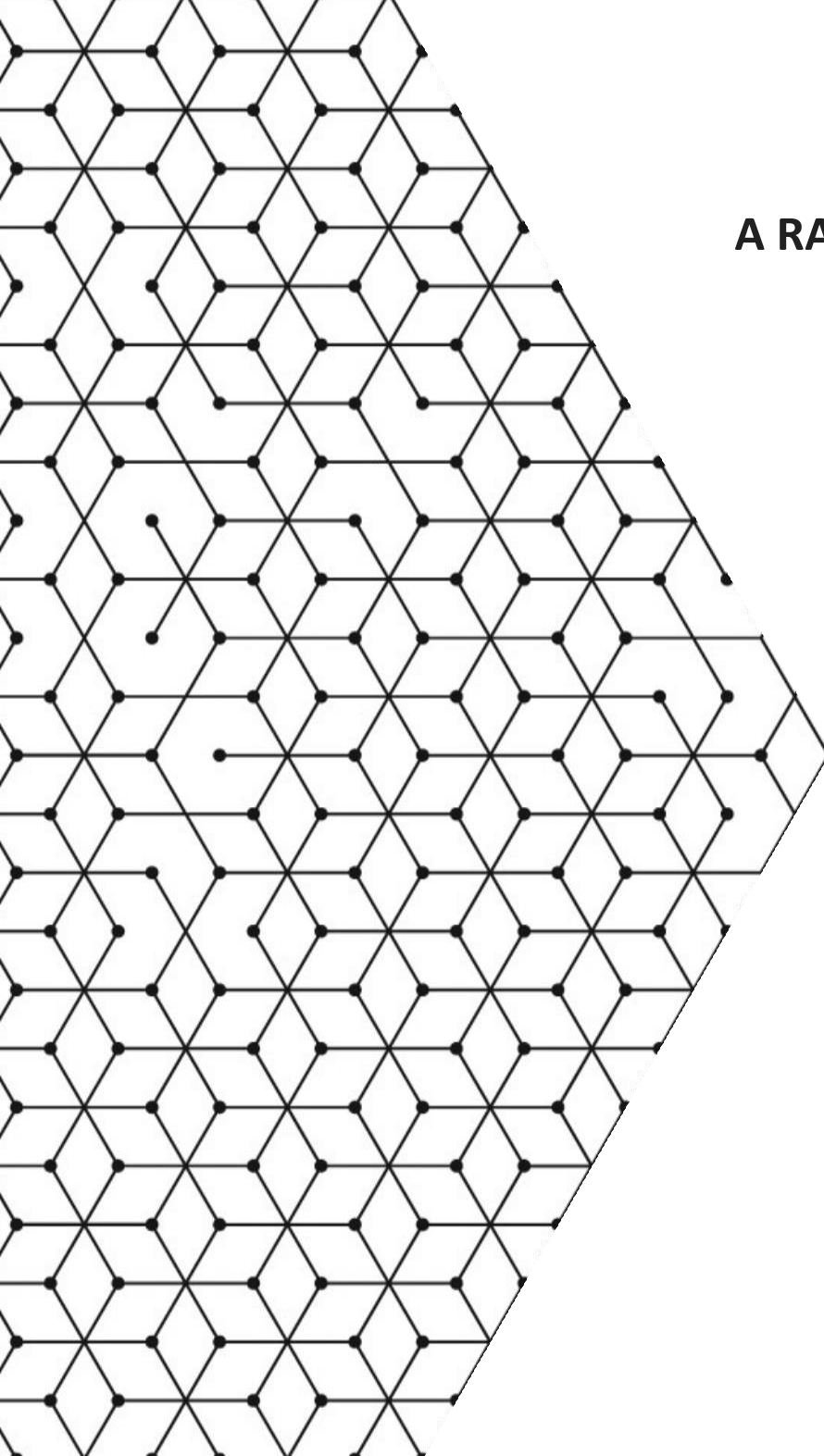




# The Hopkins Centre

Research for Rehabilitation and Resilience

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Better solutions.**



## **A RAPID REVIEW ON CLAIMANT LEGAL REPRESENTATION IN PERSONAL INJURY CLAIMS**

**Research Report**

**31 July 2019**



# Report for RACQ

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## Note:

This report is based on a rapid review of literature undertaken between February 2019 and July 2019. The content is not intended to be a comprehensive review of existing evidence available. However, the report does provide directions as to empirical research that is warranted.



## Executive Summary

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Injury compensation schemes are important mechanisms for rehabilitation and recovery following road trauma and workplace accidents. However, compensation processes are also a risk factor for claimants. Research shows that involvement in compensation processes is stressful for many claimants and impacts negatively on their physical and psychological health.

The reasons are multifactorial. Further, the evidence is limited in scope and quality due to difficulties with research design and measurement of multiple schematic, process and claimant-related factors.

Lawyer involvement has been consistently linked with claimant experiences and outcomes, in both positive and negative ways. However, there is no convincing evidence about the precise mechanisms involved. The evidence fails to account for the complexities of lawyer use alongside multiple actor dynamics or for lawyer use as a secondary outcome of claimants' dissatisfaction with process.

This rapid review was driven by an interest in developing a platform for future research on claims management and claimant outcomes. As such, the objective of the review was to synthesise the evidence in relation to the circumstances and functions of lawyer engagement in personal injury claims, claimant characteristics associated with lawyer use, and the general benefits and concerns reported in the literature.

Forty-nine published papers and reports, comprising 43 journal articles and six reports, the majority originate from Australia, were reviewed. Both fault and no-fault schemes are associated with positive and negative claimant outcomes and lawyer involvement. The complexities and nuances of scheme design cannot be overlooked when considering claimant experiences and outcomes.

Regardless of scheme design and country differences, claimant experiences and outcomes of both transport and work-related compensation are systemically linked, and both lawyer use and poor outcomes are related to multiple system factors.

Administrative and communication mechanisms are important in claimant experiences and outcomes. These include the operating procedures and processes of multiple agencies, insurance personnel and other compensation actors, including lawyers, who have varying purposes when interfacing with claimants and each other, during the compensation process. Lack of transparency and objectivity across the lifespan of a claim can be perceived as a sign of unfair handling of claims.

The operating mechanisms of multiple actors, shape how claims are handled, the approval and decision-making processes and timeframes, what claimants are exposed to and how responsive they perceive the process. The burden of paperwork and assessments, conflicts and inconsistencies in opinions contribute to a sense of being mistrusted, dissatisfaction and motivation to use lawyers.

The actions, communications and decisions of the network of actors and how these relate to broader schematic factors has not been fully accounted for in understanding the association between lawyer use, claimant experiences and outcomes.



For claimants, lawyer engagement functions to manage unfamiliar and complex processes, and is often secondary to dissatisfaction with compensation processes. For claimants with socio-economic disadvantage and other co-occurring health and legal vulnerabilities it functions as an important coping mechanism.

Claimants have mixed experiences of lawyer representation. However, assistance to understand the process, opportunity to tell their story, response to emotional needs, and access to justice are key benefits claimants derive from lawyer representation. In contrast, there is the potential for lawyers to add to the stress by increasing the burden of assessments and time frame for settlement of claims, and to set up a negative perception of insurers based on the advice that is provided.

Overall, no single mechanism accounts for claimant experiences and outcomes and there are likely to be multiple tipping points across the lifespan of a claimant's compensation that contribute to less positive experiences and poorer outcomes. Consequently, the solution to improving performance exists across multiple levels and interfaces. The next step is to examine more closely the claims handling processes since many of the mechanisms for lawyer use and outcomes are likely to reside within actions, decisions and discretions of the network of actions involved in interfacing with the claimant.

Future research should focus on the *procedural and process* mechanisms that constitute agency-based governance and *front-line practices* including the negotiations, decisions, dilemmas and discretions of claims managers across the compensation lifespan that shape experiences and perceptions of claimants, and potentially motivate lawyer use.



## Background

Injury compensation schemes are vital pathways for rehabilitation and recovery after road trauma or workplace accidents, particularly for injured people with complex needs. Compensation schemes for personal injury are highly variable across Australia due to jurisdictional differences and numerous incremental reforms (Grant & Studdert, 2009). There are 11 major workers' compensation schemes and several different motor vehicle accident compensation schemes with varying entitlements and benefits (Productivity Commission, 2011; Safe Work Australia, 2014).

