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Australasian Faculty of
Occupational and Environmental Medicine

It Pays to Care

Bringing evidence-informed practice to work injury schemes helps workers and their workplaces

An imperative for change and call to action

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Contents

List of figures

List of tables

About the Royal Australasian College of Physicians (RACP)

The RACP trains, educates and advocates on behalf of physicians and trainee physicians, across Australia and Aotearoa New Zealand. The RACP represents a broad range of medical specialties including general medicine, paediatrics and child health, cardiology, respiratory medicine, neurology, oncology, public health medicine, infectious diseases medicine, occupational and environmental medicine, palliative medicine, sexual health medicine, rehabilitation medicine, geriatric medicine, and addiction medicine. Beyond the drive for medical excellence, the RACP is committed to developing health and social policies which bring vital improvements to the wellbeing of patients.

About the Australasian Faculty of Occupational and Environmental Medicine (AFOEM)

The AFOEM is a Faculty of the RACP that represents and connects Occupational and Environmental Medicine Fellows and trainees in Australia and Aotearoa New Zealand through its Council and committees. The AFOEM are committed to establishing and maintaining a high standard of training and practice in Occupational and Environmental Medicine in Australia and New Zealand through the training and continuing professional development of members and advocating on their behalf to shape the future of healthcare.

We acknowledge and pay respect to the Traditional Custodians and Elders – past, present and emerging – of the lands and waters on which RACP members and staff live, learn and work. The RACP acknowledges Māori as tangata whenua and Te Tiriti o Waitangi partners in Aotearoa New Zealand.

Preface

Over the past decade, the evidence on the impact of psychosocial factors on occupational health has grown substantially. New-found knowledge has revealed new opportunities to assist our patients, reduce costs and secure benefits for Australian and Aotearoa New Zealand taxpayers, businesses and the broader community. These opportunities are present in the workplace, in case management approaches, in overarching workers' compensation arrangements and in healthcare.

In recent years, media has drawn attention to the human and economic costs of work injury scheme dysfunction, highlighting the pressing case for change.[1,2] There is widespread appetite for workers' compensation systems that are fair and promote health and recovery for injured workers, but important questions remain. These questions concern the specific changes needed to secure better outcomes and the systems required to enable, implement and sustain these changes.

This evidence-informed paper summarises the growing body of research on the psychosocial factors that influence recovery from work injury and illness and highlights current gaps between evidence and practice. It does so in a constructive way, aiming to present the evidence as it stands but also to seek input from other stakeholders. Workers' compensation systems are complex; a collaborative approach will secure meaningful improvements.

The main message of this paper is that two major reforms are required.

1. Change to systematically capture psychosocial information for individual claims and proactively manage psychosocial risks by providing injured workers, workplaces and treatment providers with timely support according to need.
2. Change to ensure that scheme cultures, systems and processes do not create unnecessary barriers to recovery, but instead encourage positive psychosocial factors (those known to assist recovery and return to work (RTW) – e.g. self-efficacy), whilst reducing negative psychosocial factors (those known to slow recovery and RTW – e.g. perceptions of unfairness).

This paper explores the evidence regarding psychosocial factors as barriers to RTW and how these barriers can be lowered. Key aspects of evidence-informed practice are examined, current practices are compared, and the barriers to improvements reviewed. Scheme delivery is explored through four work injury domains: 1) leadership and regulation, 2) case management, 3) the workplace, and 4) health care; though many issues are relevant across multiple domains. Specific improvements under the 'action areas' are noted and key elements necessary to secure better outcomes are listed.

This paper has incorporated constructive feedback from policymakers, medical and healthcare bodies, and people involved in research and rehabilitation. Several groups expressed their wish for improvements to the work injury schemes and a willingness to be actively involved in advocating for changes that will assist injured workers and Australian and Aotearoa New Zealand businesses.

Many of the issues discussed in this paper are applicable to other systems, such as motor accident insurance and income protection insurance. The improvements to case management, regulation and healthcare suggested here may also be of benefit to those insurance schemes.

It is hoped that this policy paper will be used as a tool to influence attitudes and practices in each of the relevant domains: healthcare, case management, the workplace and regulation. Occupational physicians may use it to advocate for evidence-informed healthcare. Case managers may use it to advocate for improved case management practices. Workers may use it to advocate for greater transparency and fairness in workplace injury management and workers' compensation systems. Workplaces may use it to advocate for more engagement with insurance claims management, and so on.

RTW practices needs all players 'on side'. Better results are achieved collaboratively. Arguably, the same applies to scheme improvements. All work injury stakeholders stand to benefit from action in the areas suggested in this paper, and contributions from all are needed to achieve the improvements suggested.

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Acronyms

ACC	Accident Compensation Corporation [Aotearoa New Zealand]
AFOEM	Australasian Faculty of Occupational and Environmental Medicine
ARC	Australian Research Council
CBT	Cognitive Behavioural Therapy
COHE	Centers of Occupational Health and Education [Washington State, US]
CT	Computed tomography
IME	Independent medical examination
IPS	Individual placement support
IWHG	Insurance Work and Health Group [Monash University]
KPI	Key Performance Indicator
NHMRC	National Health and Medical Research Council
OEM	Occupational and environmental medicine
PREM	Patient reported experience measure
PROM	Patient reported outcome measure
PSC	Psychosocial safety climate [survey]
PTSD	Post-traumatic stress disorder
RACGP	Royal Australian College of General Practitioners
RACP	Royal Australasian College of Physicians
RANZCP	Royal Australian and New Zealand College of Psychiatrists
RCT	Randomised controlled trial
RTW	Return to work
SIRA	State Insurance Regulatory Authority

Key terms

Jurisdiction – A scheme operating with its own laws, rules, or legal decisions. In this paper, referring to state/territory-based schemes (e.g. Victoria, Western Australia) or federal systems such as Comcare.

Service provider – Groups or organisations that provide services to work injury schemes. This includes treating and independent medical practitioners and other health professionals, workplace rehabilitation providers, and legal practitioners.

Stakeholder – Refers to all involved in work injury schemes. The worker and their employer are stakeholders; other scheme participants are service providers.

Work injury insurance – In this paper the term ‘work injury insurance’ is used throughout; an alternative is ‘injury insurance scheme’. In Aotearoa New Zealand, the Accident Compensation Corporation (ACC) scheme covers all people who have had an injury. Many of the principles in this paper apply to other schemes that include wage replacement, such as motor vehicle insurance schemes, veterans’ affairs and social security.

Worker – In this paper the term ‘worker’ is used to denote a person who has experienced a work injury. This person may also be a patient, claimant or injured worker.

EXECUTIVE SUMMARY

Workers' compensation systems were established to benefit injured and ill workers and businesses. Generally, benefits for both groups are greatest when recovery and return to work (RTW) are timely, durable and efficient.

However, health outcomes are actually worse for people who claim compensation than for those who don't claim.[3,4] In fact, the chance of a poor health outcome for a compensated surgical condition is about four times that for the same condition in a non-compensable setting.[3,5,6] The increased risk of a poor health outcome is even greater for workers who claim for psychological injury.[7]

Most people RTW after an injury without difficulty. However, a significant minority struggle and remain off work longer than expected for their medical condition. Research has established that workers exposed to high levels of psychosocial risk have over three times the amount of time off work as low-risk workers.[8] The more psychosocial risk factors present, the more likely it is that recovery will be delayed. As the number of psychosocial risks increase, so does the cumulative probability that a worker will not recover from their injury or illness.

Some people never return to the workforce, an outcome with immense human and financial costs. Those who remain out of the workforce long term have poorer physical and psychological health and report financial distress. Intergenerational impacts have also been established: the children of the long-term unemployed have higher rates of distress and poorer mental health than their peers.[9]

These problems are longstanding, but awareness of the need for change has grown in recent years. Reviews of compensation scheme operations in two large Australian jurisdictions have highlighted that failures of implementation can have strong negative impacts on workers and businesses.[10,11] Moreover, there is now clear evidence that system approaches which prevent or lessen psychosocial factors can reduce work disability and its associated costs by 25–50%.[8,12,13] To improve patient outcomes, psychosocial barriers for individual cases must be proactively managed, whilst also reducing the psychosocial obstacles raised by current systems, processes and cultures.

This paper aims to further the discussion about psychosocial risks and encourage work injury stakeholders to collaboratively:

- Reduce system-induced barriers to recovery and RTW.
- Improve the way psychosocial risk factors for prolonged work disability are identified and managed in work injury schemes.

Biopsychosocial care

The biopsychosocial model of healthcare recognises that health is influenced by biological, psychological and social factors.[14] The biopsychosocial approach acknowledges that each of these three components may present barriers to, as well as enablers of, recovery, and that there are interrelationships between the components.

In workers' compensation, biopsychosocial influences emerge in the domains of scheme regulation, case management, the workplace and healthcare, and within individual injured workers. Each of these domains may influence the others. For instance, scheme factors, such as delays and disputes, perceptions of fairness and bureaucratic processes, can result in reduced motivation and distress in an individual worker, leading to poorer recovery and delayed RTW.

The employer's response to injury has a notable bearing on whether someone resumes their role: the nature of workplace encounters, levels of supervisor support, workplace culture before and after the injury, and attitudes of co-workers all make a meaningful difference to wellbeing and recovery.

Individual factors such as poor or passive coping, unhelpful beliefs about pain and injury, poor recovery expectations, adverse life experiences, anxiety and mood disorders can all contribute to delayed recovery and RTW. Importantly, however, many of these biopsychosocial factors are modifiable.

A wealth of evidence suggests many scheme and workplace barriers can be lowered by modifying the way systems and workplaces interact with injured workers. Barriers arise because of unhelpful relationships, cultures, processes, and system characteristics, including in systems intended to help.

Workers with personal psychosocial barriers to recovery can benefit from individually focused interventions, such as programs designed to improve self-efficacy. Support for individuals can assist them to identify and deal with their own barriers to recovery. Workers asked about biopsychosocial factors, and supported to address these factors, express satisfaction with the care they receive and have reduced work disability.[15]

While the biopsychosocial model of care has been discussed for decades,[16] recent evidence shows that systematic application of the model can contribute to significant improvements in both worker health and scheme costs.

The shared challenge is twofold:

1. Ensure that scheme cultures, systems and processes do not create unnecessary barriers to recovery, but instead encourage factors known to assist recovery and RTW, whilst reducing negative factors that slow recovery and RTW.

2. Systematically capture psychosocial information for individual claims and proactively manage psychosocial risk by providing claimants, workplaces and healthcare practitioners with timely support according to need.

Regulation and policymakers

Regulators and insurers – particularly monopoly statutory government insurers – influence the culture, attitudes and behaviour of work injury schemes via their approaches, communication styles, and policies and procedures. Regulators set standards through their policies and expectations and through their approach to enforcement. Insurers' policies regarding case management, as well as their interactions with scheme participants, also influence scheme culture. Regulators can influence the behaviour of insurers, businesses, healthcare providers and injured workers through encouragement and education, and to a lesser extent, enforcement.

Collaboration and cooperation are needed for disparate groups to work together. Yet these are lacking in many everyday interactions: case managers express frustration about general practitioners' (GPs) certifying practices; whilst GPs express distrust about workplaces adhering to restrictions and so on. This has consequences for recovery and RTW outcomes.

When all players work towards a shared goal, RTW is more likely. A group will achieve more if group members trust each other to cooperate. A high level of trust, or social capital, results in fewer disagreements and disputes, streamlined communication, reduced requirements for written or legal documents, and better engagement.

A scheme regulator can improve collaboration and cooperation by enhancing workforce skills and scheme interactions. Persuasion, incentivisation, education, evaluation, performance monitoring, information provision and encouragement of good behaviour can all contribute.

Methods to encourage positive behaviours, trust and cooperation include:

- Stated principles and expectations of standards of service[17,18], such as being fair, treating others with respect, and being reasonable, efficient, proactive, responsive, transparent and accountable.

- Measurement of claimants' experiences, including factors that influence recovery and RTW.
- Measurement of scheme culture and levels of trust between participants.
- Clear and consistent focus on worker recovery and RTW.
- Active regulation, through monitoring and awareness of scheme factors that contribute to delayed recovery.
- Transparent sharing of scheme data.
- Explicit focus on engagement via an explicit stakeholder strategy, outreach, conferences or meetings that bring different scheme participants together.
- Avoidance of unnecessary delays, particularly with initial claim notifications and unnecessary disputes.

Minor abuses within work injury schemes by workers or employers, insurers or service providers have an outsized impact on trust and cooperation. Effective regulators have systems in place to identify and resolve such issues early and efficiently.

Large statutory insurers influence outcomes through their approach to case management and, by setting standards for third-party claims, agents contracted to undertake insurance case management. The systems, style of management (e.g. control versus partnership), financial arrangements and standards setting all have a material impact on how claims are managed and how the scheme operates.

All policymakers must recognise the importance of trust and cooperation in work injury schemes. The level of leadership in setting standards seems to vary between jurisdictions. Active endeavours to improve levels of fairness, trust and collaboration must be supported.

Case management

Workers who report positive interactions with their case manager have higher rates of RTW,[19] report less pain, greater perceived health, quicker recovery and improved quality of life.

The case manager operates within an environment that may enhance or hamper their ability to be effective. High turnover of staff, inadequate training, inadequate emotional support, high caseloads, burdensome administrative requirements, unclear expectations, cumbersome claims software and funding limitations can all play a role in limiting an individual case manager's ability to support and engage workers. Focusing on short-term fixes via key performance indicators (KPIs) or other performance targets can result in unintended consequences, with poorer outcomes for workers and schemes.

Case management should be procedurally fair, timely, proactive and supportive. Well-trained and adequately resourced case managers can help individual workers overcome obstacles, offer support, provide relevant information about rights and responsibilities, and influence other scheme participants, such as the employer or treating practitioner.[12] This is particularly important for workers at higher risk of prolonged work disability.

From a biopsychosocial perspective, attributes of case managers that enable positive outcomes include interpersonal skills (e.g., the ability to deal with people in difficult circumstances), communication and influence skills, knowledge of and ability to manage key RTW factors, and problem-solving and conflict resolution skills.[20-23]

Enabling attributes of case management systems include a systematic approach to early identification of the needs and risks of workers, fair and timely decision-making systems, and regular communication that provides guidance and support for workers, the workplace and treatment providers. Minimising bureaucratic requirements aids case managers, workers and other scheme participants, enhancing cooperation.

Some workers may have unmet needs, such as Māori and Aboriginal and Torres Strait Islander peoples, individuals from non-English speaking backgrounds, individuals with low self-efficacy and individuals with psychological injuries. A case manager with a high caseload and few supports may not have sufficient time or resources to meet these needs.

Evidence indicates that a systematic approach to identifying workers in need of extra support through early screening for biopsychosocial barriers is required. Claims management organisations need systematic approaches to providing the extra supports required via the healthcare system, referral pathways, rehabilitation counselling or additional workplace supports.

Improvements to case management systems will be facilitated by:

- Acknowledgement of case managers' influence on recovery and RTW outcomes.
- Systems that support case manager *effectiveness*, including staff selection, training and mentorship, appropriate caseloads and career path options.
- Systems that support case manager *retention*, including through attractive pay and conditions, recognition of the emotional labour of case managers, and recognition of their ability to embody the important values of fairness, respect, quality, and collaboration.
- Consistency of case managers over the life of a claim.
- National standards, such as agreed principles of practice for insurer case management.

- A common management approach across systems, such as work injury, motor vehicle accident and life insurance.
- Transparent reporting of case management systems, including turnover rates, case managers' perceptions of their effectiveness, caseloads and costs.

The workplace

Workplace psychosocial factors are a major influence on RTW outcomes, with workers indicating that, of all the domains, the workplace wields the greatest influence. Australian research shows that workers around the country who consider their employer's response to injury to be fair and constructive have, on average, considerably higher RTW rates than those who don't: 43% higher for physical and 52% higher for psychological injury claims.[19]

Key figures involved in workplace injury management are the injured worker, their supervisor, the RTW coordinator, and – through their influence on workplace culture and priority setting – senior management.

RTW rates are affected by the timeliness of injury reporting, the provision of suitable duties, RTW planning, the quality of communication, the stress of interactions with key workplace figures, support from co-workers, and the workplace culture before and after injury.

Improving workplace management of work injuries offers significant opportunities to enhance worker wellbeing and workplace productivity. RTW coordinators want and deserve more comprehensive training and skills development. Supervisor training improves confidence in managing work injuries and aids workers. Senior managers who receive reports about injuries and work injury management are more engaged and influential in this space.

Several jurisdictions are now seeking to address problems with workplace culture through the measurement and management of psychosocial hazards at work. These efforts should be applauded. Insurers may also be well placed to upskill employers in evidence-informed practices, though they would need sufficient time, training and motivation to undertake such initiatives.

Healthcare

Medical/healthcare influences on recovery and RTW include the nature and expected progression of the injury/illness, certification practices, treatment effects (which may be helpful or detrimental) and the level of coordination between the treatment provider and the workplace.

The biopsychosocial model recognises that an individual's psychosocial responses influence their neurobiology and can increase pain, distress and disability. Evidence shows that

measuring personal psychosocial responses and then offering tailored education and self-help coaching can help people manage pain and improve their ability to cope, thereby assisting recovery and RTW.

Treating practitioners, such as GPs, can set worker expectations by providing timeframes for RTW, which evidence shows leads to better RTW outcomes. Other work-focused communication strategies, such as identifying capabilities and discussing re-injury prevention, may also be effective when the worker trusts their treating healthcare practitioner.[24] There is strong evidence that a lack of positive communication and cooperation between the healthcare system and other relevant stakeholders (e.g. the employer and the compensation system) is an obstacle to work participation.[25]

Numerous challenges and frustrations, for both healthcare providers and case or claims managers, limit communication and cooperation. Not all health care offered to injured workers is high-value care – care that secures benefits important to patients (such as increases in functional capacity or comfort, relief from suffering or calm, or the ability to live normally) in a cost-effective way. Most injury claims are for common musculoskeletal conditions such as back pain, neck pain, and shoulder and knee problems. For these conditions, low-value health care, such as overdiagnosis and overtreatment, is common and associated with poorer outcomes. Low-value care can prevent a person gaining a comprehensive or correct understanding of their condition, reduce self-efficacy and delay recovery, wasting resources without securing positive outcomes.

Best practice treatment for work injury is work-focused, psychosocially informed, and evidence-informed. It is also collaborative. Time lost from work is significantly reduced by interventions that involve integration between two of the three domains of healthcare, workplace accommodation and case management.[26] Improving treatment alone is not an effective approach.

Action areas for better healthcare include:

- Developing systematic approaches for addressing psychosocial influences at the patient level. While people who may benefit from support in tackling psychosocial barriers to work may be identified through claims managers, the workplace or rehabilitation providers, the central point of coordination is often the GP. Therefore, GPs must actively tackle psychosocial risks.
- Providing evidence-, biopsychosocially-informed health care. The Clinical Framework for the Delivery of Health Services[27] outlines the importance of a biopsychosocial model and the need for effective treatment and fostering self-management. In particular, the Clinical Framework recommends the following principles:
    - Measure and demonstrate the effectiveness of treatment,

    - Adopt a biopsychosocial approach,
    - Empower the injured person to manage their injury,
    - Implement goals focused on optimising function, participation and RTW, and
    - Base treatment on the best available research evidence.
- Embedding the principles of the Clinical Framework within healthcare will help to ensure a systematic approach to biopsychosocial care.
- Adopting and promoting the Australian *Principles on the role of the GP in supporting work participation*[28] to guide GPs to foster worker empowerment, communication with other stakeholders, team-based care, the health benefits of good work, and appropriate certification. As the principles declare, this approach needs support from other scheme participants so that employers, insurers and policymakers can overcome the broader barriers to work participation. The development of a similar model may assist GPs in Aotearoa New Zealand.
- Creating easy pathways to high-value health care that informs and empowers workers. A focus on health care outcomes is important. Training of healthcare providers is sought by many in the industry, though has shown no or marginal benefit when studied. Universal education of healthcare practitioners through undergraduate and postgraduate training may assist.
- Incentivising evidence-informed, high-value care. The fee-for-service model encourages shorter, more frequent medical contacts. Higher rates of remuneration for interventions and surgery may incentivise these practices, leading to situations in which they are recommended to patients who would do better with less invasive treatment. There is a need to incentivise high-value health care, focusing on the provision of appropriate advice and explanations, grounded in a biopsychosocial approach.
- Improving work certification practices that support timely RTW to promote recovery. High rates of ‘unfit’ certificates are a barrier to work participation, with some workers who have work capacity certified instead as ‘unfit for work’. The Collaborative Partnership has partnered with GPs to develop the *Principles on the role of the GP in supporting work participation*,[28] and should be supported by schemes in the rollout of the guide. This may assist in improving certification practices. Occupational physicians are willing to partner with the Royal Australian College of General Practitioners (RACGP), the Collaborative Partnership and work injury schemes in this endeavour.

INTRODUCTION

Most people (70-80%) return to work (RTW) after a work injury with minimal difficulty and usually without any long-term consequences. The remainder find themselves in a more challenging situation. These individuals have extended time off work, frequently more than is medically necessary; some may never RTW.

In this paper, the focus is on how systems deal with workers who have experienced a work injury.[29] This is not to diminish the importance of primary injury prevention, which remains a priority. Indeed, we applaud Safe Work Australia and other organisations seeking to prevent and manage psychosocial hazards at work.[30] Primary, secondary and tertiary prevention measures are all necessary to reduce the harm that may flow from physical and mental health conditions.

Unnecessarily prolonged work disability comes at a high cost to individuals, families, employers and society as a whole. Some of these costs are visible in workers' compensation schemes (e.g. in the form of costly long-tail claims and slower RTW), while others sit outside them. Examples of external costs include lost productivity, injured workers relying on other forms of income support (e.g. socially funded disability benefits[31]) and negative impacts on children whose parents experience long-term worklessness.[32]

An increasing and strong body of evidence points to the importance of psychosocial factors in determining which workers recover and RTW in a timely way, and which struggle. Importantly, many psychosocial factors are modifiable.

However, work and accident injury schemes continue to revolve around the biological model of health care, missing the opportunity to remove psychosocial barriers to recovery and RTW. Decades of awareness of the importance of psychosocial factors have not led to material changes in practice.

Psychosocial risk factors are not systematically identified and addressed in work injury schemes. In fact, the way systems and schemes operate can increase both the frequency and impact of psychosocial barriers to RTW. As highlighted in recent reviews of two large jurisdictions, failures of implementation can have strong negative impacts on workers and businesses.[10,11]

In the *It Pays to Care: Values and Principles Based Approach* companion paper the core principles of work injury schemes are outlined, which align with the values expected within a social insurance policy framework – fairness, respect, engagement, transparency, collaboration and support; describing what is needed for work injury schemes to operate according to evidence-informed practice.

The principles of injury management that foster RTW are straightforward and well understood. However, implementation is challenging. Drawing on a compelling evidence base and the expertise of specialist occupational and environmental physicians, this paper seeks to encourage public debate on potential improvements to the design, implementation and management of workers' compensation schemes in Australia and Aotearoa New Zealand. This paper describes the impact of psychosocial factors on recovery and RTW, and points to opportunities to reduce psychosocial risk in four key domains of work injury management: leadership and regulation, case management, the workplace, and healthcare.

The challenges of translating evidence-informed research into practice have long been recognised.[33] Passive dissemination of information is generally ineffective. However, modern healthcare includes systems that foster uptake, most commonly within hospital settings, in which relevant medical specialists can adopt a leadership role.

Barriers to translating research into practice may be professional, political, institutional, managerial and in some cases, personal.[34] Professionals in sufficient numbers need to be persuaded of the value of an intervention; institutions need to be persuaded that it is affordable and deliverable; planning and commissioning need to be coordinated; and everyone needs to understand the value of the change and want it. Embedded practices often pull back to familiar practices and create webs of inertia.

If these problems lay only within healthcare, specialist occupational and environmental medicine (OEM) physicians could use the now solid base of evidence on psychosocial factors to lead a healthcare focused implementation strategy. However, healthcare is only one component of the problem; there is a need to work with scheme designers and other scheme participants to see real improvements.

The Australasian Faculty of Occupational and Environmental Medicine (AFOEM) acknowledges the breadth of expertise, research and real-life experiences that must be utilised to properly manage psychosocial risk. OEM physicians see how regulation, case management and system design issues affect patients (workers) across Australia and Aotearoa New Zealand. In this paper, system barriers are explored from the OEM physician perspective, acknowledging that other relevant perspectives need to be considered. Evidence is presented, including what works from a health and medical perspective, and suggestions for change are made.

This paper outlines the results of a narrative review, which is a useful approach for obtaining a broad perspective on a topic. It differs from a systematic review, in which all relevant publications are identified systematically, the quality of each study is assessed, and the results of studies deemed to be of sufficient quality are summarised. The main drawback of

a narrative review is that it is open to bias; its main advantage is the ability to bring together diverse material.

The suggestions in this paper remain works in progress. They are not intended as definitive, one-size-fits-all solutions to the challenges faced, which vary from jurisdiction to jurisdiction. In the 'action areas' under each domain (policymakers, case management, the workplace, and healthcare), the context for important areas ripe for change are provided. The 'Key elements for better outcomes' section outlines the important elements of evidence-informed practice. The intention is to provoke constructive collaborative discussions between those involved in work injury insurance schemes.

This paper is written principally for those involved in work injury insurance scheme design and delivery. However, it is also intended as a tool for workers, employers and other scheme participants. Each has an active role to play in understanding, encouraging and delivering evidence-informed practices within the system.

Work injury insurance scheme arrangements vary across Australia and Aotearoa New Zealand. In many cases there is a high standard of care. We acknowledge those schemes that have focused on delivering evidence-informed services using a person-centred approach. We also respect the high standard of service offered across all jurisdictions by proactive case managers, enlightened employers and treatment providers who provide high-quality care.

The goal is to build a coalition to advance the use of evidence in systems that care for people following a work injury. This paper outlines the evidence and the challenges and provides a platform to work together to press for improvements.

Finally, we acknowledge Safe Work Australia's *National Return to Work Strategy 2020-2030*[35] and Aotearoa New Zealand ACC's *Tauākī Whakamaunga atu Statement of Intent 2021–2025*.[36] *It Pays to Care* is intended to complement these strategies.

SCHEME DESIGN AND DELIVERY: A 20-YEAR CONVERSATION

Workers' compensation is a social insurance policy, designed to benefit workers, businesses and the community at large. In order to secure access to 'no-fault' workers' compensation benefits, workers have given up some rights (e.g. access to many common law actions). Equally, to reduce the chances of being sued, employers have accepted financial responsibility for some of the hazards of employment. Government's shape and oversees this 'grand bargain', as it is often known in the United States, via legislation and regulation.

Australia has 11 main schemes of workers' compensation, most of which were established in the 1980s when biomedical explanations of injury, illness, recovery and RTW predominated. Aotearoa New Zealand has one scheme that provides no-fault personal injury cover to all residents and visitors, including those injured at work, through the Accident Compensation Corporation (ACC).

According to Patrick Loisel and Pierre Côté in the *Handbook of Work Disability*,[37] workers' compensation and sickness benefit insurance systems informed by biomedical explanations typically operate as if work disability can be explained by "the severity of the condition, the effectiveness of healthcare interventions, the strength of economic disincentives, and the effectiveness of the employer's approach to disability management", with some influence exerted by the motivations of the individual worker (e.g. malingering, secondary gain, primary gain). However, this model of operation is not grounded in current empirical evidence, which demonstrates the importance of psychosocial factors; those psychological and social characteristics of individuals, case management approaches, workplaces, health care delivery and compensation systems that determine work disability.

Compelling evidence has established that biomedical approaches do not address many of the causes of work disability, and psychosocial factors exert a strong influence over work and health outcomes. Workers' compensation legislation and practice have been slow to respond to this important body of evidence.

Twenty years ago, OEM physicians developed a forerunner to this present paper. In publishing *Compensable Injuries and Health Outcomes*,[38] OEM physicians sought to bring scheme participants together to tackle the challenging problem of unnecessary work disability. That report highlighted the influence of psychosocial factors in long-term disability, and encouraged medical practitioners, scheme designers, professionals involved with RTW, lawyers and others, to work together to overcome barriers to recovery.

