Insurance workers and physiotherapists perceptions of their roles in the management of workers with injuries in the Western Australian workers’ compensation system

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Abstract

Background
Insurance workers’ and physiotherapists’ are important stakeholders in the rehabilitation of workers with an injury and subsequent musculoskeletal pain. Understanding perceptions of roles may facilitate communication between these stakeholders.

Objective
Increase knowledge around, (i) the self-perception of and (ii) the external perception of the insurance workers’ and physiotherapists’ roles in the management of a worker with an injury in an Australian workers’ compensation environment.

Methods
A cross-sectional study assessed the perceptions of insurance workers and physiotherapists related to the roles of these two professions in managing a worker with an injury via questionnaire. Respondents were also asked about potential communication barriers.

Results
Insurance workers (n=48) and physiotherapists (n=80) reported contrasting role perceptions, with their perception of the other profession leaning towards negative attributes. There was greater alignment of their beliefs of roles in the ‘ideal’ situation. The perception of barriers to communication also differed between the two professions. Effective and efficient communication was identified as a central component of mismatched role perceptions between stakeholders, but recognised as a critical attribute of ‘ideal’ stakeholder roles.
Conclusion

Insurance workers’ and physiotherapists’ self-perception of their roles differs from external perceptions. This information highlights the importance of a shared understanding of stakeholder roles in the management of a worker with an injury.

Key Words

perception, communication, stakeholders, work injury
1. Introduction

Significant individual and societal burden arises from work-related musculoskeletal pain in Australia (1-4) and internationally (5). For example, in the Western Australian workers’ compensation system 2013/14 figures show musculoskeletal pain (injury of joints/ligaments/muscles/tendons) account for 52% of lost time claims (6). Despite significant investment of resources, the average time off work for these claims is increasing (6). Trends of increasing burden are commonplace elsewhere in Australia (7) and internationally (8).

There have been a number of initiatives to help optimize management of work-related musculoskeletal pain for workers in Australia. One recent initiative is the publication of the “Clinical Framework for the Delivery of Health Services” (9), a widely endorsed practice framework for management of work-related musculoskeletal pain. This framework outlines five key principles for the management of a worker with an injury that reflect current best evidence, and there is preliminary evidence of improved health outcomes when management is guided by this framework (10). A key theme across these principles is communication between stakeholders. However, a recent survey of workers’ compensation stakeholders in Western Australia demonstrated a generally poor awareness and low implementation of the framework’s principles across stakeholders (11). While there is commonly a time lag for the uptake of clinical guidelines into clinical practice, there are also often other barriers to the implementation of such guidelines (12).

Many stakeholders are involved in the management of individuals with work-related musculoskeletal pain, which in itself can be a barrier to the efficient management of
injured workers (13-16). Effective communication amongst these stakeholders can be a factor associated with improved work rehabilitation outcomes (16-20), particularly in complex cases and/or where there is delayed recovery. Conversely, poor communication can be a factor leading to dissonance between stakeholders, resulting in poorer outcomes (17, 21). Knowledge areas requiring shared understanding between stakeholders that may be barriers to effective communication include: injury management from contrasting biomedical versus biopsychosocial perspectives (22); understanding jurisdictional legislation (23); and the understanding of different stakeholder roles (21, 24, 25).

In a typical musculoskeletal workers’ compensation claim in Western Australia, stakeholders commonly include the worker with an injury, the employer, the insurer, a medical practitioner and a physiotherapist. Other health and non-health practitioners may also become involved. It is recognized that understanding the perspective of a worker with an injury is central to successful rehabilitation (26). However, the perspectives of other stakeholders are also important. The focus of this paper is the roles of insurance workers and physiotherapists. Insurance workers are highly involved in the management of all workers with a compensable injury (21). In Australia, they coordinate multiple facets of a workers compensation claim to facilitate optimal return to work outcomes. This may include contact with a worker with an injury to explain the process of a compensation claim, authorization of and/or referral to both specialist medical services and vocational rehabilitation services, participation in case conferences to assist in co-ordination of rehabilitation efforts, and contact with the employer. They do not necessarily have specific medical training as a precursor to entering this role, and it is primarily an administrative role in nature. Physiotherapists
are also key stakeholders as they may have regular involvement from the early clinical management to the work rehabilitation of a worker with an injury (27-29). In Western Australia, physiotherapists account for more occasions of service with injured workers than general practitioners (30).

Little is known about self-perceptions (own role) and external perceptions (role of others) of different stakeholders involved in the management of a worker with an injury. There is some research that has identified that physiotherapists perceive a lack of appreciation by other stakeholders for their role and potential contribution in setting return to work guidelines (31). However, other stakeholder perceptions of the role physiotherapists are unknown. Similarly, little is known about self-perceptions and external perceptions of the role of insurance workers.