Unfortunately, the claims process itself can be a health risk factor (Grant & Studdert, 2009). Evidence from compensation research suggests involvement in compensation claims processes is associated with poor physical and psychological health outcomes (Collie, Gabbe & Fitzharris, 2015; Gabbe et al., 2007; Grant & Studdert, 2009). This is true of claimants in transport accident and workers' compensation schemes (Gabbe et al., 2007).

The evidence base pinpointing explanations for this link is sketchy and under-developed. Essentially, it shows associations of multiple factors in claimant outcomes and no clear indication of causal relationships. There is an emerging strand of research that explores aspects of the administrative, evidentiary, and decision mechanisms associated with claims processes and the way they contribute to claimants' experiences and outcomes.

These studies suggest that claimant outcomes may be driven by the combination of many factors, including:

- scheme factors (e.g. the design of schemes and benefits, including dispute resolution mechanisms)
- the claims environment (e.g. the extent to which it is adversarial)
- claims management practices (e.g. interactions and communications)

The handling of claims by insurance agencies has been examined in a small number of studies. This includes comparative studies on different models of practice (Schaafsma, De Wolf, Kayaian & Cameron, 2012), and small-scale qualitative studies about claimants' experiences with insurers in compensation schemes (Murgatroyd, Cameron & Harris, 2011). These show that the way claims are handled by insurance personnel, including interactions and communications with claimants, can be influential with respect to perception of the process and claimant outcomes.

The handling of a claim is complicated by multiple actors and complex boundaries. This includes assessments of entitlement, coordination of assessments and verification of claims (Brijnath et al., 2014; Murgatroyd et al., 2011), and making decisions about treatment and support, processes which can impact relationships and outcomes (Kilgour et al., 2015a). Insurance claims managers typically deal with the interface between claimants and multiple other agents involved in compensation processes (e.g. lawyers, medical, health and rehabilitation professionals) (Kilgour et al., 2015a). Since they oversee the recognition and legitimacy of claims, insurance personnel can affect how

**Involvement in compensation can be a health risk for claimants**

**New research focuses on multiple, intersecting factors**

- **scheme features**
- **claims environment**
- **claims management practices**



claimants perceive the process and outcomes (Murgatroyd et al., 2011). Although there is some evidence to support this (Elbers et al., 2013), multiple questions remain about the handling of claims, including legal representation in processes (Elbers et al., 2016) and experiences of claimants with high levels of disability and associated mental health needs (Spittal, Grant, O'Donnell, McFarlane & Studdert, 2018).

Access to entitlements and a sense of justice are important to personal injury compensation claimants. As such, lawyer involvement is a factor often studied in compensation research or highlighted in systematic reviews on claimant outcomes. The empirical evidence suggests lawyers do impact the experiences and perceptions of claimants (Elbers et al., 2016). Lawyer involvement has also been singled out as a factor in protracted time to settlement (Gopinath, 2016), poorer physical and psychological health, higher frequency of symptoms (Littleton et al., 2011; Murgatroyd et al., 2015), and delayed return to work (Giummarra et al, 2016; Gravel, 2010). However, it is fair to say that the nuances and dynamics of legal representation and how these along with a myriad of factors impact outcomes, are not well understood (Scollay, Unpublished; Spearing et al., 2012). Hence, caution is recommended when drawing conclusions from current research.

Most research designs particularly in motor vehicle compensation claims, measure lawyer involvement dichotomously (yes/no) and further, do not deal with the reverse causality problem in analysis. There is the possibility that legal service use can be both a predictor and an outcome of poor claimant outcomes of compensation (Spearing et al., 2012). Further, research designs serve to obscure important relationships between claimant decisions to use legal services, their claims process experiences and their health, work and social outcomes (Grant, 2015; Spearing, Connelly, Gargett & Sterling, 2012). Importantly, little research has simultaneously examined the array of internal and external enabling mechanisms of legal service use in compensation processes, which include administrative procedures, assessments and communications that can complicate but also depersonalise the experience and motivate claimants to use lawyers (Scollay, Unpublished).

The objective of this rapid review is to lay a foundation for more targeted research on legal representation and claimant experiences and outcomes. Specifically, the purpose is to assess and synthesise the literature on legal representation in personal injury claims to unravel how this relates to other schematic, administrative and claimant factors. It is anticipated that this will also contribute to the development of research questions for empirical inquiry on the handling of personal injury claims, taking account of the insurance industry perspective.

### **Review aim and questions**

This report presents the findings of a rapid review of the literature on claimant legal representation in personal injury claims.

#### **Review Questions**

- 1. What are the circumstances and functions of claimant legal representation in personal injury claims?**
- 2. What claimant characteristics are associated with legal representation in personal injury claims management?**
- 3. What are the benefits and concerns regarding claimant legal representation in personal injury claims?**



## Methods

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A rapid review was carried out to synthesise evidence about claimant legal representation in personal injury claims in countries with comparable personal injury compensation schemes, including Australia, the United Kingdom (UK), the United States of America (USA), Canada and the Netherlands.

### Search terms

Database searches were conducted in June 2019 in SCOPUS, Web of Science, ProQuest Central and PsychInfo. Relevant articles for inclusion were identified using the following search term combination: Injur\* AND compensation OR insurance OR "injury claim\*" AND "legal representation" OR "procedural justice" OR "structured settlement" OR "claim\* settlement\*" OR lawyer\* OR legal OR "claim\* process\*" OR "claim\* management" OR liability OR tort OR litigation OR "compensation process\*". Limitations applied were: published during the period 2009 - 2019; peer reviewed; journal article; from Australia, the UK, the USA, Canada and the Netherlands; and English language.

### Search strategy

The database searches yielded 1250 references. After 498 duplicates were removed and eight references identified as books or book chapters, 744 articles remained. Discussions were held to determine agreement of inclusion and exclusion criteria, with authors (MF, EH, NG & NS) independently reviewing five papers for a title and abstract screening. Differences were debated, and consensus reached. Thus, further eligibility for inclusion (in addition to the database search limitations) encompassed: (1) personal injury compensation, excluding medical malpractice; (2) any injury compensation scheme; (3) any legal representation. One author (EH) then carried out the remaining title and abstract screening using the inclusion criteria to determine the relevant studies. A total of 680 articles were excluded during the first level screening process, generating 64 articles for full-text screening. The main reasons papers were removed from further consideration included a focus on: medical malpractice; damage to property; general legal practices not related to compensation claiming; consumer fraud; law reform; debates on culpability; and no focus on a compensation scheme or process.

From the 64 articles identified for a full-text review, the team reviewed the same three papers to ensure consistency of eligibility assessment, applying more detailed inclusion criteria that: (1) the article must consider legal representation or legal issues in a compensation claims process, and (2) be original empirical research or a review of existing literature. Articles were subsequently divided between the authors (MF, MD, EH, NS & NG) for independent review. Any articles that one author was uncertain about were cross-checked by at least one other author, with differences in judgement resolved through discussion and consensus.

Of the 64 articles for full-text review, 16 were excluded because they: did not consider legal representation (n=9); were a study protocol (n=1); looked at clinical negligence (n=1); focused on regulation, legislation and policy in general (n=3); focused on legal or insurance markets (n=2). A further 11 were excluded because they were discussion papers or opinion pieces. One author (EH) screened the final 37 reference lists of the included articles, revealing another five articles for inclusion. An expert panel was subsequently consulted, yielding one article and one report. All



reference lists were then screened for grey literature, with three reports identified. A further two reports that were used in a report (without a reference list) were located through a Google search. A final count of 49 references were included in this rapid review, including 43 journal articles and six reports. Figure one is an overview of the rapid review search strategy and management of papers.

## Overview & Appraisal of the Literature

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Of the 49 publications included, 34 were original research, nine were literature reviews, and six were reports. Academic papers came from five different countries: 30 from Australia, one from the United Kingdom, four from the United States, six from the Netherlands, and two from Canada. The six reports were all from Australia, including five from Queensland and one from New South Wales.

Regarding the 34 original studies, compensation claims predominantly related to motor vehicle or transport crashes ( $n=25$ ), and workers' compensation ( $n=12$ ). In terms of fault and no-fault CTP schemes, 20 papers considered claims within fault-based systems<sup>1</sup> (15 from NSW, one from the Australian Capital Territory (ACT), one from South Australia (SA), and three from the Netherlands), and eight considered no-fault claims (all from Victoria<sup>2</sup>). Papers focusing on WC schemes were from Australia ( $n=8$ ), the USA ( $n=3$ ), and Canada ( $n=1$ ). This research included a variety of injuries, predominately varied combinations or not specified, while seven focused on whiplash and whiplash associated disorders (WAD). Study samples varied greatly, between 17 and 68,991 participants, and were predominately focused on claimants' experiences and perspectives. Two papers only focused specifically on compensation claims handling personnel and lawyers (Ilan, 2011; Peters et al., 2017).

