportive care and provided with information about what they could do to influence their organisation.

Over the course of the intervention, average days off work dropped 58% amongst the workers who received specialised case management support. Workers who received standard case management services recorded a 12% reduction in days off work.

Claims costs dropped by 40% in the companies with specialised case management but increased slightly in the business-as-usual companies. Reduction in costs in the intervention companies occurred across industry sectors, including manufacturing, health and aged care, trade, construction and transport.

Workers' compensation regulator intervention, Washington, United States of America

The Washington State Department of Labor and Industries operates the state workers' compensation program, which covers about two-thirds of the state's workforce. Over the last 20 years it has forged a partnership between labour and management and introduced initiatives that have improved health outcomes and reduced disability. Workers have retained the right to choose their treatment provider throughout.

Key features of the reforms include:[13,57,58]

- Systems-level initiatives
    - Development of Centers of Occupational Health and Education (COHE), employing medical practitioners who use evidence-based practices.
    - Improved care coordination provided through health services coordinators (similar to a workplace rehabilitation provider in Australia, though in the Washington State program they report to the healthcare provider rather than the insurer).

    - Financial support for the development of improved information systems to track patient progress.
    - Institutional executive and medical leadership committed to the goal of reducing work disability and improving health outcomes for injured workers.
- Psychosocial interventions targeted at individual workers
    - Targeted graded exercise and incrementally graded activity reactivation.
    - Education and cognitive behavioural therapy (CBT) for psychosocial barriers to recovery (e.g. fear avoidance and low RTW expectations).
    - Workplace modifications and other vocational rehabilitation interventions.
- Interventions that encourage treating practitioners to tackle psychosocial risk factors
    - Incentive payments for treating medical practitioners who adopt occupational health best practices (e.g. completing an activity prescription or communicating with the employer by phone).
    - Training designed to improve providers' ability to treat the psychosocial and medical aspects of common workplace injuries such as low back pain.

The program was developed based on the results of an initial pilot and has been enhanced over time. After eight years, workers managed under this model (compared to the control group, which received usual care) had much less time off work (an average of 50 days versus 76 days). The risk of permanent work disability was 30% lower in the intervention group than the control group (1.5% versus 2.5%).

Scheme operation and psychosocial factors

Taken alone, the following examples of psychosocial determinants may seem relatively inconsequential, yet for individual workers – especially those with complex cases – the challenges are cumulative, leading to what researchers have referred to as a 'toxic dose' of system problems.

- A call to a case manager goes unreturned. When the worker is eventually contacted by the case manager, it's about an unrelated matter.
- Four weeks pass before a treatment request is approved. Meanwhile, functional disability keeps the patient away from work and unable to meet their responsibilities at home.
- An IME report states that an injury isn't work-related, but the report contains factual errors. The worker finds the process of correcting these errors confusing and stressful, and they worry that they won't be believed.

When there is a 'toxic dose' of system effects, delays and difficulties accumulate until they impair recovery and RTW significantly.[59] The sense of powerlessness that can result from these challenges may lead to withdrawal, frustration, anger and loss of cooperation.

Scheme interactions with individual workers are the focus here, but outcomes are also affected by the way schemes interact with other participants (e.g. employers and treatment providers). For example, medical practitioners who find the process of treating a compensable patient to be problematic and stressful may simply refuse to treat workers' compensation patients, reducing the quality and availability of care.[60]

Additionally, many of the same psychosocial determinants of health apply in workplace and healthcare settings. Workers who report stress-free communication with their RTW coordinator, for instance, have better outcomes than those who say communication is fraught.[61]

Systems issues that affect RTW

Fairness

Many workers describe their experience of workers' compensation systems as unfair.[62] This belief is tied to negative compensation outcomes and recovery experiences.[63] Blaming a person or entity for the injury itself is not required, even though there may be a feeling that the employer, insurer and system as a whole have treated the claimant unfairly.[6]

In fact, a systematic review of the evidence around the impact of fault attributions in a comparable field (transport injury) found that fault attributions related to the injury itself did not have a consistent negative impact on outcomes. Lodging a fault-based compensation claim, however, was associated with worse physical health, worse mental health, and worse pain. Some evidence linked seeking legal counsel to worse mental health and worse work outcomes.[4,64]

Elsewhere, it has been established that scheme processes and outcomes strongly influence post-injury perceptions of injustice, with a corresponding impact on recovery. Workers who view their compensation experiences as unfair have poorer outcomes than workers who feel they have been treated fairly. Perceived injustice has been linked to slower recovery from injury,[65] lower self-rated quality of life,[66] poorer physical and psychological health,[6,67] worse pain,[63] more disability,[6] increased use of healthcare services[68] and a failure to RTW.[65]