Ten years ago, OEM physicians published *Realising the Health Benefits of Work*,[9] one of a series of position statements on health and good work. That position statement showed

prolonged work absence and worklessness are associated with higher rates of isolation and depression, reduced income and increased rates of multiple health conditions. This message has been widely accepted and promoted. Several jurisdictions have used the position statement to influence GPs and others to support RTW.[39-43]

The *Health Benefits of Good Work* agenda[1] ENREF 44 brought stakeholders together to understand how good work can be part of recovery from injury and illness. However, broader systemic change is still needed. Medical practitioners are more likely to certify RTW if they are confident that employers and the workers' compensation system will manage psychosocial factors well.

[1] Australasian Faculty of Occupational and Environmental Medicine. Health Benefits of Good Work. https://www.racp.edu.au/advocacy/division-faculty-and-chapter-priorities/faculty-of-occupational-environmental-medicine/health-benefits-of-good-work. Accessed August 2020.

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.

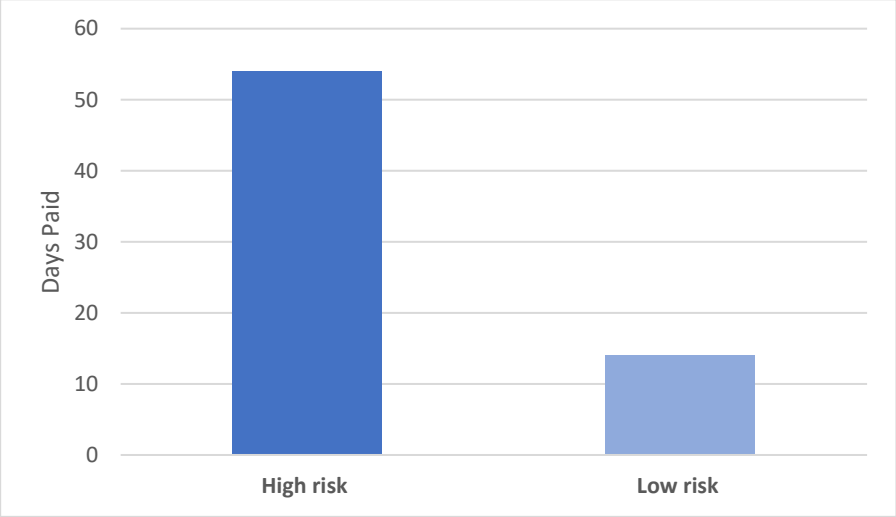


Figure 1. Average days of wage reimbursement per claim by risk categorisation

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.

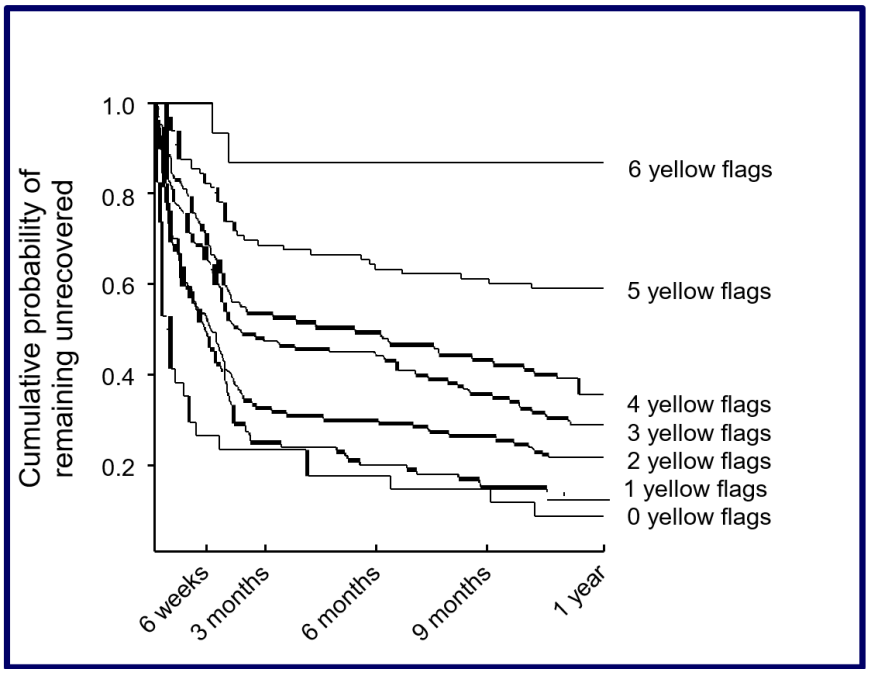


Figure 2. Likelihood of recovery and number of psychosocial risk factors

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%.

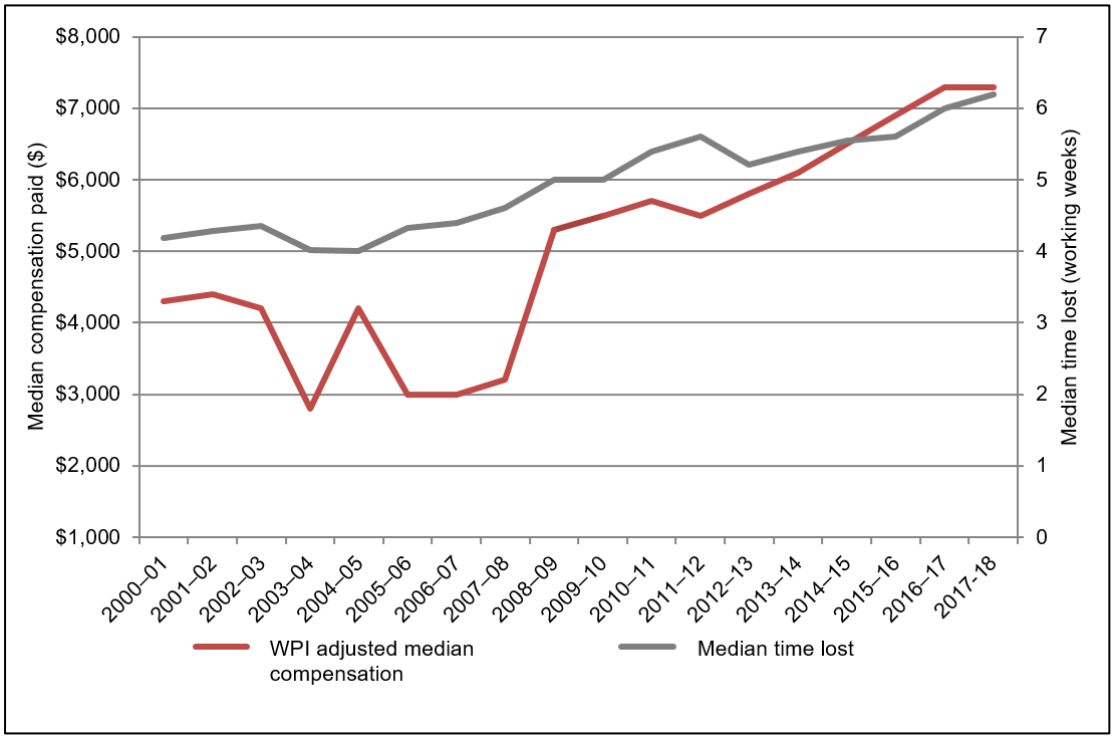


Figure 3. Median time lost and adjusted median compensation paid, Australia, 2000-01 to 2017-18

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%.

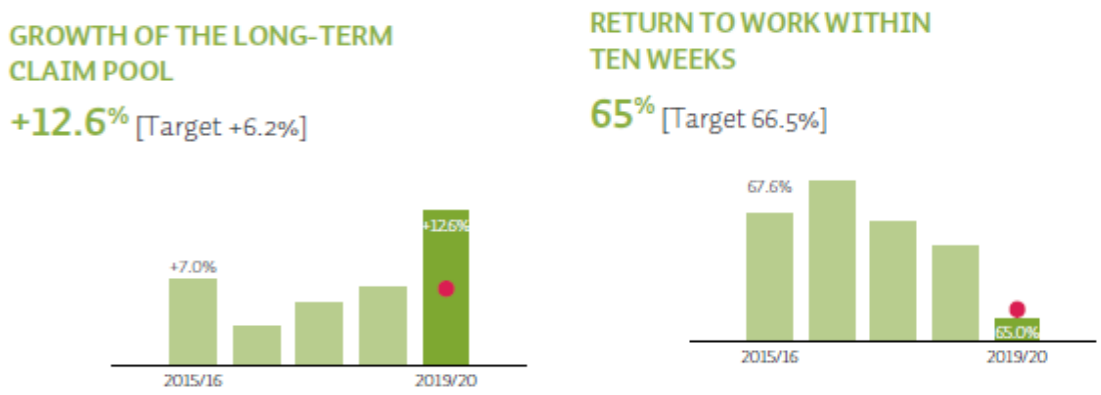


Figure 4. RTW within 10 weeks and long-term claims, Aotearoa New Zealand, 2015-16 to 2019-20

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

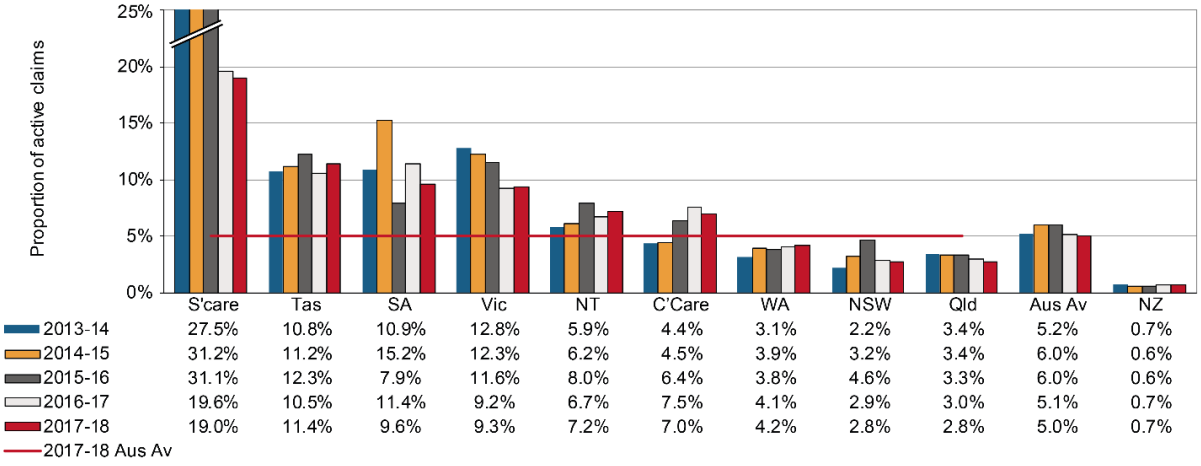
Procedural delays are common in Australian workers' compensation systems.[70] According to a study of 70,000 workers' compensation claims in the state of Victoria, close to 50% of workers experienced delays between the workplace injury and the first payment for wage replacement.[73] In Aotearoa New Zealand, 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.

LEADERSHIP AND POLICYMAKERS: REGULATORS AND INSURERS

In this section, the importance of regulators and insurers is explored in relation to scheme culture, behaviours, and influence on workers and other scheme participants. The importance of scheme culture to cooperation and collaboration, and the opportunities for scheme leaders to improve recovery and RTW is discussed, including:

- The role regulators and insurers play in setting the tone and attitude of work injury schemes.
- Avenues of influence for regulators, from enforcement to encouragement.
- Variation in regulators' approaches.
- The need for regulators to develop the skills and knowledge of scheme participants.
- How regulators can remove barriers and increase cooperation, via:
    - enhancements to scheme culture,
    - RTW expertise at senior levels,
    - open and transparent reporting; and
    - fostering non-adversarial approaches.

The 'action areas' draw from the section's content or new material to propose important areas for improvement. The 'key elements for better outcomes' outline fundamental components for evidence-informed schemes.

Background

Work injury schemes are influenced by government legislation, the policies and systems developed and implemented by regulators and insurers, as well as the culture and the way scheme participants interact.

Legislative approaches such as access to benefits, wage replacement step-downs and duration of benefits affect RTW rates. However, the evidence indicates their influence is mixed and that legislative approaches can be crude tools with unintended consequences.[108-111]

Both regulators and insurers, particularly monopoly statutory government insurers, are scheme leaders. Scheme leaders influence the culture, attitudes and behaviour of work injury schemes via their approach, communication style and suite of responses.

Regulators also set the tone via their approach to enforcement. Insurer policies on case management and their interaction with scheme participants influence scheme culture.

There is significant variation in regulators and insurers' approaches. Some regulators are at the forefront of evidence-informed approaches, leading approaches to improve culture, collaboration and scheme transparency. Other regulators have more of a focus on direct approaches. Some regulators and insurers have a well-coordinated approach to engagement and collaboration, while others focus on finances at the expense of worker care.[23]

In Aotearoa New Zealand, the accident compensation scheme has long been well regarded. In 2010 a series of reforms was introduced to manage increasing claims liabilities, and some consider there has been a reduction in case management and overall performance of the system. In response to the mooted changes, the ACC Futures Coalition was established, comprised of health providers, lawyers, community organisations, ACC consumers, academics and unions, to campaign for maintenance and improvements of the ACC.[112]

The role of the regulator and its approach to regulation

The regulator can promote positive influence on management of cases and dismantle unnecessary barriers to recovery using legislation, standards, culture, scheme oversight and delivery, and dispute systems. Regulators are also well placed to exert influence within various stakeholder domains (e.g. healthcare, the workplace), raising awareness of psychosocial risks and incentivising appropriate management.

The workers' compensation regulator is the organisation appointed by the government to regulate the work injury insurance scheme. The regulator is charged with ensuring the scheme runs smoothly, in line with legislative objectives. These objectives generally include maintaining the financial health of the scheme, whilst providing injured workers with fair compensation.

Traditionally, in work health and safety, two broad types of regulation are recognised:

- **Proscriptive strategies** of regulation that emphasise rules and transgressions and forbid rule violation. This approach has a focus on rule compliance.
- **Prescriptive strategies** that encourage achievement of goals. Prescriptive strategies encompass mechanisms to encourage those being regulated to go beyond compliance with rules to satisfy regulation requirements.

The responsive regulation model has largely replaced these traditional models.[113] Responsive regulation is flexible in its approach, depending on the behaviour of those being regulated. It may involve escalating rules-based compliance at times or a focus on fostering positive behaviours.

The responsive regulation model argues that regulators are more likely to succeed when they respond to the context, conduct and culture of those being regulated. The model suggests regulators should begin with encouragement and collaborative mechanisms that operate with respectful (and cheaper) options. Evidence indicates that most people and organisations respond well to a respectful and supportive approach, and that punitive mechanisms should be reserved for the minority of cases where persuasion fails.[114]

No matter the regulatory tools, the following principles underpin effective regulation.[115]

- **Evidence-informed.** The regulator makes assessments and acts based on objective evidence.
- **Independent.** The community has trust and confidence that the regulator is able to be effective. This means clear independence from those that are being regulated, such as the insurer.
- **Purpose driven.** Regulators set the tone and culture of the scheme, so it's important that there is clarity of purpose and a strong sense of values.
- **Authoritative.** To be effective, a regulator needs to be able to do the right thing (i.e. have appropriate powers), as well as be trusted to do the right thing (i.e. be transparent and open to scrutiny).
- **Expert.** The organisation requires appropriate expertise and capabilities. Specialist expertise in claims and work or personal injury schemes is needed at senior levels. Moreover, regulators must have their ears to the ground to understand what occurs daily in the real world, as opposed to simply reading high-level reports.
- **Consultative and communicative.** The regulator understands the perspectives of those who are affected by the regulator's decisions, which requires effective stakeholder engagement. Stakeholder engagement occurs in the setting of partnership with scheme participants and an open flow of dialogue.
- **Trusted and transparent.** Fair application of the rules and fostering appropriate behaviour increases trust amongst stakeholders. Transparency is an important principle and fosters trust.
- **Do no harm (in a complex system).** Good intentions have, at times, had unintended consequences. In such a context, transparent monitoring of changes to systems and processes is essential.

How can regulators influence work injury schemes constructively?

Various responses from the regulator, from enforcement to encouragement, influence how work injury schemes operate.

Compliance and enforcement

Compliance activities range from ensuring employers pay their premiums and appoint a RTW coordinator (in relevant jurisdictions); to overseeing payments to service providers; to investigating potential fraud (by workers, employers or service providers).

Dealing with abuses of the scheme, small or large, is important to maintain confidence in the system. Abuses undermine the trust of all scheme participants. Transparency on how problems will be identified and solved raises awareness and acts as a deterrent.

The regulator can and should use a suite of tools to understand and monitor the scheme. Early identification of inappropriate behaviour enables the regulator to deal with the problem in a timely manner. Scheme monitoring for inappropriate behaviour can involve:

- Examining the number and type of complaints.
- Encouraging open feedback from scheme participants.
- Tracking the number and nature of disputes.
- Maintaining a 'whistle-blower' hotline to support reporting of scheme abuses, such as unethical case management practices.[10]
- Audits, such as case management file audits.

Concerns have been expressed about a blurring of roles, where the regulator and insurer are housed in one organisation.[23,116] 'Regulatory capture' describes the difficulties of overseeing an industry where the regulator is too close to the body it is regulating. This may occur through asymmetry of information, pressure to support the approach of the entity being regulated, or when the regulator's connections lead them to be more sympathetic to those with whom they are in regular contact.[117] These issues have led to concerns about insurers and regulators being part of the one organisation.

Failure to deal with abuses of the scheme has a significant effect, and trust in the system is diminished when inappropriate practices persist. For example, in one major jurisdiction there have been calls for wholesale change in the state's scheme, noting repeated failures of the regulator to rein in claims practices that were considered unethical.[10] Further, inappropriate practices compromise staff tasked with enacting those practices. When staff are under pressure to achieve short-term goals (e.g. when case managers have KPIs that stipulate a certain number of certification 'upgrades' per month), they are less likely to provide holistic care to workers at a time of need. Workers may then become demoralised and demotivated, and a negative cycle ensues.

Encouragement

The more substantive problem impeding improved RTW is the difficulty of implementing evidence-informed policy. Approaches that foster proactive management, good behaviours, fairness and trust are important.

The regulator can improve culture, workforce skills and scheme interactions through persuasion, incentivisation, education, evaluation, performance monitoring, information provision and encouraging good behaviour. These approaches will be more effective if there is trust in the regulator, and this is more likely when scheme leaders act responsibly and promote scheme objectives and scheme values.

Some regulators have proactively developed and adopted mechanisms designed to foster positive behaviours, exceeding minimal compliance. Examples include:

Stated expectations of customer service and conduct. Some regulators have published explicit statements of principles and expectations of standards of service.[17,18] The principles set expectations for insurers, in particular being fair and acting with respect, being reasonable, efficient and proactive, responsive, transparent and accountable. In its 2019 annual report, the ACC stated that everything it does as an organisation aims to support the Aotearoa New Zealand way of life for all citizens and visitors.[50]

Declaration of the regulator's operating principles. The regulator declares the principles underpinning its approach.[118]

Measurements of claimants' experience. Information about lead indicators (e.g. early contact, interaction with the insurer) provides opportunities for improvement.

Explicit focus on engagement. The regulator has an explicitly stated stakeholder strategy.[119] In Queensland Australia, where stakeholder engagement is largely managed by the insurer rather than the regulator, the model includes extensive outreach.[120] Each team leader at the insurer manages one or more relationships. The relationship may be with a large employer association, a union, a health association, legal firm, or specific individuals, such as a neurosurgeon who frequently operates on injured workers. Staff are taught how to develop and maintain relationships. There may be an initial in-person meeting and then regular or intermittent contact. Contact may be face-to-face, by phone or email.

Skill development and coming together. Regular conferences are arranged in some jurisdictions, imparting knowledge and bringing scheme participants together.[121,122] In one Australian jurisdiction the regulator provides free education sessions for workers,[123] as well as quarterly forums for injury managers working for private insurers.

Transparent sharing of scheme data. Sharing of scheme data helps participants to understand how the system is tracking and fosters transparency.[124]

Active versus passive regulation. Active regulation means actively reviewing practices, such as case or claims management. An active regulator seeks to actively monitor scheme practices, attends to issues early, and has a suite of measures to monitor performance. These may include complaints, timeliness of activities, such as decision-making, documentation, surveys of workers and employers, monitoring of the type and rates of disputes and audits of case management files.

Varied regulation performance

Trust and cooperation underpin effective RTW systems, whilst prescriptive approaches produce less success.[125] Regulators set the tone. Is the regulator focused on supporting stakeholders and scheme participants, or is the approach more of a command-and-control endeavour? Is the regulator actively promoting the education and upskilling of the workforce involved in RTW?

There has been little research into the role of regulators within work injury systems. Views of stakeholder and regulator activities suggest substantial variation across jurisdictions, with more negative views about prescriptive approaches that do not foster collaboration. Deakin University researchers surveyed scheme participants in various Australian jurisdictions and issued a report in 2014.[126] They noted that participants expressed varying degrees of frustration about schemes' responsiveness to their concerns. They noted some jurisdictions' statutory authorities were felt to give lip service only to consultation with stakeholders. In two jurisdictions, participants reported that they were listened to more seriously and that regulators had made advances in respecting the input of scheme participants. However, in other jurisdictions, scheme participants said the focus was on managing them rather than engaging them, and that their feedback was unwelcome.

In reports published in 2016 and 2019,[10,23] an Ombudsman's review of one large Australian scheme concluded there had been insufficient oversight of compliance by the regulator regarding claims agents' decision-making, and that the work injury scheme had focused on financial outcomes at the expense of worker welfare.[10] The report indicated whole-scale change was needed because claims agents were not being held accountable for unsustainable decisions.

Work injury schemes have been beset by stubborn problems for decades. These challenges are vexing to those involved in patient care. The disconnect between healthcare and rehabilitation in its intimate real-world setting and the distilled information delivered in the boardroom or policy discussions seem important barriers to policymaking.

The insurer as a scheme leader

Insurers influence schemes through their policies, practices and attitudes. The organisational arrangements of insurers vary across Australia and Aotearoa New Zealand.

- In some jurisdictions, the regulator and the insurer are one organisation (Victoria, South Australia and Aotearoa New Zealand).
- In some jurisdictions, injury insurance is run by a government statutory body (Aotearoa New Zealand, Victoria, New South Wales, Queensland, South Australia and Comcare). Each insurer sets its own policies, implemented through systems, education, internal management and external consultation in some cases.
- Some insurers outsource claims management to third-party claims agents (New South Wales, Victoria, South Australia). However, policy is generally developed by the insurer with the expectation that claims agents will implement it.
- Self-insurers are licensed to manage their organisation's work injury scheme. These licences are authorised and supervised by the jurisdiction's regulator. In Aotearoa New Zealand, major employers can opt out of the ACC-administered scheme under the accredited employer scheme. They are obliged to use a third-party administrator for claims management services.
- Unlike its Australian equivalents, Aotearoa New Zealand's ACC covers work injuries, and those that occur outside work, such as at home, in motor vehicle accidents or when playing sport. It also covers children and overseas visitors.
- Private insurers operate in Western Australia, Tasmania and the Northern Territory.

Large statutory insurers (Victoria, New South Wales, Queensland, South Australia) influence scheme culture through their approach to case management and/or through their approach to third-party claims agents contracted to undertake insurance case management. There is substantial variation in insurer approaches to leading evidence-informed schemes and practices. The systems, style of management (control versus partnership), financial arrangements and standard setting have a material impact on how the scheme operates and how claims are managed.

Private insurers influence the businesses they insure, and the workers employed by those businesses. Some private insurers have developed excellent tools to support early effective case management, such as technology-based triage that includes psychosocial questions and pre-approval of some limited services.[127]

Without specialist expertise in RTW within senior management and the boards of insurers, these entities are less likely to set policies in line with evidence-informed practices. For example, a proposal to use an automated triage system for case management underpinned by an algorithm based on claims administrative data alone, as introduced by iCare, would

likely raise red flags for a RTW specialist. The failure of just such an automated triage system in one Australian jurisdiction highlights the need for the adoption and implementation of evidence-informed systems.[11]

The role of the insurer in the important area of insurance case management is covered in the case management section of this paper.

Importance of scheme culture

A positive culture inhibits poor conduct, whilst a lax culture can allow poor conduct to occur and proliferate.[128] In some settings, poor conduct may even be rewarded. An effective regulator takes measures to counteract poor conduct.

The following comments from the a recent Ombudsman's report [23] highlight the poor treatment of claimants that can result from the quest for financial rewards.

> *[The insurers] are driven by the [financial rewards] that [WorkSafe] pays … There is no regard for the injured worker … [they are] just a number. …The injured worker is almost the forgotten person. It should be about them, it shouldn't be about … how the executives get paid their bonuses, how the agents get paid their bonuses. That shouldn't be the driver of the behaviour but that is what has been happening for a number of years.*
>
> *The below listed claims may impact the 52wk … [financial reward and penalty measure]. Before you process any payment for these claims between now and 01.07.2015, can you please speak to me first. If we can hold off until this date we can positively effect [sic] this measure.*

Influencing culture in a complex scheme requires leadership, purpose and clarity of vision.

Legislation

Many aspects of work injury legislation affect RTW. Two stand out as important.

Claim lodgement with direct personal connection

The time for reporting and claim lodgement can be shortened using systems that make claim lodgement simple and flexible.[73] This may involve online reporting and/or reporting claims by phone.

Early contact allows timely assessment and management of psychosocial risk. The advantage of telephone reporting is the opportunity to communicate with the worker from the outset, helping identify barriers to recovery and RTW in a timely way. Workers with

psychological injuries are particularly likely to worry about making a compensation claim and having a poor outcome.[129]

Resolving disputes

Adversarial processes and benefit delays are associated with poorer outcomes.[77] Timely resolution of disputes, claims and benefit determinations is preferable, particularly those not dependent on 'proving disability'.

In 2011, the Productivity Commission's review of Disability Care and Support explored the impact of adversarial fault-based systems on injury-related symptoms, health and quality of life.[130] The limitations of available research were acknowledged, though the report authors considered that fault-based systems are more closely linked to poorer health than no-fault systems. No study found that common law processes have more desirable health outcomes than the alternatives.

Potential contributors to adverse outcomes include:

- Litigation processes that are often protracted and stressful.
- Immersion in a complex and adversarial system can be demoralising for some and become a preoccupation for others.
- Workers developing a continued and repeated focus on symptoms and limitations.
- The size of the award being dependent on the severity, which may interfere with rehabilitation and recovery.
- The need to attend multiple medico-legal appointments, and cope with the variety of opinions expressed.
- The duration of the process.
- Bureaucratic complexity.

The Productivity Commission's report discusses two potential results if/when symptoms are exaggerated:

> *These findings point to two separate processes that may be at work. On the one hand, people may embellish their symptoms to get bigger payouts, leading to insurance premiums that are inefficiently high even if such exaggeration does not actually affect real health outcomes. On the other hand, exaggeration may have the dual impact of leading to higher payouts while actually degrading health outcomes given the sickness orientation of the injured party. Distinguishing the two is hard, though both lead to undesirable outcomes.*

Further research into the impact of common law on workers would be helpful to assess the benefits and downsides of settlement options that can take years and can contribute to further distress and disability rather than recovery and return to normal life.

Action areas

In this section, a number of important areas for improvement are identified.

A scheme culture that promotes recovery and RTW

The regulator can set a RTW-enhancing tone for the scheme as a whole, articulating, modelling, incentivising and at times enforcing appropriate attitudes and activities. Identification and communication of scheme values that respond to the evidence around the biopsychosocial determinants of health is important.

Relevant values include fairness, timeliness, trust and reciprocity, personalised and respectful communication, and empowerment of stakeholders in the context of clear standards (as opposed to either lax or overly prescriptive approaches).

Monitoring culture
Noting that RTW is more likely when the 'whole team is onside',[125] developing a culture of collaboration is vital. Collaboration is more likely to occur when stakeholders and scheme participants feel they are heard, and their needs are being addressed.

Regulators may find it useful to seek regular feedback on scheme culture, for example, via an independently conducted annual survey of stakeholders and scheme participants, measuring levels of perceived collaboration, engagement and trust.[50] Problems identified should be dealt with quickly, within a context of open and honest feedback and a cycle of improvement. Regular communication with stakeholders should be maintained.

Strong relationships with key players develop when there is open and honest feedback and a cycle of improvement. People and groups are less likely to feel disenfranchised when there is regular communication. If they feel listened to, the trust that develops leads to greater collaboration. Dealing with small and large problems early helps deepen that trust. Scheme culture is then examined, and measures are put in place to reduce barriers to cooperation.