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<sup>1</sup> This represents the scheme at the time of the study. Both NSW and the ACT have since undergone reforms, with NSW moving to a hybrid system, and ACT becoming a no-fault scheme.

<sup>2</sup> The Victorian system was largely classified as a no-fault system across the literature, although some papers noted that it is a hybrid scheme which allows both no-fault and common law arrangements after a threshold for serious injury and fault is established (see for example Elbers et al., 2013c).



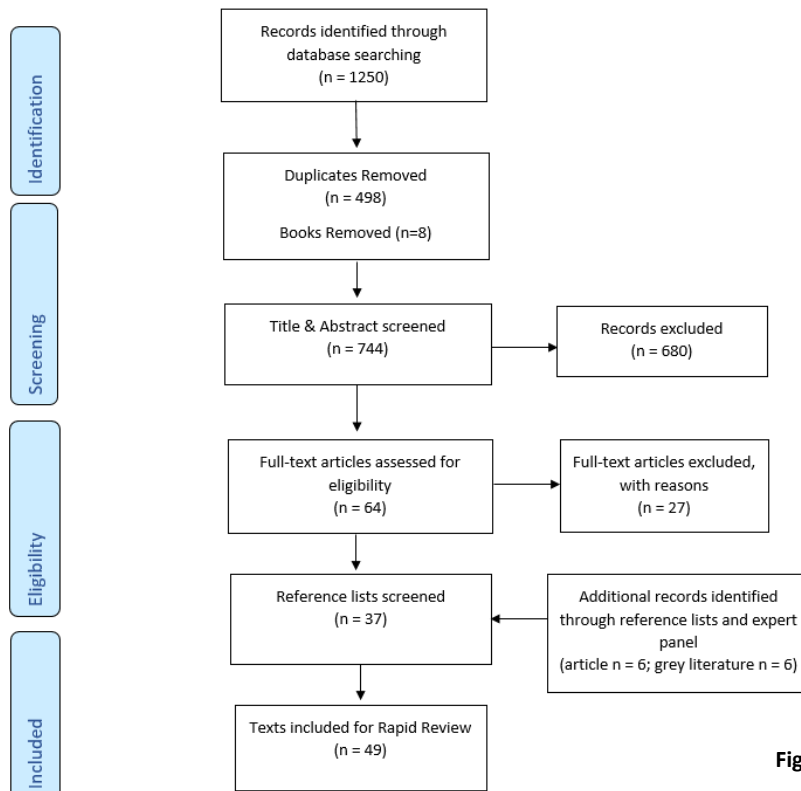


Figure 1: Rapid review search strategy

## Findings

### Two clear issues:

#### 1. Recovery is complex

#### 2. Research is impeded by methodological challenges

Two key issues emerged from the review: recovery for personal injury claimants is complex and contributing factors in compensation experiences and outcomes are multifactorial and multidirectional; and the study of compensation claimant outcomes is plagued by methodological challenges.

Arguably, these factors reinforce both the challenges and importance of understanding the complexity and nuances of associations between legal representation and claimant outcomes.

Multiple intersecting systems play a role in injury recovery and how claimants of compensation fair. Collie and colleagues (2019) highlight these as: societal systems, for example, economic and labour force conditions and attitudes; government systems such as policy, legal and regulatory frameworks; organisational and management systems including the decisions and actions taken across multiple levels of the compensation system; and personal systems including the immediate environment and functional and work status of the injured person.

Prolonged exposure to a scheme increases the likelihood of already vulnerable participants encountering stressful system complexities such as numerous medical assessments and the overall adversarial nature of the compensation process. These circumstances may lead to greater lawyer



involvement and/or be exacerbated by lawyer involvement (Casey, Feyer & Murgatroyd, et al, 2015; Gopinath et al., 2016; Grant & Studdert, 2009). There is also increasing consensus in the literature that claimants can become caught in a negative cycle tied to the compensation system, where one event complicates another.

Methodological challenges hamper development of the evidence base. Grant & Studdert (2009) have identified these as: 1) problems with measurement of factors between and within different insurance schemes; 2) failure to control selection bias in pre and post reform studies related to multiple legal, administrative and practice changes as part of the reform processes; and 3) a dichotomous binary (yes/no) when measuring lawyer involvement that is likely to conceal the more nuanced relationships with a combination of factors. Further, the measurement of legal exposure by claimants is often “ambiguous” and “insufficiently differentiated” in research designs making it difficult to pinpoint the nature and strength of relationships between lawyer representation and claimant outcome (Grant & Studdert, 2009, p.878). Some empirical studies have attempted to address these methodological challenges (Elbers et al, 2016; Grant, 2015; Murgatroyd, Harris, Tran & Cameron, 2016; Murgatroyd et al., 2017). *No causal factors* linking lawyer involvement and claimant outcomes have been found in the empirical studies cited in the current rapid review.

### **Question 1: What are the mechanisms and functions of claimant legal representation in personal injury claims?**

The first review question considers the evidence on the conditions of personal injury compensation, which might encourage legal representation and what functions lawyer use serves for claimants. This question covers structural and management mechanisms.

#### **1. Structural Mechanisms**

It is clear from this review that both fault and no-fault schemes are associated with positive and negative claimant outcomes and lawyer involvement. Schemes have unique complexities and nuances, which cannot be overlooked when considering claimant experiences and outcomes. Further, no-fault does not equate to no dispute or absence of lawyer involvement.

Many compensation schemes in Australia are ‘hybrid’ schemes, meaning they combine elements of no-fault compensation with common law damages (Coumarelos et al., 2017). Overall, the literature does not conclusively show that no-fault systems have better health outcomes for claimants. In studies comparing fault based and no-fault motor accident compensation schemes in NSW and Victoria respectively, fault-based claimants considered the process less fair (e.g. Elbers et al. 2016; Elbers 2013a). Importantly, claimants in both schemes who resorted to lawyers were equally satisfied with the process (Elbers et al, 2016). The mechanism in perceived unfairness was administratively linked, that is, it was associated with the claims handling process and related to experiences of claim lodgment, approvals and communications with claims mangers. The perception of objectivity of claims mangers, assessments and approval processes is important in whether claimants perceive the process to be fair and level of satisfaction (Elbers et al., 2016).

Fundamentally, compensation outcomes are systemically based and complicated by multiple actor interactions and interdependencies. In a foremost Australian study on the experiences of injured workers and families of workers’ compensation schemes, Collie and colleagues (2019) concluded

Irrespective of scheme and country, injured workers' negative experiences were related to problems with the system

Where transparency and accountability were perceived to be lacking claimants were highly motivated to seek the assistance of lawyers

Lawyer assessments of claim viability may be a better predictor of claimant outcomes

The intersecting procedures, actions and decisions of multiple actors are reflected in claimants' mixed experiences with insurers and lawyers

that multiple systemic factors were important contributors to experiences and recovery outcomes. Interactions among multiple actors, including lawyers, health professionals and employers, affected outcomes, although these were uniquely shaped by other systemic issues such as regulatory and organisational aspects of the scheme.

Likewise, Kilgour and colleagues (2015b) found injured workers' experiences systemically linked. These authors conducted an international systematic review of injured workers and their experiences interacting with health professionals and insurance personnel. Regardless of differences in schemes across and within countries, the findings consistently showed that injured workers' negative experiences were related to problems with the system. Moreover, where transparency and accountability were perceived to be lacking, particularly regarding entitlements, claimants were highly motivated to seek the assistance of lawyers.

**There also exists a market incentive for lawyer engagement in personal injury compensation**, which may contribute to an association with poor outcomes. It is reasonable to assume, as Grant and colleagues (2009) point out, that lawyer engagement will be linked to poor outcomes primarily because lawyers will be inclined to choose cases that they can win. Consequently, permanent or long-term impairment will be associated with lawyer engagement. This view is supported by Gopinath et al. (2016) and Ioannou et al. (2016).

In that respect, Grant and Studdert (2009) propose that a lawyer's assessment may be the best predictor of claimant outcomes:

*"The lawyer's assessment of claim viability may be an even more potent predictor of long-term prognoses than standardised clinical metrics of injury severity because the lawyer has the medical information at hand and can bring an experienced eye to particular features of the claimant's situation that may influence recovery prospects" (p. 880)*

## 2. Claims handling mechanisms

### a. Multiple actor interactions

Multiple actors and organisations play a role in recovery of injured persons. Importantly, these constitute a complex network of procedures, actions and decisions that can have both a negative and positive impact on process and outcome (Collie et al., 2019). Some claimants report problematic relationships with insurance personnel and dissatisfaction with procedures (Elbers et al., 2016), whereas others have positive experiences (Grant, 2015).