Perceptions of informational and interpersonal injustice are associated with increased distress and mental ill-health.[69] In contrast, fair compensation outcomes and processes have established benefits.[70] Of particular importance are timely claims determinations and clear communication with workers about their rights and responsibilities.[71]

Fair outcomes. The key decisions made in workers' compensation systems are initial liability decisions, decisions about access to treatment for workers with accepted claims, and decisions about claims finalisation or termination. When the outcomes of these decisions are

seen as fair, stakeholders' trust in the insurer/regulator, and the workers' compensation system overall, grows. In contrast, exploitations of the system undermine trust, especially when there is a perception that these abuses are tolerated by the insurer or regulator. Real-world examples of unfair outcomes include unfounded rejections and terminations of claims,[23] premium volatility, and the acceptance of fraudulent or ungrounded claims.[11]

Fair processes. But what about *perceptions* of fairness? Inevitably, instances will arise in which compensation stakeholders do not get the outcome they want. For workers, perceptions of injustice may arise when a claim is rejected;[70] for employers, the acceptance of a claim might seem unfair. At all times – but especially when outcomes are unfavourable – the process, communication and relationship help determine whether a person considers their situation to be fair or unfair.
An injured worker with a rejected claim might be expected to describe the situation as unfair. However, researchers have found that a person who receives an unfavourable outcome is more satisfied with and more likely to accept that outcome if they feel that they've been treated fairly throughout the process.[72] In contrast, people who receive an unfavourable outcome *and* perceive the process as unfair are substantially more likely to dispute the decision, be disenfranchised and cooperate less.

Delays

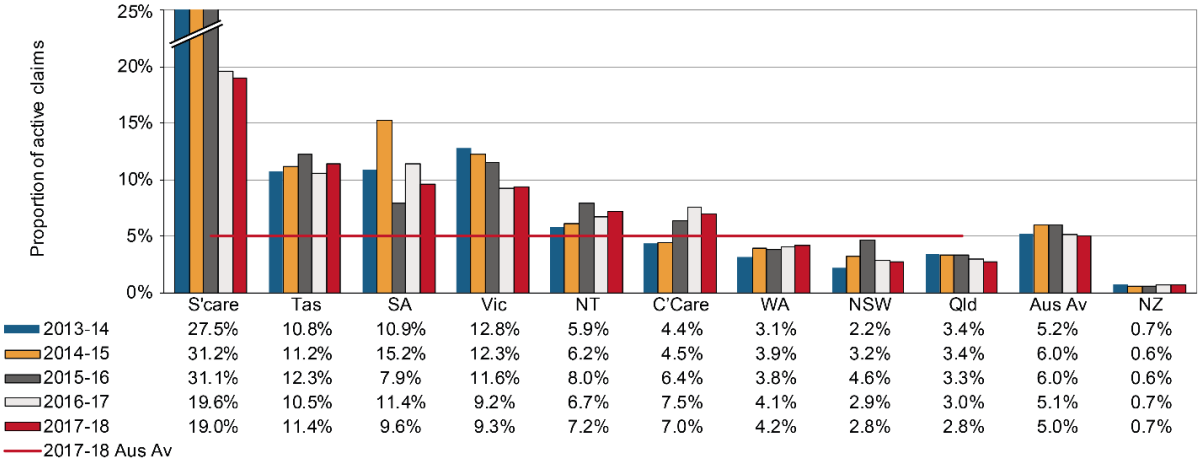
Procedural delays are common in Australian workers' compensation systems.[70] According to a study of 70,000 workers' compensation claims in the state of Victoria, close to 50% of workers experienced delays between the workplace injury and the first payment for wage replacement.[73] In Aotearoa New Zealand, the ACC's *Shaping our Future Strategy* includes automated claims processing and other initiatives to improve efficiency for its over two million annual claims.[74]

Delays increase perceptions of unfairness and worsen RTW outcomes. There is a dose–response relationship between processing delays in workers' compensation and the development of a long-term claim. The more delays a claimant experiences, the greater the chance that they will be away from work for a year or more.[73] Australian research has also established that delays have a strong association with negative health impacts such as poorer long term-recovery and greater disability, anxiety and depression.[52,71]

Workers report that payment delays have stressful financial repercussions, including falling behind on the mortgage, being forced to sell the family car or home, defaulting on loans, being unable to put food on the table, and negative credit ratings that persist beyond the life of the workers' compensation claim.[23,52]

Disputes and investigations

In 2017-18, 5% of active workers' compensation claims in Australia and 1% of cases in Aotearoa New Zealand were disputed.[75,76] Rates of disputation, shown in Figure 5 below, need to be interpreted with caution because there are jurisdictional differences between the types of decisions made and recorded. However, the chart below allows an understanding of the disputation trends over time within individual jurisdictions. Most Australian jurisdictions recorded increases in disputation rates during the five-year period 2013-18, although under Seacare, and in Victoria and Queensland, the level of disputes reduced.



