ISCRR
Institute for Safety, Compensation and Recovery Research

Annotated Bibliography

Dr Donna McKenzie and Samantha Barker - Institute for Safety, Compensation & Recovery Research
Janine Krochmal - Monash University Library

1 October 2012

Prepared for: Nathan Clarke, Personal Injury Education Foundation (PIEF)

Research report #: 22-023

A joint initiative of

WorkSafe VICTORIA
TAC TRANSPORT ACCIDENT COMMISSION
MONASH University

Please Note: ***Evidence Reviews produced by ISCRR may not involve exhaustive analyses of all existing evidence and do not provide definitive answers to the research questions they address. Information contained in ISCRR Evidence Reviews is current at time of production (September 2012) but may not be current at time of publication.***

Table of Contents

Introduction

The Personal Injury Education Foundation (PIEF) was established in 2006 by a consortium of Australian and New Zealand accident compensation regulators, insurers and claims management organisations as an educational program focused on the needs of those working in the personal injury industry. Courses are designed to improve the professionalism and capability of people working in the industry.

PIEF's postgraduate program has been designed to further the range and depth of personal injury management skills and is delivered in partnership with Deakin University. Following the five-yearly evaluation of the program three new units will be progressively implemented over the next two years. Two of the three units, listed below, are relevant to this review and are currently under development for the 2014 academic year:

1. *Strategic Return to work* - the purpose of this unit is to develop a strategic understanding of the factors, cultures and tools that influence return to work/community after injury; and

2. *Managing Compensable Injury Claims* – this unit will give students an overview of the reasons for the differences in outcomes for compensable injury clients.

To assist PIEF students in understanding the complexity of the issues that will be covered in each module, ISCRR has been asked to compile annotated bibliographies of relevant reference materials for the various components of each module. Each module has a number of relevant topic/learning outcome areas. To focus the search process, these were presented as research questions:

1. Strategic Return to Work/Community

    a. *Introduction to return to work/return to community (RTW/C):* What are the concepts of presenteeism and absenteeism and what implications do they have for RTW/C? Other introductory material will be supplied by PIEF.

    b. *Identifying and overcoming barriers to RTW/C*: What are the enablers and barriers that prevent or assist injured people in RTW/C?

    c. *Compensation system stakeholders*: Who are the different parties involved in compensation systems? What are the implications for the way in which these groups interact for injured people in achieving a successful and timely RTW/C?

    d. *The impact of work and workplace cultures on wellbeing and RTW/C*: What impact can work and workplace cultures have on the wellbeing of those seeking to RTW/C? What can be done to remedy any harmful effects?

    e. *Managing difficult/complex cases*: What are the characteristics of a difficult or complex compensation claim and the issues involved in managing such cases to RTW/C? Do mental health (including stress related) cases differ from other kinds of complex cases?

f. *Evaluating RTW/C programs*: What are the criteria for a successful RTW/C intervention according to different jurisdictions/compensation systems? How are interventions (both organisational and individual) evaluated?

2. Managing Compensable Injury Claims

a. *Measurement and differences in defining health outcomes:* What are the different definitions of "health outcomes" for compensable injuries compared to non-compensable injuries and why?

b. *Defining success:* What has been successful in influencing outcomes for RTW/C?

c. *Managing expectations:* What are the different agendas and expectations of various RTW/C stakeholders (e.g. injured worker; employer; family; insurance company; healthcare professional)? Are they different in different jurisdictions and to what extent can these perspectives influence the RTW/C process?

d. *Socio-economic consequences of "worklessness"*: What impact does being without work for an extended period or being unable to return to pre-injury work, have on the health and wellbeing of an injured person?

e. *Biopsychosocial models of recovery*: What are the important factors in holistic models of recovery and their influence on RTW/C outcomes?

f. *Specialised treatment programs*: What examples are there of the significant elements of a successful specialised/ targeted recovery/ treatment program for RTW/C in a compensable setting? Does this differ between types of program and/or types of injury?

g. *Treatment Coordination:* What is current best practice for claims managers in compensable systems when co-ordinating treatment for different types of claims, i.e. minor to moderate compared to catastrophic injuries? (

h. *Managing complex claims*: what are the factors that influence outcomes for compensation schemes in managing difficult or complex claims?

Method

Relevant peer reviewed and a selection of grey literature from 2000 to 2012 was sourced from various Monash University online medical, health and social research databases, including Google Scholar. Search terms were based on the different research questions and results often overlapped the various topic areas.

The subject matter experts engaged by PIEF to develop the modules were consulted to determine the research questions and at various points throughout the selection process. This ensured that the literature was appropriate and fit for purpose.

All material selected is therefore presented within each of the two modules under the relevant research question. References are then listed alphabetically according to type of material (e.g. as a report, magazine article, journal article etc.). Sections have been (mostly) limited to 10 references.