In a study by Grant (2015) involving CTP and WC claimants across Victoria, NSW and South Australia, participants had mixed experiences



of both CMs and lawyers, with negative experiences of CMs relating to expertise, mode of contact, and care and concern; and negative experiences of lawyers relating predominantly to timeliness and adequacy of advice. Similarly, Murgatroyd and colleagues (2011; 2015a) have reported mixed experiences of personal injury claimants regarding both insurers and lawyers. This suggests that claimants' experiences of compensation and their responses during the process are likely to be more multifaceted than has been revealed in research to date.

Negative experiences and dissatisfaction can motivate claimants to resort to lawyers, which arguably has not been fully appreciated in studies on claimant outcomes. For example, a mixed method study by Elbers and colleagues (2015) examining claimant stress with the NSW CTP fault-based scheme in Australia found an association between the presence of anxiety/depressive mood, dissatisfaction with the insurance company and lawyer engagement. Although the strongest factor in mood status was pain-catastrophising, dissatisfaction with procedures, actions decisions covered: (Elbers et al., 2015):

- lack of communication and lack of information
- delayed or denied compensation payments
- slow treatment approval
- complicated paperwork and
- discussions about causality and fault

**This review points to a need to understand lawyer engagement as an outcome of claims handling dynamics rather than focusing on its predictive influence on claimants' health**

From the US perspective on workers' compensation, Chibnall and Tait (2010) also argue that dissatisfaction with processes and treatment is a motivation for legal representation that has not been fully accounted for in studies to date but warrants attention due to the long-term compromises to adjustment. In their study, claimants who retained lawyers due to dissatisfaction, while seeking a coping mechanism for short-term relief of psychological distress during the claim process, experienced a deleterious impact on long-term adjustment after claim settlement.

### *b. Assessment processes*

Assessment processes, and particularly medico-legal assessments, have a bearing on claimant outcomes, mainly because of how these are handled and more so, how they are perceived. Assessments can generate stress and dissatisfaction and be a reason behind lawyer engagement. Importantly, lawyer involvement, when secondary to dissatisfaction, is associated with poor outcomes.

A qualitative study in Australia (Murgatroyd et al., 2011) on claimants of motor vehicle compensation showed many used lawyers to help them negotiate insurer and assessment processes and in response to frustration and dissatisfaction with having to repeatedly prove pain or disability. Notably, in this study, compensation claimants found recovery more difficult than those who did not seek compensation, particularly medico-legal assessments, which exacerbated their dislike of the claims handling process and motivated them to use a lawyer. Assessments were perceived by claimants as disbelief of their injury or disability and demands on them to prove their claim.

While the perception of distrust and dissatisfaction are mechanisms of lawyer use, lawyer engagement may also precipitate an increased number of medical assessments, exacerbating





claimant anxiety and stress related to the requirement to repeat their story numerous times, as well as delaying the claim settlement (Grant, 2015; Murgatroyd, Cameron & Harris, 2011).

The number of assessments and the weight and type of evidence used in decision-making processes can influence claimant experience. A systematic review of the association between compensation and chronic pain (Giummarra et al., 2016) found that the number of medical assessments, in addition to lawyer engagement, generates increased stress and by association, contributes to chronic pain. On the other hand, Elbers and colleagues (2012) found no conclusive evidence of an association between expert assessments or numbers of assessment and claimant recovery.

Conflicting assessments, particularly regarding injuries that are clinically less clear, may also exacerbate experiences of claimants. In an Australian study focused on time to claim closure in fault-based compensation (Gopinath et al. 2016), it was speculated that claimants with whiplash injuries could encounter conflicting medical opinions, unsuccessful therapies, and stigma or distrust in the process of documenting their suffering and disability. This, in turn could not only delay claim settlement but generate dissatisfaction and be a motivator for claimant response.

**This review refutes the idea of a straight-forward relationship between lawyer representation and claimant outcomes**

Tait and Chibnall (2016) found in a study of injured workers with low back pain in the US, that lawyer representation was linked to deep dissatisfaction with the claims process. Importantly, the authors concluded that lawyer representation, secondary to dissatisfaction with the process, might be more important in helping to explain poor outcomes. This suggests research needs to take account of lawyer use as an outcome rather than a predictor only.

The handling of assessments can influence the claimant's perception of the response to their non-pecuniary or emotional needs. Akkermans (2009) interviewed 61 personal injury claimants in the Netherlands about whether their needs and expectations were met in the compensation process. This study found that claimants were frustrated by what they perceived as impersonal relationships and a fixation of insurers on financial compensation in the claims process and neglect of their emotional needs. It concluded that current claims management practice does not pay sufficient attention to personal suffering and the need for justice. Yet, this could improve perceptions of fairness and satisfaction for claimants and could generate a less protracted and conflictual process (Akkermans, 2009; Casey, 2015b; Elbers, 2013).

A critical question raised by the review regarding assessment processes, and specifically medico-legal assessments, is whether a biomedical and financial focus is contributing to claimant distress (Akkermans, 2009; Bandong et al., 2018). Nevertheless, a stronger biopsychosocial approach is advocated, which acknowledges the multiple factors are many levels impacting claimant outcomes:

*Perhaps most importantly, the findings suggest the need to think differently about injury recovery, to move away from a deterministic and reductionist biomedical model of injury compensation to a holistic, connected and collaborative approach that recognises the influence of psychological and social factors on recovery, and the complex interplay between factors and system actors (Collie et al., 2019, p.62).*

### *c. Prolonged exposure to claims processes*

Prolonged exposure to compensation processes accompanied by lawyer engagement impacts claimant experiences and outcomes. However, the timing of lawyer engagement does vary across the lifespan. Further, protracted settlement time is not lawyer related only since co-occurring claimant vulnerabilities such as mental health are influential factors.

Based on the same CTP study cohort in NSW, Casey et al., (2015a, 2015b) found that shorter time to claim closure was associated with having no legal representation at baseline (2015a) and those with lawyer involvement were less likely to have their claim settled at three- and 12-months post injury than those who did not engage a lawyer (2015b). However, in this cohort other significant factors associated with protracted time in the compensation process also included greater disability and worse mental health at baseline, and a prior claim (Casey et al., 2015a). Gopinath (2016) found lawyer involvement a strong prognostic indicator of protracted time in a compensation system, especially in settling claims over 24 months. In their systematic review of injured workers' interactions with insurers in workers' compensation systems Kilgour et al. (2015b p.178) found that "resorting to legal assistance did not necessarily speed the resolution of contested decisions nor procure the justice that injured workers sought. Instead the duration of the claim could become prolonged and increase the suffering of the injured worker".

The trajectory of lawyer engagement across the lifespan of the claim has also been documented in a few studies. Gopinath (2016) found lawyer engagement in a cohort of road trauma injury claimants in NSW increased from 6% at 0-12months post claim, to 46% at 12-24 months and finally 62% over 24 months. Casey et al. (2015b) recorded lawyer engagement as 11% at baseline (i.e. at claim notification and within 3 months post injury), 25% at 12 months and 27% at 24 months (2015a). Claimants with legal representation at 12 months were more likely to have socio-economic disadvantage, have had a prior claim and a worse baseline health profile, compared to those without a lawyer. Interestingly, in this same study, helplessness and older age were associated with continued disability at 12 months and not lawyer involvement.

### *d. Scheme complexity*

Scheme complexity is both a mechanism and function of legal representation, and this is likely to be highly relevant to those who would be considered more vulnerable at time of injury. Some of the reasons given by participants in various studies for engaging a lawyer (Elbers et al, 2016; Grant, 2015; Ioannou et al., 2017; Kilgour et al, 2015b; Murgatroyd et al, 2011) include a need for assistance to: simplify and interpret claim processes; navigate the process; access expert advice; help to resolve disputes; access benefits and establish negligence; obtain access to information (Elbers, Akkermans, Cuijpers et al. 2013).



**When the system is perceived to be inherently challenging or difficult to understand, lawyers are often viewed as an ally in the pursuit of justice, or a way to avoid stress**

**Increasing the transparency of compensation processes may reduce motivations to engage lawyers**

Elbers' (2016) comparison of no-fault and fault based personal injury compensation systems in Australia also showed that the main reason why participants involved a lawyer was to deal with a complex process that was unfamiliar. This was also a key finding in CTP claimant research conducted by the Motor Accident Insurance Commission (MAIC) in Queensland (MAIC, 2017), which showed that lack of understanding of the process was a prime factor for engaging a lawyer.

