

CONTEXTUAL FACTORS INFLUENCING EARLY RETURN TO WORK IN THE RURAL AND REMOTE SECTOR

MARINA CICCARELLI* AND JESSICA DENDER†

ABSTRACT

Early return to work (RTW) interventions are important in facilitating successful and timely resumption of the worker role following a work-related injury. Early RTW strategies include strong communication between the employer, injured worker and treating physician; maintenance of the worker role, and accommodation of the injured worker through the provision of suitable alternative duties and modification of the workplace. In the State of Western Australia, all regions beyond the capital city are considered rural and remote. Workplace rehabilitation providers working in rural and remote regions face unique challenges in implementing early RTW interventions for injured workers due to issues of geographic distance, work cultures and limited availability of alternative job duties. This paper discusses some of the factors restricting early RTW interventions and possible strategies to overcome these hurdles.

I INTRODUCTION

Various individual, organisational, health care, and legislative factors have been identified in the literature as important in facilitating a successful return to work (RTW) outcome following work-related injury.¹ Implementing early RTW interventions is considered vital to preventing long-term disability and achieving timely and durable RTW following a work-related injury.² Early RTW interventions to prevent long term work disability include clear and regular communication between the employer, injured worker and treating physician; maintenance in or early resumption of the worker role, and accommodation of the injured worker through the provision of suitable alternative duties and modification of the workplace. The Model of Human Occupation (MOHO)³ has been used to explain the impact of injury on a worker and highlights the importance of early intervention initiatives that maintain the connection between the injured worker and the workplace.⁴ The MOHO proposes that four main factors influence work behaviour: volition, habituation, performance and the environment.⁵ Volition refers to the work choices individuals make based on values, interests and their belief in their ability to perform the job.⁶ Additionally, work that is meaningful and satisfying is likely to have a positive impact on the individual's perception of themselves in the worker role. Injured workers with little job satisfaction or a poor sense of connection to the work or

* Centre for Research into Disability and Society, Curtin Health Innovation Research Institute, Curtin University, Western Australia.

† People Sense Pty Ltd, Busselton, Western Australia. Case studies used throughout the document are based on the experiences of the second author in her course of practice.

1 Niklas Krause et al, 'Determinants of Duration of Disability and Return-to-Work After Work-related Injury and Illness: Challenges for Future Research' (2001) 40 *American Journal of Industrial Medicine* 464.

2 Edward J Bernacki, 'A Facilitated Early Return to Work Program at a Large Urban Medical Center' (2000) 42 *Journal of Occupational and Environmental Medicine* 1172.

3 Gary Kielhofner, *A Model of Human Occupation* (Williams and Wilkins, 1985).

4 Gary Kielhofner et al, 'The Model of Human Occupation: Understanding the Worker Who is Injured or Disabled' (1999) 12 *Work* 37.

5 Ibid.

6 Ibid.

workplace may have less motivation to return to work, compared to motivated injured workers.⁷

Internalising the worker role is important in developing daily routines and habits that are congruent with the requirements of the job, including appropriate dress, punctual attendance, pace and quality of work, and interpersonal relationships with co-workers and supervisors.⁸ The presence of pain and other symptomatology following work injury can interrupt the daily routines of individuals. Increased time away from the workplace following injury can result in the development of habits that are incongruous with a worker role, such as irregular sleep and waking patterns, physical inactivity⁹ and an increase in time spent in other roles (eg, patient, homemaker, carer). Early intervention initiatives may include the promotion of regular daily work routines soon after injury such as waking and dressing, attending vocational rehabilitation appointments, and attending meetings and participation in suitable work activities at the workplace related to the RTW program. All these can assist the injured worker to retain habituation around the worker role.

The MOHO proposes that skilled performance in the task demands of a job occurs through knowledge, training, and experience performing the job. Injury can interfere with the worker's presence and participation at the workplace, which over time can lead to physical de-conditioning, reduced self-confidence in their capacity to do the job, and redundancy in knowledge and skills.¹⁰ These factors all negatively impact on volition, habituation and performance in the worker role, as over time the worker role is replaced by other incompatible roles, including the 'patient' role.¹¹ Prior research identified that in the acute stages of injury, low intensity and workplace specific interventions resulted in better RTW outcomes than medically oriented interventions¹² that viewed the injured worker as a patient. Therefore, opportunity for early re-connection with the workplace following injury is important in preventing loss of identity of the worker role and the development of secondary physical and psychological disability.