Embed the concept of 'do no harm' into work injury schemes

Workers who experience a work injury can suffer further harm through the myriad of claims procedures, medico-legal investigations, dispute processes and surveillance that can hinder recovery, with consequences for the worker, their employer and the scheme.[131]

Prevention of further harm to the worker is an important principle. Workers' compensation legislation generally includes statements that outline its objectives:

- Make provision for compensation for injured workers.

- Promote rehabilitation of workers.
- Promote safety measures.
- Hear and determine disputes in a fair, just, economical, informal and quick manner.

Guthrie and Monterosso (respectively, professor and lecturer in law at Curtin University) recommend that the concept 'above all, do no harm' is embedded into the objectives of the workers' compensation legislation. They consider this aids interpretation of the entire scheme.[131] It can be applied specifically in respect of two existing purposes: rehabilitation and dispute resolution.

Raising awareness of what works

Engaging government

Workers' compensation is social insurance. It is therefore important that relevant Government Ministers and departments understand what helps and what harms those in the community who have experienced work injury. A clear understanding of the business and scheme benefits of preventing and managing psychosocial risks is also important.

Sharing stakeholder expertise

Stakeholder-to-stakeholder education is another promising possibility. For example, well-informed insurers with expertise in RTW could educate employers about best practice injury management. This could occur via advice or provision of resources. Service delivery could be online, over the phone or in person. Such approaches may be particularly beneficial for smaller employers with little experience of claims management.

Modelling positive approaches

Ideally, RTW-enhancing values will drive the behaviour of the regulator and insurer as well as scheme participants. There are many opportunities to improve outcomes and lead by example.

RTW expertise at the top

Regulators and insurers' boards and senior management teams would benefit from expertise in RTW, ideally at the most senior or second most senior level. Medical consultants have invited senior managers to spend time in medical consultations to help them understand the real-life impacts schemes have on people (N. Ford, personal communication, July 2021).[132] A similar approach in healthcare governance has found benefits from senior managers being immersed for a day in the 'real world' of patient care.[133] Any similar initiatives in the context of workplace injury management and workers' compensation would require permission from claimants.

Consultation and collaboration

Although regulators and large insurers engage stakeholders in every jurisdiction, there is room for improvement in some jurisdictions. Clearly articulated stakeholder engagement strategies are one promising option.

An effective stakeholder engagement strategy might include:

- Educational events to upskill those involved in the scheme.
- Networking opportunities to foster connections.
- Biannual survey of stakeholders, seeking their views on scheme culture.
- Consultation with scheme participants, particularly around the introduction of new policies.

Involving the community in the strategic intent of policymakers is important. For example, in Aotearoa New Zealand, the ACC Futures Coalition[112] considers there is a case for substantial reform of the ACC, and has called for a wider examination of the scheme's operation.[134]

Safeguard trust and fairness

Abuses of the scheme will occur from time-to-time, such as inappropriate behaviours from insurers, employers, employees and service providers. Schemes need systems in place for these to be promptly identified and resolved to safeguard stakeholder trust in the integrity of the scheme. The regulator needs to have sufficient authority over the insurer and scheme participants to be effective.

Proactively address psychosocial issues

There are many opportunities for regulators to directly address the psychosocial determinants of health and recovery. One option worth exploring is the development of digital resources to prevent and manage psychosocial risks. Smartphone applications would provide access to most people and would allow electronic completion of screening questionnaires and sharing of results. Such initiatives would help raise awareness of the psychosocial determinants of health, as well as assist in managing individual risk.

Transparent monitoring of scheme performance

If improvements to scheme operation are to have their intended effect, they must be underpinned by an accurate, widely shared understanding of scheme performance. The development of quality standards and rich methodology to monitor progress towards those standards would be useful in this regard.

Monitoring options could include:

- **Surveys to monitor scheme performance.** Customer satisfaction can be useful to measure but a more in-depth approach is preferred, using feedback from the RTW Survey[51] and measuring known psychosocial influences on RTW such as perceived fairness.
- **Regular quality auditing of case files.** This would require evaluating a set of case files for markers of good case management, including risk identification, quality of communication, delays, approaches to influence the employer, frequency of delays and unnecessary disputes, and whether the case manager is acting in line with the values of the scheme.
- **Recording staff turnover rates**. Within both claims management organisations and scheme providers, such as rehabilitation professionals.
- **Reports of both lead** (e.g. employer response to injury, early contact with worker, time to claim lodgement) **and lag indicators** (RTW rates). Measures of health outcomes, as well as RTW outcomes, will assist in scheme monitoring and improvements.
- **Separate reporting in the RTW Survey**. Those who have been involved in the scheme for more than three months, and those with complex cases (approximately 20% of cases overall).
- **Regular reporting on the level of complaints.**

Scheme participants need clear feedback about the state of the scheme, including outcome data (e.g. RTW rates, with a clear description of how they are determined) and psychosocial influences on RTW gleaned from the case file audits (e.g. levels of perceived justice, dispute levels). Safe Work Australia has partnered with the Insurance Work and Health Group at Monash University to develop a scorecard that assesses RTW performance, including lead and lag indicators.[135] This will enable meaningful comparison over time and between jurisdictions.

Simpler, speedier systems for claim lodgement with direct personal connection

Reporting and claim lodgement can be shortened with systems that make claim lodgement simple via online and/or telephone reporting.[73] This also facilitates rapport with the injured worker, and allows early assessment and management of psychosocial risk.

Researching and implementing better dispute resolution with less legal involvement

It is well recognised that adversarial attitudes and disputes significantly reduce the likelihood of RTW. Many workers who seek legal advice do so because they feel the scheme has treated them poorly.

Most schemes provide alternative dispute resolution mechanisms for resolving disputes. These include varying mechanisms for mediation and agreed settlements. Fostering non-adversarial claim settlement approaches is recommended.

Systems that take a cooperative approach and focus on early support of the individual and avoidance of disputes lessen the risk of common law claims. Alternatives to common law should be considered. For example, lump sum payments in one jurisdiction[136] (for non-economic loss) are based on the level of impairment but also factor in economic loss. In Aotearoa New Zealand, a formal review hearing can be requested for adverse decisions.[76]

Claims settlement can occur in varying ways. Evaluation of best claim settlement practices is needed. If common law is used as a method for resolving matters, research on how to limit the adverse consequences may assist in shaping processes that do not prolong disability but promote recovery and RTW outcomes.

Monitoring and enforcement

Ideally, regulators will monitor insurer and self-insurer compliance against performance indicators through audits, assessments, reviews and/or investigations. The results should trigger proportionate responses to non-compliance and may also be fed back to stakeholders to ensure transparency and accountability.

Monitoring should cover:

- Number of complaints.
- Number of improvement notices.
- Timely and appropriate resolutions.
- Case file audits.
- Outcomes of surveys of workers and employers.

A long-term research agenda

Program evaluation

As outlined in this paper, a substantial number of factors contribute to RTW and work disability. The challenge is how to put that evidence into practice. Implementation is challenging, and unintended consequences a real concern. A key need is to take current understandings and implement them in the real world.

Program evaluation examines the actual implementation and impacts of an initiative to assess whether the planned effects, costs and benefits were achieved. Program evaluation can identify what has worked, what problems arose, and any unintended consequences. The evaluation may assess cost-effectiveness. These are important lessons, particularly in an environment where policymakers may replicate initiatives that seem to have been effective in other jurisdictions.[137]

For example, ReturnToWorkSA introduced the mobile case manager model in 2015. The mobile case manager seeks to meet with workers, employers and service providers face-to-face and in workplaces. The mobile case manager is also able to make timely decisions, coordinating and enabling access to services for workers. They are generally more experienced and have lower caseloads than other case managers. While information about the employment conditions of mobile case managers is not publicly available, it is our understanding that they are paid a higher salary than other case managers and are expected to have greater skills and experience. The approach has been considered successful in supporting RTW, and WorkSafe Victoria has adopted the model.

An evaluation of the approach would aim to assess whether the program was appropriate, effective and efficient, and which components contributed to success or require improvement. Is the model successful because of the face-to-face communication, the level of expertise of mobile case managers, and/or their ability to make timely decisions? Would the same success be expected if all case managers were similarly skilled and remunerated? Understanding effective and ineffective components also supports adoption in a different environment, using local evidence and knowledge to maximise the benefits in a jurisdiction featuring different contexts, attitudes and practices.

Co-design of programs is a developing field involving end users in program design, intervention and evaluation. The co-design approach is considered to be a promising way to improve innovation in service delivery.[138] Important elements of co-design include design practice, collaborative working, creating an environment for innovation, team skills and attitudes, and transfer of knowledge.[139] However, several elements require attention for the process to be effective: involving diverse participants, dealing with extra complexity, enabling equal inclusive involvement, and managing power relations and expectations.[140] Considering

the impact of schemes on worker outcomes, end user input has significant potential to streamline systems.

Process evaluation, a component of program evaluation, can accompany controlled trials[137] to enable a better understanding of the components that contribute to any success. Understanding decision-making factors among scheme participants can also assist.[137]

A program evaluation policy may assist in this approach becoming more routine. The development of program evaluation skills, expertise and budgeting will promote consistency in program evaluation.

Behavioural intervention research

Behavioural interventions involve changes to the way communications and decisions are framed and conveyed to have impact on behaviour. Several Australian governments have dedicated behavioural economics units.[141-143]

Simplifying and streamlining communication can be a cost-effective approach that aids workers and insurers. Behavioural insights applied to arranging IMEs has shown promise in improving the experience of the injured worker and securing cost savings.[144]

A trial in NSW involved a range of interventions:

- Documenting redesign involving clearer language and reducing the number of letters and requests for information.
- Empowering communication to increase the workers' feeling of ownership of the RTW process and removing messages that reinforce the 'injured condition'.
- Encouraging the workers to make personal commitments based on average injury times.
- Setting expectations and mutual obligations with the worker.
- Sending work and health plans to the workers early.
- Ensuring plans are personalised and have an RTW focus.

The combined result of these interventions was that RTW occurred earlier and RTW rates increased.[30]

There are many such opportunities for improvement, which stakeholders currently discuss and apply in an ad hoc fashion. A central coordinating body could work with jurisdictions to identify best practice options and implementation approaches.

Implementation research

Implementation research is the study of methods to promote the systematic uptake of evidence-based practices into routine practice and to improve the quality and effectiveness of healthcare and the way systems operate.[145] Some examples follow.

The WISE study in New South Wales, Australia[146]

Earlier observational research revealed the short-form Orebro musculoskeletal pain questionnaire was a good predictor of work disability.[49] Those over the cut-off score of 50/100 on the questionnaire had three times the duration of time off work of those who scored below the cut-off.

The WISE implementation study set up a system to provide extra support to those identified as at high risk of work disability. Through access to a psychologist, extra RTW coordinator support, and early injury management consultant recommendations, extra support was provided to workers at high risk, resulting in notable improvements in their RTW timeframes.

The intervention required the involvement of people in varied roles: case managers, workplaces, health providers, hospital administrators and NSW Health. Training of case managers, RTW coordinators and psychologists was part of the intervention, and follow-up reminders and training was needed at times.

The study took years to complete, with an initial study set-up phase, implementation and two years of follow-up to evaluate the program's outcomes. However, the benefits are commensurate with the time and effort involved. The system of care has been shown to be effective and substantially advanced our knowledge of what can be achieved and how.

Back pain public health campaign

In 1997, a major public health campaign was run in Victoria to change common misconceptions about back pain. The previous efforts of the Victorian WorkCover Authority (now WorkSafe Victoria) to educate GPs had proved ineffective; costs from back pain claims had tripled over the preceding 10 years.

The campaign consisted of television advertising aimed at the public and healthcare providers; it delivered clear messages about the strength of the spine and the importance of returning to normal functioning. Messages were delivered by well-known sportspeople, television personalities and well-regarded healthcare practitioners.

An evaluation of the initiative found that population beliefs and fears about back pain improved,[147] as had GPs' attitudes to treatment and certification,[148] and there was a reduction in the number of back pain claims and days lost from work, with associated significant cost savings.[147] Follow-up studies showed sustained benefits at five years.

Value of implementation studies

Both studies detailed above provided insights that other policymakers and practitioners could use. The back pain campaign led to similar, though scaled down, campaigns in the United Kingdom, Canada and the Netherlands. The WISE study model of early intervention is now being implemented at Australia Post.

There are many facets of work injury care that can be improved but have not yet been tackled. For example, we've understood for many years that workplace communication has a large impact on whether a worker returns to work. Yet, only 59% of workers report their employer contacted them following their physical injury, and 39% for a psychological injury.[19] What strategies are effective in improving an employer's response to injuries? How can we implement what we know about the influence of the employer in aiding recovery and RTW?

Examples of potential targets for implementation studies are given below.

Via the workplace

- Studies of training supervisors: does training supervisors in how to deal with work injuries improve their knowledge, behaviours and RTW outcomes? If so, what are the most cost-effective methods of skilling supervisors? Are the needs different for small, medium and large employers?
- What are the most effective ways to inform and influence finance and senior leaders about work injury management at the workplace?

For case management

- What training is needed for effective case management? What team structures provide the best support? What methods work best for case managers to identify psychosocial barriers and provide support?
- Are mobile case managers more effective than traditional case managers? If so, is the difference the face-to-face contact, lower caseload, greater level of experience, or a combination of these factors?

For treatment providers

- What shifts treating medical practitioners' certification practices and behaviours? A Cochrane review of interventions to deal with over-testing and prescribing (such as inappropriate opioid prescription) indicated feedback letters to high prescribers can increase desired practice by about 4%.[149] Can similar approaches reduce the level of unfit certification?

These questions are faced by policymakers across Australia and Aotearoa New Zealand. It is likely that what works in one jurisdiction will be applicable in others. Ideally, a program of

implementation studies would be developed nationally, and various jurisdictions would complete and share relevant studies. A central pool of information, including program elements and results, could be shared locally and internationally.

Conducting implementation studies

As noted above, implementation studies can be complex to set up, take years to complete, and involve many diverse participants. Because implementation research is developed in real-world situations, the fundamental research questions best come from those working in the real world, such as policymakers. Involving those who implement assists the identification, design and conduct phases of research. Other elements of implementation research include:

- Fostering collaborative ties between key stakeholders involved in policy generation, program management and research.
- Integrating research into policy and program decision-making from the outset.
- Viewing evaluation as an integrated and standard component of programs.
- Addressing the 'why' and 'how' of implementation effectiveness, to understand the pathways that influence outcomes. Qualitative research embedded in implementation studies can be useful for this.
- Inviting those involved to reflect on their practices and experiences, which can contribute to improvements.

Varied research designs and approaches can be used: pragmatic trials designed to evaluate effectiveness in real-world situations, pre-post studies that may not have a control group (e.g. another employer or jurisdiction), and effectiveness–implementation trials. Randomised controlled trials (RCTs) are very useful but may not be feasible at a program level.

Despite the importance of implementation research, it continues to be a neglected field of study, partly because of a lack of understanding about what it is and what it offers, and partly because of a lack of investment in implementation research activities. Billions of dollars are spent on work injury schemes, but very little on real-world studies of what is effective.

A long-term agenda that starts with defining relevant implementation research questions is needed. To develop this field of research, relevant skills, partnerships, budgets for implementation studies and national coordination are required.

Key elements for better outcomes

This section outlines important elements for policymakers in operating an evidence-informed scheme.

Worker-focused care

⇒ Scheme regulators are explicit about the expectations of customer service and conduct by insurers, such as acting with respect, and being fair, reasonable, efficient and proactive, responsive, transparent and accountable.

⇒ Measure and share claimants' experiences, including factors that influence recovery and RTW. These results form an important component of ongoing improvements.

⇒ Invest in resources that promote early intervention and early support for claimants and their workplaces, including empowering workers to be active participants in their recovery and RTW.

⇒ Implement a systematic approach to foster whole-of-scheme adoption of the biopsychosocial model of care, through stated expectations of insurers, education and skilling of the workforce, including healthcare and workplace rehabilitation providers.

⇒ Reduce friction points that contribute to scheme-induced psychosocial barriers, such as streamlining decisions about healthcare treatments, constructive communication and simplified written communication.

⇒ Identify inappropriate behaviour early: monitor the number and type of complaints, encourage feedback from scheme participants (including a whistle-blower hotline for reporting of scheme abuses, such as unethical case management practices and inappropriate provider behaviour), and conduct regular case management file audits.

⇒ Focus on staff development in case management; avoid short-term approaches such as KPIs.

⇒ Foster high-value healthcare for workers; consider payment and other incentive structures to encourage best practice healthcare.

⇒ Measure and focus on health outcomes.

⇒ Include 'do no harm' provisions in the objectives of workers' compensation legislation.

Develop collaboration, cooperation and trust

⇒ Recognise that a positive culture inhibits poor conduct, and a lax culture allows poor conduct to occur and proliferate.

⇒ Scheme leaders conduct consultation and communication. Stakeholder engagement occurs in the setting of partnership with scheme participants and an open flow of dialogue.

⇒ Communicate scheme values that respond to the evidence around the psychosocial determinants of health: fairness, timeliness, trust and reciprocity, personalised and respectful communication, and empowerment of stakeholders.

⇒ Scheme leaders act as role models, declaring their own operating principles and focus.

⇒ Measure scheme culture and trust annually and use the results to improve.

⇒ Develop and declare the scheme's approach to engaging participants, with a declared stakeholder strategy that includes scheme meetings and conferences, shared learning opportunities, and regular meetings between the regulator and industry and professional associations.

⇒ Ensure schemes across Australia and Aotearoa New Zealand collaborate through sharing of research and resources, and encourage a similar approach between private and public insurers.

⇒ Develop, measure and share lead and lag indicators to foster continuous improvement in approaches that improve RTW rates.

⇒ Avoid unnecessary delays, particularly with initial claim notifications and unnecessary disputes.

⇒ Ensure fair application of the rules and transparency in communications.

⇒ Actively identify minor abuses of schemes and deal with them early.

Enhance skills and experience within work injury schemes

⇒ Recognise that the skills and experience of those involved in the scheme have a major impact on RTW outcomes.

⇒ Develop resources to educate and inform key workplace staff on their roles in facilitating RTW, including RTW coordinators and line and senior managers.

⇒ Develop a suite of national resources for healthcare provider education, including undergraduate and postgraduate training for medical practitioners and allied health providers, with ongoing educational events to upskill those involved with the scheme.

⇒ Develop national standards, principles and training approaches for insurance case managers.

⇒ Have specialist expertise in RTW within the senior management of regulators and insurers.

⇒ Senior leaders and Board directors spend time at the coalface to understand the personal stories of workers.

Simplify and personalise

⇒ Ensure claim lodgement is quick and simple to enable early intervention. Focus on claim lodgement options that allow for personal contact, triage and biopsychosocial assessment, and early responsive case management.

⇒ Favour dispute resolution mechanisms that minimise adversarial interactions and can be completed quickly. If common law is used, research and minimise the factors that increase disability and distress.

Continuous improvement and innovation

⇒ Support innovation through funding incentives.

⇒ Create a long-term research agenda focusing on improvements in efficiency and effectiveness. Coordinate implementation research, program evaluation and behavioural intervention research through a central organisation to share learning.

⇒ Ensure the key elements of case management and collaboration are in place and foster a culture of ongoing improvement.

CASE MANAGEMENT

Case management is a vitally important role in work injury systems. For many injured workers, perceptions of their case manager determine perceptions of the system as a whole. A systematic review of studies of workers' perceptions of insurers found that workers who develop a rapport with their case manager tend to think highly of the compensation system, whilst negative interactions cause workers to lose faith in both the case manager and the system overall.[52]

In this section, the following is addressed:

- Role of the case manager.
- Characteristics of case management systems that enable individual case managers to be efficient and effective.
- Factors that impede high-quality case management (staff turnover, bureaucratic systems).
- Importance of soft skills such as communication, empathy, persuasion and negotiation.

The discussion of case management practice that follows here is underpinned by an awareness that the behaviour of individual case managers is influenced by the expectations and directives of the organisation that employs them. The employing organisation (e.g. an insurer or other service provider) in turn responds to the financial incentives and culture set by the overarching workers' compensation scheme.

As participants in various workers' compensation systems around Australia and Aotearoa New Zealand, specialist OEM physicians see how the attitudes and approaches of workers' compensation authorities influence stakeholder behaviour. The structure of many workers' compensation systems means that this influence is particularly strong in relation to case management practice.

For example, if the financial incentives set by insurers are based on closing cases, claims management organisations will set case managers' KPIs accordingly. Under pressure to meet their KPIs, some case managers will, in words taken from an internal email between a real-life case manager and his/her direct manager in one jurisdiction, 'terminate away!' rather than take a supportive, worker-centred approach.[23]

In contrast, a workers' compensation authority might adopt a worker support model in principle, but in reality fail to provide adequate resources in terms of case manager numbers and expertise, and systems that support case manager effectiveness.[11] In theory the approach is good, but in practice it may be difficult (if not impossible) for individual case

managers to implement. There may well be a failure of case management, but individual case managers are not to blame.

The role of case management in workers' compensation

Ideally, insurance case management is a collaborative process of assessing need and planning and implementing the necessary supports to achieve quality, cost-effective outcomes in line with legislation.

Insurance case managers are employed by private insurers (Western Australia, the Northern Territory and Tasmania), public sector insurers (Aotearoa New Zealand, Comcare, Queensland) or claims agents contracted by insurers (New South Wales, Victoria, South Australia).

The responsibilities of workers' compensation case managers vary between jurisdictions too. Common duties include:

- Claims determinations.
- Decisions about access to treatment and rehabilitation services.
- Building relationships and effectively communicating with all claims stakeholders (e.g. injured workers, employers and service providers).
- Managing paperwork and other administrative aspects of claims.

Some challenges of case management

Case management has been described as a difficult and emotionally demanding job that requires strong interpersonal skills (including written and verbal communication and conflict resolution), good time management, problem-solving skills, a clear RTW focus and administrative efficiency.[20-23]

In most jurisdictions, case managers are expected to have some technical knowledge, such as an understanding of workers' compensation legislation, processes and systems, and enough medical knowledge to question workers' entitlement to medical treatment as appropriate. Case managers must also maintain effective interpersonal relationships with all claims stakeholders, despite varying levels of engagement, cooperation and goodwill. However, case managers have responsibilities that may reduce stakeholders' willingness to enter into a collaborative relationship. For example, the use of IMEs to contest diagnoses or treatment recommendations can cause tension between the case manager and the worker and/or the treating practitioner.[87]

Case managers' responsibilities vary considerably depending on the complexity of the case at hand. Complex cases are time-consuming and require greater levels of expertise than straightforward cases. However, complex cases are not necessarily allocated to experienced case managers, and mental health claims are not necessarily allocated to a case manager with expertise in that field.

Attempts have been made to allocate specialised case managers according to the stage of the claim (e.g. the eligibility determination stage, the RTW phase, and the long-term stage), with the terminology used varying between jurisdictions. Such approaches are likely to be well-intentioned but can have unintended consequences.

Researchers who interviewed injured workers with long-term claims and other claims stakeholders (e.g. healthcare providers, case managers, lawyers and mediators) in one jurisdiction noted that a staged approach used in that jurisdiction may inadvertently have exacerbated "the frequency of change in staff and number of claims managers that injured workers, employers and HCPs [healthcare providers] must deal with".[150] As a result, injured workers reportedly experienced more distress and received worse service (e.g. via repeated loss of knowledge about the claim and the claiming individual), while case managers experienced frustration and less job satisfaction. Such practices may also be a breeding ground for mistrust, with some injured workers and claims stakeholders forming the opinion that insurers rotated case managers to ensure that professional distance was maintained and claims costs contained.

However, the greatest challenge to continuity of care likely comes from high staff turnover amongst case managers. Injured workers in Australia may have multiple case managers over the life of a compensation claim. For some workers – especially those with complex claims – this is a stressful experience because rapport and claim history is lost whenever a change of case manager occurs. Treating practitioners also describe the frustration of being asked to submit a new report each time there is a change in case manager.[150]

Other systems issues may pose further challenges. For example, insufficient staffing, ineffective claims management software, negative culture, poorly designed processes and time-consuming bureaucratic demands make effective case management difficult, if not impossible.

There is little publicly available information about staffing within insurers. However, a 2014 review by the Aotearoa New Zealand Auditor-General detailed the number of case managers by claims segment within the ACC.[151] There were approximately 1700 case managers for 41,500 claimants at any one time. While simple arithmetic suggests this translates to a caseload of about 24 claims per case manager, the report indicates caseloads varied between 37 and 85 cases, depending on the location, the level of case

complexity and the level of staff skills and experience. The Auditor-General's report goes on to say that the average number of minutes spent on each claim varied by case complexity, from 22 minutes per week for the low-risk Recover Independence Service to 94 minutes per week for more complex cases under the stream known as Serious Injury Service. The ratio of full-time staff equivalent to managers was about six to one.

More complex cases are often referred to an external party, i.e., a workplace rehabilitation provider (also known as an occupational rehabilitation provider). Rehabilitation providers have tertiary qualifications in health, such as physiotherapy or occupational therapy. Rehabilitation counsellors have specific training in case management and coordination of RTW. Rehabilitation providers and rehabilitation counsellors coordinate RTW with the workplace and treating practitioners. In 2019, the Heads of Workers Compensation Authorities published an updated principles of practice for Workplace Rehabilitation Providers[152] that supports the use of therapeutic counselling for the management of biopsychosocial barriers to recovery and RTW.

The rehabilitation provider may need to work within a narrow framework set up by the regulator or insurer or may have wide latitude in how a case is approached. Referral to a rehabilitation provider is common for more complex cases, but at times busy case managers outsource cases simply to reduce unmanageable loads. Referral for RTW services is less common in Queensland, where the insurance case managers typically coordinate RTW activities.

A final challenge of case management is the lack of direct research into best practice implementation. There is a lot of evidence about case management principles and approaches that cause problems, but less evidence about what works.

How do case managers and case management systems influence recovery and RTW?

Direct impacts of case management practices on the health, recovery and RTW of injured workers are well established, with corresponding impacts on costs.[12,153]

Disability,[6,71] pain,[63] physical health, perceived fairness,[6,67] psychological health,[63,71,89] use of healthcare services,[68] rate of recovery from traumatic injury,[65] long-term recovery,[71] likelihood of RTW,[65] speed of RTW[73] and quality of life[66,71] all vary according to worker experiences of compensation systems, particularly the degree to which workers perceive their compensation experience to be fair and low in stress. The behaviour of case managers helps create these perceptions, which are key psychosocial determinants of health.[6,59]

In the 2018 Australian National RTW Survey, data showed that nearly one-quarter of workers (23% of the 2515 interviewed) reported a negative or neutral claims experience. A positive claims experience was strongly associated with returning to work after accounting for other influences (i.e. injury and worker characteristics, as well as workplace factors).[51]

In 2014, the Aotearoa New Zealand Auditor-General reviewed the case management approach of the ACC and found that ACC did not provide a consistent quality of service to claimants with different treatment and rehabilitation needs.[151] The conclusion was that the ACC needed a more claimant-centred approach, particularly for claimants with complex needs. A follow-up review in 2017 found there had been improvement in case management, but assessing the new model, termed Next Generation Case Management (underpinned by algorithms based on claims data, but not fully implemented) was deemed premature.[154]

For injured workers, consistency of case management is important. Qualitative research conducted amongst long-term injured workers and other claim stakeholders in Victoria showed how repeatedly briefing new case managers on the injury and the history of their claim can leave injured workers 'feeling unsupported, frustrated and confused about their responsibilities or entitlements and so unable to manage their own recovery'.[150]

In contrast, well-trained and adequately resourced case managers who stay with an injured worker over the course of their claim can promote RTW through a partnership approach. The case manager may help the individual overcome obstacles, offer support, provide relevant information about rights and responsibilities, and influence other scheme participants such as the employer or treating practitioner.[12] These approaches are particularly important for people with an elevated risk of delayed recovery and RTW, who may be anxious, unsure, unhappy about their work situation, or coping with other life challenges.

Effective case managers and best practice case management systems

Case managers

Case management should be procedurally fair, timely, proactive and supportive. As such, the attributes and skills of an effective case manager include:[20-23]

- Interpersonal skills to enable positive interactions with people in difficult situations.
- Ability to influence multiple scheme participants through verbal or written communication.
- RTW focus and attitude.
- RTW facilitation skills.

- Assessment skills.
- Cultural safety and awareness skills.
- Appropriate language skills.
- Trauma-informed safety and awareness skills.
- Organisational and administrative skills.
- Problem-solving skills.
- Conflict resolution skills.
- Time management skills.