When the system is perceived to be inherently challenging or difficult to understand, lawyers are often viewed as an ally in the pursuit of justice (Collie et al., 2019; Elbers, Akkermans, Cuijpers et al., 2013; Elbers et al., 2013b, Ioannou et al. 2016), or a way to avoid stress (MAIC, 2017). Moreover, lawyer-client interactions are often perceived to be considerably fairer than insurer-client interactions (Ioannou et al., 2016).

Once legal services are engaged, this can lead to further complexity, increased duration of claims, and disruption of communication processes. For example, a study conducted by Ioannou et al (2016) on road injury claimants in Victoria concludes that involvement with a lawyer may add to the challenging nature of the claim and perpetuate feelings of injustice leading to a negative compensation experience. The authors propose increasing the transparency of compensation processes to reduce the proportion of clients engaging a lawyer. Of note, in some jurisdictions in Australia, once a lawyer is engaged, all communication goes via the lawyer meaning the CMs or COs no longer communicate with the claimant directly (Murgatroyd et al., 2011).

Elbers et al. (2013) investigated claimants' perceptions of fairness of the compensation process in relation to the information they were provided, their interaction with lawyers and insurers, and the impact these factors had on their quality of life. In this study, lawyer engagement at 12 months was an independent predictor for anxiety, which was likely due to the more adversarial process accompanying lawyer involvement. Equally, the authors speculated that a complex and/or confusing claims process contributed to anxiety, which encouraged claimants to seek legal advice.

Regardless of the inconsistencies of evidence, a reoccurring theme in the research literature is claimants' perception of the stressfulness of the process. Indeed, injured claimants, their relatives, employers and healthcare providers all report compensation systems and processes difficult to navigate (Collie et al., 2019). There is some support in the literature for the "secondary victimisation hypothesis", that is, that claimants experience renewed victimisation related to the compensation process, including the attitudes and behaviour of personnel they interact with (Akkermans, 2009; Elbers et al, 2013; 2015).

In Akkermans' study (2009) with personal injury victims and their relatives in the Netherlands about needs and expectations, participants described their experience of the compensation process as:

**Experiencing distrust in the attitudes and behaviours of personnel and having no control in the process link to perceptions of injustice**

“the disaster after the disaster” (Akkermans, 2009, p.3). Participants perceived no control over the process; experienced events as stressful, offensive or degrading; and perceived the opposing party as impersonal and focused on minimising the amount of compensation as much as possible. Akkermans (2009, p.4) concludes that “procedural justice” determinants are vital in the claims handling process, including:

- claimants satisfied that they have had opportunity to recount their side of the story
- claimants’ participation in the decision-making process
- claimants satisfied they are treated with respect, trust, friendliness, openness
- confidence in the fairness and neutrality of experts involved

Arguably, transparency is a way to reduce complexity and improve compensation processes. Ioannou and colleagues (2016) are advocates for clearer and more accessible information, specifically about how to seek compensation and the types of entitlements and support available, as a way of avoiding the negative repercussions for claimants.

*Ensuring that communication style and claim-related processes are clear, accessible, and equitable for injured persons, particularly being sensitive to health literacy, beliefs, and behavior, could reduce the need to involve a lawyer, and facilitate recovery (Ioannou et al., 2016, p.387).*

In summary, there is sufficient evidence to indicate that there are multiple mechanisms at multiple levels of the compensation process impacting claimants’ experiences and outcomes. Further, these constitute potential tipping points for poor outcomes across the lifespan of the compensation process. However, the complexities and nuances of the claims handling process, involving multiple actors, are under-explored. This is a critical oversight given that dissatisfaction with claims processes is associated with lawyer use, and more so, those who are motivated are demonstrably different to other claimants and their adjustment is considerably impacted long-term (Chibnall & Tait, 2010).

**Question 2: What claimant characteristics are associated with legal representation in personal injury claims management?**

The presenting socio-economic vulnerabilities and capabilities of claimants, factor in recovery and outcomes and notably, are associated with lawyer use in personal injury compensation. People with poor baseline mental health, those with low socio-economic status and people from non-English speaking background (NESB) are over represented in terms of seeking legal assistance with their compensation, most likely because they are also more vulnerable to the stress of compensation. Socio-economic disadvantage also goes hand in hand with other legal problems, which exacerbates vulnerabilities.

Pre-injury morbidity in terms of mental health and chronic disease has been strongly associated with lawyer involvement (Casey et al, 2015; 2015a; 2015b; Elbers et al, 2013d; 2015; Murgatroyd,





2015) and evidence indicates that people with mental health problems may be over represented in compensation claims processes compared with other people in the community (Casey et al. 2015a, 2015b, 2015c; Casey et al. 2011). Several comparative studies led by Australian researchers have found mental health problems are higher in claimants of compensation at baseline and more specifically, a link between mental health problems and legal representation (Casey et al. 2015a, 2015b, 2015c; Casey et al. 2011). Chronic pain is also a motivator to seek legal representation (Dufton, 2012).

Baseline mental health problems are often a precursor for significantly poorer outcomes in compensable personal injury claimants. This was a key finding of an international systematic review (Elbers et al., 2013d). It is possible that claimants with poor health at baseline, particularly mental health, may be more vulnerable to the stressors of the compensation process (Grant & Studdert, 2009).

Lower socio-economic status and non-English speaking background (NESB) are also characteristic of claimants who use lawyers (Gravel et al., 2010; Murgatroyd, 2015; Tait et al., 2016). An Australian study by Murgatroyd et al (2017) of 452 admitted patients with motor vehicle related orthopaedic trauma showed that 80% of CTP and 48% of WC claimants were legally represented, with the sole predictor of lawyer use being socio-economic factors, namely, speaking a language other than English at home and lower household income. Several studies have found low socio-economic status at baseline a predictor of lawyer involvement, including those of Casey et al. (2015b) and Murgatroyd et al. (2017) in Australia, and Ilan (2011) in Ireland.

**Claimants with poor health, particularly mental health, may be more vulnerable to stressors of compensation process**

Several studies found that speaking a language other than English at home was associated with getting legal assistance with claims (Casey et al, 2015b; Murgatroyd et al., 2017), as well as being of African American race (Chibnall & Tate, 2010) or an immigrant (Gravel et al., 2010). A Canadian study by Gravel and colleagues (2010) on experiences of compensation processes for immigrant and non-immigrant workers found that immigrant workers were more likely to seek legal advice to deal with claims that were denied or contested by employers, or to help with getting their story understood. Interestingly, several studies specifically excluded people from NESB (Littleton, 2011; Casey et al., 2015b; Ioannou et al., 2016).

Higher vulnerabilities most likely mean legal representation is a coping mechanism. A review of literature on the management of low back injury workers' compensation claims (Tait & Chibnall, 2016) concluded that legal representation was a way of dealing with systemic stressors and generated emotional benefits for claimants. Hence, considering lawyer use as a coping mechanism to deal with the systemic stressors of compensation is plausible (Chibnall & Tait, 2010; Ioannou, 2017).

Research published from the Law and Justice Foundation of NSW's LAW Survey (Coumarelos et al., 2017), indicate that high vulnerability including socioeconomic disadvantage is also associated with a range of legal problems, not only personal injury. It is not surprising therefore that people with lower capability for dealing with the bureaucracy of a compensation claim would seek legal services to help them with this.

### Question 3: What are the benefits of and concerns about claimant legal representation in personal injury claims?

From the literature reviewed, the main benefits for claimants with lawyer engagement in claims processes can be summarised as: assistance provided by lawyers to understand the process; a respectful hearing; opportunity to tell their story; access to justice e.g. realising entitlements to benefits; and change to mitigate injustice (Elbers 2016; Grant, 2015; Iannou, 2016; Murgatroyd et al., 2011). Benefits of legal representation for CTP claimants in Queensland have included the ease of understanding the process and prompt organisation of treatment and rehabilitation (MAIC, 2017).