The physical, social, organisational and legislative environments can act as either barriers or enablers to maintaining the injured worker in the worker role.¹³ Accommodation of the injured worker through provision of suitable alternate duties, modifications to the work environment,¹⁴ and social support by co-workers and supervisors are essential to prevent long-term work disability following injury.¹⁵ Workers' compensation in Western Australia (WA) is a no-fault system and workers' compensation insurance for workers is a mandatory requirement of employers. The State workers' compensation legislation¹⁶ outlines the responsibilities of key stakeholders (employer, injured worker and treating physician) in achieving a timely and efficient return to work following work-related injury, illness or disease. Through effective communication between stakeholders, a suitable

7 Ibid 41.

8 Ibid.

9 Ibid 42.

10 Kathi Brenneman and Michael J Littleton, 'The Model of Human Occupation: A Return to Work Case Study' (1999) 12 *Work* 6.

11 Ibid.

12 Philip Davis, Maziar Badii and Annalee Yassi, 'Preventing Disability from Occupational Musculoskeletal Injuries in an Urban, Acute and Tertiary Care Hospital: Results from a Prevention and Early Active Return-to-Work Safety Program' (2004) 46 *Journal of Occupational and Environmental Medicine* 1253; Annalee Yassi et al, 'Early Intervention for Back-Injured Nurses at a Large Canadian Tertiary Care Hospital: An Evaluation of the Effectiveness and Cost Benefits of a Two-Year Pilot Project' (1995) 45 *Occupational Medicine* 209.

13 Kielhofner et al, above n 4, 43.

14 J Crook, H Moldofsky and H Shannon 'Determinants of Disability After a Work Related Musculoskeletal Injury' (1998) 25 *Journal of Rheumatology* 1570.

15 William S Shaw 'Employee Perspectives on the Role of Supervisors to Prevent Workplace Disability after Injuries' (2003) 13 *Journal of Occupational Rehabilitation* 129, 139.

16 *Workers' Compensation and Injury Management Act 1981* (WA).

work-place based graduated RTW programme for the injured worker can be developed, implemented and monitored.¹⁷ A Code of Practice¹⁸ outlining the minimum requirements for implementing work-placed-based injury management strategies provides a framework for employers to manage the process.

While many large employers provide in-house injury management services, medium- and small-sized employers often do not have sufficient human or financial resources to provide these services and rely on external expertise. Similarly, when cases are complex as in the case of a stress-injury claim, workplace rehabilitation providers approved by the State workers' compensation authority (WorkCover WA) and chosen by the injured worker, assist the key stakeholders in the RTW process through provision of case management and vocational rehabilitation services. In accordance with the State workers' compensation legislation, vocational rehabilitation activities are work-place based¹⁹ and involve a range of workplace interventions including identifying suitable alternative duties, workplace modification, job modification, education in safe work practices and case management; interventions that are reported as being effective in achieving positive RTW outcomes.²⁰

Workplace rehabilitation providers assisting injured workers in rural and remote work sectors face challenges in facilitating early RTW interventions. This paper outlines the contextual factors impacting on early RTW initiatives in rural and remote Western Australia, and discusses some strategies that have been used to facilitate positive RTW outcomes.

II THE UNIQUE EMPLOYMENT LANDSCAPE OF WESTERN AUSTRALIA

The State of Western Australia (WA) occupies the western third of the Australian continent. It has an area of 2.5 million square kilometres and the distance from north to south is approximately 2400km.²¹ Despite the enormity of the State's physical size, the capital city of Perth is the sole metropolitan area within the State, and all regions outside of the metropolitan area are classified as rural and/or remote.