Elements of best practice case management systems

Accurate risk identification and intervention. Best practice case management prioritises accurate early identification of the needs and risks of workers, targeting care accordingly and evaluating the results.[155]

Timeliness of claims determinations, wage replacement payments and treatment. Delays are linked to prolonged disability, worse RTW outcomes, the development of secondary injuries and strong feelings of injustice in workers.[23,25,52,59,63,70,71,73,89,156-161] Delayed claims lodgement and extended decision-making timeframes are associated with increased risk of longer disability duration.[162]

Responsive monitoring. Effective case management systems track worker progress, monitor biopsychosocial influences and proactively trigger intervention as required.[12,71,153]

Guidance and support for workers and treatment providers. Difficulties in understanding the requirements of the claims process cause stress, undermine recovery and may lead to a more adversarial mindset.[63,71] Active guidance from a trusted case manager is preferred,[52] although high-quality online information can reduce feelings of injustice too.[88] Treating practitioners – especially those who irregularly manage workers' compensation claims – may also benefit from case manager guidance in terms of roles, responsibilities and administrative requirements.[59,158,163,164]

Regular, effective communication. Poor communication practices are linked to negative recovery and RTW outcomes,[52,59,71,89] whilst case management initiatives that include empathetic, supportive, informative and individualised communication substantially reduce the number of days of compensation paid, total claim costs, total medical costs and the amount paid in weekly benefits.[12,153]

Minimal paperwork and other bureaucratic demands for case managers and other scheme participants. Arduous and repetitive administrative requirements leave little time for proactive case management. Administrative demands also damage workers' mental

health and recovery prospects and reduce cooperation between insurers and healthcare professionals.[59,63,71,87] Treating practitioners say that more paperwork leaves less time for therapeutic work, and reduces their willingness to treat compensable patients.[60,163]

Fair and transparent disputes, reviews and investigations. Adversarial contexts result in poorer health outcomes for injured workers, lower rates of RTW and more negative emotions for stakeholders.[67,71,165] Ideally, IMEs are meant to assist with questions about diagnosis, causation, management and prognosis, and apply evidence-based medicine. However, in reality IMEs are frequently a source of tension, distrust and conflict in the RTW process,[52,166,167] and may delay recovery.[23,63,87,166] Other investigative processes also cause stress and humiliation for injured workers, compromising recovery.[23,89] Fair and transparent processes, with open sharing of information between stakeholders, are likely to build trust and safeguard engagement.[63]

Cooperation/capacity for multidisciplinary action. Best outcomes are achieved via multidisciplinary interventions.[26,168] Promotion of cooperation amongst stakeholders is an important part of case management.[169] This may include the provision of resources to enable key stakeholders to participate (e.g. payment for treating practitioners), noting that currently case managers cannot universally approve payments for multidisciplinary interventions.

Mental health. The limited available research on psychological claims suggests work injury schemes benefit from a best practice framework covering:[30]

- Developing the management practices for psychological claims.
- Optimising claims management teams.
- Engaging and supporting employers in the recovery at work/RTW process.
- Bringing evidence to treatment and rehabilitation.
- Effective decision-making supported by analytics and automation.
- Recording progress.

Transition support. Workers exiting the work injury scheme may not have resumed work. Transition support to assist workers navigate their next steps has shown promise, providing holistic care that is not constrained by the legislative limits of the compensable system. A pilot program in Victoria, developed through the Collaborative Partnership, is considered to have achieved over $10 million in potential savings via reduced Commonwealth Government benefits that were expected as workers transitioned from benefits in one scheme to benefits in another scheme, as well as aiding those workers.[170]

Barriers to improvement

Gaps in knowledge

Much remains unknown about effective case management in the context of workers' compensation. How much time should a case manager be allocated for simple versus complex cases? What competency-based training makes a positive difference? What is an appropriate division of time between compliance activities and proactive case management? How much of the role should entail influencing others, for example, upskilling a workplace in evidence-informed injury management to streamline the management of future cases?

Yet, there are no definitive answers to these questions – which is not to say there is no information about positive approaches. For instance, behavioural approaches in arranging IMEs have shown promise in improving the experience of the injured worker and securing cost savings.[144] There are many such opportunities for improvement, which stakeholders currently discuss in an ad hoc fashion.

What is lacking is an overarching structure for sharing successful case management strategies. In fact, the human and economic cost of work injuries may justify the establishment of a research institute for case management. Such a centre could facilitate the research, discussions, meetings and forums necessary to identify effective case management approaches. Options for funding the transition to evidence-informed practice include National Health and Medical Research Council (NHMRC) Partnership Projects, NHMRC Centres of Research Excellence, Australian Research Council (ARC) Industry Linkage Projects, Cooperative Research Centres, and the ACC in Aotearoa New Zealand.

It would also be helpful to have a data-driven understanding of factors that affect the quality of case management services. Annual reports on the state of the claims management workforce would help guide future improvements in this area.

A belief in quick fixes

While there have been difficulties in establishing quality case management practices in many jurisdictions over the last 30 years, recent reports have highlighted (and, importantly, provided novel data) on the state of case management in some parts of Australia. These highlight the state of case management practices that are contrary to the principles of evidence informed case management.

A 2019 Ombudsman's investigation into case management practices concluded:[10]

Agents are still unreasonably terminating complex claims: cherry picking evidence, doctor shopping, relying on Independent Medical Examiners (IMEs) over treating medical practitioners even when evidence is unclear, contradictory or inconclusive – or ignoring it if it didn't support termination.

The workers affected in the cases we reviewed included nurses, teachers, police officers, aged care and childcare workers, truck drivers, baggage handlers and tradesmen. The emotional toll was unequivocal; the cost not only to them and their families, but to society, should not be underestimated.

A 2019 review of the main insurer in another large jurisdiction found case management gaps had resulted in a notable deterioration in RTW rates and underwriting losses.[171,172] Problems identified included:

- Poor file management, and poor understanding of and skills required for compliance with legislation and best outcomes.
- The claims agent's workforce had been below the approved capacity due to ongoing recruitment difficulties.
- Case management was based on early triage into risk categories: 40% of the reviewed files were allocated to the wrong support category, resulting in delays.
- A focus on recruiting staff with customer service skills resulted in a lack of the skills and experience required for the technical case management of claims.
- Claims agents' financial incentives did not encourage proactive case management. Only 1% of the agent's remuneration was for RTW outcomes.
- The information technology (IT) system was difficult to use, with no master data catalogue for each file, making it difficult for claims managers to learn what had occurred in relation to the assigned claims.

The details of the 2019 reviews are included here because they highlight the many challenges to and importance of effective implementation. Note that in both jurisdictions, the relevant organisations accepted the reviewer's recommendations and are seeking to make improvements.

The use of KPIs in case management and health can and has led to perverse incentives and unintended consequences.[173] KPIs have been shown to encourage a short-term focus and to be 'gaming the system'.

Over the decades, various schemes have trialled different systems: in-house case management, outsourcing to one private claims agent, outsourcing to multiple claims agents, running private schemes, in which the private insurer carries the financial risk, and varying incentive arrangements to foster good claims agent practices. No one approach stands out

above the others. What does stand out is the need for a stable workforce of trained and experienced case managers who are supported to provide evidence-informed case management. Current approaches in some jurisdictions do not achieve this aim.

Systemic obstacles to effective case management

Inadequate support. Some case managers are not supported to cope with the emotional demands of the role.[22]

High turnover of case managers. Anecdotally, turnover is 40% per annum in some case management organisations in some jurisdictions. When turnover is high, continuity of care for injured workers becomes very difficult to provide.

Absence of standard training requirements. There is no standardised training for case managers, either within jurisdictions or nationally. This is at odds with comparable roles that involve assisting vulnerable Australians, including childcare and aged care. Further, training in human (soft) skills such as active listening is inconsistent.

Overwhelming caseloads. Thirty-five cases per case manager effectively means an allocation of one hour per case per week. Dealing with a complex case may take many hours in a week, yet there are reports of caseloads of 70–100 in some jurisdictions. In Aotearoa New Zealand, the ACC is currently trialling new approaches to claims management.

Inconsistent conditions and salaries. There is significant variation in conditions and salaries paid to case managers across the country, affecting both skill levels and retention. Case managers with experience have many opportunities to move into other roles with better conditions, such as working for self-insurers, directly for employers or moving into the life insurance sector. The cost of paying case managers well and developing the workforce is substantial; however, this needs to be compared to the costs associated with poor claims management practices.

Bureaucratic processes. Bureaucracies typically impose many requirements, and in some jurisdictions case managers say administrative requirements take precedence over case management activities, leaving little time to speak with injured workers or be proactive.

Lack of effective IT software. Case managers may lack software that is user-friendly and supports case management activities.[172]

Lack of research in case management implementation. Despite a shared understanding of the principles of effective case management, there is not yet sufficient research on

practical implementation approaches. Industry innovators have begun to partner with researchers to fill this knowledge gap (e.g. Recovery Blueprint[174,175] and the PACE project[176]). More such initiatives are needed.

Funding limitations. Attempts to control the costs of claims administration can lead case managers to rely on other scheme participants for everyday case management activities.

Reliance on claims investigation processes known to cause harm. Independent medical examinations and surveillance of injured workers can delay recovery and cause considerable stress. Whilst questionable claims should be investigated, the potential benefits of investigation must be weighed against known risks. Repeated requests for IMEs have been seen as a form of doctor shopping by case managers in some jurisdictions.[10]
A review of healthcare interactions following work injury found that workers forced to attend multiple medical assessments with no therapeutic value (e.g. IMEs) developed adversarial relationships with their case managers. Other research has shown that compensation recipients who undergo medical assessment are less likely to perceive the process as fair than those who aren't assessed.[67]

Workers with long-term claims and scheme providers have indicated pending a claim for investigation is routine for some types of claims, such as mental disorder claims. It is suggested that investigating workers and the circumstances of the claim can contribute to an adversarial and distrustful atmosphere.[150]

The needs of Māori and Aboriginal and Torres Strait Islander workers

There are significant gaps between the health of Māori and Aboriginal and Torres Strait Islander peoples and non-Indigenous Australians and European-New Zealanders. These gaps are linked to experiences of historical trauma related to colonisation, including violence, loss of culture and land, and ongoing policies that perpetuate inequities in both countries. These issues affect Māori and Aboriginal and Torres Strait Islander workers in the workplace.

Māori workers have greater exposure to occupational risk factors than non-Māori. They make up 15% of the population[177] but only 8% of ACC claims in Aotearoa New Zealand.[178] Disparities for Māori include higher rates of serious/fatal injuries on the roads, lower GP referral rates to medical/surgical specialists, finding the claim process more complicated and ACC less helpful in their RTW, and lower rates of employment participation after serious injury.[179]

It has been recognised that Aotearoa New Zealand's health system does not meet the needs of Māori.[179] By extension, mental health and advocacy services face similar issues, in that they are not reflective of Kaupapa Māori (Māori world views and values). This can make it harder for Māori to RTW and is a significant factor that should be considered in the design of workplace injury schemes.

In Aotearoa New Zealand, the health of Māori is a right guaranteed by *Te Tiriti o Waitangi/Treaty of Waitangi*. Te Tiriti o Waitangi's underpinning principles are:[180]

- **Partnership**, which involves working together with iwi, hapū, whānau and Māori communities to develop strategies for Māori health gain and appropriate health and disability services.
- **Participation**, which requires Māori to be involved at all levels of the health and disability sector, including in decision-making, planning, development and delivery of health and disability services.
- **Protection**, which involves the Government working to ensure Māori have at least the same level of health as non-Māori, and safeguarding Māori cultural concepts, values and practices.

As outlined in a 2015 ACC report:

> *Māori service delivery, particularly health service delivery, emphasises the importance of having a holistic view of health incorporating spirituality and whanau ties, a focus upon community and community taking ownership, provision of leadership that has integrity and an ability to build and/or utilise strong community networks.*[181]

The same ACC report outlines five key expectations of Māori regarding services in Aotearoa New Zealand:

1. **Fairness** – a system must achieve fair outcomes for Māori and all New Zealanders.
2. **Choice** – all choices must be fair and open.
3. **Improvement of services** – disparities must be addressed within both the larger healthcare system and ACC.
4. **Kaupapa Māori** – Māori world views and values must be respected and integral to the design and delivery of ACC services for Māori.
5. **Consultation and communication** – in the absence of genuine interaction and co-development/co-design, no changes to services will be successful in improving Māori trust and confidence in an organisation or the utilisation of services.[181]

As a Crown entity, ACC is responsible for actively supporting Crown obligations under Te Tiriti o Waitangi. ACC is currently developing new Kaupapa Māori Health Services. Its website advises that it is "working in new ways to ensure injured Māori have greater access

to services, improved experiences of ACC care, and better health outcomes" and "to provide whānau with a choice of services that deliver culturally appropriate care and uphold our responsibilities to Te Tiriti o Waitangi".[182]

Aboriginal and Torres Strait Islander peoples represent 3.3% of the total Australian population,[183] and many work in high-risk industries. In 2016, the main industries or sectors of employment for Aboriginal and Torres Strait Islander peoples aged 15–64 were healthcare and social assistance (15%), public administration and safety (12%), education and training (10%) and construction (9.5%).[184] From 2011 to 2016, the number of Aboriginal and Torres Strait Islander peoples who recorded in the Census that construction was their industry of employment grew by 28% – from 11,800 in 2011 to 16,200 in 2016.[185]

There is a significant gap between indicators of health and wellbeing for Indigenous and non-Indigenous Australians, including a shorter life expectancy, higher infant mortality, poorer health and lower levels of education and employment.[186] In 2018, the Indigenous employment rate was around 49%, compared with approximately 75% for non-Indigenous Australians.[187] These disparities are directly linked to experiences of trauma related to colonisation, including violence and loss of culture and land, policies such as the forced removal of children, and new instances of trauma.[188]

Aboriginal and Torres Strait Islander peoples do not have equitable access to care and treatment. The Royal Australasian College of Physicians has developed principles to inform and support the equitable provision of high-quality, effective, accessible, affordable and culturally safe specialist medical care. These principles represent a standard that should be adopted by funders, facilitators and service delivery organisations. They are:[189]

- Indigenous leadership.
- Culturally safe and equitable services.
- Person-centred and family oriented.
- Flexibility.
- Sustainable and feasible.
- Integration and continuity of care.
- Quality and accountability.

These principles can also be applied in Aotearoa New Zealand to provide high-quality, effective, accessible, affordable and culturally safe specialist medical care to Māori. Similarly, the needs of workers who are culturally and linguistically diverse and work in high-risk industries need to be acknowledged and met to reduce the disparities they face in health outcomes.[190]

Action areas

Accurate, responsive systems to deal with cases at risk of prolonged disability

Case management systems are one avenue by which workers' compensation systems can identify and manage the psychosocial risks of individual claims. Ideally, each organisation managing claims should undertake early screening and identification of high-risk cases. Each organisation should also have a strategy in place to address psychosocial obstacles to work including:

- Referral for therapeutic counselling.
- Referral for extra external assistance.
- Early input from specialist OEM physicians.
- Education and engagement in the workplace.

Claims investigations (including IMEs and surveillance) have health risks. They should be managed with care and sensitivity, particularly for workers at risk of prolonged disability.

Better recruitment, training and retention of case managers

The cultivation of a skilled, experienced workforce of workers' compensation case managers should be an urgent priority in every jurisdiction. Many things could be done to improve the recruitment, training and retention of case managers.

Recruitment. Arguably, workers' compensation case management is best understood as a helping or caring role. Therefore, case managers should be recruited with the understanding that the purpose of the role is to help people in a time of need. Other beneficial skills and aptitudes (e.g. communication skills, time management and administrative proficiency) should also be considered.

Training. Case management is a technically demanding role. As with aged care, it may be appropriate to develop a nationally accredited course (such as a Certificate III or IV) that standardises training, with encouragement for Diploma and Bachelor level studies. (An Aotearoa New Zealand Certificate in Case Management (Certificate Level V) exists already.[191]) Such a course would help ensure that case managers understand the principles of evidence-informed care, including awareness of the impact of psychosocial factors on RTW and recovery. However, differences in legislation between jurisdictions would need to be considered.

Retention. Options that may improve retention of case managers include:

- Improving pay and conditions in some jurisdictions.
- Clarifying and publicising career pathways for case managers, including advancement into complex case management, technical work, team leadership roles and management roles.
- Developing a system of mentors, for transfer of knowledge, support and connection.
- Recognising the emotional demands of the role, with commensurate human resource strategies to sustain case managers.
- Aligning perceptions and reality (i.e. ensuring that if case managers are recruited on the basis of wanting to help others, the role actually allows them to do so).
- Conducting an annual survey of case managers in each jurisdiction to understand whether they have the resources to do their job effectively and efficiently, without undue stress.

Consistency and specialisation

In addition to the retention strategies described above, case management systems should be structured to promote continuity of care. Workers report that changes in case managers occur frequently and hamper their claims.[150]

Segmentation of claims into short, middle and long term (or any similar designation), with transfer of the injured worker to a specialised case manager according to the stage of the claim, should be avoided. However, some specialisation in case management may be appropriate. For instance, it may be useful to have case managers who specialise in claims for psychological injury or in assisting workers identified to be at high risk of delayed recovery and RTW.

When specialisation is preferred, efforts should be made to promptly match injured workers to an appropriate case manager and secure continuity of care thereafter. It is also important to monitor and assess such measures to ensure they meet the needs of injured workers and improve job satisfaction amongst case managers.

Greater transparency regarding case management resources, costs and approaches

Assessing the impacts of changes to workers' compensation service delivery is notoriously difficult; these are very complex systems, making it hard to pinpoint cause and effect. This difficulty is exacerbated by the paucity of accurate, comprehensive data on case management resources, costs and approaches.

Using consistent methods and measures where possible, all jurisdictions should consider publicly reporting:

- Average claim numbers per case manager.
- Annual rates of staff turnover.
- Full costs of case management, including the costs associated with workplace rehabilitation providers and other outsourcing that occurs, especially when this outsourcing results from inadequate resources within the system.
- Case managers' views on whether the system they are working within supports evidence-informed RTW practices.
- Case managers' own job satisfaction, workload etc. (i.e. the psychosocial safety climate of case managers).

Recognising the need for culturally appropriate responses

There is a need for significant improvements in the workers' compensation and health systems for Māori workers, Aboriginal and Torres Strait Islander workers and other workers who have reduced access and greater needs in rehabilitation. Reducing disparity should be a priority for all workers' compensation systems.

The ACC in Aotearoa New Zealand has explicitly identified reducing disparity as a priority. Approaches to address disparity include building organisational capacity, establishing and building partnerships with relevant groups, and embedding cultural responsiveness within the system.[181] Outcome measures include fewer fatal/serious injuries, better employment participation after injury and new partnerships. Important approaches to improve equity include:

- Acknowledging that mainstream service provision alone is insufficient.
- A deep organisational commitment to responding to Māori.
- Better funding and longer-term commitment to Māori programs to ensure success.
- Applying the evidence for effective responses to Māori reported in the literature.[181]

Australian jurisdictions could do more in this regard.

National principles of practice for insurer case management

There is a need to clarify the responsibilities of case managers within workers' compensation systems and identify the key competencies and skills (including human or 'soft' skills) required to meet those responsibilities. One potential way forward is the development of a set of national principles of practice for insurance case managers, informed by the biopsychosocial model of health and recovery. The *Principles of Practice for Workplace*

Rehabilitation Providers,[152] endorsed by the heads of workers' compensation authorities in September 2019, could provide a template for such a document.

Note that any principles of practice must shape practice within all levels of relevant organisations (i.e. insurers and other providers of claims management services), not just the practices of individual case managers. Workplace and systemic factors such as feedback from managers, internal systems, KPIs and financial incentives must all promote evidence-informed case management, focused on worker care.

Better research, more leadership

Research

Targeted research is needed to inform case management practices in workers' compensation. Useful topics would include:

- Training needs of case managers, notably the skills and capabilities needed, as well as the best ways to meet those needs.
- Causes of the high turnover of insurance case managers and ways to reduce turnover.
- Comparative studies of case management approaches and outcomes across jurisdictions, looking at variables such as:
    - allocation of complex versus simple cases; and
    - time spent on compliance activities versus proactive case management.
- Evaluation of pilot program initiatives to test out different approaches, noting that there is some ongoing research in this vein (e.g. the PACE project[176] and Project Blueprint[174]).
- Cost-effectiveness of extra early support to prevent long-term disability.
- Most effective case management team structure: the level of allied health, injury management advisers and medical care support for case managers, basing team structure on claim duration versus the employer's type of industry, specialised teams for mental health claims or regionally based employers.
- Behavioural interventions that streamline communication between claim stakeholders.
- Testing various approaches to support people at high risk of delayed recovery and RTW.

The views of case managers should be integral to developing effective case management systems.

Leadership

The complex questions around case management arrangements would be well served by the creation of an ARC-funded Centre of Excellence for research into case management. Such a centre could coordinate innovative, high-quality research, and foster collaborations between universities, governments, businesses and unions. The Health Research Council of Aotearoa New Zealand could also provide leadership in this field, as it has done in the field of health housing.[192]

The field would also benefit from greater stakeholder engagement to inform and drive research and share positive approaches. More discussions, meetings and other forums would be beneficial in this regard.[193]

Independent medical examinations (IMEs)

Perceived fairness

Practitioners new to IMEs are likely to benefit from training. IMEs are outside normal practice for many medical practitioners. Practitioners may not be aware of the impact of an IME on workers' perceptions of fairness, but feelings of injustice are common when workers do not feel they have been heard or understood.

Encounters with IME practitioners are expected to be less stressful if pre-appointment information is comprehensive. It would also be beneficial if IME practitioners received training in the principles of procedural justice and applied these to their role. Training IME practitioners in the delicate task of writing reports based on their clinical opinion and expressed in a way that does not disenfranchise the worker may also assist.

Some referrers require practitioners to be in active clinical practice. Research is yet to establish whether this improves the quality of IME consultations and reports.

The purpose of the IME

At times, IMEs are needed for legislated requirements (e.g. assessment of permanent impairment). At other times, the assessment may be arranged to influence the treating practitioner.

Alternative arrangements are available in some jurisdictions, including second opinion services that the treating practitioner can arrange, with advice received directly. In NSW, an independent medical consultation is specifically designed to incorporate discussions with the treating practitioners. In Victoria, an IME practitioner may be asked to see the worker and visit the worksite to explore work options as a way of influencing the treating practitioner.

Clarity of purpose will help shape the arrangements. If a traditional IME is undertaken, the process should be clear. Sharing of IME reports with the treating practitioner should be standard.

Use of the same IME practitioner is recommended if a repeat IME is needed. There are many reasons for this, including that the practitioner is in a better position to assess health and RTW issues if seeing the patient over time. The worker does not need to repeat their history multiple times, and seeing the same practitioner is generally less stressful. 'Doctor shopping' to obtain a desired opinion is an inappropriate claims management strategy[23] and should be avoided.

IMEs can be more stressful for those with mental health claims. The Royal Australian and New Zealand College of Psychiatrists (RANZCP) recommends treating clinicians be consulted in preparation for a genuinely needed IME to ensure that patients are prepared and supported as much as possible.[194,195]

Enhancing the use of occupational epidemiology

Research on contributing factors to musculoskeletal conditions is of variable quality, can be difficult to access and requires considerable time to evaluate. For example, many research studies evaluate people at one point in time (cross-sectional study), which is open to recall bias. Other studies are on limited numbers of people, and such studies may not objectively evaluate the work demands. Disagreements about work contribution understandably follow from lack of a shared understanding of up to date currently available research.

The establishment of an agreed central pool of higher quality research may help develop a shared and improved understanding of the nature of work risks and their contribution to common musculoskeletal conditions such as back pain, shoulder conditions, carpal tunnel syndrome etc. In turn, this would help to reduce unnecessary disputes.

Key elements for better outcomes

Develop and communicate a clear model for insurance case management

⇒ Clarify the principles of best practice case management, including the principles of service delivery and administration. Important principles of service delivery include early risk identification, adopting a person-centred approach, prompt decision-making and procedural justice, collaboration, empowering the worker and the workplace to secure timely RTW, being just, and recognising the education, skills, knowledge, competencies and experience needed to be effective.

⇒ Consider the development of a set of national principles of practice for insurance case managers, informed by the biopsychosocial model of health and recovery. The *Principles of Practice for Workplace Rehabilitation Providers* could act as a template.

Improve the case management operating environment

⇒ Include a systematic approach to risk identification and the needs of workers, providing extra support to those more likely to have prolonged work absence.

⇒ Where possible, ensure consistency of case managers over the course of the claim.

⇒ Invest in early intervention approaches through appropriate caseloads, early engagement of the worker and the workplace, and extra support for the worker where appropriate.

⇒ Set up systems that enable timely decisions about claims determinations, wage replacement payments and treatment to reduce frustrations experienced by workers and their treating healthcare providers, distress, and the development of prolonged work absence.

⇒ Minimise paperwork and other bureaucratic demands for case managers and other scheme participants to allow more time for case managers and other scheme participants to focus on recovery and RTW.

⇒ Streamline and simplify communication through friendly formats, with letters written in language that is easily understood, taking into account the fact that some workers have low literacy or are unfamiliar with English.

⇒ Develop the competencies and skills of case managers and resources that support RTW. Avoid the perverse incentives that can arise through short-term targets via KPIs.

⇒ Use case management software that is user friendly, supports case management activities and minimises the need to move between varying software systems.

Develop the case management industry

⇒ Invest in the long-term development of the case management workforce through better selection, training, retention and career development pathways.

⇒ Select insurance case managers for their people skills, including communication skills and capacity to influence others, service coordination and collaboration abilities, and empathy.

⇒ Improve the training of case managers in RTW skills and the technical components of case management within their jurisdictions.

⇒ Develop national standards for the training of prospective case managers and include training requirements in the selection criteria.

⇒ Recognise and address the emotional demands of case management. Support case managers via coaching on how to deal with difficult people, mentoring, facilitating early requests for support, and regular surveys of case manager morale and needs.

⇒ Implement a system for mentorship, transfer of knowledge, support and connection.

⇒ Ensure case manager turnover is low through retention strategies: attractive pay and conditions, appropriate caseloads, career pathways, an ability to work in line with the values of fairness, trust, respectful communication and empowerment of stakeholders.

⇒ Reduce the bureaucratic load to ensure case managers can focus on the worker and the workplace and RTW.

⇒ Reduce disputes where possible through procedural fairness and good decision-making. Make communication personal, complete actions within agreed timeframes, explain the process, ensure the person has a chance to have input into the process, deal with the person with respect, and communicate the result of decisions in a timely and respectful manner.

Address the social determinants of health

⇒ Recognise that some groups such as Māori, Aboriginal and Torres Strait Islander peoples and people from non-English-speaking backgrounds need to have equitable access to services and culturally safe and appropriate case management.

⇒ Ensure organisations commit to programs that appropriately respond to the need for programs for Māori in Aotearoa New Zealand and others who should have access to culturally appropriate care and co-designed initiatives. Further, develop and support the Māori case management workforce and Māori leadership.

Improve IME processes

⇒ Recognise IMEs and other investigations can be stressful for workers. Ensure letters about IME appointments are simple and easy to understand and explain their purpose.

⇒ Educate IME practitioners about the negative health and recovery impacts of perceived injustice and employ strategies for conducting IME consultations and writing IME reports that promote perceptions of fairness amongst injured workers.

⇒ Where possible, use the same IME practitioner for repeat consultations. This enables the clinician to assess changes over time and is less stressful for the worker.

⇒ Where there is an agreed history of the injury, share that with the IME practitioner so the worker does not need to repeat the same history on multiple occasions. This is particularly the case for people who have experienced significant trauma.

⇒ If the worker is to undergo a psychiatric IME, involve their treater to provide support prior to the IME consultation.

⇒ Routinely share IME reports with treating practitioners, for transparency, accuracy and accountability, and coordination.

Develop case management through a coordinated research agenda

⇒ Develop a long-term research agenda. Consider the establishment of a research institute focused on case management to facilitate research, discussions, meetings and forums necessary to identify effective case management approaches. Options include NHMRC Partnership Projects, NHMRC Centres of Research Excellence, ARC Industry Linkage Projects and Cooperative Research Centres in Australia, and the ACC in Aotearoa New Zealand.