Notably, qualitative research on road trauma claimants' experiences and satisfaction of claims processes in Australia (Murgatroyd et al., 2015a) and the Netherlands (Elbers et al., 2012) has highlighted a communicative and empathic relationship as a key mechanism of positive claimant experiences. The Netherlands based qualitative study on the claimant-lawyer relationship conducted by Elbers and colleagues (2012) identified five desirable characteristics, including: communication, empathy, decisiveness, independence, and expertise. Furthermore, in this study, two benefits stand out in relation to claims handling processes, notably, empathy and independence and how these attributes were perceived by claimants. For example, the genuine interest of the lawyer in their personal story and the perceived independence from the insurer, which also included the expert assessments initiated by the lawyer, were positively regarded by claimants, although no conclusions could be drawn in relation to how this impacted their wellbeing. Hence, communication and relationships are potentially modifiable aspects of the compensation processes (Collie et al., 2019; Kilgour et al., 2015b).

#### ***Concerns regarding lawyer involvement for claimants' experiences and outcomes***

##### **Lawyer engagement concerns:**

- longer time to settlement
- prolonged return to work timeframes
- increased medical assessments
- high costs of medical assessments and lawyers
- increase in health service use
- generate perceptions of injustice due to nature of advice given
- lawyers receive too much of the settlement money

A general concern regarding lawyer engagement to highlight from the literature relates to the quality of advice. Grant (2015) examined transport and work-related claimant experiences of patients admitted to hospital in three Australian states, showing 48% of participants used a lawyer to deal with difficulties accessing information about entitlements and a perceived lack of transparency of claims officers (COs). In this study, there were highly variable experiences of both lawyers and COs, however, the negative experiences of lawyers were linked to a perception of poor quality service by lawyers who were not sufficiently capable and who provided inadequate advice.

A second concern relates to the idea of whether compensation sets up a negative cycle, which lawyer involvement is but one ingredient. This has been raised by Australian researchers Casey et al. (2015a) and Gopinath et al. (2016). Although lawyer involvement is associated with slower time to claim closure, the concern is that claimants become trapped in a challenging and



complex process from the outset, and that certain conditions lead some claimants to use lawyers to assist them, which in turn prolongs processes, add to complications and delays, anxiety, frustration and dissatisfaction and a detrimental cycle. Moreover, a stressful experience may potentially generate secondary psychological impacts for claimants (Ioannou et al., 2016).

The main concerns around lawyer involvement in compensation processes can be summarised as:

- longer time to settlement (Gopinath et al., 2016)
- prolonged return to work timeframes (Shields et al., 2017)
- increase in medical assessments and cost or time to approved treatment (Bandong et al., 2018)
- increase in health service use (Harris et al., 2009; Shields et al., 2017)
- higher perceptions of injustice due to the information and advice provided by lawyers (Ioannou et al., 2017)
- lawyers are costly and receive too much of the settlement money (MAIC, 2017)

## Conclusion

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Current evidence is inconsistent and ambiguous. There is no conclusive evidence regarding interaction of multiple mechanisms in claimant experiences and outcomes, or regarding the association between lawyer use and outcome. What is clear is that claimant outcomes are systemically based, that is, the contributing mechanisms are linked to structural issues embedded in scheme design, administrative issues embedded in the procedures, processes and decisions of a multiple agents, and claimant related factors in terms of the capabilities and vulnerabilities. Central to developing multilayered solutions to improve outcomes is to better understand the claims handling process and dynamics, including how lawyers represent an outcome of claimant experiences and complexity.

## Current Opportunities

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**Focus on addressing modifiable procedures impacting on perceptions of justice**

### ***What are current opportunities for improvements to claims processes?***

Despite the limitations, the current evidence supports the case that improvements in compensation processes are highly desirable to reduce claimant stress and facilitate claimants' satisfaction with the claim process and long-term outcomes. It also indicates that improvements need to target multiple mechanisms across many schematic, process and claimant dimensions, and importantly, potential starting points:

*In order to improve recovery and claim outcomes, compensation systems should focus on addressing modifiable procedures impacting on perceptions of justice, and continue to enhance the experience of procedural justice by tailoring procedures and interactions to reduce the stressful and adversarial nature of seeking compensation (Ioannou et al., 2016, p. 387)*

The immediate opportunity for claims managers to influence some of these mechanisms is to attend to the modifiable aspects of claims processes that impact on claimants' experiences and outcomes.



From a claims manager perspective, this review indicates that opportunities to modify or strengthen aspects of process include:

1. **Strengthen claimant-centred approaches** by a) focusing on holistic case management delivered by well trained and qualified staff with detailed knowledge of health issues, as well as advanced communication skills and an empathic approach may improve claimants' outcomes; b) improving the approachability of personnel involved in claims handling to build and sustain close relationships; which would also enable ongoing and timely attention to the emotional needs of claimants.
2. **Strengthen pathways for vulnerable claimants** – improved screening at claim notification those at risk of delayed recovery and facilitate early intervention.
  - Collecting bio-psychosocial information to predict longer term health profile might be useful to target interventions (Bandong et al., 2018; Casey et al., 2015a; Gopinath et al., 2016)
  - Once those at higher risk of delayed duration are identified it may be possible to target interventions to assist these claimants through any perceived complexities in the system, which may address underlying reasons for lawyer engagement
3. **Address needs of claimants with mental health problems** – at claim notification and throughout the process strengthen support that is aimed at increasing their resilience, e.g. provide extra assistance in navigating the essential parts of the claims process and minimising their exposure to the parts of the system known to be particularly stressful (Casey, et al., 2015a)
4. **Improve transparency and trust of processes** – strengthen claimant trust of processes by clear/accessible communication and information across the compensation lifespan; timely information sharing, and timely approvals (Ioannou et al., 2016); and managing perceptions and impacts of medico-legal and other assessments (Ioannou et al., 2016; Murgatroyd et al., 2011)

## Future Research

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Significant knowledge gaps remain regarding the mechanisms that contribute to claimant experiences and outcomes, both positive and less positive. Legal representation is one among multiple contributing factors in experiences and outcomes but the nuances of this within the claims handling process are under-explored.

Notably, despite the complexities of claims management and the network of actors involved, very little research has focused on the procedural aspects and the agency-based governance and decision processes that influence experiences and outcomes, and potentially motivate lawyer use.

Qualitative research focusing on street-level perspectives on claims management is warranted to unravel the complexity of multiple factors impacting claimant experiences and outcomes. Regarding lawyer use and claimant outcomes, two future lines of inquiry include developing evidence about:

- 1) the *procedural* and *process* mechanisms and *front-line practices* that constitute multi-agency governance of personal injury compensation and stimulate lawyer use; and
- 2) the *negotiations, decisions, dilemmas and discretions* of claims managers across the





compensation lifespan that shape experiences and perceptions of claimants, and potentially motivate lawyer use.

More broadly, these future directions could also gather evidence of good governance by examining: the processes and interactions between claims managers and claimants with varying needs that facilitate quality planning relationships and achieve positive experiences; and the boundary work between claims managers and other actors in the compensation process and their impacts on decisions about entitlement, access and approvals.


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## Appendix A: Rapid Review Literature, Summary

Author	Title	Country	Aim	Method/Design	Scheme or Accident Type
Akkermans, A. J. (2009).	Reforming personal injury claims settlement: paying more attention to emotional dimension promotes victim recovery.	Netherlands	Investigate the needs, expectations and experiences of victims and their relatives in the settlement of personal injury losses.	Qualitative study using 61 in-depth interviews with personal injury victims, victim's relatives and surviving relatives; literature review; and meetings of experts working in settlement practice.	Includes injuries cause by: traffic accidents, workplace accidents, medical negligence and violent crime.
Bandong, A. N., Leaver, A., Mackey, M., Ingram, R., Shearman, S., Chan, C., ... & Rebbeck, T. (2018).	Adoption and use of guidelines for whiplash: an audit of insurer and health professional practice in New South Wales, Australia.	Australia	Determine insurer and health professional compliance with recommendations of the 2014 NSW clinical practice guidelines for the management of acute Whiplash Associated Disorder (WAD); and explore factors related to adherence.	An observational study involving an audit of 288 randomly-selected claimant files from 4 insurance providers in NSW with WAD.	NSW CTP
Casey, P. P., Feyer, A. M., & Cameron, I. D. (2011).	Identifying predictors of early non-recovery in a compensation setting: The Whiplash Outcome Study.	Australia	Compare people with WAD who have recovered with those that have not, within 3 months of injury, and identify potential predictors of poorer health and non-recovery to inform claim screening processes.	Cross-sectional analysis of 246 people who sustained a WAD and lodged a claim within 3 months of injury.	NSW CTP
Casey, P. P., Feyer, A. M., & Cameron, I. D. (2015 a).	Associations with duration of compensation following whiplash sustained in a motor vehicle crash.	Australia	Identify the associations of extended time receiving compensation benefits with the aim of developing a prognostic model that predicts time to claim closure.	Prospective cohort study of 246 people with WAD.	NSW CTP
Casey, P. P., Feyer, A. M., & Cameron, I. D. (2015 b)	Associations with legal representation in a compensation setting 12 months after injury.	Australia	Compare claimants with WAD between those with and without legal involvement in their compensation claim and identify associations with legal involvement at 12 months post injury; and longer-term disability.	Inception cohort study of 246 participants with WAD.	NSW CTP
Casey, P. P., Feyer, A. M., & Cameron, I. D. (2015 c)	Course of recovery for whiplash associated disorders in a compensation setting.	Australia	Identify recovery trajectories based on disability, pain catastrophizing and mental health; examine developmental linkages between the trajectories.	Longitudinal cohort study of 246 participants with WAD after a MV (motor vehicle) related injury, with follow-up of 24 months.	NSW CTP
Chibnall, J. T., & Tait, R. C. (2010).	Legal representation and dissatisfaction with workers' compensation: Implications for claimant adjustment.	USA	Examine the relationship between lawyer retention and adjustment outcomes for Workers' Compensation low back claimants at post-settlement and long-term follow-up.	Comparative longitudinal study, n=1,464 participants at 21 months post-claim settlement, n=371 participants at 72 months post-claim settlement.	Workers' Compensation (WC)