WA has a population of approximately 2.56 million²² and over one quarter of WA's population reside in rural and remote geographic regions. In 2009, WA experienced 2.9 per cent population growth from the previous 12 months, compared to a national population growth of 2.1 per cent.²³ Some of the most rapid increases in labour force growth rates during 2000-05 were in rural and remote regions of the State.²⁴ A major factor influencing this growth has been increase in employment opportunities within the resources sector, specifically on- and off-shore exploration and mining of gas and mineral deposits in WA. The increase in mining activity occurred during the 'resources boom' in the first half of this decade, to cater for rising international demand for iron ore, natural gas and oil with the rapid industrialisation of China and India. Consequently, the mining sector is responsible for approximately 30 per cent of the State Gross Product and 70 per cent of the State's total exports revenue.²⁵ This growth contributed to the subsequent

17 Government of Western Australia, *Workers' Compensation Injury Management Code of Practice* (2005) 5.

18 Ibid.

19 WorkCover WA, *Injury Management Code of Practice Guidance Notes*, 4 <http://www.workcover.wa.gov.au/NR/rdonlyres/31CADB83-248A-4352-BFF2-80C3169285F7/0/Injury_Management_Code_of_Practice_Guidance_Notes.pdf>.

20 Johannes R Anema, 'Multidisciplinary Rehabilitation for Subacute Low Back Pain: Graded Activity or Workplace Intervention or Both?: A Randomized Controlled Trial' (2007) 32 *Spine* 291, 295.

21 Tourism Western Australia, *About Western Australia* <<http://www.westernaustralia.com>>.

22 Australian Bureau of Statistics, 3101.0 - *Australian Demographic Statistics* (2009)

23 Ibid.

24 Australian Bureau of Statistics, 1367.5 - *Western Australian Statistical Indicators* (2006) 34.

25 Australian Bureau of Statistics, 1367.5 - *Western Australian Statistical Indicators* (December- 2007) 14.

migration to WA of skilled and unskilled mining company employees, as well as workers who provide support services within the surrounding communities of the mines. In addition to the mining industry, rural and remote workers support tourism, grain and sheep farming, and fishing industries and their surrounding communities across the State.

Industries based in rural and remote regions of WA are among those with the highest frequency rate of lost-time claims arising from a work-related injury. For example, in 2007-08, agricultural, forestry and fishing industries accounted for 17.4 lost-time claims per million hours worked, second only to the manufacturing industry with 19.0 lost-time claims per million hours.²⁶ The highest number of work-related injuries for male workers in Australia occurs in agriculture, forestry and fishing industries, with 128 per 1000 employed experiencing at least one day/shift absence due to a work-related injury.²⁷ Accordingly, in 2009-10 the average recommended workers' compensation insurance premium rates for agriculture, forestry and fishing industries were the highest of all industry groups,²⁸ reflecting the high frequency and duration of work-related injury claims among workers in these rural and remote occupational groups. High injury rates may be related to the heavy manual labour nature of the work in these industries,²⁹ as well as the work and social cultures within rural communities.

III FACTORS INFLUENCING EARLY RETURN TO WORK IN RURAL AND REMOTE EMPLOYMENT SECTORS

Rural and remote regions have unique characteristics that influence not only the incidence and prevalence of work-related injuries, but also the success of early RTW initiatives. The following commentary discusses factors that impact on early RTW for workers in rural and remote regions of WA, and describes case management strategies that are used to either counter the effects of these factors or to use them to advantage.

A The work culture within agricultural communities

Many agricultural farms in WA are family-owned and operated. The workplace (ie the farm) is also the family home, and there are often few boundaries, physical or otherwise, to differentiate the two. The employer/owner is typically the male head of the family, whose adult child/children may also work on the farm. Additional seasonal workers, such as sheep shearers and crop pickers, are contracted in as necessary. The focus of business is very much on maximising production, and consequently less time and resources are made available for formal processes in place at the workplace with regard to induction in safe work practices, training and supervision, recording of lost-time injuries and injury management procedures.