This study aimed to increase knowledge around, (i) the self-perception of and (ii) the external perception of the roles of different stakeholders (insurance workers’ and physiotherapists’) in the management of workers with an injury in the Western Australian workers’ compensation system. Greater understanding of role perceptions may provide a basis for enhancing stakeholder communication and ultimately the management of workers with musculoskeletal pain.
2. Methods

2.1. Setting

This study involved insurance workers’ and physiotherapists’ who work in the Western Australian workers’ compensation system. In Australia there are 11 separate workers’ compensation systems, represented by individual state/territory legislature with additional systems for specific occupational groups (e.g. seafarers, defence force personnel) (32). The Western Australian system is a statutory, risk based, no fault system with state government oversight. All physiotherapists’ registered to practice in Western Australia are eligible to be service providers, with no requirement for education specific to the workers’ compensation sector. There is no requirement for a health professional background for insurance workers.

2.2. Data Collection

Insurance workers’ and physiotherapists’ in the Western Australian workers’ compensation system provided their self-perceptions and external perceptions on the roles of different stakeholders. Additionally, both stakeholders provided perceptions of barriers to communication between stakeholders.

Data were collected as part of a larger online questionnaire (23). The part of the questionnaire related to this project involved structured questions (questions with a closed set of responses) around commonly perceived positive and negative attributes of the roles of insurance workers’ and physiotherapists’. This included; (i) perceived attributes of stakeholders based on ‘Present Experience’, and (ii) perceived attributes of these roles in the ‘Ideal Situation’. A question about commonly identified barriers to stakeholder communication was also developed.
The structured questions for this study were developed using a two-step approach. Firstly, key themes were identified through focus groups, one comprising of five insurance workers’ and another comprising five physiotherapists’. Participants had varying levels of experience within the Western Australian workers’ compensation system. The ten most commonly identified: ‘Present Experience’ attributes; ‘Ideal Situation’ attributes; and barriers to communication were then collated and ranked to be used as answer options for the questions. In the second phase of questionnaire development, the questionnaire was piloted on two experienced insurance workers’ and two experienced physiotherapists’ to ensure face validity.

The final questions and answer options are shown in Table 1. All potential responses related to ‘The Ideal Situation’ were written to reflect positive attributes on the premise that negative attributes would not be selected. The questionnaire was made available using Qualtrics online software (www.qualtrics.com). Demographic data (age, gender, occupation, education level and experience in the workers’ compensation sector) was collected along with responses to the developed questions.

Potential respondents were invited to participate via email advertisement to physiotherapists’ through the Western Australian branch of the Australian Physiotherapy Association, and for insurance workers via email to staff members of insurance providers. It is not possible to provide exact numbers of the eligible physiotherapists’ and insurance workers’ who were invited to participate. This study used a pragmatic approach where all insurance companies in the Western Australian workers’ compensation system were asked to invite their insurance workers’ to
participate in an anonymous survey. An estimate of the total number of insurance workers in the Western Australian workers’ compensation system who could have received the study invitation was approximately 150-200, but we have no way of knowing how many actually received the survey. Similarly, while we know there were approximately 1400 physiotherapists in Western Australia who were sent the email, it is unknown how many of these regularly treat workers’ compensation patients and would have therefore been eligible to participate in this study.

2.3. Ethics Statement

Curtin University Human Research Ethics Committee provided consent for this project (Protocol Approval PT0171). Subjects provided informed consent to participate in the study by ticking a box on the initial page of the online questionnaire, which was required to proceed to the actual questionnaire.

2.4. Analysis

Descriptive statistics for the demographic data were performed in Stata 13.0. Qualtrics software was used to cross tabulate the questionnaire responses between insurance workers’ and physiotherapists’. Chi-Square analysis was performed for role perceptions, barriers to communication, using a p value of .05. Statistical calculation was set to account for multiple responses for questions where participants were asked to select their top three choices. Radar graphs were used to display participant responses, allowing for visual comparison between insurance workers’ and physiotherapists’ responses.
3. Results

Forty eight insurance workers’ and 80 physiotherapists’ participated in the online questionnaire. Table 2 presents the demographics of the participants. Compared with physiotherapists’, insurance workers’ had greater female representation, were younger, had undertaken less university education, and had less average years of job experience.