	S'care	Tas	SA	Vic	NT	C'Care	WA	NSW	Qld	Aus Av	NZ
2013-14	27.5%	10.8%	10.9%	12.8%	5.9%	4.4%	3.1%	2.2%	3.4%	5.2%	0.7%
2014-15	31.2%	11.2%	15.2%	12.3%	6.2%	4.5%	3.9%	3.2%	3.4%	6.0%	0.6%
2015-16	31.1%	12.3%	7.9%	11.6%	8.0%	6.4%	3.8%	4.6%	3.3%	6.0%	0.6%
2016-17	19.6%	10.5%	11.4%	9.2%	6.7%	7.5%	4.1%	2.9%	3.0%	5.1%	0.7%
2017-18	19.0%	11.4%	9.6%	9.3%	7.2%	7.0%	4.2%	2.8%	2.8%	5.0%	0.7%
2017-18 Aus Av											

** Note: Seacare operates differently to most other schemes – workers need to be fit to do their normal duties to RTW at sea*

Figure 5. Dispute rates in work injury claims across Australia and Aotearoa New Zealand, 2013-18

Reprinted from "Comparative Performance Monitoring Report. Part 3- Premiums, Entitlements and Scheme Performance," by Safe Work Australia, 2020, Canberra.

According to the Australian data from the 2013 and 2014 National RTW Surveys, disagreement with the employer or claims organisation is linked to lower RTW rates. When a difference of opinion was reported, RTW was 22% lower in physical claims and 23% lower in psychological claims.[19] In Aotearoa New Zealand in 2019, the ACC helped 92.4% of clients receiving weekly compensation to RTW within nine months, and 88.9% of those not in the workforce to return to independence.[50]

Inappropriate and unnecessary use of surveillance has been noted in some Australian jurisdictions,[10] while Aotearoa New Zealand has reportedly moved away from the use of surveillance. In a systematic review of qualitative research from around the world (including Australian studies), many workers who felt that they were fighting the system or had experienced surveillance described intense distress, including thoughts of suicide. The vast

majority of the workers included in this research had originally made a claim for physical (not psychological) injury.[52]

Recourse to common law in work injury claims is an option in some jurisdictions. Common law cases typically take years to be resolved and are more likely to occur when there has been an adversarial relationship with the employer or insurer. Common law claims may act as a disincentive to recovery and RTW. An actuarial review of the international evidence found that fault-based components of schemes tend to be associated with adversarial processes, benefit delays and poorer outcomes than no-fault schemes.[77] For example, some injured workers have stated they were advised it is not in their best interest to find a job until their case is finalised. A 2004 Productivity Commission review noted that the delays involved in reaching a settlement can be detrimental to the interests of the worker, and can entrench the worker in behaviour that is incompatible with successful rehabilitation.[78]

Trust, relationships, reciprocity, social capital

Social capital is the idea that a group will achieve more if group members trust each other to cooperate.[79,80] Low social capital costs money.[81] A Danish study involving more than 30,000 hospital workers showed that individuals working in a team with high social capital were at lower risk of long-term sickness absence than those in a team with low social capital. The greater the dose of social capital, the less sickness absence recorded.[82] [83]

Return to work is a cooperative activity.[84] To do well, particularly in challenging circumstances, participants must work together. If one participant is less cooperative, the workload for others increases and the chance of success is reduced.

The costs of poor social capital can be direct or indirect.

- **Direct costs** are easier to see and calculate, i.e., time taken to write unnecessary agreements, wage replacement costs, insurance premiums, etc.
- **Indirect costs** are more difficult to recognise but their impact is often more damaging. Indirect costs include loss of productivity, costs of replacement staff, loss of goodwill and cooperation. Indirect costs are subtle and spread over the system, affecting multiple areas. Indirect costs are most frequently overlooked when chasing short-term gains.