Agricultural workers have been described as 'having a close affinity with the land'³⁰ and develop their sense of identity from their work. Within the context of MOHO, this self-identity related to the work role serves as an enabler to a successful RTW, with farm workers motivated to returning to pre-injury work duties. Agricultural workers often work longer hours in comparison to other occupations,³¹ with the average number of

26 WorkCover WA, *Workers' Compensation in Western Australia Statistical Report 2004/05 to 2007/08* (2009) 19.

27 Australian Bureau of Statistics, *4102.0- Australian Social Trends - Work-related Injuries* (2007) 2.

28 Ibid 4.

29 Ibid 2.

30 Amanda E Young, Roger Strasser and Gregory C Murphy, 'Agricultural Workers' Return to Work Following Spinal Cord Injury: a Comparison with Other Industry Workers' (2004) 26 *Disability and Rehabilitation* 1013,1020.

31 David Glasscock, 'Psychosocial Factors and Safety Behaviour as Predictors of Accidental Work Injuries in Farming' (2006) 20 *Work and Stress* 173, 174.

hours worked among male agricultural workers 49.5 hours per week.³² When considered against statistics that indicate the highest injury rate among male workers in Australia was among those who work 41-49 hours per week,³³ the likelihood of a work-related injury among agricultural workers is high.

A study of Victorian farm workers who had sustained a spinal cord injury reported that seven of 20 injured workers returned to farming post-injury,³⁴ despite the degree of manual labour tasks involved. Many agricultural workers do not have formal post-secondary school education, with training in their profession occurring on the job. Thus, options for alternative, less physically demanding, jobs outside farming may be restricted due to the injured-worker's limited transferable skills, knowledge and non-motivation to work anywhere other than in agricultural farming.³⁵ Young et al found that a successful RTW to pre-injury work was influenced by the fact that farmers were self-employed and were able to modify the working environment to accommodate functional limitations related to the physical injury and did not have to deal with negative attitudes of employers.³⁶ However, self-employment is not always an option and opportunities for re-deployment into alternative suitable work are limited in small rural and regional communities. The following case study illustrates this issue.

In a regional centre located in the 'wheat belt' of WA (ie farming of predominantly wheat and other grain crops), a young male sustained a disc-related lower back injury during the course of his work as the sole employee and farm manager on a small farm. The severity of the injury prevented him from returning to his pre-injury role and due to the small size of the farming business, internal redeployment was not a viable option. To achieve his injury management goal of external redeployment into a physically suitable new vocation, a work trial was required to enable a graduated RTW. With his employment and educational history limited to agricultural work, and without any formal qualifications, opportunities for redeployment into the more sedentary agricultural retail or insurance industry were extremely limited. Furthermore, the culture within the town was that individuals should 'start at the bottom as a stores-person and work their way up to more senior positions'. This reduced the opportunity for the injured worker to enter into agricultural retail work that potentially offered duties that were either sedentary or had low physical demands, and thus engage in a safe RTW.

In order to obtain suitable alternative work placements in small regional centres the injured worker and workplace rehabilitation provider must: (i) extrapolate the injured worker's identified transferrable skills across industries; (ii) examine local and sometimes personal contacts who may be drawn on to provide work trial placements; and, (iii) conduct labour market research to identify current local employment trends; to plan a viable, outcome focused redeployment path for the injured worker.

B Disconnect between the injured worker and the rural and remote workplace

Early intervention RTW initiatives focus on maintaining a physical and psychological connection between the injured worker and the workplace. As illustrated using the MOHO, this connection to the workplace assists in retaining the injured worker in the 'worker' role and fosters communication with, and psychosocial support by, the employer and co-workers. Lack of co-worker and employer support at the workplace

32 Young et al, above n 30, 1020

33 Australian Bureau of Statistics, 4102.0 - *Australian Social Trends- Work-related Injuries* (2007) 2.

34 Amanda Young and Gregory Murphy, 'Spinal Cord Injury Rehabilitation Outcomes: A Comparison of Agricultural and Non-agricultural Workers' (1998) 6 *Australian Journal of Rural Health* 175, 177.