⇒ Compare and evaluate the experience and capabilities of case managers across Australian and Aotearoa New Zealand to gain an understanding of their training and development and support needs.

⇒ Develop a shared understanding of which case management strategies are effective – that is, promote recovery and RTW – and which create barriers.

⇒ Evaluate structures for case management teams, such as the ratio between case managers to injury management advisers. Assess whether case management teams are best aligned with case duration, the nature of the industry, case complexity or some other factor.

THE WORKPLACE

Workplace injury, protracted disability and work absence,[196,197] secondary injury[198] and long-tail claims are all preventable, to some degree, via changes at work. The key is greater understanding and better management of the impact of workplace psychosocial factors on recovery and RTW.

In this section, the following is explored:

- Role the workplace plays in recovery and RTW.
- Importance of early worker contact and the role of the supervisor and RTW coordinator.
- Importance of workplace culture.
- Need for senior management engagement.
- Approaches that can improve recovery and RTW.

The role of the workplace in managing work injury

Many important claim milestones occur at work. The workplace is usually the site of injury and injury prevention, first response, injury reporting, claims submission and injury management activities, including sick leave coordination, identifying modified duties/work accommodations and on-the-job recovery. Employers also influence insurers' perceptions of the legitimacy of claims.

The way in which the workplace manages these compensation claim milestones affects claim outcomes. Key figures involved in workplace injury management are the injured worker, their immediate supervisor, the RTW coordinator, and senior management, who – like the workers' compensation regulator for the scheme as a whole – have a strong influence over injury management culture.

Fairness, delays, disputes, trust, information, communication and locus of control are as (if not more) influential at work as they are in the broader scheme. Other psychosocial influences are specific to the workplace; these are discussed below. Employers may be frustrated by claims, particularly if they consider they are funding claims that are non-meritorious or occur through low-level work contributions to an underlying health condition.

The Collaborative Partnership in Australia has called for the development of principles of the role of employers to facilitate RTW and how to work positively with GPs to improve RTW.[28]

How the workplace influences recovery and RTW

Workplace factors are a central influence on RTW outcomes – more influential, according to research and stakeholders, than scheme operation, case management and the individual characteristics of the worker.[62,199,200] Workers' compensation stakeholders in Australia and elsewhere have said that the workplace is the single greatest influence on RTW outcomes.[199,200]

Figure 6 below highlights a pivotal workplace psychosocial factor: post-injury workplace contact with the worker. RTW is more likely when the employer makes early contact with the injured employee. However, only 59% of the 2013 and 2014 RTW Survey participants (the total number of participants was 9,377) included in the Australian data reported their workplace had contacted them about their injury. This dropped to 36% of employees who lodged a psychological claim.[19]

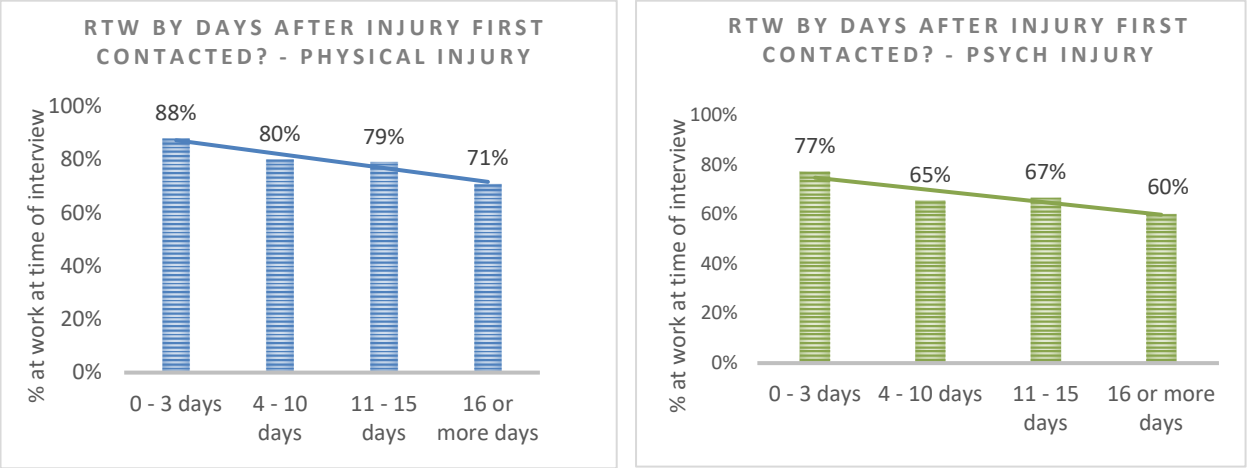


Figure 6. Percentage of workers who had RTW and time from injury to first contact by workplace, by injury type.

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, 2017, Safe Work Australia.

In Aotearoa New Zealand, the ACC has a 'stay at work' service which works with everyone involved – the worker, the employer, case managers, rehabilitation specialists and treatment providers – to find solutions to help injured workers recover at work and to remain engaged with their normal lives.[201]

Other important factors come into play immediately after injury:

- Timeliness of injury reporting, which affects business costs and speed of RTW.[202,203]

- Supervisor response to injury, which may be empathetic and supportive or angry and suspicious, and has been shown to influence recovery and perceptions of fairness.[159,204]
- Decisions about whether to take time off, ignore the injury, or attempt supported recovery at work.[160]
- RTW planning.[202]
- Identification, management and adjustment of suitable duties and other work modifications.[202,205]

For complex, long-term, long-tail claims, other workplace factors dominate, including:

- Quality of communications between the injured worker and RTW coordinator.[202]
- Support from colleagues and supervisors.[206]

The workplace environment prior to injury

Many other influential workplace factors exist. Some are in place prior to injury, for example:

- Job satisfaction.[200]
- Control over the work performed.[200]
- Pre-existing levels of support from colleagues and supervisors.[206]
- Relevant stigmas (e.g. against claiming workers' compensation, or people with mental health conditions).[207]
- Poor workplace culture, which increases the risk of new onset depression.[208]
- Employers' fiscal strategies, which help determine the level of support available to injured workers.[59]

Organisations that do not manage such factors, termed psychosocial hazards, may also face consequences from failing to comply with legal duties. Legislative obligations to manage workplace psychosocial hazards are increasing, including during the RTW period. SafeWork NSW has released a code of practice that specifies some of these duties.[209] Similar projects are underway in Western Australia[210] and the Australian Capital Territory,[211] and other jurisdictions are likely to follow.

Wellbeing at work can be promoted in many ways, including in cost-effective multi-component health promotion interventions. For instance, compared to a control group, workers participating in an intervention combining diverse approaches (personalised health and wellbeing information and advice, a health risk appraisal questionnaire, access to a tailored health improvement web portal, wellness literature, and seminars and workshops focused on identified wellness issues) had significantly lower stress levels and less absenteeism and presenteeism. A United Kingdom review found the return on investment with such an approach was 9:1.[212] Another United Kingdom review of investment in mental health, conducted in 2020, found an average return of 5:1, and that this had increased from a ratio of 4:1 in 2017.[213]

Since 2017, there have been positive changes in approaches to workplace mental health. These include a shift, among large employers, towards talking more openly about mental health at work and providing greater support to staff.

Workplace obstacles to recovery and RTW

Barriers for injured workers

In the Healthcare section of this paper, personal psychosocial factors that affect the way an employee deals with injury and RTW are discussed. If a worker is not motivated to RTW,

outcomes are likely to be poor. Poor outcomes are also likely if the worker doesn't feel that RTW is a safe and valid option.

Workplace psychosocial factors influence these attitudes. If the worker feels blamed or disbelieved, if they feel they will be pressured to perform tasks that jeopardise recovery, or if they sense hostility from colleagues, motivation may flag and worry grow, increasing the risk of poor outcomes.[168,214-216]

Challenges of supervising recovery and RTW

Supervisors and line managers are often first to know about a work injury. Their response sets the tone for the claim that follows, be it suspicion and conflict or trust and support.[159,204,217,218]

Supervisors report injuries, manage workplace accommodations and modified duties, and are expected to minimise the impact of injury on colleagues and production.[169,219,220] However, many supervisors say they lack the necessary skills, training, aptitudes and support to meet these responsibilities in a way that promotes recovery and RTW.[221]

Simultaneously supporting a returning worker, ensuring that the team hits productivity targets and keeping co-workers onside is a big ask. As a result of these conflicting responsibilities, some supervisors view injured workers with frustration or suspicion. Such attitudes are contagious; co-workers tend to follow the lead of the supervisor. These kinds of workplace dynamics have a measurable impact on RTW outcomes.[206]

In many smaller businesses, the supervisor deals with work injuries without the support of an RTW coordinator, making their role even more important. For example, in NSW 70% of workplaces are small businesses and do not have an RTW coordinator. Claims are less common in small businesses and supervisors may be unaware of key aspects of support, such as early contact. Early external support through workplace rehabilitation providers may enhance RTW effectiveness.

Challenges for RTW coordinators

Similar to case managers, RTW coordinators juggle relationships with many stakeholders and must balance competing interests in order to promote recovery and RTW. The RTW coordinator acts as the bridge between the employee and the workplace. Managerial *and* psychosocial skills are important for success.[20,222-224]

Key responsibilities of RTW coordinators include:

- Developing and implementing RTW programs.

- Educating the workforce.
- Identifying suitable duties.
- Preparing RTW plans.
- Informing injured workers about RTW processes and workers' compensation rights and responsibilities.
- Liaising with the treating doctor and other treating practitioners.
- Maintaining injury and RTW statistics.
- Developing policies to improve injury management systems.

However, Australian RTW coordinators say their training is insufficient for the demands of their role.[225] In particular, they assert that:

- Training is focused on the legislation rather than the human (soft) skills so important to their role.
- Specialised trainers with expertise in RTW should be used.
- After the short training course required in most jurisdictions, there is little opportunity for ongoing learning. Newcomers to the field can find it hard to get support from more experienced coordinators. There are few opportunities for networking, particularly for coordinators in small to medium-sized organisations.

Challenges for senior managers

Senior management exert influence over a plethora of workplace factors (quality of work, workplace culture, attitudes towards mental health, productivity imperatives, investment in upskilling and training) that influence recovery and RTW.[218] More directly, senior management has input into injury management policies and shape the culture around work injury and workers' compensation. The support of senior management helps embed new RTW approaches into their organisation and overcome resistance to change.[226]

However, the boards and senior management teams of many organisations lack expertise in injury management. There may be little understanding of:

- Psychosocial influences on recovery and RTW.
- Costs of poor management.
- Strategies and approaches that improve claims outcomes.

Improving workplace injury management: some promising approaches

Proactive identification and management of psychosocial barriers to RTW

Early identification and management of psychosocial barriers to recovery and RTW are associated with better outcomes for workers. Psychosocial barriers can be personal as well as specific to the workplace (e.g. poorly designed modified duties). Methods for identifying and managing psychosocial barriers are discussed in the Healthcare section of this document.

Equipping and enabling supervisors to better manage injury and RTW

Australian research has established that supervisors in high-claim industries want comprehensive training programs that cover the knowledge, skills and behaviours which support RTW.[221] Research from the United States of America has shown that supervisors who receive such training are more confident in managing work injury. Reductions in claims and lost time due to injury have also been documented.[227]

Relevant supervisor skills include:[221]

- Human (soft) skills, such as listening and communication.
- Developing trust and responsiveness.
- Reintegrating the employee with an injury back into the workplace.
- Understanding the challenges workers with an injury face.
- An understanding of ergonomics, so that work activities can be modified to support recovery at work.

Further, a Swedish study found that when supervisors and high-risk injured workers were offered collaborative training in problem-solving and communication:[228]

- Half as many employees reported work absence due to pain, compared to treatment as usual.
- Less than a third as many days of work were lost compared to usual care.
- Half as many follow-up healthcare visits were needed, compared to usual care.

The role of the supervisor is even more important in workplaces that do not have an RTW Coordinator.

RTW Coordinators

RTW coordinators who adeptly manage suitable duties and other work modifications obtain better RTW outcomes.[202,205] The quality of communications between the injured worker and RTW coordinators has an impact too.[61,202]

Australian research has shown that RTW coordinators who create RTW plans with injured workers increase the likelihood of durable RTW, as do RTW coordinators who engage injured workers in low-to-no-stress interactions. The impact of RTW planning is particularly pronounced for short-term claims. For longer-term claims (e.g. at six months), good interactions with the RTW coordinator nearly double the odds of RTW, while RTW plans do not make a meaningful difference. Ten months after injury, workers who report stressful interactions with their RTW coordinator are no more likely to be back at work than workers with no RTW coordinator.[61]

Importantly, there is an appetite for learning in the industry. RTW coordinators have said they want more help in developing the human (soft) skills needed for the role, including interpersonal skills (e.g. conflict management and good communication skills).[222,229] RTW coordinators particularly value opportunities to learn from one another.[225]

Managing psychosocial risks at work

The legislative obligations to provide a safe psychosocial working environment are accompanied by a growing number of resources intended to help organisations identify, assess and control psychosocial risks at work. In 2021, Safe Work Australia released *People at Work*,[230] a free, online, validated psychosocial risk assessment survey assessing some of the most common workplace psychosocial hazards. The hazards assessed are emotional demands, role ambiguity, role conflict, role overload, group relationship conflict, group task conflict, job control, supervisor support, co-worker support, praise and recognition, procedural justice, change consultation, workplace bullying, and work-related violence and aggression.[231] People at Work is jointly funded by Comcare, Safe Work Australia, SafeWork NSW, SafeWork SA, WorkCover Tasmania Board, Work Health and Safety Commissioner ACT, Workplace Health and Safety Queensland, NT WorkSafe, WorkSafe Victoria and WorkSafe in Western Australia.

Other resources include information about industry-specific psychosocial hazards and factors released by Workplace Health and Safety Queensland;[232] fact sheets covering work-related stress, bullying, violence, fatigue and sexual harassment from WorkSafe Victoria; updated information on workplace stress and its psychosocial causes from SafeWork SA;[233] information about COVID-19-related psychosocial risks from WorkSafe ACT;[234] and

podcasts and videos from the Department of Mines, Industry Regulation and Safety in Western Australia.[235]

Measuring for mentally healthy workplaces: a practical guide for medium to large organisations[236] is a tool to assist workplaces understand how they can gather and use data to evaluate their workplace using a broader suite of measures.

Barriers to change include a lack of understanding about the impact of a negative workplace environment, tight fiscal environments and risk appetite within the organisation. Change may be most challenging for workplaces with the highest need. Workplaces may have many psychosocial risk factors because of systemic low regard for protecting or supporting worker health. These workplaces may be unlikely to invest in training or support RTW. It may be more appropriate to manage these workplaces through regulatory enforcement, rather than education about business cases or training programs.

Implementation considerations include competing priorities, year-to-year budget cycles and a tendency to focus on immediate priorities rather than long-term benefits. Evidence that establishes a business case for focusing on relevant longer-term outcomes and investment in workforce planning and design may benefit RTW outcomes.

A system culture of collaboration

In Canada, an intervention that hinged on collaboration between union representatives and a large healthcare organisation to develop an RTW plan led to a 50% decrease in disability duration.[169,217] Economic benefits of contact between the workplace and treating practitioners have also been established.[202] Overall, RTW-enhancing interventions work best when they have a multidisciplinary approach.[26,168]

Informed, engaged senior management

Senior management activities that improve injury management include requesting reports or information from lower-level managers, being available for problem-solving if barriers to RTW persist, and demonstrating an interest in injury management and RTW.[21]

A Victorian study of the impact of organisational injury management policies found the following organisational governance factors were associated with better RTW results:[229]

- Regular reporting on RTW to the board of directors.
- Regular reviews by senior managers of RTW performance.
- Regular reviews by supervisors and line managers of RTW plans and the progress of occupational rehabilitation.

- Training for managers and employees in workplace health and safety and RTW procedures.
- An organisational infrastructure for employee wellbeing.

Engagement of senior managers can be enhanced by clear reporting on the costs of poor RTW practices. Comparison to the industry average provides managers with a clear sense of how their organisation is tracking in terms of injury management and RTW. It's also important to raise senior management's awareness of psychosocial risks.

Another tool for assessing the workplace is the psychosocial safety climate (PSC) survey.[237] It measures employees' perception of senior management having prioritised their mental wellbeing by creating a psychologically healthy workplace.

The PSC survey explores employee perceptions of management commitment, the priority of mental health within the organisation, communication, and employee participation and involvement. It can predict:[237-240]

- Future work conditions, psychological health and engagement with other workers.
- Injury likelihood and under-reporting of work injuries.
- Sickness absence;.
- Prosocial procedures (job design, social relations) that prevent bullying.
- Productivity loss.
- Future work absence after work injury.

Companies with low scores (poor psychosocial culture) have high claims costs and organisations with high scores (good culture) have low claims costs. Organisations with a low or moderate PSC have significantly more average days lost per workers' compensation claim than those with high PSC scores, as shown in Figure 7 below.

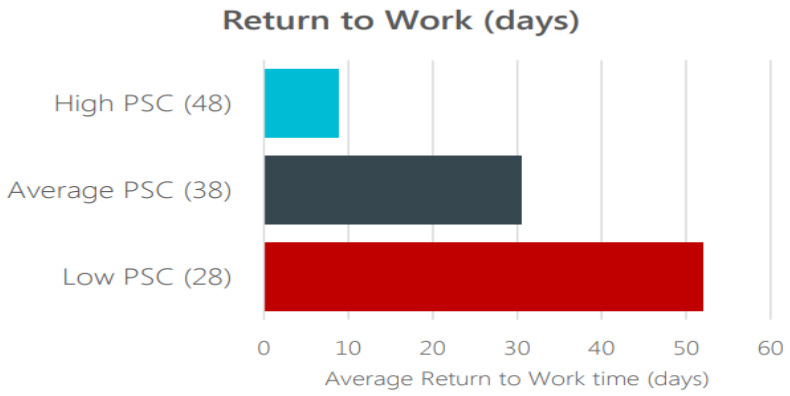


Figure 7. Average time to RTW by PSC score.

Reprinted from "Psychosocial and human capital costs on workplace productivity", Safe Work Australia by H. Becher and M.F. Dollard, 2015. www.safeworkaustralia.gov.au

Some jurisdictions have tried to influence workplaces via multi-modal campaigns, including using television advertisements. The NSW-based iCare currently provides excellent online information for employers (e.g. https://www.icare.nsw.gov.au/news-and-stories/psychological-injury-at-work/#gref – accessed 2/11/21). The long-term effectiveness of these approaches needs to be evaluated; sharing the results of such research will aid other jurisdictions.

Future directions: a learning loop between employers and insurers?

Another potential conduit for influencing and upskilling employers is the insurer or claims agent. The claims team interfaces with small, medium and large employers. The claims organisation is involved early with virtually all claims and, therefore, all employers. Medium and large employers will typically have their own systems for managing work injuries. Small employers have infrequent claims and are less likely to have systems in place when an injury occurs.

Could insurers be engaged to take a less reactive, more proactive approach? Could the insurer or claims manager spend part of their working week on preventative measures, identifying workplace issues that would benefit from better systems or upskilling of staff? This would require a revamp of the way the system operates. Such an approach would facilitate early identification and management of workplace issues. Insurers are well placed to help employers identify and fix gaps in their systems.

Research indicates messages are more likely to be heeded when all parties are receiving the same message. For example, when patients, medical practitioners and insurers received the same message about staying active with back pain, medical practitioners said it was easier to treat because patients had heard the same messages.[147]

Moreover, teaching is an effective way of learning. With the insurers/claims agent focused on upskilling the employer and supporting greater cooperation, it is likely this will increase constructive responses from insurers or claims agents themselves.

Stakeholder feedback on an earlier draft of this paper showed that views on the appropriateness of insurers educating employers are mixed. Some indicate a key function of work injury schemes is to drive innovations and practices that foster good workplace practices. Insurers active in this space report that the understanding that comes from working with employers gives them insight into how workplaces function, and in turn their ability to service the employer and employees. However, others have suggested insurers are not sufficiently trained or independent to provide this service and that it should be undertaken by third parties.

Vocational programs

'Host' employer options, where the worker may be placed to support their rehabilitation if their normal employer does not have available duties, are provided in several jurisdictions. Potential enhancements to these programs may improve take-up in some jurisdictions. These include the development of portals on which employers who are interested in taking on injured workers for suitable duties can register to be part of the program, thereby streamlining administration.

Action areas

Scheme managers are likely to achieve the greatest improvement in workplace management of psychosocial factors by influencing broad organisational approaches to work, injury and recovery. These broad approaches shape the way co-workers and supervisors view and treat injured workers, as well as the perceptions and attitudes of injured workers.[214,219,220,241]

Training and skill development

Development of short training modules for senior managers. These would enable advancement of the business case for managing psychosocial risks, demonstrating the return on investment for best practice injury management. Because the same principles apply across jurisdictions, the material could be made available nationally.
Similar skill development is applicable for governing boards. Directors benefit from an understanding of the impact of workplace culture and RTW interventions, and the value of their requests for information and relevant reports.

Further training, support and upskilling of RTW Coordinators. Regulators can take the lead in ensuring that RTW Coordinators are equipped to meet the challenges of the role and are able to access support when needed. Some jurisdictions already provide multiple opportunities for RTW Coordinator development through:

- Annual conferences.
- Webinars
- Meetings.
- Teams within the regulator to directly support RTW Coordinators and workplaces.

Other jurisdictions may wish to replicate or adapt these initiatives, bearing in mind that peer-to-peer learning is particularly valued in this sector.

Supervisor and line manager training
Face-to-face and 'just-in-time' online modules could be developed and used to train inexperienced supervisors in dealing with workers' compensation claims. Scheme managers

could consider supporting training providers to become engaged in line manager training. Alternatively, workplace rehabilitation providers could be employed to identify unhelpful supervisor or workplace practices. Once these are identified, organisations can take steps to improve them, or the workplace rehabilitation provider could upskill line managers individually or as a group.

Fostering effective organisational approaches

Minimising adversarial responses. Employers may benefit from more information and hard data about the costs of disputes.

Promoting good work and work design. Good work minimises workplace injuries and assists recovery and RTW, especially when there is an emphasis on the physical and psychosocial determinants of work quality.[241] Some jurisdictions are already taking this message to employers (e.g. icare's multi-modal campaign). Evaluation of the results of this approach would be useful for all.

Development and promulgation of the business case for small, medium and large employers may assist organisational leaders to implement better practices. Premium incentive schemes have already been used in some jurisdictions to influence employer approaches. The available psychosocial surveys could be used as the basis of an incentive scheme, but this would need to be undertaken carefully to ensure the validity of results.

Some jurisdictions conduct annual surveys of the psychosocial climate of the public sector.[242,243] Those surveys could be used in a similar manner to foster improvements in work culture, with an expected reduction in work disability and time lost from work.

Revision of scheme funding models to more explicitly incentivise the use of best practice approaches within workplaces may assist. This may require research to identify discounts or tiered premium structures that more clearly link reduced costs to good practice.

Creative approaches to influence employers

Improving injury management practices.

Utilising insurer expertise to improve workplace injury management is a new approach worth exploring. Case manager expertise could be used to upskill employers, for example, by providing employers with training in best practice prevention, early intervention and RTW-promoting injury management strategies.

Educating employers on best practice workplace management can streamline RTW for an individual. Ideally, workplace practices should be improved so that prevention and early

intervention become the norm. If the workplace is supportive, over time the demands on the insurance case manager will be reduced. There will be less need for written agreements, fewer and less severe disputes, and fewer psychosocial obstacles to recovery and RTW to overcome.

Provision of just-in-time support and education are important for small employers, who are less likely to be skilled in work injury management and are less likely to be interested in injury management education prior to an injury, given their low frequency of claims experience.

Improving injury prevention.

While there is much insurers can do to improve their claims and case management, there is value in claims management organisations using their direct connections to also improve physical injury prevention/risk reduction.

The most recent Safe Work Australia workers' compensation statistics[56] show that:

- The frequency rate of injuries has plateaued in recent years after many years of steady decline.
- Each year there are around 110,000 workers seriously (defined as at least one week off work) injured in the course of undertaking work.
- Half of all injuries occur in the top four industries: construction, transport, manufacturing and health.
- The median direct cost of a workplace injury/claim is over $12,500 (indirect costs around five times more). Note here that direct costs refer to initial wage replacement and initial medical expenses, and the impact on workers compensation premium. Indirect costs refer to staff replacement costs, lost productivity, supervisor time, admin, RTW Coordinator time, onboarding of replacement staff, and loss of goodwill.

Influencing or investing in injury prevention by those paying for claims, including the claims management teams, has the potential to reduce human and economic costs by minimising the number of injuries.

An example of an insurer seeking to reduce injuries is WorkCover Queensland's Injury Risk Reduction Initiatives (IRRI). Following a series of around 12 pilots per year over the last three years, the organisation is now partnering with industry and experts to deliver programs that are practical (e.g., young workers educating other young workers) and target specific risk areas. Some IRRI pilots are aimed at industrywide issues, some are employer specific and others are based on particular injury profiles and/or worker/employer demographics. Interim evaluations have shown promising results, such as improved attitudes to safety and reduction in claim numbers and costs.[244]

Key elements for better outcomes

Workplace culture

⇒ Reduce psychosocial hazards and promote wellbeing at work. Measure psychosocial hazards through validated questionnaires and use that information to minimise them. Enact policies to prevent workplace bullying, enhance workers' level of control over the work performed, provide workplace flexibility, reduce stigma related to mental health and work injury claims, and promote wellbeing through leadership and health promotion options.

⇒ Have RTW policies and procedures in place and ensure these are understood through induction and update training. Clarify roles and responsibilities of those involved in RTW, including workers, line managers, RTW coordinators, HR and senior managers.

RTW practices

⇒ Have a system for early reporting of work injuries that is personalised, ideally occurs within 24 hours, and allows for triaging for healthcare, early support and early discussions about stay at work or RTW.

⇒ Support workers with transport, where appropriate, following an injury, to assist them to attend hospital, a local medical practice or their usual GP.

⇒ Ensure suitable duties are offered and that the duties are meaningful. Where possible, foster stay at work. Modify normal duties and/or hours where possible, so the worker remains within their normal team.

⇒ Engage workers in identification of suitable duties. Facilitate the worker and supervisor working together on suitable duty modifications.

⇒ Ensure any restrictions recommended through certification are followed, helping the worker and maintaining the trust of the worker's treating practitioners.

⇒ Set goals for RTW and map out a RTW plan with the worker and supervisor.

⇒ Recognise that disputes and delays are demoralising for workers; identify what can be done to overcome delays and minimise disputes where possible.

⇒ Recognise that some workers may require extra support, especially those who are anxious or have low confidence, difficult relations with co-workers, or personal or family challenges. Encourage workers to take an active role in their recovery and RTW.

Foster the development of RTW skills in the workplace

⇒ Train supervisors in how to respond to injuries, noting their key role and impact. Key points include how to respond to the first report of injury, problem solving, communication, provision of suitable duties and workforce reintegration.

⇒ Support RTW Coordinators with further training in communication and influence, problem solving and RTW skills.

⇒ Report to and engage senior managers, including the board of directors, on injury and RTW performance measures, training for managers and workers in health and safety and RTW procedures, psychosocial hazards and approaches to support worker wellbeing. Ensure senior managers understand the cost of claims and the benefits of early effective support.

Integration with the employer's insurer

⇒ Recognise that RTW is improved by scheme participants working together. Align strategies regarding early intervention, identification of psychosocial barriers and RTW approaches. If no suitable duties are available at the workplace, consider host employer options to maintain work fitness and routines.

⇒ The insurer plays an active role in educating and skilling employers in injury prevention strategies, as well as injury management strategies.

HEALTHCARE

Healthcare is a major influence on outcomes following work injury. Many injured workers receive excellent healthcare: evidence-based, work-focused and supportive. However, we need to acknowledge that, overall, health outcomes for people who experience work injuries are worse than for those who experience similar conditions in non-compensable settings.[3,5]

Noting these relatively poor outcomes, the following factors may contribute:

- Insufficient use of the biopsychosocial model in work injury healthcare.
- Low-value health care, including overtreatment and non-evidence-based treatments.
- Other health care issues that contribute to poor outcomes.
- Limits on cooperation between healthcare providers and work injury schemes.
- Barriers to improvement.

This section explores good health care – evidence-based, high-value care – including:

- Frameworks that support evidence-informed care.
- Examples of effective care in practice, including healthcare in isolation and healthcare integrated with other system components.
- Promising alternative delivery options, including group health care and digital or web-based health care.