Very little to no material was found that directly addressed the final two questions for the Managing Compensable Injury Claims module. Instead, these sections contain related materials that address aspects of these issues.

Strategic Return to Work/Community

Introduction to Return to Work/Return to Community (RTW/C)

Magazine Articles

1. **Anon, May 4, 2012. Price of presenteeism. *Occupational Health,* 390.**

   This article is a brief discussion of three definitions of presenteeism and how the concept relates to workforce productivity (two-page article).

2. **Anon, June 10, 2011. Sickness absence surveys reveal conflicting results. *Occupational Health,* 365.**

   This article discusses findings from a number of different surveys/statistics on sickness absence in the UK (one-page article).

3. **Anon, May 2007. Increase in absence: a management challenge. *The Safety & Health Practitioner*, 25(5):7.**

   This article reports briefly on the UK's 2006 Annual CBI/AXA survey (half-page article).

Report

4. **Confederation of British Industry (CBI), 2011. *Healthy returns? Absence and workplace health survey 2011*. Accessed 13/9/2012. Available from http://www.cbi.org.uk/media/955604/2011.05-healthy_returns_-_absence_and_workplace_health_survey_2011.pdf**

   Survey sponsored by Pfizer UK. The following is taken from the foreword to this publication: "Today, employers use a wide range of tools to monitor absence and help employees return to work. The 2011 survey looks at how firms are managing absence in the recovery from the recession. One key fear – that last year's record low would be impossible to replicate as the economy picks up – has been dispelled, with average absence per employee remaining broadly flat at 6.5 days. But this does not mean that there is room for complacency; the gap between the best and worst performers is 16.6 days, and even the leaders in the field can learn from their peers. At a direct cost of £17bn, absence remains a significant burden on the UK economy. Given the tight spending round, this is a particular concern in the public sector, where absence levels remain substantially higher than in the private sector. The results of the survey indicate that better management of long-term absence may hold the key. The introduction of the fit note in April last year was a key development, and followed employer calls for more support in assessing employee capability. But the survey indicates that there is more work to be done if we are to fully benefit from this important change. Importantly, employers clearly feel that the introduction of the electronic fit note later this year must be used as an opportunity to roll out further training for GPs so that they feel confident in using the new system."

Book

5. **Treble, J. & Barmby, T., 2011. *Worker absenteeism and sick pay.* New York: Cambridge University Press.**

   Absenteeism is the single most important cause of lost labour time, yet it has received much less scholarly attention than more dramatic forms of industrial disruption, such as strikes. Arguing that any explanation of absence rates must take into account the interests of employers and employees, this book constructs a model of the markets for absence and sick pay. These are not independent since sick pay affects workers' incentives to be absent, and absences affect employers' willingness to pay sick pay. The book reviews the available empirical evidence relating to both markets, stressing the importance of careful identification of the effect of the price of absence on demand, since this is a crucial quantity for firms' policies. It concludes by discussing the implications of the model for human resources management, and for the role of the state in sick pay provision.

Book Chapter

6. **Biron, C. & Saksvik, P.O., 2009. Sickness presenteeism and attendance pressure factors: Implications for practice. In Cooper, C.L., Quick, J.C. & Schabracq, M.J., *International handbook of work and health psychology,* (3rd ed.).pp 77-96. Wiley-Blackwell.**

   Sickness presenteeism was first coined by Cary Cooper in the 1990s to describe the growing propensity of workers who spent long hours in the workplace when they feared for their jobs (Chapman, 2005). Since then, many other definitions of sickness presenteeism have been developed and the term has been used inconsistently in the scientific literature. In this chapter, the literature is reviewed to explore how the term has been used, its consequences, and the determinants which have been found to influence it. The implications for health promotion and occupational health programmes are discussed.

Journal Articles

7. **Alonso, J., Petukhova, M., Vilagut, G., Chatterji, S., Heeringa, S. *et al.,* 2011. Days out of role due to common physical and mental conditions: results from the WHO World Mental Health surveys. *Molecular Psychiatry,* 16(12):1234-46.**

   This study examines the relative importance of commonly occurring physical and mental disorders in accounting for days out of role in 24 countries that participated in the World Health Organization (WHO) World Mental Health (WMH) surveys. Overall, 12.8% of respondents had some day totally out of role, with a median of 51.1 a year. The strongest individual-level effects (days out of role per year) were associated with neurological disorders (17.4), bipolar disorder (17.3) and post-traumatic stress disorder (15.2). The strongest population-level effect was associated with pain conditions, which accounted for 21.5% of all days out of role. Common health conditions, including mental disorders, make up a large proportion of the number of days out of role across a wide range of countries.