35 Ibid 179.

36 Young et al, above n 30, 1020.

has been identified as a factor that impedes re-integration to the workplace following work-injury.³⁷

Therefore, injured workers who are unable to immediately return to work are encouraged to at least attend injury management meetings at the workplace to maintain a physical connection to the employer and their co-workers; however, this is not always possible for injured workers employed in rural and remote regions. A unique characteristic of employment within the mining industry in WA is the high prevalence of *fly-in fly-out* (FIFO) positions, whereby mine workers maintain a permanent residence in the metropolitan area and commute by aeroplane to and from the mining towns, where they are provided with temporary housing for the duration of their weekly, fortnightly or monthly rosters. Therefore, there are many mine workers who maintain a permanent residence in the metropolitan area, but work in regional and remote areas of the State. Consequently an injured FIFO worker who returns home to the metropolitan area for medical attention and to convalesce is unlikely to maintain the physical connection to the workplace due to the geographic distance between the two.

One example of this difficulty is the case of a middle-aged plant (bogger) operator at a remote mine site who sustained a work-related knee injury. The injured worker is required to drive his machine in the mine, located several hundred metres underground. In the event of an emergency, the worker would not have been able to climb out of the mine shaft via the vertical emergency ladder, and so alternative work duties were required. However, the injured worker was unable to participate in an on-site RTW programme because he was physically unable to drive to and from his home and the airport to access the worksite by aeroplane. Alternative transportation options were considered including public transport, car pooling, taxi and a family member driving the injured worker to and from the airport; however, all these options were ruled out after considering the worker's graduated RTW schedule and cost-effectiveness of the options.

This case study and the case study described in III A are two examples of how the physical environment can impact on return to a worker role; however the social and organisational environments can also impact on return to work initiatives. Many work teams on mine sites are paid bonuses based on productivity performance, and so team members assist one another to achieve the production targets. The job description for a bogger operator is not likely to include frequent heavy lifting as an identified physical job demand; however, in reality the bogger operator assists the labourers on the team with their work as needed, to maximise the likelihood of the team reaching the productivity target. As a consequence, other members of the work team are less likely to want an injured worker on-site and on-shift, who is unable to contribute to the team's productivity.

Therefore, when working with injured workers, who are unable to complete a graduated RTW at the original workplace due to physical, organisational or social barriers, the workplace rehabilitation provider must attempt to source work hardening programmes in their local area. Obtaining a suitable work trial, replicating the physical demands of the job and, and perhaps more importantly, the mine site's physical, social and organisational environments, is difficult. The nature of work completed on-site is usually specific and unique to that mine site; and as such, the regional workplace rehabilitation provider must obtain physical pre-injury job demand information from workplace representatives, and identify a role within the injured worker's local community that incorporates similar physical demands and that is vocationally appropriate. A suitable alternative for the injured bogger operator was to participate in a graduated work hardening program on a construction site that mimicked the uneven ground of the mine site, but also provided

37 WE Hoogendoorn et al, 'High Physical Work Load and Low Job Satisfaction Increase the Risk of Sickness Absence Due to Low Back Pain: Results of a Prospective Cohort Study' (2002) 59 *Occupational and Environmental Medicine* 323, 328.

opportunity for the worker to perform pre-start checks on vehicles, and to begin climbing on and off small plant.

While work trials in other workplaces provide opportunity for increasing the worker's physical capacity for heavy manual work and long duration work shifts, the physical and psychological connection of the injured worker to the workplace and communication between the key stakeholders (injured worker, employer and treating physician) are diminished. Regularly scheduled telephone case conferencing has been used effectively to ensure that all stakeholders have the opportunity to communicate regarding the injured worker's progress, discuss any potential barriers to a RTW to the pre-injury job and hours, review, and if necessary, modify RTW goals.

The social culture within the mining communities can however, be used to advantage in the RTW process. FIFO mine workers develop strong social connections with their co-workers on regular rostered shifts and time away from the work-site due to injury negatively impacts on these social relationships. Employers and work rehabilitation providers can capitalise on the social motivation (volition to be in the work role and work environment) by using the following strategies. Injured workers who do not demonstrate physical capacity for physical work duties over a full 12 hour shift can remain at the worksite and participate in on-site training activities to maintain their skills, participate in on-site gym programs to supplement the work hardening activities, provide supervision of work teams, leading hands and trades assistants, and participate in staff social functions to maintain the injured worker's connection to the workplace. Opportunity to bring injured workers to the mine site for shorter roster periods during the RTW process is more likely to be a financially viable option when the employer has access to a charter aeroplane, rather than using more expensive commercial flights.