Health care for those with psychological consideration and the importance of culturally safe and respectful care are also discussed.

The role of medical and allied health professionals in workers' compensation

A range of medical and allied health professionals participate in workers' compensation systems. They include GPs, surgeons and other medical specialists, psychologists, physiotherapists, rehabilitation providers and occupational therapists. Specialist OEM physicians are recognised as the medically trained experts in work health.

GPs traditionally provide primary medical care, advocate for their patients and make decisions about the worker's capacity for work activities. However, GPs have conflicting views about their role in work injury schemes.[9]

GPs often need to communicate with other medical and health practitioners, case managers, employers and workplace rehabilitation providers. In many instances there is poor communication between stakeholders, and this can contribute to delays, confusion and conflicting priorities.

Personal psychosocial factors and healthcare

> *Health systems around the world are predicated on the false belief that doctors fix patients. They don't. Doctors enable people to create the circumstances to heal themselves* (Dr David Beaumont, 2021). [245]

A key element in effective healthcare is to support the individual to understand how to care for their health, how to manage their condition and how to increase their sense of control (their internal locus of control). This is care for the *whole* person.

As outlined earlier, there are many personal psychosocial factors that affect recovery and RTW.

Discussions about low motivation may be viewed as painting the worker in a negative light. However, low levels of motivation are important to identify. Repeated delays in claims determinations or approval of healthcare, an unhelpful workplace, claims disputes and other workplace or system factors affect many people, reducing their motivation to RTW. These are modifiable factors. If low motivation is identified as a barrier to engagement, the contributing factors must be identified and mitigated.

In previous sections, this paper focused on the ways in which psychosocial factors affect recovery and RTW. The biopsychosocial model takes a holistic view of these issues, recognising the impacts of medical influences on health, as well as the psychosocial influences we have emphasised elsewhere.

Medical influences on recovery and RTW include:

- Nature and expected progression of the injury/illness;
- Accurate diagnosis and identification of contributing factors (e.g. specific work tasks that have caused the problem).
- Provision of evidence-based, appropriate treatment and advice.

The biopsychosocial model recognises that an individual's psychosocial responses generate neurobiological processes that increase pain, distress and disability, and that by identifying and measuring personal psychosocial responses, tailored education and self-help coaching can reduce the impact of those neurobiological processes.

Psychosocial characteristics of the injured worker affect each of the medical influences on recovery and RTW listed above. For example, people who are distressed are more likely to present their case histories in an intense, emotive manner and describe higher levels of pain. This can influence diagnosis and treatment.

Medical practitioners may respond to patient distress by recommending time off work, investigations and risky treatment (e.g. surgery, opiates), regardless of whether the evidence supports such steps. Surgeons may not recognise that fear and distress can increase reports of pain. A distressed patient complaining of substantial problems is more likely to be operated on, and that surgery is less likely to be successful.

The distressed or fearful patient is also more likely to have other unnecessary interventions, such as multiple injections that have low effectiveness. They are less likely to be taught self-management strategies, which have a strong evidence base.

There are many misunderstandings and incorrect beliefs about common health conditions. People across five countries, including Australia and Aotearoa New Zealand, were surveyed about their understanding of the meaning and seriousness of 14 terms commonly used in spinal radiology reports (including disc bulge, annular fissure, disc degeneration, disc height loss, disc protrusion, facet joint degeneration and spondylosis). Self-reported understanding of all terms was poor. At best, 35% reported understanding the term ‘disc degeneration’. For all terms, a moderate to large proportion of participants (range 59–71%) considered they indicated a serious back problem, that pain might persist (range 52–71%) and they would be fearful of movement (range 42–57%).[246] The evidence indicates these misconceptions are common and have little correlation with the presence or severity of back pain. They have the potential to alter patient expectations, the treatment that follows and a person’s approach to engaging in activity.

Personal psychosocial characteristics also affect adherence to and effectiveness of treatment. For instance, if patients with back pain worry that they’ll do more damage if they resume activities like exercise or work, they are likely to do less. Some are particularly fearful and catastrophise. Such misunderstandings can lead to activity avoidance, and therefore to poorer health and RTW outcomes. People with a history of anxiety or depression are more vulnerable to these problems. There is an association between self-efficacy – a person’s perception of their ability to perform the actions necessary to secure a desired outcome – and the speed and durability of RTW.[247]

In contrast, studies of patients with chronic pain show that the use of active rather than passive pain coping strategies is associated with less disability and distress.[248,249] High adherence to self-management approaches also improves outcomes. Helping people understand why self-care is important supports the ‘what and how’ of active self-management.[250]

As these examples illustrate, psychosocial factors are extremely influential, even within the medical context. A systematic approach to identifying and managing psychosocial impediments to recovery and RTW in the healthcare domain is needed.

How treatment providers influence recovery and RTW

Treating practitioners are not the primary influence on RTW and recovery outcomes for compensable patients, but can make a positive contribution to RTW, particularly in the first six months of a claim. A study of workers with back pain showed that treatment providers who address common personal psychosocial issues (e.g. attitudes to pain) and empower patients to self-manage their conditions reduce sickness absence and long-term disability.[251]

The biopsychosocial model holds that educating a person about pain improves participation. This is an important core and early component of self-management coaching, even in the absence of other psychosocial risk factors.[45]

Australian research has identified another strategy that is linked to improved RTW outcomes – the provision of an estimated RTW date.[24] The same research showed that other work-focused communication strategies (e.g. identifying activities that an injured worker can do, discussing re-injury prevention and contacting other stakeholders in the process) may only be effective if the injured worker perceives their encounters with the treating practitioner to be low in stress.[24]

The importance of the quality of the relationship between the injured worker and the treating practitioner is elsewhere emphasised in research showing that injured workers speak positively of healthcare professionals who show respect for their individual needs, help them navigate the compensation system, validate the work-relatedness of their injury or health condition, and offer reassurance and support.[87] In contrast, there is strong evidence that a lack of positive communication and cooperation between the healthcare system and other relevant stakeholders (e.g. employer, the compensation system) is an obstacle to work participation.[25]

Another obstacle to RTW is the limited availability of high-quality, evidence-based, work-focused healthcare.[25] Treatment providers in Australia and Aotearoa New Zealand generally offer a high standard of care, but some patients may struggle to access it because of geographic limitations, systems barriers, health practitioners not accepting compensable patients, or because of entrenched pockets of non-evidence-based medicine. These barriers to appropriate care harm RTW outcomes.

Value-based health care

Value-based healthcare is a framework for evaluating the benefits of healthcare treatments that matter to patients, relative to the costs of treatment. Value-based

healthcare seeks to improve health outcomes that matter to patients while improving efficiency and reducing waste. In general, patients want better function and greater comfort after treatment, with as little disruption to everyday life as possible.

In essence, high-value healthcare is evidence-based and valuable to the patient and the community. Using everyday language, we might also think of it as good healthcare.

Patients tend to prioritise three overarching health outcomes:[252]

- Capability, or functional capacity.
- Comfort, or relief from emotional and physical suffering.
- Calm, or living normally while receiving care.

The value of treatment can be assessed by comparing its measured improvement in a person's health outcomes against the cost of achieving that improvement.[252]

Not all treatment recommended to injured workers is evidence-based. Some treatments are ineffective, for example, massage, which reduces pain in the short term but does not improve function.[253] Other treatments cause harm, such as rest and the avoidance of activity for non-specific back pain, opioid prescriptions that lead to addiction or misuse, or unnecessary surgical procedures that increase pain in the long term.

For example, we might ask whether spinal fusion reduces low back pain and improves function in the short and long term, relative to other available treatments. On balance, the evidence indicates that it does not.[254] The procedure involves significant life disruption, with a recovery period of six to 12 months, and has a high rate of complications.[254,255,256] It is also one of the most expensive surgical procedures performed. Arguably, patient benefits are not commensurate with costs. We might therefore conclude that, for most patients, spinal fusion represents low-value healthcare.

The evidence does not preclude spinal fusions being performed but places the treatment in the context of the available options. Modern treatment guidelines for low back pain acknowledge the need for a focus on prioritising treatments that restore function and quality of life. Quoting from the American College of Occupational and Environmental Medicine's multidisciplinary guidelines, with some two and a half thousand references:[257]

Many invasive and non-invasive therapies are intended to cure or manage low back pain, but no quality evidence exists that they accomplish this as successfully as therapies that focus on restoring functional ability without focusing on pain.

Patients should be encouraged to accept responsibility for managing their recovery rather than expecting the provider to provide an easy 'cure'. This process promotes the use of

activity and function rather than pain as a guide, making the treatment goal of return to occupational and non-occupational activities more apparent.

Treating practitioners with compensable patients sometimes feel caught between their duty to look after patients and the bureaucracy and competing interests of workers' compensation systems. A patient-centred, high-value approach has a combined focus on improved health outcomes and reduced costs.

A significant barrier to implementation is that the current fee-for-service arrangements incentivise low-value care. Higher fees are paid for invasive procedures, while high-value treatments such as advice and explanation, biopsychosocial care such as correcting unhelpful beliefs, providing extra support and encouraging self-management take extra time and are not remunerated accordingly.

Further, failure to fund treatments, including non-evidence-based treatments, can result in disputes, disenfranchise health practitioners, and put the onus on insurers to make these difficult judgements. It can be confusing for workers to have their doctor's advice contradicted.

In 2020, New South Wales State Insurance Regulatory Authority (SIRA) undertook a review of healthcare.[258] SIRA noted that healthcare costs had increased by over 30% over two years, with a drop in RTW rates over the same period. While some of this was due to billing practices, the major contributor to the increase in costs was increased treatment. A greater proportion of people were accessing treatment and more services were utilised per person. Allied health services accounted for 23% of healthcare expenditure.

Continued treatment that provides short-term benefit, and treatment that does not encourage self-management, can foster dependence on treatment. Reduced self-efficacy is associated with lower rates of RTW.[259]

Overtreatment

Ineffective and harmful medical practices are longstanding problems, but the scale and normalisation of over-diagnosis and overtreatment (provision of treatment with no net benefit to patients) have expanded exponentially in the last few decades.[260]

There are various subsets of treatment impacts within the concept of overtreatment.[261]

Overuse: Provision of a service that is unlikely to increase quality or quantity of life, that poses more harm than benefit, or that patients who were fully informed of its potential benefits and harms would not have wanted.

Overdetection: A health-related finding is detected in an asymptomatic person, probably by testing technology. The finding does not produce a net benefit for that person.

Overmedicalisation: Altering the meaning or understanding of experiences, so that human problems are reinterpreted as medical problems requiring medical treatment, without net benefit to patients. For instance, a patient with back pain may have a scan that shows disc bulges and foraminal stenosis, though they do not have radicular symptoms. The scan results are conveyed to the patient as a concern and referral to a spinal surgeon is arranged. The patient is now worried about their spine and starts avoiding activities that cause soreness. In fact, this avoidance makes pain more likely in the future. This is an example of how over-detection and overmedicalisation can negatively impact an everyday condition that affects most people at some point.

A recent study arranged an MRI scan on all patients with acute back pain with radiculopathy.[262] Those randomised to receive their scan results reported smaller improvements than those who were not given their results. In another study, people with back pain were randomised to have radiology or not; those who had radiology reported more pain and worse overall health status after three months, and were more likely to seek follow-up care.[263]

Shoulder problems are common, as are shoulder investigations. Scans often show multiple findings, including partial thickness tears and bursitis. Patients told they have a rotator cuff tear report a higher perceived need for surgery, while advice about the condition being bursitis results in a lower perceived need for surgery.[264]

Low-value care: Interventions that confer no or very little benefit for patients; or for which the risk of harm exceeds probable benefit; or for which the added costs do not provide proportional added benefits all represent low-value healthcare.

How overtreatment occurs

Treatments with marginal benefits should always be considered carefully. This is even more urgent in the compensable context, where the evidence says the chance of a poor outcome is already significantly higher than amongst the general population.

Treating practitioners and the wider community tend to overestimate the benefits of interventions and underestimate the downsides and risks.[265,266] Not all workers receive clear and factual information on likely outcomes of a procedure, or on rates of adverse consequences. If patients and treating practitioners lack a comprehensive understanding of risks and benefits, they may make non-evidence-based decisions.

Faced with a distressed patient, health professionals may feel they have to ‘do’ something. The pressure to provide treatment may outweigh concerns about a lack of effectiveness or even potential harms. We see this in many areas, with serial treatment failure: overuse of investigations, overuse of opiates or other strong pain medicine, ongoing physiotherapy that is not making a significant difference, and with some types of surgery.

Increasingly, researchers are questioning various surgical procedures and comparing them to conservative management. Further, over the last five years, better quality trials have shown the poor value of surgery over conservative management for some common problems.[267,268,269,270]

There are few studies of the impact of ‘free’ healthcare, but this may be an influencing factor. Paying for a service introduces a cost–benefit evaluation of the service for that person. A study that evaluated general healthcare in the US found that those randomised to the group with no co-payment received about 40% more healthcare, but had no improvement in function and reported more pain, more worry and more restricted activity days.[271] This is not to suggest co-payments should be introduced for workers, but the factors that drive overtreatment need to be understood to be managed.

Overtreatment is a well-recognised problem. Many factors contribute to it, including the cognitive biases of the healthcare professional, an innate need to ‘do’ something, and perverse incentives such as fee-for-service arrangements. Thought processes may include giving the patient ‘every chance’, that there is little to lose, or that more is better.

Why does this matter? Unnecessary tests, treatments and diagnoses may bring direct harm to people through adverse effects of interventions,[272,273] psychosocial impacts of receiving a diagnostic label,[262] and at times an overwhelming burden of treatment.[274] It may mean people attend for healthcare three or four times a week for an everyday health condition.

According to Harris and Buchbinder’s recent book on overtreatment:[275]

> *Our own experience as doctors and researchers has shown that much of medicine doesn't do what it's supposed to do: improve health. Modern medical care is designed to maximise the number of encounters with the system, constantly prescribing, operating, testing and scanning, and prioritising business over science. It's a system rife with perverse incentives and unintended consequences, producing health care without necessarily improving the health of the recipients of that care. The problem threatens the delivery of efficient and effective health care, wastes money and causes harm.*

The issue of overtreatment has been discussed in many forums. Leading clinicians, researchers and publications have endeavoured to address the issue, as outlined below.

- Evolve – an initiative led by physicians and the Royal Australasian College of Physicians to drive high-value, high-quality care in Australia and Aotearoa New Zealand.[276]
- Choosing Wisely – an international clinician-led initiative that identifies the top five tests, treatments or procedures medical practitioners and patients should question within each field of medicine. The Royal Australasian College of Physicians is a founding member of Choosing Wisely in Australia and New Zealand. All Evolve recommendations are made available through Choosing Wisely.
- *British Medical Journal* series titled 'Too Much Medicine';
- *Journal of the American Medical Association* series titled 'Less Is More';
- Australian Wiser Healthcare collaboration; and
- Annual Preventing Overdiagnosis Conference.

Despite such initiatives, the message about overtreatment has not yet become common knowledge or accepted by healthcare providers and the general public.

Healthcare providers do not intentionally recommend ineffective treatment or treatment that does harm. Many factors contribute to recommending treatment that does not have a clear evidence base.

It is what we have learnt and what we believe assists

We have developed standard ways of operating, and they take a long time to change. For example, we may see a person with back pain improve with a certain treatment and conclude that the treatment has helped. Yet, people are more likely to attend healthcare practitioners when their condition is at its most painful, and the natural history (what is expected to happen with or without treatment) is for the condition to improve. Our observations lead us to conclude that the treatment is helpful, even in the face of research evidence suggesting otherwise. We are also more open to and accepting of evidence that supports our beliefs, and less likely to accept evidence that goes against our beliefs and usual practice.[275]

Uncertainty

Healthcare practitioners deal with many scenarios in which the actual benefits and risks are unknown. We are more likely to fall back on our beliefs and usual practices in these situations.[275]

Understanding and accessing the evidence

Research can be hard to access and difficult to read. Many medical practitioners and other healthcare providers are not trained in understanding epidemiology and critical appraisal of studies.[275]

Wishful thinking and the pressure to 'do something'

In many instances, treatment is straightforward and obviously necessary. A disc prolapse in the back that presses on the nerves to the bladder and bowel can cause long-term incontinence. Surgery for this condition needs to be done urgently.

Surgery for someone who has back pain with diffuse leg pain and much distress has a poor chance of resolving the problem and facilitating their recovery and/or RTW. People want to get better, and those within work injury schemes can feel under external pressure to get better. Surgery may be presented as a solution, and in some situations the individual may be given overly optimistic estimates of the chance of success. There is often little discussion about the potential downsides of interventions, which can be significant.[275] For example, a recent review of spinal surgery in New South Wales (39% fusion, 60% decompression) found that 19% of those undergoing surgery underwent additional spinal surgery within two years of the first operation.[256]

It's in our interests

Without having a treatment to offer, healthcare practitioners can feel ineffective.[275] The alternatives, including explaining the lack of benefit of treatment or how the patient can learn to manage their health problem, is time-consuming. Practitioners underestimate patients' wishes to understand the nature of their condition and what they can do to help themselves.

Available referral pathways

Accessing healthcare can be difficult, particularly for some conditions and in some regions. Accessing evidence-based healthcare can be particularly challenging. For example, it may be easier to access interventional treatment for a patient with back pain than specialist care that is holistic, considers the person's psychosocial care, and provides advice and explanation and a focus on functional restoration through exercise. Once again, financial incentives seem to influence this situation.

Medical care is provided though fee-for-service arrangements. Increased supply of healthcare providers creates increased demand.

Quoting from Harris and Buchbinder:[275]

> *Treating health care as a commodity incentivises processes over outcomes, the complex over the simple, and treatment over prevention. Furthermore, doctors (who control the spending) don't bear the cost burden of their decisions. Most importantly, if medicine becomes big business, it must work primarily to create profit. Too often, profit is derived from delivering more health care.*

The community

Some patients question the value of treatments and surgery, yet many do not. There is general lack of understanding that unnecessary testing can lead to overtreatment. In fact, many expect tests or scans to be done for their health problem[277] and trust healthcare practitioners less if investigations are not ordered.

Overtreatment is often associated with low-value care and treatment that may not assist the patient's recovery. For example, treatment may be hands-on (i.e. passive) and detract from a focus on exercise and helping the person learn about activity modifications that work for their health condition. A study of almost 5000 people in the UK found that maintaining moderate or vigorous exercise reduces the risk of low back pain at four years of follow-up.[278] Fostering engagement in exercise takes time, focus, knowledge and skill. It can be an uncomfortable approach for both the patient and the healthcare professional if expectations are that something will be 'done' to fix the problem.

Healthcare issues that contribute to poorer outcomes

Lack of systematic management of personal psychosocial risks

Many healthcare providers accept that psychosocial factors play an important role in RTW, similar to other RTW stakeholders.[200] However, two main obstacles prevent better management of psychosocial factors in the healthcare context:[279]

- Identification and management of psychosocial factors is not a routine part of injury management for many healthcare providers.
- Managing psychosocial factors through counselling or coaching is not universally seen as an integral part of rehabilitation and case management.

For instance, in a survey of 173 physiotherapists in Western Australia, only 39% regularly used formal risk assessment questionnaires, citing lack of time and knowledge as obstacles. The physiotherapists in this research said they didn't know how to adjust clinical decisions according to psychosocial risk.[280]

A challenge for practitioners is to avoid reactivating the biomedical model by 'diagnosing' a psychosocial condition. A 'diagnosis' of catastrophising can be difficult to explain to a patient,

and the complexity of these types of conversations is a major barrier to successful implementation of systemic biopsychosocial care.[281]

Lack of a shared goal

Return to work success is contingent upon all stakeholders agreeing on an RTW goal and accepting an intervention plan to achieve that goal.[282] Divergent goals are often associated with overtreatment and delayed rehabilitation.

A study of rehabilitation clients found there are two main motivational orientations, RTW-focused and recovery-focused, and that these orientations can be regarded as partly overlapping.[283] Unsurprisingly, motivation with an RTW focus was less common in those aged over 45 years than in younger workers.

Recovery-focused individuals may have unrealistic expectations of recovery and believe that they must be largely or completely better before normal life resumes. The focus may be on pursuing treatments and interventions rather than re-engaging with work and life.

Achieving a clear, reasonable and shared long-term goal for the injured worker can be difficult. To achieve this requires honesty, listening, understanding the psychosocial factors and good negotiation skills. If there is no honestly shared goal, then much time and money is wasted.

Lack of work-focused healthcare and the rise in 'unfit for work' certificates

Failure by healthcare professionals to address work issues within the clinical encounter is an obstacle to work participation.[25] Despite this fact, research has established that healthcare providers – even those trained in occupational health – sometimes fail to ask workers' compensation patients about workplace issues. There is also evidence that injured workers do not volunteer concerns about the workplace during medical consultations, even when they're worried that workplace factors will delay their recovery.[284]

An evaluation of GPs' initial certificates of capacity in Victoria revealed that three-quarters of certificates marked the person as unfit for work, and 94% of those with a mental health claim.[285] In addition, the percentage of certificates marking a person unfit for work was noted to be rising.[286]

These certifying practices significantly hamper rehabilitation and RTW endeavours and present a significant barrier to RTW. Following an injury, some people will be totally unfit for work, but a much greater proportion retain some work capacity.

Although most medical practitioners believe work is generally beneficial to health, contextual and systemic factors may discourage conversations about RTW. Moreover, GPs have said

that managing RTW is not a core responsibility.[287] Health practitioners point to other factors that discourage an RTW focus, including:

- Lack of training, time and financial incentives.
- Role conflict, lack of communication and confidence.
- Believing a strong patient influence on decision-making is necessary to preserve the doctor–patient relationship.
- Perceived lack of patient motivation.

Medical practitioners may be influenced by the perception that the workplace lacks appropriate duties to accommodate an individual's limitations. According to WorkSafe Victoria,[288] only 41% of medical practitioners believe that their patients' employers want their patients back at work. This contrasts with the Return to Work Survey finding that 71% of workers with an injury report their employer made efforts to find suitable employment for them.[51] Further, many jurisdictions offer 'host' employer options, where the person may be placed to support their rehabilitation if their normal employer does not have available duties. Information from Victoria also indicates only 27% of medical practitioners believe that the employer will adhere to the restrictions they outline on their certificate, and only 22% have confidence in the employer's RTW coordinator.[288]

In Aotearoa New Zealand, the ACC provides training modules for GPs and other providers about rehabilitation, connection to the workplace, maintaining income and overall confidence, and how to certify work capacity. Other jurisdictions endeavour to reach GPs in training and educate them about certification and the operation of the work injury scheme.

Opioids

A 2014 study of Australian workers with a compensation claim identified that around 10% had received a prescription for opioids. Progression to long-term use occurred in close to 40% of those who received prescription opioids.[289]

Research from the United States of America has shown that use of short-acting opioids in work injuries was associated with 1.8 times the likelihood of claim costs of over $100k and long-term opioid use close to four times the likelihood, compared to claims in which the worker did not receive opioids.[290]

According to NPS MedicineWise, on average three people die and nearly 150 are hospitalised per day because of harm from opioids in Australia.[291] In 2016, 1,045 Australians died of an opioid overdose; three quarters of these deaths arose from prescription opioids.[292] In Aotearoa New Zealand, there are around 37 deaths per year from opioid overdoses, making up around half of drug-related deaths.[293]

While prescription opioids can be effective in managing severe pain, like many medications they can also cause negative side effects and unintended consequences. Eighty per cent of people who take prescription opioids for more than three months will have a negative side effect.[294] Side effects include impaired coordination, anxiety, depression, drowsiness, dry mouth, reduced immune system function, loss of muscle mass and weakness, impaired sex drive, infertility and constipation. Impaired mental function is associated with a 42% increased risk of road trauma.[295]

Opioid therapy is not indicated in chronic non-cancer pain, with no evidence for improvement in the level of chronic pain and functional outcomes.[292] Population studies show that people maintained on long-term opioid therapy for chronic non-cancer pain describe more troublesome pain and greater functional interference than people not on opioids. For some, longer-term opioid use can lead to tolerance, as well as opioid-induced hyperalgesia and increased pain.[296]

Other substance abuse

Opioids are not the only substances that can impair health and RTW outcomes following workplace injury. Individuals may also develop dependence on substances such as alcohol, benzodiazepines and anti-epileptics.

People are more prone to self-medication and substance abuse when they are off work. Help is available,[297] but not often sought because of the stigma around addiction to these substances. Stigma reduction strategies are needed to encourage people to seek help for substance abuse health issues.[298] Effective treatment will avoid further harm to the individual, while increasing the likelihood of timely recovery and RTW.

Conflicting expectations, insufficient cooperation

Arguably, there is a poor fit between expectations of workers' compensation systems and the time, resources, inclinations and decision-making latitude of healthcare workers.[59] For example, Australian employers and compensation agents believe that GPs should promote RTW, but injured workers say that GPs should support them and help them navigate the compensation system.[299]

GPs also express concern when employers deal with work-related and non-work-related conditions differently, offering modified duties for those with work injuries but requiring those with non-work-related conditions to be fully fit before allowing RTW. While it is understood there can be greater costs for work injuries, health practitioners may be wary of the employer expressing positive intent regarding rehabilitation when their patients with non-work-related conditions are excluded from work.

GPs see themselves as advocates for their patients but they are also, via their role in sickness certification, responsible for submitting paperwork that helps determine whether a given compensation claim will be accepted, disputed or denied. Therefore, GPs must assess the work-relatedness of the injury or illness at hand against legislative standards. Depending on the type of injury, this may be a complex and difficult task and one for which they have not been trained – and potentially one that requires them to go against the wishes of their patient. As a result, health practitioners describe difficulties in fostering cooperation between stakeholders and report challenging and complex discussions.[163]

Variations in workers' compensation caseloads and provider experience

There is substantial variation in the number and type of workers' compensation caseloads that individual health professionals take on. For instance, in Victoria, around 4% of GPs certify 25% of all workers' compensation claims. Most GPs (70%) treat 13 or fewer workers' compensation patients each year.[164] In Aotearoa New Zealand, all GPs are registered ACC providers and see worker's compensation claims as part of their routine practice.

Research from Victoria showed that GPs with relatively high caseloads of patients claiming workers' compensation issued significantly more alternative duties certificates and significantly fewer unfit-for-work certificates than GPs with lower workers' compensation caseloads.[164] However, medical costs were higher amongst the more experienced GPs. Patient profiles and injury types differed between the two groups too, making it difficult to pinpoint reasons for the differences in certification practices.

Workers may be less likely to develop chronic disability if they are treated by a provider with experience of the workers' compensation system, regardless of the severity of the injury. A large study from California found that injured workers treated by practitioners who had 0–2 workers' compensation patients each year were more than twice as likely to develop a chronic disability as those treated by providers who had 3–60 patients per year.[158] Other comparisons confirm that workers treated by more experienced practitioners are better off.[158,300]

Independent medical examinations

If a case manager wants the status of a worker's injury assessed (or re-assessed) or wants another opinion on the work-relatedness of the injury, they can refer the worker to an independent medical examiner (usually a relevant specialist) for an IME.

Good decision-making may require an independent specialist's opinion that can be used to constructively guide case management. However, it is important this is done in a manner that the worker perceives as fair and just. If the process is perceived to be unfair, cooperation is less likely.

A review of healthcare interactions following work injury found that workers' experiences of IMEs were often negative, particularly for mental health claims.[87,166] There were concerns that the assessments were superficial and comments that the IMEs were sometimes judgemental, damning and biased. Psychologists working in Victoria told researchers that the current system of IMEs exacerbates injury and increases healthcare costs, with an immediate and enduring negative influence on recovery.[166]

Independent medical examinations are non-therapeutic encounters; that is, the doctor is not there to guide the patient or offer treatment. This is an unfamiliar situation for patients and medical practitioners. In the role of independent medical examiner, medical practitioners may be unaware of the importance of their part in the process, particularly as it pertains to the worker's perception of the fairness of the system overall.

Healthcare providers' frustrations with compensation systems

Healthcare professionals report frustrations that reduce their ability – and willingness – to work within workers' compensation systems. These frustrations can produce poor expectations of recovery for patients claiming compensation.[60,163] Some of these frustrations are outlined below.