3.1. The Role of Physiotherapists’

In terms of ‘Present Experience’ (Figure 1a) there was a significant contrast in the insurance workers’ perception versus physiotherapists’ self-perception of the role of physiotherapists’ ($\chi^2=113.39, p<.01$). Insurance workers’ perceptions were generally more negative, whereas physiotherapists’ self-perceptions were generally more positive. For example insurance workers’ commonly selected responses aligned to a lack of a clear treatment plan, poor communication and lack of functional treatment approach. In contrast, physiotherapists’ perceived that they had a functional outlook by tailoring treatment programs for return to work, appropriately progressed in the provision of treatment and provided education/advice.

In terms of ‘The Ideal’, there was still a difference between both group’s perceptions ($\chi^2=37.85, p<.01$), but the overall response patterns appear to be more aligned (Figure 1b). Most notably, insurance workers strongly identified the need for physiotherapists’ to provide a clear treatment plan.

3.2. The Role of Insurance Workers’
In terms of ‘Present Experience’ there was again quite a wide variation in the response frequency between physiotherapists’ perceptions and insurance workers’ self-perception (Figure 2a, $\chi^2=72.29$, $p<.01$). Lack of communication was a common perception of the physiotherapists’, as was perceived inconsistency in decision-making. Insurance workers’ perceived their role to be aligned with guiding return to work, but felt they were overloaded in terms of work demands.

For ‘The Ideal’, perceptions were much more closely aligned, but there were differences between the groups (Figure 2b, $\chi^2=40.19$, $p<.01$). These related to insurance workers’ perceiving themselves to be educators of other stakeholders and relationship builders, which were not selected as commonly by physiotherapists’.

### 3.3. Barriers For Communication

Responses for communication barriers are shown in Figure 3. Physiotherapists’ more frequently selected lack of medical knowledge, conflicting advice and lack of feedback compared to insurance workers, who most commonly selected lack of understanding of the system and caseload as barriers ($\chi^2=23.94$, $p<.01$).
4. Discussion

Insurance workers’ and physiotherapists’ are key stakeholders in the management of workers’ with musculoskeletal pain in the workers’ compensation environment (21, 28, 29). This study provides novel insights into external and self-perceptions of stakeholder roles within the Western Australian workers’ compensation system. It also identifies perceived barriers to communication between stakeholders. Data were gathered from a specific jurisdiction, making the findings highly relevant to that jurisdiction. While there are differences in systems across Australian workers’ compensation jurisdictions (32), the similarities in these systems suggest that the patterns identified in this study are likely to be relevant in other Australian states. Further, communication has been identified as an issue internationally (16-20) and as such the findings are relevant in an international context despite potential differences in the nature of insurance workers’ job descriptions and qualifications in other countries.

4.1. Insurance Workers’ and Physiotherapists’ Roles

There were mismatches between external and self-perceptions of both professions in relation to ‘Present Experience’. External perceptions were generally more negative, whereas self-perceptions were generally more positive. External perception of poor treatment planning and lack of a functional approach by physiotherapists’ was one important finding (Figure 1a). Previous research has identified poor quality of treatment plans provided to insurers’ by physiotherapists’, particularly around return to work goals (33). This perception is also supported by the limited awareness and engagement of physiotherapists’ with current evidence based guidelines in a recent
survey of stakeholders in the Western Australian workers’ compensation system (11). Conversely, other literature suggests physiotherapists’ have the capacity to focus on return to work and functional work restoration, and as a profession are well placed to assist with return to work recommendations and planning (31). This is consistent with physiotherapists’ perceptions of their present role in this study. Physiotherapists’ should contribute to return to work recommendations’ consistent with current guidelines (34), particularly given their close interaction with a worker with an injury around symptoms and physical capacity (35). This is not the present perception of insurance workers’ however. This may be an indication of either a lack of understanding of the role of physiotherapists’, or experience of some instances of poor physiotherapy practice behaviours, or most likely, both.

Insurance workers’ play an important role in return to work planning, stakeholder education and building relationships (21). These roles were frequently identified by insurance workers’ in relation to their ‘Present Experience’, but not by physiotherapists’ (Figure 2a). Physiotherapists selected more negative attributes, which is possibly reflected by the insurance workers’ own perceptions of being overloaded (Figure 2a). Overloading may be a factor in the breakdown of role fulfillment (36), and may negatively affect communication. Other potential influences on these disparate perceptions include: biomedical versus biopsychosocial views of injury management (11, 34); differences in injury management knowledge between stakeholders (11) and; differences in understanding of jurisdictional legislation between stakeholders (13). As insurance workers’ do have a role in authorization of services, indications of physiotherapists’ perceiving insurance workers’ as the ‘Middle-person’ and
‘Uncompromising on company policy’ (Figure 2) could be representative of an underlying feeling of a ‘power-imbalance’ in the relationship that could affect communication. While this didn’t emerge as a specific theme in this study, it may be worth consideration in future research.