C Limited opportunities to find suitable alternative duties in physically demanding work environments

Employers in rural areas are generally smaller than those in metropolitan areas, with self-employed workers over-represented in agricultural farming areas.³⁸ Small-sized organisations tend to be associated with fewer formalised return to work processes, and the relationships between no early RTW measures due to company size within the agricultural, mining and forestry industries are significant.³⁹ Following work-injury, not all injured workers are able to immediately return to pre-injury duties. Injured workers provided with modified work programmes have almost half the number of lost-time days related to their injury, and approximately twice the RTW rate of injured workers who are not provided with modified work duties.⁴⁰ Thus, the inability of the employer to find suitable alternative duties that match the physical and/or psychological capacity of the injured worker can hinder early intervention initiatives and delay the planned RTW outcomes.

Some mining companies will not accommodate an injured worker at the mine site until they are able to fully perform their pre-injury work duties and hours. In this case, teleworking may be a viable option to minimise lost-time from work and maintain the injured worker's performance in the worker role. The following case study demonstrates this RTW strategy.

38 Tom Seekins, 'Rural and Urban Employment Patterns: Self-employment as a Metaphor for Rural Vocational Rehabilitation' (Report, Montana University Affiliated Rural Institute, Missoula, MO, 1992) 2.

39 Raymond Baril, 'Early Return to Work of Injured Workers: Multidimensional Patterns of Individual and Organizational Factors' (2003) 41 *Safety Science* 277, 284.

40 Niklas Krause, Lisa K Dasinger and Frank Neuhauser, 'Modified Work and Return to Work: A Review of the Literature (1998) 8 *Journal of Occupational Rehabilitation* 113, 135.

An experienced Haulpac driver who resides in a south-west regional centre is employed on a FIFO basis by a mining company operating in the State's far north-west. The driver experienced a whiplash injury as a result of a motor vehicle accident at the workplace. The injured worker was unable to tolerate the four hour drive from his home to metropolitan Perth to board the flight to the mining town, even with an overnight rest before the flight. The work rehabilitation provider negotiated with the employer, on behalf of the injured worker, for the injured worker to work remotely from home updating the company's training manuals for new employees, including instructions for safe work practices using various plant and equipment. This workplace accommodation providing suitable alternative work duties in an appropriate environment resulted in a win-win situation: there was minimal lost-time from work (thereby reducing claim costs for the employer) and the injured worker was able to remain productive in his worker role during the period of convalescence.

Another case example of a successful RTW strategy involves an injured worker from a south-western wine producing region of WA. Many local residents in this regional centre are employed in viticulture, which is an extremely seasonal industry. Winemaking processes tend to be linear in nature, requiring one task to be repeatedly performed for up to 12 hour shifts, over a designated period. A middle-aged female vineyard hand experienced a laceration injury to the palmar aspect of her thumb on her dominant hand. Post-operatively she relied solely on her non-dominant hand to complete her activities of daily living, and subsequently reported localised aching in the dorsal aspect of her non-dominant wrist extensor and forearm extensor muscles. The winery was unable to provide suitable alternative duties outside of the vineyard and the next available vineyard task was pruning, which involved extension of both wrists and repetitive gross gripping with both hands. Consequently, the worker was unable to commence a RTW programme with her pre-injury employer and a work placement for work hardening was sought. The workplace rehabilitation provider approached a network of occupational safety and health representatives working with various employers in the local area. A larger winery in the area provided the opportunity for jobs at the cellar door, restaurant, gift store and administrative departments, which had light physical task demands. The injured worker was placed at the larger winery to participate in a graduated work hardening programme until she was able to perform her pre-accident duties, and a successful RTW with the pre-injury employer was achieved.

Establishing a network of occupational health and safety representatives across or within specific industries in rural and remote regions, allows for each to assist the other with work placements as required, enabling earlier return to work outcomes.