Collie, A., Newnam, S., Keleher, H., Petersen, A., Kosny, A., Vogel, A. P., & Thompson, J. (2019).	Recovery Within Injury Compensation Schemes: A System Mapping Study.	Australia - Victoria + Commonwealth WC	Characterise relationships and interactions occurring in three Australian injury compensation systems to identify the range of factors that impact on injury recovery, and the interactions and inter-relationships between these factors	Qualitative research. Data collected directly from 17 injured workers and their family members via qualitative interviews.	Commonwealth WC; CTP Victoria; Victorian WC
Coumarelos, C., Grant, G.M. & Wei, Z. (2017)	Personal injury problems: new insights from the Legal Australia-wide Survey.	Australia	To shed light on four different types of personal injury problems that are likely to be 'justiciable' or have legal aspects – problems associated with motor vehicle injury, work-related injury, product injury and injury due to other negligence.	Uses data from the Legal Australia-Wide (LAW) Survey	
Dufton, J. A., Bruni, S. G., Kopec, J. A., Cassidy, J. D., & Quon, J. (2012).	Delayed recovery in patients with whiplash-associated disorders.	Canada	Identify potential predictors of delayed recovery in WAD based on analysis of clinical, treatment-related and non-clinical-related variables	Retrospective review of a large database of a national network of physiotherapy and rehabilitation service providers; 5581 individuals injured in MVC.	Motor Vehicle Crash (MVC)
Elbers, N. A., Akkermans, A. J., Cuijpers, P., & Bruinvels, D. J. (2012a).	What do we know about the well-being of claimants in compensation processes?	Netherlands	Explore the literature for 3 themes: 1) Is being involved in a compensation process bad for health? 2) What is causing the negative compensation effect? 3) How can claimants' wellbeing be improved?	Systematic review	
Elbers, N. A., Akkermans, A. J., Cuijpers, P., & Bruinvels, D. J. (2013a).	Effectiveness of a web-based intervention for injured claimants: a randomized controlled trial.	Netherlands	To develop a web-based intervention to improve feelings of control (empowerment), self-efficacy, health status, perceived justice, knowledge, and the ability to work for injured claimants in order to facilitate recovery.	Randomized controlled trial of 176 participants.	MVC, Dutch fault-based scheme
Elbers, N. A., Akkermans, A. J., Cuijpers, P., & Bruinvels, D. J. (2013b).	Procedural justice and quality of life in compensation processes.	Netherlands	Investigate claimants' perceived fairness of the compensation process; provided information; interaction with lawyers and insurers; in relation to quality of life.	Observational study using online questionnaire with 176 participants injured in traffic accidents	Traffic compensation, Dutch fault-based
Elbers, N. A., Akkermans, A. J., Lockwood, K., Craig, A., & Cameron, I. D. (2015).	Factors that challenge health for people involved in the compensation process following a motor vehicle crash: a longitudinal study.	Australia	Investigate whether the interaction with the insurance agency is associated with anxiety and explore qualitatively aspects of dissatisfaction with the compensation process	Mixed method study. Phone interviews with 416 participants were conducted at 2, 12 and 24 months after the MVC.	NSW CTP
Elbers, N. A., Collie, A., Hogg-Johnson, S., Lippel, K., Lockwood, K., & Cameron, I. D. (2016).	Differences in perceived fairness and health outcomes in two injury compensation systems: a comparative study.	Australia	Compare perceived fairness and recovery of claimants in the fault-based compensation system in New South Wales (NSW) to the no-fault system in Victoria, Australia.	Comparative study using telephone interviews to complete questionnaire and health outcomes measure, n=182 participants.	NSW CTP and Victorian CTP



Elbers, N. A., Cuijpers, P., Akkermans, A. J., Collie, A., Ruseckaite, R., & Bruinvels, D. J. (2013c).	Do claim factors predict health care utilization after transport accidents?	Australia (Dutch collaboration)	Investigate whether claim factors, such as no-fault versus common law claims, the number of independent medical assessments, and legal disputes, predict health care utilization after transport accidents.	Cross-sectional analysis of a cohort study, n= 68,911.	Victorian CTP
Elbers, N. A., Hulst, L., Cuijpers, P., Akkermans, A. J., & Bruinvels, D. J. (2013d).	Do compensation processes impair mental health? A meta-analysis.	Netherlands	Conduct a systematic review and meta-analysis to draw a general conclusion about the effect of compensation procedures on mental health of trauma victims	Meta-analysis of 10 prospective cohort studies addressing compensation and mental health after traffic accidents, occupational accidents or medical errors.	
Elbers, N. A., van Wees, K. A., Akkermans, A. J., Cuijpers, P., & Bruinvels, D. J. (2012b).	Exploring Lawyer–Client Interaction.	Netherlands	Identify desirable characteristics for lawyers involved in compensation claims	Qualitative study; interviews with 21 victims of MVC.	MVC
Giummarra, M. J., Cameron, P. A., Ponsford, J., Ioannou, L., Gibson, S. J., Jennings, P. A., & Georgiou-Karistianis, N. (2017).	Return to work after traumatic injury: increased work-related disability in injured persons receiving financial compensation is mediated by perceived injustice.	Australia	Investigate whether the relationship between receiving compensation and return to work (RTW) was associated with elevated symptoms of psychological distress (i.e., anxiety, depression, and posttraumatic stress disorder) and perceived injustice.	Quantitative cross-sectional study of 364 participants who sustained an MVC injury.	MVC
Giummarra, M. J., Ioannou, L., Ponsford, J., Cameron, P. A., Jennings, P. A., Gibson, S. J., & Georgiou-Karistianis, N. (2016).	Chronic pain following motor vehicle collision.	Australia	Evaluate the evidence for the relationship between compensation and chronic pain following MVC within a biopsychosocial framework.	Systematic Review of 27 studies.	
Gopinath, B., Elbers, N. A., Jagnoor, J., Harris, I. A., Nicholas, M., Casey, P., ... & Cameron, I. D. (2016).	Predictors of time to claim closure following a non-catastrophic injury sustained in a motor vehicle crash: a prospective cohort study.	Australia	Prospectively assess factors that could influence time to claim closure (socio-demographic, compensation-related, health, psychosocial and pre-injury factors) over 24 months following a non-catastrophic injury.	Prospective cohort study of 364 participants involved in a compensation scheme following MVC.	NSW CTP
Grant, G. M. (2015).	Claiming justice in injury law	Australia	Explore claimant experiences in compensation processes of patients admitted to hospital with injuries in three states	Longitudinal cohort study of 332 participants. Combined qualitative and quantitative data. Follow-up interviews and data collection took place at 3, 12, 24 and 72 months post-injury.	CTP and WC in NSW, Victoria and South Australia
Grant, G., & Studdert, D. M. (2009)	Poisoned Chalice-A Critical Analysis of the Evidence Linking	Australia	Critically review research into the compensation–health relationship.	Literature review	