There was greater alignment of role beliefs between insurance workers’ and physiotherapists’ in regard to ‘The Ideal’ role for each profession. A functional, appropriately progressed, return to work focus was a common footing in ‘The Ideal’ (Figure 1b). This aligns with best practice recommendations in Australia (37), and in international recommendation for return to work rehabilitation (38). Insurance workers’ and physiotherapists’ both rated communication highly as an ideal role for insurance workers’ (Figure 2b), consistent with previous opinion of the critical role of case managers as communication facilitators (39).

The similarities and differences in perceptions related to ‘Present Experience’ and ‘The Ideal’ may provide targets for education programs to improve alignment and greater understanding of the roles between professions, resulting in better teamwork (16, 20, 40), where skills of stakeholders are utilised efficiently and effectively. There is preliminary evidence that this approach can result in claims management more aligned with contemporary guidelines (10, 41), though more research is required to determine if this results in improved outcomes for injured workers.

4.2. Barriers for Communication
Communication was identified as a key role for insurance workers' and physiotherapists' (Figure 1 and 2), consistent with previous studies championing the importance of stakeholder communication in work rehabilitation (16-18, 42). Good or bad communication has been linked to workers' satisfaction within the Western Australian workers' compensation system (43) and elsewhere (44, 45). Knowledge of barriers to communication is an important step in proposing solutions.

Both stakeholders cited case load as a significant barrier to effective communication, a known barrier to communication (16). Unavailability of the other person may also act as a similar deterrent to communication. Given the importance of communication at multiple levels for optimal outcomes in the workers’ compensation system, higher prioritization of maintaining communication may be beneficial. In the Western Australian system, there is reimbursement for communication at a rate equal to direct care of a worker with an injury. This would suggest that remuneration should not be a factor in lack of prioritization of communication, and it wasn’t identified as such in this study. For certain clients though, high levels of communication may not be necessary (17, 21). Identifying cases where efficient, timely, multidirectional communication is required may help streamline communication practices. Screening tools are available to identify ‘at risk’ injured workers (46-48). This type of screening could potentially act as a trigger for the instigation of higher levels of communication. And case management with a significant focus on optimizing communication channels can have positive effects on the cost and length of claims (49). Further efforts to improve stakeholder communication are warranted, and understanding the barriers to communication should be useful in this endeavor.
4.3. Limitations

Given the nature of the recruitment via email advertisement, we cannot report the proportionate response rate to the online questionnaire. Differences in the demographics of the two professions (Table 1) are likely to reflect workforce profiles. This paper has only investigated perceptions of two stakeholders. Perceptions of other major stakeholders (occupational therapists, vocational rehabilitation providers, injured workers, employers and general practitioners) would also be useful. It must be acknowledged that the factors investigated in this study are part of a more complex system (17, 21, 50, 51), and should be considered in that light. However the findings of this study could be used to inform educational programs for stakeholders to improve understanding of roles and communication. Interventions based on these concepts may have a positive influence (52). Further research is required to assess the effect of education including the information obtained in this study.

4.4 Future Directions

Good communication should be inherent in stakeholder interactions, consistent with optimal models of care in the compensable environment that ultimately avoid negative context for a worker with an injury (53). Perceptions identified in this study could be used to inform educational interventions to improve communication between stakeholders and ultimately outcomes in the return to work process. We have found insurance workers are receptive to education that includes components of role definition and champions a shared basis of understanding as a platform for improved communication (41). Development of a policy document that highlights good
communication practice and strategies to overcome barriers, that sits alongside the “Clinical Framework for the Delivery of Health Services” (9) in Australia, would be a good future step to enhance understanding of the concepts identified in this research and more broadly in the literature. This formative investigation could form the basis for formal qualitative research to elaborate further on the theme of role perceptions that underlie the communicative process.

5. Conclusion

Differences in the perception of the roles of insurance workers’ and physiotherapists’ in the Western Australian workers’ compensation system based on ‘Present Experience’ have been identified. These differences reduce (become less) when stakeholders provide their role perceptions based on ‘The Ideal’ situation, however differences remain. Effective and efficient communication has been identified as a key factor, and barriers to this have been highlighted by the results. The findings highlight the need for consideration of how different stakeholders in workers’ compensation rehabilitation perceive one another.

