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.