	Personal Injury Compensation Processes with Adverse Health Outcomes.				
Gravel, S., Vissandjee, B., Lippel, K., Brodeur, J. M., Patry, L., & Champagne, F. (2010).	Ethics and the compensation of immigrant workers for work-related injuries and illnesses.	Canada	Examine the compensation process for work-related injuries and illnesses by assessing the trajectories of a sample of immigrant and non-immigrant workers in Montreal	Secondary comparative analysis of qualitative data obtained from a previous study using a convenience sample, n = 104 participants.	WC, Montreal, Canada
Harris, I. A., Murgatroyd, D. F., Cameron, I. D., Young, J. M., & Solomon, M. J. (2009).	The effect of compensation on health care utilisation in a trauma cohort.	Australia	Determine whether there is an association between compensation factors and health care utilisation following major trauma.	Retrospective cohort study within a major metropolitan trauma centre, n=355 participants.	NSW CTP and WC
Harris, I. A., Young, J. M., Jalaludin, B. B., & Solomon, M. J. (2011).	Predictors of neck pain after motor vehicle collisions: a prospective survey.	Australia	Identify possible psychosocial predictors of neck pain in patients with acute injuries following motor vehicle trauma.	Prospective survey, n=306 participants.	MVC
Ilan, J. (2011).	The commodification of compensation? personal injuries claims in an age of consumption.	UK	Probe the "real-politik" of compensation seeking and responses within the context of road negligence claims against Irish Local Authorities	30 ethnographic interviews with claims handlers and personal injury lawyers combining open semi-structured interviews with periods of observation.	road negligence claims against Irish Local Authorities
Ioannou, L., Braaf, S., Cameron, P., Gibson, S. J., Ponsford, J., Jennings, P. A., ... & Giummarra, M. J. (2016).	Compensation system experience at 12 months after road or workplace injury in Victoria, Australia.	Australia	Examine compensation system experiences in compensation claimants in Victoria, Australia, and explore the relationship between these experiences and injury outcomes.	Quantitative cross-sectional study recruiting from TAC and Worksafe; n=160 participants	Victorian CTP and WC
Ioannou, L. J., Cameron, P. A., Gibson, S. J., Gabbe, B. J., Ponsford, J., Jennings, P. A., ... & Giummarra, M. J. (2017).	Traumatic injury and perceived injustice: Fault attributions matter in a "no-fault" compensation state.	Australia	Determine whether characteristics at the time of injury, or hospital discharge (e.g., injury severity, fault, compensation status), could identify which patients would have higher perceptions of injustice, or whether these beliefs emerged alongside the persistence and difficulty coping with pain; disability and not returning to work; and mental health symptoms over time.	Observational cohort study; n=433 participants.	Victorian CTP and WC
Kilgour, E., Kosny, A., McKenzie, D., & Collie, A. (2015).	Interactions between injured workers and insurers in workers' compensation systems: a systematic review of qualitative research literature.	Australia -	Systematic review to identify and synthesize findings from peer reviewed qualitative studies that investigated injured workers interactions with insurers in workers' compensation systems	Systematic review of 13 articles.	

Littleton, S. M., Cameron, I. D., Poustie, S. J., Hughes, D. C., Robinson, B. J., Neeman, T., & Smith, P. N. (2011).	The association of compensation on longer term health status for people with musculoskeletal injuries following road traffic crashes: emergency department inception cohort study.	Australia	Compare the health status of people claiming compensation for injuries sustained in MVC, with people who do not claim compensation.	Prospective cohort study of people presenting to the emergency department with mild to moderate musculoskeletal injury following RTC, n= 95 participants.	ACT CTP
Murgatroyd, D. F., Cameron, I. D., & Harris, I. A. (2011).	Understanding the effect of compensation on recovery from severe motor vehicle crash injuries: a qualitative study.	Australia	Explore the factors that influence recovery from serious injuries sustained in MVC particularly differences between those with compensable and non-compensable injuries	Qualitative study using focus group methods and grounded theory analytic techniques, n=34 participants.	NSW CTP and WC
Murgatroyd, D. F., Casey, P. P., Cameron, I. D., & Harris, I. A. (2015b)	The effect of financial compensation on health outcomes following musculoskeletal injury: systematic review.	Australia	Systematic review of prospective studies to identify associations between compensation related factors and health outcomes following musculoskeletal injury from prognostic and/or intervention studies.	Systematic Review of 29 articles.	
Murgatroyd, D. F., Harris, I. A., Tran, Y., & Cameron, I. D. (2016).	Predictors of return to work following motor vehicle related orthopaedic trauma.	Australia	Determine the predictors (including compensation related factors) of time to RTW following motor vehicle related orthopaedic trauma.	Data collected by written questionnaire in person at baseline within 2 weeks of injury with follow-up at 6, 12 and 24 months. N=452 participants.	NSW CTP
Murgatroyd, D., Harris, I. A., Chen, J. S., Adie, S., Mittal, R., & Cameron, I. D. (2017).	Predictors of seeking financial compensation following motor vehicle trauma: inception cohort with moderate to severe musculoskeletal injuries.	Australia	Investigate the predictors of seeking financial compensation, namely making a claim and seeking legal representation, following motor vehicle related orthopaedic trauma	Inception cohort study. Data were collected at baseline within two weeks of injury. Participants were followed up at 6, 12 and 24 months. N=452 participants.	NSW CTP
Murgatroyd, D., Lockwood, K., Garth, B., & Cameron, I. D. (2015a).	The perceptions and experiences of people injured in motor vehicle crashes in a compensation scheme setting: a qualitative study.	Australia	Explore participants' perceptions and experiences of the claims process after sustaining a compensable injury in a MVC. Why do people seek legal representation? How can people be assisted following a compensable injury and their experience with the claims process improved?	Qualitative study - five focus groups with a total of 32 participants who had sustained mild to moderate injuries in a MVC.	NSW CTP
Peters, S. E., Coppieters, M. W., Ross, M., & Johnston, V. (2017).	Perspectives from employers, insurers, lawyers and healthcare providers on factors that influence workers' return-to-work following surgery for non-traumatic upper extremity conditions.	Australia	Determine stakeholder's perspectives on factors that influence a worker's ability to RTW following surgery for a non-traumatic upper extremity conditions (such as carpal tunnel syndrome and tendinopathies of the shoulder, wrist and hand, which account for a significant proportion of these upper extremity conditions).	A questionnaire completed by RTW stakeholders, n=1011 participants.	WC, Australia



Schaafsma, F., De Wolf, A., Kayaian, A., & Cameron, I. D. (2012).	Changing insurance company claims handling processes improves some outcomes for people injured in road traffic crashes.	Australia	Compare an approach towards claims handling for people injured in road traffic accidents with the standard approach and analyse potential individual predictors for better health recovery and return to work 7 months post-injury.	Evaluation of a quality improvement activity within an insurance company, n=231 participants at initial timepoint, n=186 participants at 7 months.	NSW CTP
Shields, E., Thirukumaran, C., Noyes, K., & Voloshin, I. (2017).	A review of a workers' compensation database 2003 to 2013: patient factors influencing return to work and cumulative financial claims after rotator cuff repair in geriatric workers' compensation cases.	USA	Analyse a database of geriatric workers' compensation patients after surgical repair of the rotator cuff and identify both medical and nonmedical patient factors that influence the time it takes for them to return to work at full duty, including a comparison of arthroscopic and open techniques.	Compensation database interrogated, n=1903 claims.	WC
Shields, E., Thirukumaran, C., Thorsness, R., Noyes, K., & Voloshin, I. (2016).	Patient factors influencing return to work and cumulative financial claims after clavicle fractures in workers' compensation cases.	USA	Analyse workers' compensation patients after surgical or nonoperative treatment of clavicle fractures to identify factors that influence the time for return to work and total health care reimbursement claims	Retrospective prognosis study. Query of the Workers' Compensation national database. N=169 claims.	WC
Spearing, N. M., & Connelly, L. B. (2011).	Is compensation "bad for health"? A systematic meta-review.	Australia	Evaluate the quality of the empirical evidence of a negative correlation between injury compensation and health outcomes, based on systematic reviews involving both verifiable and non-verifiable injuries.	Systematic meta-review of 11 systematic reviews	
Spearing, N. M., Connelly, L. B., Gargett, S., & Sterling, M. (2012).	Does injury compensation lead to worse health after whiplash? A systematic review.	Australia	Systematically review the evidence on the "compensation hypothesis" (that compensation does more harm than good) in relation to compensable whiplash injuries.	Systematic review of 11 articles.	
Tait, R. C., & Chibnall, J. T. (2016).	Management of occupational low back pain: A case study of the Missouri workers' compensation system.	USA	Review literature on management of low back injury claims in Workers' Compensation	Literature review	WC