Perceived lack of respect for professional opinion
Treating practitioners and medical specialists may become frustrated when their expertise is sought and then questioned or overturned by workers' compensation bodies.[165] Such frustrations reduce their desire to participate in workers' compensation systems. There may be a perception that their time and knowledge is not valued by workers' compensation authorities.[163]

Burdensome administrative requirements
Healthcare professionals say the administrative requirements of workers' compensation are burdensome and confusing, particularly when the claim drags on or the worker's situation becomes complex.[163] Not all medical practitioners understand the requirements of compensation systems, for example, in terms of the types of information required to complete a form satisfactorily.[163,59] This may adversely affect quality of care and can also influence claims determinations.

Time-consuming responsibilities
Best practice assessment and treatment of work injury is time-consuming. It entails assessment of the clinical problem, which may include a physical examination, a conversation about work and other psychosocial factors, development of a treatment plan (e.g. prescriptions, referral for investigations or to a specialist) and completion of the certificate of capacity. Treating practitioners may also be expected to discuss individual

claims with other claims stakeholders, such as a case manager or the worker's immediate supervisor. In some jurisdictions, they are not paid for these services.

Fraught relationships

Workers say that healthcare professionals become less helpful once treatment is requested under workers' compensation schemes.[87] Employers and case managers have also described difficulties in communicating with treating practitioners.

Access to treatment

Some injured workers struggle to access appropriate, timely, high-quality care.[59,163] Geographic variations in treatment availability can delay RTW, as can delays in case managers approving treatment.[25]

Moreover, some GPs and specialists decide not to treat compensable patients. Almost all GPs in a Victorian study reported that medical specialists had at some point refused to accept referrals of compensable injury patients. At this point, GP reluctance to treat is more common than refusal to treat.[60] In Aotearoa New Zealand, many, but not all specialists, are registered ACC providers.

There is an absence of data on how many GPs do not – or do not wish to – treat compensable patients. However, deciding not to treat may be best for the doctor and the patient in some circumstances, given that GPs with little experience of workers' compensation tend to be associated with poorer outcomes.

In recent years in Aotearoa New Zealand, discussion has continued about the role of the ACC and the arbitrary distinctions it draws between pre-existing conditions, sickness, and injuries suffered in a workplace context. Many patients are refused approval for support by the ACC due to these distinctions, with this consistently identified as a prominent issue affecting wellbeing.[301]

Complexity of system influences, limited impact of treating practitioners

Because GPs certify work absence and act as the gateway to workers' compensation payments, many stakeholders assume that influencing them will substantially alter the trajectory of a case. However, the evidence suggests that treatment providers have less influence on complex cases than the workplace or claims system.

Over the last decade, various interventions have attempted to shift GPs' attitudes towards capacity certificates and upskill GPs in injury management, but medical practitioners are now more likely to certify someone unfit for work than they were 10 years ago.[285] In many instances, recommending time off work may reflect non-evidence-based practice. Just as it is quicker to refer a patient for an investigation (e.g. a CT scan) than to explain that the test

isn't necessary, so certifying time off work may represent the path of least resistance to a time-poor GP.

However, medical practitioners may rightly be wary of certifying work capacity if they perceive that a lack of workplace support or other psychosocial stressors around the compensation process will do their patient harm. Good work is good for health and wellbeing – not any work, under any conditions. Bad work is bad for health and wellbeing, and in such cases certifying RTW may not be appropriate.

In Aotearoa New Zealand, in 2018, the ACC formed a Primary Health Care Strategy Sector Engagement Group with representatives from national professional bodies in primary healthcare. Following concept design workshops and roadshows, ACC is endeavouring to build a collaborative framework with this sector to improve access and outcomes for patients and drive system efficiencies.

Barriers to improvement

Practitioner barriers

Inadequate training in psychosocial issues and mental health
Many health practitioners, including GPs, say they have had little training in dealing with complex work injury cases, particularly when non-medical factors are the key drivers of work absence.[287] There is also an appetite for more training in how to manage mental illness and chronic pain – both common components of complex workers' compensation claims. If non-medical obstacles to RTW are identified, treating practitioners may feel unequipped to offer appropriate referrals, advice and support, or to adjust clinical decisions accordingly.

Lack of interest and experience in work health and workers' compensation systems
General practitioners and other health professionals who treat few workers' compensation patients each year may understandably not prioritise workers' compensation education. Targeting this group of practitioners may prove challenging and potentially have a low return on investment.[299]

Time constraints
With so many boxes to tick in a workers' compensation consultation, it is easier to simply certify time off work or agree to an unnecessary investigation than to educate patients about self-management or persuade them to accept evidence-based recommendations about the importance of activity.

Lack of collaboration with other stakeholders
Employers and compensation agents believe that GPs should ask them for a full and accurate picture of the workplace, the worker's role, and the possibilities for modified duties,

to facilitate prompt RTW. Research indicates that such approaches improve RTW outcomes. However, GPs do not necessarily see communication with employers as a priority. This may be because they are rarely paid for talking to employers and compensation agents, feel that the doctor–patient relationship comes first, and prioritise patient confidentiality over collaboration with other scheme participants.[299]

Case conferences have been used to foster collaborative discussions about a worker's recovery and RTW. Use of video-based case conferences may assist rural and remote workers and practitioners.

The difficulty in changing clinical practices – clinical guidelines

Clinical guidelines can achieve positive health outcomes in some circumstances. For example, an opioid dosing guideline introduced in Washington State in 2007 curtailed dangerous high-dose opioid therapy without reducing the use of safe and effective opioid therapy.[302] Amongst injured workers claiming compensation, health outcomes improved and mortality was reduced after these guidelines were introduced to health practitioners via a web-based program that included a 'yellow flag' warning when the opioid dose reached a certain threshold.[303,304]

While regulating bodies can assist, some practitioners consider they should focus on outcomes and leave treatment approaches to treating practitioners. In NSW, a very small study of clinical guidelines for psychologists found some evidence of beneficial outcomes for patients, but sub-optimal application by psychologists.[305]

A US study found that primary care physicians with access to an electronic tool that prompted them to make RTW recommendations did so significantly more often than primary care physicians without the tool, but the proportions of physician–patient encounters that included an RTW recommendation were low (7.3% in the group with the tool and 1.6% in the group without).[306]

Inconsistent implementation of clinical guidelines is a common problem.[305,306] An evaluation of guidelines for the management of whiplash in NSW found that, while there was general compliance with recommendations on avoiding x-rays and treatment, there were still considerable passive treatments and lack of use of risk identification options.[307] Practices that are not compliant with the guidelines have poorer health outcomes and greater treatment costs. This can result in conflict if the insurer seeks to limit treatment not in accordance with the guidelines and the Clinical Framework for the Delivery of Health Services. Barriers to adoption of clinical guidelines include a lack of quality improvement skills and leadership support amongst clinicians, hesitancy to change routine, guideline overload, and resistance from patients and families.[308]

System barriers

Lack of referral options to manage psychosocial barriers

Psychosocial counselling is not widely available, so referral is not always possible. Health coaching is a promising field, but more research is required to gauge how it can be delivered most effectively.[309]

There are difficulties for patients with persistent pain. While multidisciplinary programs assist some, referrals and enrolment often occur later than ideal. There are insufficient services in some regions, and insurance case managers may not approve referrals. Access to community-based pain services, to which GPs can refer patients within the first few months of an injury, may allow earlier adoption of self-management strategies and minimise the use of opioids.

Inadequate remuneration

In some jurisdictions, treating practitioners are not paid for services such as consulting with the employer about RTW. This exacerbates the general perception that workers' compensation cases are burdensome and stressful to treat. In some jurisdictions, there is a perception that the remuneration of healthcare professionals is not commensurate with the demands placed on them by workers' compensation systems.[60,163]

Lack of incentives for quality care

In Australia and Aotearoa New Zealand, treating practitioners are not always incentivised for evidence-based practice. Incentive programs have yielded positive results elsewhere.[13,58] In Aotearoa New Zealand, as part of supporting safer treatment, the ACC is working with the healthcare sector and studying treatment injury claims, for example, about medication safety and how to prevent healthcare associated infections and surgical harm.[310]

Disengagement with the system

As noted earlier, some GPs decide not to treat compensable patients, while other GPs report that medical specialists refuse referrals from compensable patients.[165] At this point in time, GP reluctance to treat is more common than refusal to treat.[60] A study of psychologists in Victoria found some psychologists refuse treatment of compensable cases due to system issues such as late referrals, the difficulties when there is disagreement about treatments, problematic IME processes, and lack of remuneration for case conferences or liaison with other healthcare providers.[166]

Suspicion of the system

While healthcare providers are generally supportive of evidence-based medicine, they have expressed concerns about implementation of evidence-based decision making in the workers' compensation setting.[311] GPs are apprehensive that an evidence-based decision

tool may be applied rigidly and not take into account clinical judgement, patient variability and preferences.

Healthcare interventions and approaches that improve outcomes

Best practice treatment for work injury is work-focused and psychosocially and evidence informed. It is also collaborative.

A systematic review of interventions that promote RTW found strong evidence that time lost from work was significantly reduced by multi-domain interventions encompassing at least two of the three domains of healthcare, workplace accommodation and case management.[26] There was also moderate evidence that multi-domain interventions reduced costs. However, improvements to treatment alone were generally not effective. Overall, single-domain interventions were less effective than interventions that took a collaborative approach.

Healthcare frameworks seeking better models of care

Two important frameworks, developed by healthcare providers, seek to support appropriate healthcare in work injury schemes. The first, the Clinical Framework, provides a comprehensive outline of appropriate healthcare. The second provides advice to support the role of GPs in dealing with work injuries.

GPs refer their patients for treatment but may not feel confident about evaluating the effectiveness of that treatment. The Clinical Framework is explored in detail below as it can provide GPs with a sound method of evaluating the treatment their patient is receiving through allied healthcare. For example, a GP can request outcome or biopsychosocial risk measurements to evaluate whether there are objective measures of improvement and to understand how well biopsychosocial issues are being addressed.

The Clinical Framework for the Delivery of Health Services[27]
The Clinical Framework was created to help allied health professionals treat clients with compensable injuries. It was developed in Victoria in 2004 and updated in 2011, with input from the Transport Accident Commission and WorkSafe Victoria.

In 2012, the Clinical Framework was adopted by virtually all compensation systems across Australia, including workers' compensation and car accident schemes and the Department of Veterans Affairs. It's also supported by relevant peak body associations, including the Australian Osteopathic Association, the Australian Physiotherapy Association, the Chiropractors' Association of Australia, Occupational Therapy Australia and the Australian Psychological Society.

The Clinical Framework comprises five principles designed to ensure that healthcare services for compensable clients are goal oriented, evidence based and clinically justified.

Principle 1: Measure and demonstrate the effectiveness of treatment

To assess whether treatment offers measurable benefit to the injured person, the treating practitioner must identify and assess relevant, specific and functionally-oriented outcomes – for example, improvement in levels of activity or participation. To provide information about progress over time, the chosen outcomes should be measured at the beginning of treatment and repeated regularly.

Principle 2: Adopt a biopsychosocial approach

Rather than looking at a client's injury or condition in isolation, the Clinical Framework asks practitioners to consider the biological, psychological and social factors that influence health. In the early phase of injury management, this means focusing on educating clients about the injury and expected pathway to recovery, and emphasising the benefits of continued participation at home, work and within the broader community.

Practitioners are advised to identify biopsychosocial risk factors that may delay recovery: biological risks, mental health risks, psychological risks, social risks and other risks (e.g. workplace risks). If risks are identified, the Clinical Framework advises the allied health professional to devise a treatment plan that addresses them in a way that prevents or manages persistent pain, ongoing activity limitation and restricted participation in life.

Principle 3: Empower the injured person to manage their injury

Empowerment of the injured person is key: the Clinical Framework asserts that use of passive strategies (e.g. massage) should decrease as recovery progresses, to make way for more activity and independence on the part of the client. One empowering strategy is education, ensuring clients understand:

- Who's responsible for what.
- The nature of the injury, expected recovery timelines and prognosis.
- The importance of continued active participation in work, home and social life.
- The risks associated with prolonged inactivity.
- The risks and likely benefits of the proposed treatment.

It is also important to clearly establish:

- Collaborative treatment goals and timelines.
- Effective self-management strategies for the client.
- An expectation that the healthcare professional will support independence from treatment when appropriate (i.e. that treatment will not continue indefinitely).

The Clinical Framework outlines educational and motivational strategies that treating practitioners can use to encourage the development of beliefs that empower clients. In some instances, the practitioner may encourage the client to seek psychological support.

Self-management strategies are empowerment in action, helping injured people take control of their situation and participate at work and home despite ongoing symptoms. Examples include problem solving, pacing, relaxation techniques, ergonomics, exercise and sleep hygiene.

The final plank of empowerment involves preparing clients to manage relapses. Relapse management strategies include:

- Informing clients that relapses are possible and for some conditions likely.
- Developing client awareness of triggers, and good coping strategies to implement early.
- Written plans.
- Talking to significant others about assisting during relapse.

Principle 4: Implement goals focused on optimising function, participation and RTW

Practitioners should collaborate with clients to develop SMART goals, that is, goals that are Specific, Measurable, Achievable, Relevant and Timed. Progress towards these goals should be assessed regularly, with reset or modification undertaken as appropriate.

The Clinical Framework asks treating practitioners to avoid goals based on reductions in impairment – for example, to reduce depression or reduce back pain. Instead, the preference is for goals that highlight improvements in function. For example, a relevant functional goal for a worker with depression is to be able to concentrate on reading for 30 uninterrupted minutes four days a week.

When appropriate, practitioners are encouraged to consider goals that involve RTW. When RTW is not appropriate, goals should focus on promoting independence, improving function and participation, or preventing deterioration.

Principle 5: Base treatment on the best available research evidence

Health research is not all created equal. Systematic reviews of RCTs provide the best foundation on which to base a treatment approach. The next best option is evidence from a single RCT. The Clinical Framework advises practitioners to offer treatments with rigorously demonstrated effectiveness. If there is good evidence that the treatment is not effective, the treatment should not be used. Unproven treatments can be considered if there is no current best practice as established by research.

Principles on the role of the GP in supporting work participation

This position statement, supported by the RACGP, outlines principles for the role of the GP relative to other stakeholders.[28] The principles are applicable to all healthcare roles. Requirements for high-quality patient care were identified through extensive consultation. Feedback from health professionals, employers, employee and health consumer representatives and unions, the disability sector, academics and claims organisations indicated the following components of healthcare provision are important.

- **Empowerment**: People with illness, injury or disability must be empowered to participate in good work through greater individual choice and control, which GPs can support through a patient advocacy role.
- **Communication**: Stakeholders (employers, benefit and income support providers, healthcare providers, case managers and any other person involved in supporting work participation) should communicate more openly and effectively with GPs, who are ideally placed to promote the health benefits of good work and contextualise patient experiences.
- **Team-based care:** More effective shared responsibilities and a team-based approach to care coordination, patient management and specialist input will support the role of the GP. The team-based approach will help to address variations in the capacity and capability of stakeholders.
- **Health benefits of good work:** GPs are ideally placed to promote the health benefits of good work. The health benefits of good work are embedded in GP practice in the RACGP- endorsed *Principles on the role of the GP in supporting work participation*. All stakeholders also have a critical role in promoting the health benefits of good work and actively supporting work participation.
- **Capacity:** Together with the patient, the GP identifies work capacity and functional ability, and is supported by the employer and other stakeholders to make work adjustments and match the job to the individual.
- **Barriers:** Employers, insurers and policymakers must dismantle broader barriers to work participation.

General practitioners are encouraged to make an informed and shared decision about their role with their patient. The GP can opt to take on medical and RTW coordination care, or focus on a medical management role and acknowledge that others will focus on the coordination of RTW.

Measuring health experiences and health outcomes

Value-based healthcare is based on what is important to the worker/patient. Patient-reported measures provide important information about whether their care and treatment delivery has helped from their perspective. Two such measurements are described below.

- **Patient-reported experience measures.** PREMs measure patients' views of their experiences whilst receiving care. They are an indicator of the quality of patient care. Information (e.g. the quality of communication and timeliness of assistance) is gathered using questionnaires.[312] They endeavour to measure specific patient experiences, for instance, whether they felt they were listened to, rather than more general measures such as satisfaction with care.
- **Patient-reported outcome measures.** PROMs are standardised, validated questionnaires that may be completed before and after surgery, or following treatment. They allow an intervention to be measured from the person's perspective and include measures of general health and/or their health in relation to a specific condition. They measure clinical effectiveness and safety.[313] PROMs are being used internationally and in Australia within the public health sector (e.g. for joint replacement surgery).

PREMs and PROMs provide information that can be useful for individuals and their healthcare, for policymakers or health system managers, and for healthcare providers in maintaining or improving the level of care. Use of electronic surveys can streamline data collection. The measures, collated at a system level, allow comparison of local, regional and inter-jurisdictional differences, evaluation of specific initiatives or improvements over time, and whether healthcare is actually valued and useful for workers.[314]

Our current commonly used measures of claim outcomes are RTW and claims costs. These may be proxies for return to health, but are insufficient to truly measure long-term health outcomes, people's experiences of their treatment and the effectiveness of treatments.

Examples of effective healthcare approaches

Below are four examples of approaches that have been shown to improve RTW outcomes. The first entails healthcare support only. In examples two and three, the healthcare component is combined with improvements to workplace accommodation and case management. The fourth example includes therapeutic counselling.

Tackling psychosocial influences at the patient level
A study in Norway targeted people who had been off work for eight weeks because of back pain.[315] Common personal psychosocial barriers to recovery were addressed via education about pain and activity. The intervention was based solely on advice and explanation intended to foster self-management and increase function.

Patients were reassured that their back pain was unlikely to be a serious problem. It was explained that severe back pain was best thought of as inadequate circulation in the muscles and that the resulting muscle spasms and pain did not indicate a serious, long-term issue.

Patients were advised to continue with normal activities. It was strongly emphasised that the worst thing they could do for their back was to be too careful.

The link between emotions and low back pain was explained as a muscular response, in that increasing tension in the muscles could increase the pain. Great emphasis was put on removing fears about low back pain. The patients were told that mobilising the spine regularly via activities such as walking would help circulation and decrease pain. After three months, each patient was reviewed and invited to ask questions. The education component of the intervention was reinforced.

The research found that:

- There was a 50% reduction in sickness absence from work for the treatment group compared to the control group.
- At five-year follow-up, 19% of the treatment group were off work, compared to 34% of the control group.[251]

These findings are consistent with numerous studies that have tackled psychosocial factors within healthcare. Lower rates of catastrophising and better psychological health are consistent with greater self-efficacy in self-managing one's health problem. An RCT providing psychological treatment to reduce fear and a sense of threat in those with long-term back pain helped people reconceptualise their pain as non-dangerous brain signals rather than tissue damage. This resulted in significantly lower pain scores at one year of follow-up, compared to a control group.[316]

An Australian study using evidence-based care within a hospital staff clinic, with a focus on an explanation of the nature of back pain and its good prognosis, compared outcomes to those for people who elected to have usual care. Workers supported with the evidence-based approach had less time off work, spent less time on modified duties and had fewer recurrences; 70% resumed normal duties immediately, and fewer than those managed under usual care developed chronic pain,.[317]

Better healthcare via a systems approach

As referred to earlier in this paper, the Washington State workers' compensation scheme manager set up a series of Occupational Health and Education Clinics (COHE clinics) which injured workers can attend if they choose. (Unions and employers were consulted about the process.) The centres provide evidence-based healthcare, as well as clinical leadership in occupational health and RTW. In one study, workers treated via the COHE clinics had 34% fewer lost days of work than those not treated via a COHE clinic.[13]

In the COHE clinics, medical practitioners are incentivised for adopting occupational health best practices:

- Reporting a new injury – US$21.
- Completing an activity prescription – US$53.
- Communicating with the employer or a health services coordinator by phone – US$25 for 5–10 minutes through to US$71 for 21–30 minutes.
- Comprehensively analysing impediments to RTW – US$169.

There are financial incentives for healthcare providers to promote activity, such as through targeted graded exercise and reactivation approaches, and educational and cognitive behavioural approaches to tackle issues such as fear avoidance and RTW expectations.

Evidence-informed medicine, promoting appropriate practices and discouraging unnecessary procedures and surgery, is supported. Health services coordinators, similar to workplace rehabilitation providers, are funded to coordinate care. These coordinators report to the health practitioners rather than the insurer.

Research showed that patients who saw medical practitioners in those clinics who were high adopters of best practice had 57% fewer disability days than patients who saw medical practitioners who were low adopters. After eight years, there was a 25% reduction in permanent disability from common musculoskeletal conditions amongst patients who saw medical practitioners who were high adopters of best practice.

The COHE clinics have been sufficiently successful for their role to be expanded over time. With freedom of choice in place, about 70% of workers claiming compensation in Washington now attend one of these clinics.

Australian workplace-based intervention to identify and manage psychosocial factors
As mentioned earlier in this paper, an intervention in NSW public hospitals[15] systematically identified employees with an injury who had high Orebro scores, a measure that reflects psychosocial barriers to RTW. After identifying risk, steps were taken to address the workers' fears and misunderstandings.

One aspect of the intervention was to offer referral to a psychologist who had been trained in a systematic approach to psychosocial counselling.[318] Only about half of the high-risk participants took up that option. Nevertheless, it represented a systematic approach to identifying and addressing psychosocial factors using a healthcare provider. The intervention offered workers additional support via workplace RTW coordinators and facilitated early specialist review through an injury medical consultant. This approach resulted in a 30% reduction in claims costs at 11 months post-injury, with control group costs continuing to rise while intervention group costs plateaued at 10-11 months.[15]

Therapeutic counselling and self-management

Therapeutic counselling (also termed health coaching) involves health education and health promotion with a trained coach to enhance individual wellbeing. Health coaching supports people to build self-efficacy – the belief that one can initiate and sustain a desired behaviour. Behaviour change is more likely to be maintained when goals are self-determined and the person is invested in the result.

In comparison to traditional healthcare, health coaching can:[309]

- Significantly improve patients' physiological, behavioural, psychological and social outcomes.
- Improve medication adherence.
- Assist with weight loss and increase the levels of motivation and personal satisfaction.
- Improve physical activity.

In the management of work injuries, biopsychosocial therapeutic counselling also incorporates self-management skill development. Self-management is a systematic behavioural approach designed to improve outcomes for patients with chronic conditions by teaching them to monitor their own symptoms, make informed decisions about managing their conditions, and solve problems as they arise.[319] Self-management strategies include goal setting, activity pacing, thought management and physical reconditioning.

High adherence to self-management approaches improves outcomes.[249] However, many GPs do not have the time or expertise to engage patients in self-management strategies.

Referral to an allied health practitioner with training in self-management is one option, and it may also be possible to deliver self-management programs to patients remotely. For example, internet or workbook-based remote-delivery pain management courses following cognitive behaviour therapy principles, in conjunction with weekly contact with a psychologist by email or phone, can reduce disability, anxiety and depression. Research employing these interventions showed that patients had high levels of completion and most reported satisfaction with the course.[320,321]

Rehabilitation counsellors, allied health providers who have undergraduate or postgraduate training in biopsychosocial care, may be well suited to therapeutic counselling or health coaching. Training programs have already been developed to upskill providers in health coaching on psychosocial factors in work injuries via online[322] and face-to-face formats.[323] This training has been taken up by a range of allied health practitioners, usually employed by workplace rehabilitation providers. Research on this approach found a 32% mean reduction in personal psychosocial factors, with increases in work readiness and work hours strongly associated with improvement in psychosocial scores. Controlled studies are required to

verify this association with RTW when applied broadly within an injury management scheme.[324]

Digital, web-based and group healthcare

New healthcare approaches may assist the delivery of higher-value treatment for work-related injuries.

Digital care programs can be delivered direct to large numbers of individuals without the need for one-on-one, in-person service provision, or as a supplement to in-person services. If effective, digital care programs have the capacity to improve value in healthcare, securing good outcomes at lower costs and/or shoring up the benefits of treatment. Another advantage of digital and web-based healthcare is that it is inherently data-rich, so it can provide valuable information on progress to treating practitioners. Further, anonymised data can provide information about the program itself. It also fits well with the self-care approach recommended elsewhere in this document. Finally, digital care programs have the potential to motivate participants via gamification elements and/or by connecting participants to one another via social media-type features. In short, there is potential for digital care programs to be cost-effective, large-scale, data-generating and engaging. The question is: do digital care programs secure comparable results to treatment as usual?

Research tackling this question has returned promising results. Evaluations of the efficacy of web-based or app-based programs have shown clinical benefits for diverse conditions, including chronic pain,[325-327] diabetes self-management, weight loss, physical activity and smoking cessation,[328] knee osteoarthritis,[329] mild to moderate depression,[330] and reduction of sedentary behaviour in office workers.[331] Cost savings have also been identified, with some studies showing reductions in healthcare costs for engaged participants.[325]

However, it should be noted that the currently available research is not of uniformly high quality and important questions remain. Some studies have returned results that highlight the need to design digital healthcare interventions with care, for instance high dropout rates, low utilisation of the service or benefits that persist only in the short term.[331] More high-quality research is required to investigate long-term effects of digital health interventions, allow a more fine-grained and evidence-based approach to designing intervention components and measure cost-effectiveness definitively.

Some group-based exercise programs have a sound evidence base. The Good Life with osteoArthritis in Denmark (GLA:D®) was developed in 2013 and introduced in Australia in 2016. Physiotherapists or other allied healthcare providers are trained over two days in how to deliver the program to people with knee or hip osteoarthritis. The eight-week program commences with three sessions of patient education (including one session from a patient who has completed the program), followed by 12 group-based supervised exercise sessions

of 60 minutes. Strategies to continue exercise are reviewed at three-month follow-up. An evaluation of just under 30,000 people across Australia, Denmark and Canada found a reduction of 26–33% in mean pain intensity, an increase of 8–12% in walking speed, and 12–26% improvement in joint-related quality of life after treatment.[332]

A similar program has been developed for people with back pain[333] and is currently being evaluated to assess outcomes.[334] These group-based programs offer an alternative to traditional one-on-one treatments and may be more effective.

Specialist care

Occupational physicians, the primary drivers of this policy on evidence-informed scheme delivery, have expertise in work-related health conditions, working with workplaces and dealing with complex cases and situations.

In South Australia, GPs have the option of referral for a second opinion one-off assessment service, with a structure that ensures the GP is the driver of the referral and that they receive feedback on treatment and work recommendations. Four specialist groups are included in this service: occupational physicians, pain physicians, psychiatrists and surgeons. In NSW, the insurer (or claims agent acting on the insurer's behalf) can obtain a specialist opinion on work capacity and treatment, with the injury management consultant making contact with the GP following the consultation. We are not aware of these approaches being evaluated, but the benefits of early specialist access for GPs seems likely to support improved certification and overall management of work injuries.

Treating people with psychological injury

As noted previously, RTW rates are consistently lower for psychological injury cases. A comparative analysis of RTW and RTW influences in physical and mental health claims found similar psychosocial factors influence both types of claims, though the magnitude of impact is often greater in psychological injury cases.[7] Moreover, those with a psychological injury claim report receiving less help and support than those with a physical injury claim.[19] The fluctuating nature of mental health conditions can also be challenging.

Researchers have examined characteristics of workers, the impact of treatment, as well as RTW practices.[217,335,336] The employer's response to the injury and claim, early contact from the employer, assistance before a claim is lodged, low-stress encounters with the claim system and the absence of disputes are all associated with higher rates of RTW.[19] These are the same factors that influence RTW in workers with physical injuries. This implies the same principles of management should be applied in psychological cases as are recommended for physical injuries: early diagnosis, treatment, discussion with the workplace, and identification of work capacity based on function.[337]

As with physical injuries, the type and mechanism of injury should influence RTW approaches. Claimants who suffer workplace bullying are unwilling to RTW in the same role if there has been no organisational change, and/or they were going to be managed by the same supervisor who bullied them or failed to stop bullying by others. However, research has also shown that claimants who suffer post-traumatic stress following a traumatic event are more likely to return to the same job if treatment is effective.[150]

Psychiatrists stress that interventions are time critical for mental health cases; care within the first few days is important (N. Ford, personal communication, July 2021).[132] However, the RANZCP notes that, because most psychosocial symptoms are self-reported, there is a subjective element when determining the cause and degree of injuries, which can make it more difficulty for claims to be made and accepted.[338] For example, 44.5% of mental health claims by Victorian police officers were rejected, as opposed to 4.7% of claims involving physical injuries. This high level of claim rejection limits early access to treatment.