6. Acknowledgements

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7. References


**Figure 1:** Insurance workers’ and physiotherapists’ perceptions of the role of physiotherapists’ in the workers’ compensation system. (Responses expressed as percentage of total respondents who chose the associated characteristic.)

**Figure 2:** Insurance workers’ and physiotherapists’ perceptions of the role of insurance workers’ in the workers’ compensation system. (Responses expressed as percentage of total respondents who chose the associated characteristic.)

**Figure 3:** Insurance workers’ and physiotherapists’ perceptions of barriers to communication in the workers’ compensation system. (Responses expressed as percentage of total respondents who chose the associated characteristic.)
### Table 1: Survey questions and answer options

We have listed ten positive and negative items related to the roles of **physiotherapists** in the WA workers' compensation system.

*Please select 3 items that best reflects your *PRESENT EXPERIENCE* of the role physiotherapists play.*

- Promote independence
- Tailor program to return to work
- Progress treatment appropriately
- Don’t have a clear treatment plan
- Provide rehabilitation
- Poor communication
- Opinion not valued
- Education/Advice
- Advocate for patient
- Don’t have a functional approach

*Please select 3 items that you *BELIEVE SHOULD BE* the most important roles of physiotherapists.*

- Promote independence
- Tailor program to return to work
- Progress treatment appropriately
- Have a clear treatment plan
- Provide rehabilitation
- Communicate
- Opinion is valued
- Education/Advice
- Advocate for patient
- Have a functional approach
We have listed ten positive and negative items related to the roles of insurance workers in the WA workers’ compensation system.

Please select 3 items that best reflects your **PRESENT EXPERIENCE** of the role insurance workers play.

- Guide return to work
- Education of other stakeholders
- Middle-person
- Inconsistent
- Lack of communication

Please select 3 items that you **BELIEVE SHOULD BE** the most important roles of insurance workers.

- Guide return to work
- Education of other stakeholders
- Middle-person
- Are consistent
- Communication

Please select 3 items that you generally consider to be the most significant **BARRIERS TO COMMUNICATION** within the workers’ compensation system.

- Language
- Case load
- Unavailability of the other person
- Lack of feedback
<table>
<thead>
<tr>
<th>Superiority complex</th>
<th>Other priorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation</td>
<td>Conflict with other advice</td>
</tr>
<tr>
<td>Lack of understanding of system</td>
<td>Lack of medical knowledge</td>
</tr>
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</table>
**Table 2:** Demographic data.

<table>
<thead>
<tr>
<th></th>
<th>Physiotherapists</th>
<th>Insurance Workers</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>n=80</td>
<td>n=48</td>
</tr>
<tr>
<td>Age</td>
<td>36.5 (12.0)</td>
<td>29.8 (6.9)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Female</td>
<td>43 (53.8)</td>
<td>34 (70.8)</td>
</tr>
<tr>
<td>- Male</td>
<td>37 (46.3)</td>
<td>14 (29.2)</td>
</tr>
<tr>
<td>Highest Education Level</td>
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<td></td>
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<tr>
<td>- Secondary</td>
<td>0 (0)</td>
<td>15 (31.3)</td>
</tr>
<tr>
<td>- Tertiary</td>
<td>41 (51.3)</td>
<td>16 (33.3)</td>
</tr>
<tr>
<td>- Post-Graduate</td>
<td>32 (40.0)</td>
<td>17 (35.4)</td>
</tr>
<tr>
<td>- Doctorate/Specialist</td>
<td>7 (8.8)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Workers Compensation Experience</td>
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<td></td>
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<tr>
<td>- 0-1 year</td>
<td>11 (13.8)</td>
<td>18 (37.5)</td>
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<tr>
<td>- 2-5 years</td>
<td>24 (30.0)</td>
<td>14 (29.2)</td>
</tr>
<tr>
<td>- 5-10 years</td>
<td>13 (16.3)</td>
<td>11 (22.9)</td>
</tr>
<tr>
<td>- 10+ years</td>
<td>32 (40.0)</td>
<td>5 (10.4)</td>
</tr>
</tbody>
</table>

Age = mean (standard deviation). Others = n (percentage).
Figure 1:

a) Present Experience

![Present Experience Diagram]

b) Ideal

![Ideal Diagram]
Figure 2:

a) Present Experience

b) Ideal
Role perceptions physiotherapists insurance workers

**Figure 3:**

![Role perceptions graph showing various factors affecting role perceptions of physiotherapists and insurance workers. The graph illustrates the percentage of factors such as Lack of medical knowledge, Language, Case load, Superiority complex, Motivation, Lack of understanding of system, Conflict with other advice, Other priorities, and Lack of feedback, and their impact on role perceptions.](image-url)