D Completion of work projects in rural and remote centres

Another barrier to early RTW following work injury relates to the completion of projects within small rural or remote towns. This is for example the case, when large construction or mining projects that provide direct or indirect employment for the majority of residents in regional centres, complete their work and cease operation.

In 2009, a large-sized employer completed construction works in an inland regional centre in WA. As a result, all employees were terminated, including those with open workers' compensation claims. Injured construction workers were required to engage in RTW work hardening programmes with a view to returning to their pre-injury duties with a new employer; or for redeployment into a new job entirely. RTW delays were encountered as other terminated employees, who had no work injuries, filled job vacancies in other local and ongoing construction projects in surrounding areas. Furthermore, small businesses, such as food and retail outlets, that supported the workers and residents in the local community, began closing down due to reduced business and income as terminated construction employees moved away in search of other work opportunities. Consequently,

these businesses could not accommodate interim work hardening programmes for those injured workers with transferrable skills.

Strategies engaged to overcome RTW barriers in this scenario included: (i) canvassing for work trials in nearby regional town centres; (ii) assessing public transport routes where transportation was a barrier for the injured worker, and structuring the graduated RTW programme around public transport schedules; (iii) identifying, via personal and professional contacts, and assessing opportunities on other local construction projects for work hardening with the view to employment; (iv) reviewing the injured worker's employment history and determining whether work hardening activities could be provided by a previous employer; and (v) research into the estimated commencement dates of proposed local construction projects to provide a goal and timeframe for potential work hardening and work trial opportunities.

In cases where RTW objectives and targets were determined through the active involvement of the injured worker and utilised identified work hardening/work trial opportunities in the local area, the injured workers demonstrated greater motivation to participate in their RTW rehabilitation programme.

E Timely and routine access to medical and rehabilitation specialists

Many agricultural, mining, fishing and forestry workers residing in rural and remote WA live long distances from specialist services situated within the capital city, Perth, and therefore potentially have less opportunity for frequent and timely access to medical and rehabilitation services. This may result in poorer RTW outcomes following work injury. Evidence from the literature indicates that a strong multidisciplinary approach to managing a work injury provides the best work outcomes.⁴¹ For injured workers in rural and remote regions, access to a team of specialist medical, rehabilitation and support staff can be problematic.

By way of example, a young male miner sustained a fractured wrist during work. He was taken to the closest regional hospital where he was advised that a doctor would not be on site for three days. He was advised that he would need to travel to the next regional medical centre, located approximately two hours drive away, for medical imaging of the injury. During the three day period while awaiting a medical review, his employer was not provided with a diagnosis for the injured worker, or with any medical restrictions for his RTW. Consequently, the injured worker was returned to unsuitable duties involving repetitive flexion, extension and deviation of the injured wrist. After three days the injured worker was unable to use the injured hand.

Mining companies operating in WA generally nominate treating medical practitioners in the Perth metropolitan area to treat fly-in-fly-out workers. Nominated treating practitioners generally have awareness of the employer's early RTW procedures, and of the light duties available and the respective physical and psychological task demands. This can assist in effective early coordination of RTW. However, for those injured workers residing regionally who attend a medical review initially with a Perth-based practitioner, may be required to regularly travel significant distances from their regional homes to Perth for follow up medical reviews, especially during periods of incapacity for work. Nominating a local treating medical practitioner to oversee management of the injured workers' return to work may provide continuity and regularity of medical management for the duration of the claim, whilst reducing the workers' need to travel significant distances.

'Yellow flag' is the term given to psychosocial, workplace, personal, or compensation-related factors that increase the likelihood of a long-term disability following a physical

41 JB Staal, 'Occupational Health Guidelines for the Management of Low Back Pain: An International Comparison (2003) 60 *Occupational and Environmental Medicine* 618, 625.

injury.⁴² The absence of timely and comprehensive medical management of the work injury can result in the injured worker unsure of diagnosis and prognosis, fearing re-injury and possibly catastrophising the injury. A work-related injury that presents with yellow flags requires management using a multidisciplinary approach of medical, allied and psychosocial health staff that work collaboratively with the injured worker and employer,⁴³ and maintain strong, effective communication among all stakeholders. This can be problematic when physical distance separates the stakeholders and the injured worker is physically disconnected from the workplace.