In the view of the RANZCP, schemes themselves create unnecessary hardship for mental injury claimants. Some of the problems arise from the practices of agents, and some stem from the legislative design of the schemes.[338]

Psychiatrists note that psychosocial risk factors associated with suicide include legal problems, economic problems and limitations due to disability or chronic health conditions. Distress may increase if and when psychological claims are denied, and steps to support those with rejected claims should be considered.[339] We note that WorkCover Queensland provides an independent Workers Psychological Support Service to combat this problem. It offers short-term support and guidance, connections with community services, such as housing assistance, counselling and financial advice.[340]

Workplace-based screening for depression, followed by care management for those found to be suffering from or at risk of developing depression and/or anxiety disorders, can be cost-effective. In a UK study, those identified as being at risk of depression or anxiety disorders were offered a course of CBT delivered in six sessions over 12 weeks.[212] Web-based CBT courses may be less stigmatising to individual workers, but less is known about their longer term effectiveness.

Clinical guidelines developed to assist Australian GPs assess, diagnose and manage work-related mental health conditions outline various factors that may act as warning signs of a comorbid or secondary mental health condition.[341] Patient-related factors include greater pain intensity, insomnia, low self-efficacy, lack of social support, perceptions of injustice in the claims process and a past history of depression. Work-related factors include job strain and a failure to RTW. However, it is acknowledged that the evidence supporting this guidance is of low quality and that more research is warranted.

Funded by the Australian Government Department of Jobs and Small Business and Comcare, Office of Industrial Relations – Queensland Government, SIRA (NSW), ReturntoWorkSA and WorkCover WA, the guidelines also list appropriate diagnostic tools for depression, anxiety, PTSD, alcohol and substance use disorders, and major depression and adjustment disorder. They contain guidance on how to assess whether the mental health condition has arisen as a result of work, advice on the process of conveying a mental health diagnosis, and strategies for improving both personal recovery and RTW outcomes. The guidelines list patient and workplace factors to consider when assessing the patient's workability. They also offer strategies for communicating with the workplace and for managing patients whose conditions do not improve as expected.

Return to work professionals, through workshops run as part of a review of psychological claims care in NSW, articulated three key principles of an effective approach to care for people with psychological injury.[342]

- **Tailored, person-specific treatment and management.** An approach to treatment, case management and workplace engagement that reflects the injured person's specific needs and circumstances was considered critical. Those involved in the treatment of people with psychological injury should first seek to understand the individual and their unique circumstances before developing care and RTW plans.
- **A multi-stakeholder approach.** Within an injury compensation setting, it is recognised that the injured person and their healthcare team are key participants in care, but also that insurance case managers and (particularly within workers' compensation) employers play critical roles in the care process.
- **The importance of early action.** The importance of early recognition of psychological injury and rapid provision of supports and services was emphasised. This spans the multiple stakeholders involved in the care process, including employers, insurers and treatment providers.

Occupational services are more effective if workers unable to return to their normal job are assisted in finding new employment quickly and are supported in the transition back to work. Continuity of psychological treatment is important.[150] For individuals with complex mental health needs, specialised psychosocial supports, such as individual placement support (IPS) programs, may be appropriate. These programs involve a rapid job search, on-the-job-training and ongoing case management. IPS programs have proven very effective in improving vocational outcomes for adults with severe and complex mental illness.[343-346] Research on IPS programs for young adults (including those with less severe mental illness) is promising and ongoing.[347] The 2021 Productivity Commission Inquiry into Mental Health recommends that IPS programs should be rolled out 'on a staged basis for all job seekers with mental illness … across Australia' as a priority reform, and expects a substantial return on investment from them.[348]

Further, the Productivity Commission[349] recommends that workers' compensation schemes fund clinical treatment, including rehabilitation, for all mental health-related workers' compensation claims, for a period of up to six months or until RTW, regardless of liability. Some jurisdictions have already implemented this priority reform;[350] others are encouraged to take action.

Delivering culturally respectful and safe healthcare services

Providing culturally respectful and safe healthcare services is essential to addressing the health inequities Māori and Indigenous Australians face.

In Aotearoa New Zealand, Māori are consistently under-represented among service users. Under-utilisation occurs in use of elective surgery services, home and community support services and duration of weekly compensation claims (5–50% lower than for non-Māori people).[134] There is a need to guide Māori through ACC processes to ensure they receive appropriate services and apply a Kaupapa Māori approach – meaning face-to-face services delivered by Māori for Māori.[134]

As outlined in the *Monitoring framework on cultural safety in health care for Indigenous Australians*, published by the Australian Government's Australian Institute of Health and Welfare in 2019:[351]

> *the concept of cultural safety has been around for some time, with the notion originally defined and applied in the cultural context of Aotearoa New Zealand. It originated there in response to the harmful effects of colonisation and the ongoing legacy of colonisation on the health and healthcare of Māori people – in particular in mainstream care services.*
>
> *The cultural safety of Indigenous health care users cannot be improved in isolation from the provision of health care, and the extent to which health care systems and providers are aware of and responsive to Indigenous Australians' cultural perspectives. The structures, policies and processes across the health system all play a role in delivering culturally respectful health care.[351] … Cultural respect is achieved when the health system is a safe environment for Indigenous Australians, and where cultural differences are respected.*

The same principles apply for workers' compensation systems to become culturally safe for Māori in Aotearoa New Zealand and Aboriginal and Torres Strait Islander people in Australia.

Action areas

Implementing a systematic approach to addressing psychosocial factors

A systematic approach is needed to screen, assess and treat psychosocial barriers and has enormous potential to aid recovery and RTW. We have placed this section under healthcare, though the topic is applicable broadly across each scheme domain discussed in this paper.

The challenges of implementation are many. They include implementing systems to ensure consistent early risk assessment, encouraging acceptance by all players that addressing psychosocial factors is a core component of work injury care, and upgrading the skills and capabilities of people who take on the role of addressing these barriers.

A systematic approach would need to be implemented carefully and would likely be a multi-year project. Work injury management could lead to overutilisation of some services, and introducing significant changes could bring similar risks. Pilot projects would assist in determining both the efficacy and efficiency of models of care and referral options.

While there are many challenges to implementation, there are also many opportunities for improved practice by developing a framework for implementation, including:

- Development of national guidelines for psychosocial practice.
- Consideration of how biopsychosocial care can be incorporated into routine case/claims management practices, documentation and IT systems.
- Training of case managers via brief biopsychosocially informed education, which has been shown to positively influence claims manager behaviours.[44]
- Managing a shift within insurer operations to enable the required culture, resourcing and processes to enable biopsychosocial and person-centred care.
- Fostering routine use of biopsychosocial practices in early healthcare by GPs, allied health practitioners and medical specialists. For example, could GPs be empowered to provide a biopsychosocial plan in the same way that they deliver a mental health plan? Use of electronic case records may assist in biopsychosocial assessment becoming part of routine care.
- Adopting approaches through which policymakers can best support routine biopsychosocial care.
- Consideration of biopsychosocial factors within IMEs, including within physical and psychiatric consultations.
- Reflecting on how biopsychosocial care can be supported by RTW coordinators and employers.

- Establishing a resource centre of systems, with policies, processes, tools, templates, supporting resources and industry experts that enable a systematic approach to the implementation of psychosocial risk identification and management strategies. The resource would include relevant content for case managers, policymakers, healthcare and RTW professionals, and the workplace.
- Identification of the skills and capabilities needed to enable effective assessment and management of biopsychosocial care.
- Assessment of what would be needed to train and upskill the industry to be routinely effective, including case managers, medical and other health professionals, RTW coordinators and rehabilitation professionals, noting that training by itself may be insufficient to ensure systematic adoption of biopsychosocial care[352]
- Consideration of the unintended consequences of the introduction of significant initiatives.
- A campaign to reduce stigma that can be associated with questions about the biopsychosocial model.

The three components of a systematic approach

1. Screening

Routine screening of patients who are off work for a week or more can identify those at heightened risk of work disability.[3] This can be termed psychosocial triage.

A brief, well-researched tool such as the short-form Orebro Musculoskeletal Pain Questionnaire, the Depression, Anxiety and Stress Scale or K10 may be appropriate, depending on the worker's situation. A shorter five-question screening tool has also been shown to identify most people with high rates of psychosocial risk factors.[324]

Screening tools need to be easy and efficient to use to be adopted widely. Limiting the number of questions and the ability to screen online, face-to-face or over the phone, or in writing will enhance use. A screening tool that can be applied by a health professional, a case manager or RTW coordinator is more likely to be used.

While we have included this approach under healthcare, experts recommend all players involved in injury management should seek to identify and remain alert to psychosocial flags throughout the course of a claim.[353] It is better to over-identify cases than to allow some

[3] In medical use, triage refers to the assignment of degrees of urgency to decide the order of treatment.

people to develop long-term problems. As such, a screening questionnaire needs to have high sensitivity (not miss cases), even if the specificity (ability to identify non-cases) is low.[353,354] Screening should also ensure that the information gained is captured in a structured database and can be used to influence future actions.[355]

2. Assessment

Once the level of risk is established, a more in-depth analysis can guide treatment. Salient psychosocial factors for the individual high-risk patient can be identified through a more detailed questionnaire, validated for this purpose.[356] As an example, if fear avoidance is recognised as a major barrier, referral to a physiotherapist experienced in this area may be appropriate. If the predominant issue is anxiety, referral to a psychologist is more likely to assist. Alternatively, a practitioner with skills across all biopsychosocial factors and trained to deliver self-help skills coaching could elicit a deeper understanding of the psychosocial barriers when multiple domains are influential. In complex cases, specialist occupational physicians can help assess and manage obstacles to meaningful and durable RTW.

3. Treatment for psychosocial barriers

A move towards proactive management of psychosocial factors raises the question of treatment options. Addressing psychosocial issues can require sensitive discussions as patients may be focused on the biomedical model and flagging of psychosocial issues may be unwelcome.

GPs wishing to refer patients for psychosocial counselling currently have limited options. Possibilities include:

- Specially trained physiotherapists, who can focus on the management of psychosocial factors such as fear avoidance.
- Rehabilitation counsellors, who receive training that includes a focus on biopsychosocial counselling.
- Discipline-specific self-management training for patients, which may be delivered in person, or supplemented with internet or workbook-based programs.
- Community-based psychologists who deal with uncertainty, anxiety, trauma symptoms and adjustment to injury counselling.
- GPs trained in health coaching, who may be well placed to deliver counselling within consultations.
- Self-management biopsychosocial health coaching via workplace rehabilitation providers with appropriate competencies, which would require funding.

Biopsychosocial interventions delivered by physical therapists vary significantly in their effectiveness. A review of training and competency assessments found that training methods

vary, from brief lectures to workshops that combine learning methods and include supervision and feedback via experimental learning.[44] The authors concluded that measures of post-training competency to deliver biopsychosocial interventions are needed to implement the biopsychosocial model of healthcare, along with supervision, support, mentoring and a competency-based learning model.

The impact of counselling for psychosocial factors in individual cases can be monitored to assess progress over time, enable comparison with baseline levels, and confirm effectiveness. A rigorous evaluation of the effectiveness of counselling by type of practitioner would be useful.

Developing a systematic approach to the provision of therapeutic counselling or treatment to help people overcome psychosocial barriers is a significant undertaking. Scheme design elements should include:[324]

- Biopsychosocial implementation at all levels of the scheme.
- Specific biopsychosocial education for all parties.
- Tools to enable GPs to assess and monitor recovery.
- High levels of trust and collaboration.
- Early psychosocial triage screening.
- Reduction in resistance to early referral by case managers.
- Identification and measurement of individual psychosocial risk factors.
- Matching of psychosocial profiles to interventions.
- Coaching for self-management skill development.
- Grading and matching RTW actions with work readiness.
- Reassessment of psychosocial factors to measure biopsychosocial progress.
- Monitoring and management within a digital database.

The same approach is applicable to psychological injury claims. Early identification and management of psychosocial barriers is vital.

Encouraging evidence-based and high value medical care

The work injury system provides extra services, over and above Medicare, with the aim of supporting recovery and RTW. In stark contrast to this aim, health outcomes are worse for those whose conditions are dealt with under a compensation system.

We support the focus on value-based healthcare, including healthcare that takes into account:[357]

- Health outcomes that matter to patients.

- Experiences of receiving care.
- Experiences of providing care.
- Effectiveness and efficiency of care.

Both the community and healthcare practitioners overestimate the benefits of interventions and underestimate the rate of complications, so an awareness campaign about iatrogenic problems would be useful. For example, people who undergo spinal investigations in clinical settings, where guidelines recommend against such investigations, report more pain and reduced function. As discussed earlier, overtreatment can reduce self-efficacy and delay return to function; surgery with marginal benefits may result in complications.

Encouraging workers to understand their treatment options, including the pros and cons of interventions, may be aided by promoting the questions developed by the Choosing Wisely initiative.[358]

- Do I really need this test, treatment or procedure?
- What are the risks?
- Are there simpler, safer options?
- What happens if I don't do anything?

The Choosing Wisely campaign suggests a fifth question: *what are the costs?* This is less relevant because treatment costs are funded through claims. However, there may still be costs in terms of time, and emotional and opportunity costs; for example, a focus on interventions may delay self-management or exercise approaches.

The use of PREMS and PROMs can guide the development of person-centred approaches and value-based healthcare. Piloting use of PREMs and PROMs within work injury schemes for those undergoing joint replacement may be a valuable first step; this would allow comparison to similar measures within the public hospital systems that involve pre–post surveys. Use could be gradually expanded to more everyday claims.

Changing longstanding patterns of referral in healthcare is a major challenge and will require collaboration. We support review of fee structures to incentivise healthcare that promotes improvements in function patient self-management and minimises the development of iatrogenic problems. In addition, development of high-quality multidisciplinary centres of care may provide clinical leadership in the use of high-value healthcare.

Financial incentives for practitioners

Fee structures encourage short consultations and incentivise ‘doing something’. Ordering a scan is quicker than explaining why a scan is not needed. Well-designed financial incentives, developed via consultation with business, unions and health practitioners, have improved

recovery and RTW outcomes elsewhere. We suggest trialling the use of similar incentives in Australia and Aotearoa New Zealand, using the Washington model as a guide.

A national treatment efficacy register

A national resource that provides evidence-based information on the effectiveness of common and invasive treatments could be housed nationally and used in each jurisdiction to determine coverage and alternative management options. This resource could include information on the rates of complications for specific procedures, enabling informed, evidence-based decision-making for practitioners and patients. Aotearoa New Zealand's Health Quality and Safety Commission has functions, powers and funding to support best practice medical care[359] as does the Australian Commission on Safety and Quality in Healthcare.[360]

Clinical guidelines

The evidence around the effectiveness of clinical guidelines in securing a shift towards evidence-based practice is mixed but promising. We suggest that clinical guidelines can be helpful in the injury management context if implemented and disseminated thoroughly.

Guideline uptake requires multifaceted engagement strategies, including:

- Dissemination of educational materials (including written materials, didactic presentations and interactive conferences).
- Continuous efforts via educational meetings and educational outreach visits, audits and feedback, workshops and small-group interactive postgraduate training sessions.
- Social interaction via local opinion leaders.
- Decision support systems (manual or automated) and reminders to prompt health professionals to perform actions according to the current state of evidence.

Evidence-based prescribing

Most pain conditions can be treated with non-opioid analgesia.

The AFOEM counsels against prescription of opioids for the treatment of acute or chronic pain without thoroughly assessing the patient's clinical condition, potential side-effects, alternative analgesic options, work status, and capacity to perform safety critical activities such as driving a motor vehicle.[361] Similarly, the RACGP advises against prescription opioids for uncomplicated neck and back pain and other musculoskeletal pain.[296] Opioids should only be considered for patients with chronic non-cancer pain once non-pharmacological therapies and non-opioid medicines have been optimised. If opioids are appropriate, they

should only be considered as part of a multimodal treatment approach, and each GP and patient must have a clear plan that includes criteria for ceasing the medicine.

Opioid analgesia attenuates with time, while the harm persists or increases with time and increasing doses. For some patients, the primary benefit of opioids becomes the avoidance of withdrawal. Recent evidence suggests that tapering opioids improves pain, function and quality of life. However, this is often challenging and can take time.

Public health campaigns can help educate medical practitioners and the community.[362]

Consideration of other treatment delivery options

Web-based therapies, which may be combined with face-to-face consultations, have promise. Early studies indicate web-based treatment options can be both effective and cost-effective, as well as providing treatment options for people in regional and remote communities and those experiencing difficulty accessing evidence-informed healthcare. Research into their use in work injury schemes is recommended.

Improving certification of work capacity

Some health conditions render an individual unfit to work; recovering from surgery, a major fracture, or severe back pain may necessitate time away from work. However, for most everyday physical or psychological conditions, modifying activities or the workplace will allow that person to remain at work. Indeed, unnecessary time away from work can result in reduced fitness, isolation, disconnection from work, and a greater risk of long-term health problems.

The current high rate of issue of certificates declaring workers unfit for all work must be reduced. For the small number of practitioners who routinely certify most or all patients unfit for work, compliance approaches may be needed.

Qualitative research with GPs suggests they are reticent about managing work injuries. Evaluations of education programs designed to improve certification practices suggest poor take-up and no change in practice.[299]

The Collaborative Partnership worked with the RACGP to develop *Principles on the role of the GP in supporting work participation*.[28] The impact of this document will be enhanced by the development of a statement of operating principles and further communication to foster take-up of the key messages. Other options being considered include AFOEM assisting the RACGP with the curriculum for training of GP registrars, continued professional development training, and inclusion of material to support certification practices in practice software. The IT additions may include all currently used certificates within Australia, along with guidance

material such as examples of completed certificates and information on how to best complete them.

We acknowledge the importance of improved certification and note the many unsuccessful endeavours by policymakers to improve certification practices. The problem is multifactorial, and we recommend that schemes support the Collaborative Partnership to solve it.

Research into interstate differences in the percentage of unfit certificates may assist. If the differences are significant, the factors influencing GP decision-making should be identified and interventions to correct them devised. Intervention research on the use of practice software tools may also be helpful.

A worker whose GP does not treat work injuries may need assistance in securing appropriate treatment. Some GPs may wish to manage the medical aspects of their patients' care and have other healthcare providers certify work capacity and undertake RTW coordination. Another GP in the same practice may be available and willing to treat. Other alternatives include the GP managing clinical care but another person such as a clinic nurse taking over the case management role. Some injured workers have no option but to find a new clinic, presenting an additional challenge during an already stressful time.

Recent initiatives have sought to expand the types of health professionals able to write certificates of capacity. For example, in some jurisdictions physiotherapists and other allied health practitioners,[363,364] including psychologists,[364] are able to complete work capacity certificates. In Aotearoa New Zealand, acupuncturists, audiologists, chiropractors, dentists, nurses, optometrists, osteopaths, physiotherapists, podiatrists and medical practitioners can lodge claims, and nurse practitioners and medical practitioners can issue medical certificates about work capacity.[365]

The benefits of having the primary treater write certificates include better coordination and reduction in administrative demands on GPs. Additional education regarding certification may be appropriate for these groups.

There should be clear options available for workers whose GP clinic cannot provide treatment and certification. Possibilities include:

- Establishing a register of GPs willing to take on new work injury patients – ideally, experienced GPs with an interest in occupational health.
- Developing clinics that specialise in occupational health, focused on evidence-informed practice. The COHE clinics in Washington State provide a model for this service. A specialised clinic would ideally engage GPs with a special interest, allied health professionals and a specialist occupational and environmental physician.

- Consideration of other primary healthcare providers. Physiotherapists can write progress certificates of capacity (though not initial certificates of capacity) in Victoria and New South Wales. An evaluation of physiotherapy certification and RTW practices would be worthwhile, given that physiotherapists are:
    - Trained to focus on function.
    - Required to undertake psychosocial screening in some jurisdictions, increasing awareness of psychosocial factors.
    - Often more familiar with patients than some other treatment providers, due to longer consultations and more frequent attendances.
    - Less pressed with providing ancillaries to treatment, such as prescriptions, referrals and investigations.
    - Able to speak with patients while treating them, providing opportunities to reinforce messages over time.

Better training for health professionals

Better integration of occupational health in undergraduate studies

One way this might occur is by engaging students in team-based learning around realistic case studies involving RTW, common occupational injuries and ethical issues around sickness certification in the workers' compensation system. Such approaches have been well received by students, although clinical outcomes have not been evaluated.[366] In addition, a more comprehensive understanding of the biopsychosocial approach is required in all undergraduate programs.[324] The development of a national curriculum may enhance take-up by universities.

Postgraduate training

Medical practitioners learn much of their early clinical care in hospital environments from more senior colleagues who may be registrars or consultants. However, few occupational physicians work in hospital environments and many are unable to disseminate knowledge about the workplace and management of work injuries. Locating an occupational physician within an emergency department of a private hospital was found to be constructive and cost-effective in treating hospital staff with injuries.[367] Evidence-informed care via hospital staff clinics has resulted in better outcomes.[317] Greater use of occupational physicians in managing injuries, but also in being consulted on non-hospital staff cases, such as in

emergency departments, may be another option for upskilling medical practitioners in the first few years after graduation.

Targeted training for specific groups of practitioners

Regulators could fund research into treatment providers' workers' compensation profiles, certification practices, and health and RTW outcomes to identify opportunities for investment in targeted education. For example, targeted education for GPs with a high caseload of injured workers as patients may be a more cost-effective way to improve outcomes in 25% of cases.[299] Education of medical practitioners can also occur during postgraduate training as a GP or surgical registrar, or via continuing professional development studies.

GP training should build skills in having early conversations with patients to identify and provide care for those with psychosocial factors. Informing GPs about the importance of collaborative dealings with employers, case managers and rehabilitation providers may enhance RTW and recovery for our patients.

The increased rate of certifying workers as unfit for work implies that specific training in certifying fitness for work is needed. GPs need clear advice that certification should be based on capability, not the practitioner's understanding of whether suitable duties are available. A targeted campaign that informs practitioners about how their certification practice compares to others may assist.

The message about the health benefits of good work[9] and the detrimental impact of long-term worklessness was released 10 years ago, but has had variable uptake and impact. Education of GPs on the consequences of being off work needs reinforcing. Proactive care by GPs is important and should include expectation setting, fostering early RTW to prevent loss of work fitness, and coordination of evidence-informed healthcare.

Psychologists may also benefit from training in work-focused therapy. Workplace rehabilitation providers are predominately health professionals and may be well positioned to complement rehabilitation counsellors in delivering biopsychosocial therapeutic counselling.

Enhanced cooperation

In work injury schemes, as in other spheres of life, cooperation is enhanced through respectful communication and constructive engagement. We support use of video case conferences, particularly for regional and remote healthcare practices.

Overcoming health inequity barriers

Health services are more effective when the needs of Indigenous workers and culturally and linguistically diverse workers are recognised and addressed. Specific programs that address barriers to accessing treatment and support can help fill such gaps. This requires acknowledging that mainstream service provision may be insufficient, funding and committing to programs that engage the disadvantaged, and appointing case managers who have similar cultural backgrounds or who have an understanding of diverse social and cultural needs.[181]

Key elements for better outcomes

Implement a system-wide approach to reduce modifiable biopsychosocial influences

- ⇒ Identify those who are likely to benefit from extra support via early routine screening.
- ⇒ Undertake pilot programs to evaluate the best methods of early screening – through GP consultations, allied healthcare, the workplace, claims lodgement or insurance case managers. Important elements include worker satisfaction with the process and streamlined systems to achieve high rates of completion and take-up.
- ⇒ Develop resources and systems that take account of biopsychosocial factors. This includes developing healthcare providers' ability to recognise and address psychosocial factors within everyday consultations. Referral pathways for those with support needs will need to be identified and funded.
- ⇒ Screening is the first step, the second is a more thorough assessment of the modifiable issues to be addressed. An assessment approach can be structured, such as through validated questionnaires, which can be used as an engagement tool as the results are fed back to the individual.
- ⇒ Offer therapeutic counselling (health coaching) and relevant support to those identified as having extra needs through psychosocial screening. This includes education about factors that affect pain and how an individual can manage them. Therapeutic counselling may include training in problem solving, CBT approaches to reduce anxiety and approaches that enhance self-efficacy.
- ⇒ Evaluate options to identify the effectiveness and efficiency of varying implementation options and approaches.

⇒ Develop a system-wide map of system needs for implementation across service providers, workplaces, and case and claims management.

⇒ Develop a national suite of resources for widespread implementation.

Improve healthcare to improve health outcomes

⇒ Recognise, discuss and acknowledge the limits of our current healthcare system, including the role of incentives that can have both positive and negative impacts on health outcomes.

⇒ Recognise that evidence-informed healthcare and value-based healthcare are closely aligned, and that there is poor uptake of the use of guidelines and other tools designed to promote evidence-informed healthcare.

⇒ Support workers to remain at work where possible to minimise loss of physical and work fitness.

⇒ Consider developing public health communication campaigns or strategies to educate the community and healthcare providers about the harms that arise through unnecessary investigations, overtreatment and reliance on ‘quick fixes’.

⇒ Encourage workers to ask the Choosing Wisely questions about their healthcare:

- Do I really need this test, treatment or procedure?
- What are the risks?
- Are there simpler, safer options?
- What happens if I don’t do anything?

⇒ Promote strategies that engage workers to be active participants in their own healthcare to enhance self-efficacy, and approaches that minimise the likelihood of further problems.

⇒ Incentivise referral pathways to practitioners that provide holistic care.

⇒ Recognise the current fee structure incentivises interventions and ‘quick fixes’ and implement study and co-design options to incentivise high-value care.

⇒ Consider investing in centres that include teams that provide evidence-informed work injury healthcare.

⇒ Support clinical leadership proponents of high-value care.

Improve certification

⇒ Support system-wide approaches that inform healthcare providers about the importance of work in most people's lives, including:

- Ensuring that some physical activity is undertaken on workdays.
- Providing a sense of community and social inclusion.
- Allowing workers to feel that they are making a contribution to society and their family.
- Giving structure to days and weeks.
- Aiding financial security; and
- creating a decreased likelihood that individuals will engage in risky behaviours, such as excessive alcohol consumption.

⇒ Consider other certification options, such as through allied health providers, and evaluate them if and when introduced.

⇒ Consider support for early referral for specialist healthcare advice by occupational physicians or other relevant specialists, to provide input on work capacity.

⇒ Recognise that most GPs have little training in assessing work capacity and are influenced by factors such as trust in the workplace, likelihood of following recommended restrictions etc.

⇒ Develop national resources to educate undergraduate and postgraduate GPs to assist in the evaluation of work capacity.

⇒ Consider the need to train medical practitioners in occupational health during their early hospital training years, by training emergency physicians or embedding occupational physicians in emergency departments and hospitals in general.

Conclusions

Injury insurance schemes exist to help people in times of need but fail to secure good health and recovery outcomes for a significant proportion of participants. We call for a collective conversation aimed at reconnecting injury insurance schemes with commonly shared values of fairness, respect, collaboration, transparency and efficiency. These values support recovery and return to work and are supported in turn by a strong and growing body of evidence indicating that modifiable psychosocial determinants of health can be proactively managed to improve outcomes and reduce costs.

There are many opportunities to improve health and financial outcomes in work injury insurance schemes in Australia and Aotearoa New Zealand. At the individual level, RTW requires collaboration between stakeholders who sometimes perceive themselves to be at odds. This is also true when the improvements sought are structural, to do with attitudes and practices across workers' compensation schemes.

We seek to build a coalition to tackle this public health problem, collaborating with other stakeholders to address the action areas identified below.

Regulators modelling good behaviours and influencing work injury scheme participants through a range of encouragement mechanisms, education, fostering collaboration and evidence-informed practices. Regulators have the authority, information and proactive approaches to ensure compliance and awareness that scheme abuses will not be tolerated.

Insurers focusing on recovery and RTW as their primary aim. Insurer case management is supported by systems that maximise effectiveness: appropriate case numbers per case manager, low staff turnover, appropriate training in human (soft) skills such as active listening, as well as the technical aspects of case management, and efficient and effective IT systems. Delays and disputes are minimised.

Workplaces recognising the importance and cost benefits of providing 'good' work and being informed about the importance of supportive approaches to aid their workers with their recovery and RTW. Workplaces understand this is the best approach for their workers, workplace productivity and the financial health of their organisations.

Healthcare or case management systems identifying workers at higher risk of long-term disability through psychosocial factor screening, triage, and systems that help workers overcome psychosocial barriers to work. Healthcare is evidence-informed and high value, and healthcare providers cooperate with other domains such as case management and the workplace.

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