Social capital operates on a systemic level. As soon as one person's trust is broken, they are less likely to be cooperative, leading others to lose trust in them. The system as a whole operates more smoothly and RTW is more likely when parties have a level of trust in each other.[85]

Information and communication

Injured workers and case managers have both described Australian compensation system requirements as bureaucratic, complex and process-driven.[22,86] Additionally, injured workers have said that interactions with insurance claims personnel are characterised by miscommunication, deception and depersonalisation. Injured workers have told Australian researchers that these poor communication practices damage their mental health.[86] Moreover, injured workers believe that a lack of clarity around insurer decision-making processes causes healthcare practitioners to become alienated from workers' compensation systems.[87]

Timely access to clear and appropriately presented information about processes, rights and responsibilities can increase the perceived fairness of the system,[88] and may reduce workers' drive to seek legal advice.[63] Communication that is respectful, relevant and regular is crucial.[52] In contrast, less positive ways of communicating with workers prolong and complicate claims.[59]

Communication content and methods can both cause problems. Unhelpful practices include:

- Non-user-friendly formats, such as letters written in language that is confusing or intimidating, or simply unsuitable because of a worker's literacy level or understanding of English.[59]
- Lack of personalised, face-to-face communication.[59,89]
- Failure to proactively inform workers of their entitlements.[90]
- One-way communication that doesn't take workers' input into account.[52]
- Failure to consider the physical and emotional condition of individual workers, for example, the way that some medications affect memory and concentration.[59]
- Paperwork requirements that injured workers, employers and treating practitioners find confusing or overwhelming.[59,89]
- Insufficient contact with the worker, such as no reassurances that requested information has been forwarded,[89] or case managers being hard to contact or not returning calls.[89]

Australian research has demonstrated that communication-based approaches with workers has a measurable impact on recovery and RTW. Case management systems underpinned by positive communication between stakeholders improve RTW outcomes and reduce costs.[12]

Locus of control

Locus of control is the degree to which we consider that we have control over the events and outcomes in our lives. Someone with a strong internal locus of control believes their actions

control events in their lives, and this is positively associated with favourable work outcomes.[91] Those with a strong external locus of control believe external factors, rather than their own actions, control events.[92] Lower perceived control in the face of life challenges is associated with poorer health.[93]

Why is locus of control a psychosocial risk factor? Work injury schemes expect and require workers to conform to system requirements. Over time, this signals to the worker that the system is the driver, rather than the individual being in control of the situation.

Those with a strong external locus of control tend not to believe they can change this situation through their own efforts. They may have a sense of powerlessness. Schemes that set up rules and expectations and expect people to conform tend to enhance that external locus of control. Systems can reduce the sense of personal responsibility and warp an individual's normal pattern of decision-making. Systems can also reduce self-efficacy – the belief one will cope with whatever life throws one's way.[94] Approaches that enhance a person's locus of control may assist.[95]

Active coping and self-efficacy are positive psychosocial factors that help injured workers recover and RTW in a timely way.[96,97] High self-efficacy following pain management programs is strongly associated with clinically significant functional gains.[98] High self-efficacy has a positive association with RTW outcomes.[99]

By introducing complexity, delays, confusing communication and negative interactions between scheme participants, scheme delivery models may undermine attitudes and activities that promote a stronger locus of control, as well as recovery and RTW.

Equity and social determinants of health

Health equity is the absence of systematic disparities in health (or in the determinants of health) between different social groups who have different levels of underlying social advantage/disadvantage.[100]

Health inequities are significant for some groups. For example, in Aotearoa New Zealand, Māori workers are subject to greater occupational risk factors than non-Māori workers.[101] Further, Māori workers are less likely to access services designed to aid recovery and RTW. This underutilisation contributes to health inequity. Underutilisation is most notable in elective surgery, home and community support services, and duration of weekly compensation claims. The difference in the service utilisation of Māori and non-Māori varies between 5% and 50%.[102]

These equity concerns are significant issues for the ACC because Māori have the lowest rate of claims despite no evidence that they suffer injury at a lower rate.[103] Māori have higher

representation in dangerous industries, and even in the same occupation have been found to carry out more dangerous tasks.[101] This is recognised by the ACC, which has defined success over the next decade as achieving improved outcomes/experience for Māori clients and businesses, increased injury prevention effectiveness for Māori, and improved ACC culture and capability in relation to Māori.[104]

Return to work at three months after an injury of low severity is more likely for Māori with financial security, a professional occupation or jobs requiring less frequent repetitive hand movements.[105] Re-injury rates are high though; 62% sustained a second injury within two years.[106]

Barriers to accessing services include social, cultural, economic and geographical factors. While economic and geographic barriers may be obvious, social barriers can be harder to identify and therefore harder to eliminate. For example, a disconnect between Māori models of health and wellbeing and the 'medical model' (i.e. disease-oriented model) of health and wellbeing influence approaches to treatment.[107] Māori service delivery emphasises the importance of a holistic view of health, incorporating spirituality and community, and consideration of Whānau[2]. Māori would be aided by awareness of their specific needs, at an individual level and at a program or system level.

[2] Whānau is often translated as 'family', but its meaning is more complex. It includes physical, emotional and spiritual dimensions.