The development of a community-based model of intervention has been proposed, whereby increasing the knowledge and skills of local community health professionals may improve the delivery of specialised services to injured workers in rural and remote areas.⁴⁴ This is an important issue as professional development opportunities in rural and remote areas in WA are limited, and travelling to the capital city Perth for training courses can be a time consuming and expensive option for health professionals working in the State's far north, approximately 2200km away. Thus, the most commonly used method for professional development and community education activities among health professionals working in WA's rural and remote communities is via computer-based teleconferencing and video conferencing.⁴⁵

In addition to improving rural health professionals' knowledge of injury management processes and strategies for facilitating effective RTW outcomes, better communication with rural and remote employers and workers regarding their rights and responsibilities within the provisions of the workers' compensation and injury management legislation is warranted. There are current initiatives that promote safety management among rural and remote workers in WA. For example, FarmSafe WA Alliance is a community-based group comprised of (among others) farmers, occupational safety and health consultants, representatives from the Injury Control Council of WA, and the Combined Universities Centre for Rural Health, whose focus is to provide education, training and awareness of occupational safety and health and well-being matters to farmers, their workers, and families.⁴⁶ Workshops on issues such as farm safety, child farm safety, and emergency procedures when working in remote areas, are held locally in rural farming communities across the State.⁴⁷ The State workers' compensation authority (WorkCover WA) provides regular information sessions regarding the injury management process to employers and injured workers in metropolitan Perth, and there is a need for similar locally-offered community-based education regarding injury management to assist injured workers in rural and remote regions, many of whom are self-employed or small-sized employers, achieve an early RTW. In 2010 WorkCover WA offered injury management seminars in five regional centres across the State.⁴⁸ If face-to-face delivery of information sessions is not viable within a greater number of regional and remote centres, opportunities for web based interactive seminars (webinars) should be explored. Webinars provide opportunity for individuals in multiple locations to meet in an online forum, receive information from an instructor, and engage in discussion and ask questions in real time. Injury management

42 Accident Compensation Corporation, 'New Zealand Acute Low Back Pain Guide' (Wellington, 2004 ed) 26.

43 Michael JL Sullivan, 'Integrating Psychosocial and Behavioral Interventions to Achieve Optimal Rehabilitation Outcomes' (2005) 15 *Journal of Occupational Rehabilitation* 475, 482.

44 Ibid.

45 WA Country Health Service, *Telehealth* <<http://www.wacountry.health.wa.gov.au/default.asp?documentid=408>>.

46 See FarmSafe WA Alliance, *About Us* <<http://www.farmsafewa.org>>.

47 See FarmSafe WA Alliance, *Services* <<http://www.farmsafewa.org>>.

48 WorkCover WA, *Calendar of Events* <<http://www.workcover.wa.gov.au/Returning+to+Work/Calendar+of+Events/Default.htm>>.

seminars for health professionals, injured workers and employers in rural and remote areas could be delivered in this format.

IV CONCLUSION

Large physical distances among regional and remote employment centres, the injured worker's residence and specialist medical and rehabilitation services, can negatively impact on early RTW interventions and prolong work disability. Limited local access to specialist services can delay diagnosis and medical management of the work injury, and regular and timely communication between the key stakeholders in developing and monitoring a graduated RTW programme can be problematic. Furthermore, agricultural, forestry, fishing and mining jobs involving predominantly heavy physical job demands may offer limited opportunity for workplace-based work hardening activities. Workplace rehabilitation specialists employed to case manage the RTW of injured workers in rural and remote areas can utilise a number of strategies to overcome these potential barriers. These include utilising professional and social networks in regional areas to identify opportunities with other employers for work trials and work hardening activities to progress to pre-injury capabilities; and nominating a treating physician in close proximity to the injured worker's rural/regional home to liaise with specialist medical professionals in the metropolitan area. The provision of local education, either in person or via online seminars, to rural and remote health professionals, employers and workers in the management of work injuries is recommended.