8. **Baker-McClearn, D., Greasley, K., Dale, J. & Griffith, F., 2010. Absence management and presenteeism: The pressures on employees to attend work and the impact of attendance on performance. *Human Resource Management Journal,* 20(3):31-328.**

This article is based on interviews collected in case studies of two UK organisations (one private and one public) to examine absence management and a conceptual model of presenteeism. This study found that presenteeism is a complex 'problem' and that it is not a single one-dimensional construct, but is continually being shaped by individual and organisational factors. In addition, it was found that performance and well-being are more closely related to the organisational reaction to presenteeism and absenteeism, rather than the act itself. Findings are further illustrated using data from seven other case studies.

9. **Bekker, M.H., Rutte, C.G. & Van Rijswijk, K., 2009. Sickness absence: A gender-focused review. *Psychology, Health & Medicine,* 14(4):405-18.**

This paper reviews the literature on the relationships between sickness absence and gender. Various explanations are discussed using a classification derived from the Multi-Facet Gender and Health Model. Women's absence depends on countries, age- and professional groups, and seems restricted to short-term absence. Main conclusions with respect to future research concern the desirability of context-sensitive research and the usefulness of short-term versus long-term absenteeism as an outcome variable. Further investigation of the effects of organizational and psychosocial gender-related work characteristics, gender-bias in diagnostics and treatment, as well as gender differences in specific person-related factors interacting with gender differences in work-related daily life factors, are recommended.

10. **Cancelliere, C., Cassidy, J.D., Ammendolia, C. & Cote, P., 2011. Are workplace health promotion programs effective at improving presenteeism in workers? A systematic review and best evidence synthesis of the literature. *BMC Public Health*, 11:395+**

This study aimed to determine: if Workplace Health Promotion programs are effective in improving presenteeism; characteristics of successful programs; and potential risk factors for presenteeism. Successful programs were found to offer organizational leadership, health risk screening, individually tailored programs, and a supportive workplace culture. Potential risk factors contributing to presenteeism included being overweight, a poor diet, lack of exercise, high stress, and poor relations with co-workers and management. Although research is limited, there is preliminary evidence that some WHP programs can positively affect presenteeism and that certain risk factors are of importance.

11. **Collins, A. & Cartwright, S., 2012. Why come into work ill? Individual and organizational factors underlying presenteeism. *Employee Relations*, 34(4):429-442.**

This paper explores the perceptions of presenteeism of managers and employees in one private and one public sector organization. The aim was to understand why individuals come into work, despite being unwell, rather than taking time off work.

Findings highlight the importance of both the work environment and an individual's personal motivation, including their work ethic and support other research that organisational attendance management mechanisms can lead to absenteeism. However, well-designed and managed return to work policies can be of reciprocal benefit to both the organization and the employee.

12. **Dionne, G. & Dostie, B., 2007. New Evidence on the Determinants of Absenteeism using linked Employer-Employee Data. *Industrial & Labor Relations Review,* 61(10:108-120.**

    This paper extends the typical labour-leisure model used to analyse the decision to skip work to include firm-level policy variables relevant to the absenteeism decision and uncertainty about the cost of absenteeism. Estimates based on data from Statistics Canada's Workplace Employee Survey (1999-2002), with controls for observed and unobserved demographic, job, and firm characteristics (including workplace practices) indicate that work arrangements were important determinants of absence. For example, the authors find strong evidence that standard weekday work hours, work-at-home options, and reduced workweeks were associated with reduced absence, whereas shift work and compressed work weeks were associated with increased absence.

13. **Edington, D.W. & Schultz, A.B., 2008. The total value of health: a review of literature. *International Journal of Workplace Health Management*, 1(1):8-19.**

    This review provides evidence of the association between health risks and the workplace economic measures of time away from work, reduced productivity at work, health care costs and pharmaceutical costs. A strong body of evidence exists which shows that health risks of employees are associated with health care costs and pharmaceutical costs. A growing body of literature also confirms that health risks are associated with the productivity measures of time away from work, workers' compensation, absenteeism and presenteeism. Furthermore, studies have shown that changes in risks are associated with changes in health care costs, time-away-from-work and presenteeism.

14. **Johns, G., 2011. Attendance dynamics at work: The antecedents and correlates of presenteeism, absenteeism, and productivity loss. *Journal of Occupational Health Psychology,* 16(4):483-500.**

    This study examined the antecedents and correlates of presenteeism, absenteeism, and productivity loss attributed to presenteeism. Predictors included work context, personal characteristics, and work experiences. Business school graduates employed in a variety of work positions (N = 444) completed a Web-based survey. Presenteeism was positively associated with task significance, task interdependence, ease of replacement, and work to family conflict and negatively associated with neuroticism, equity, job security, internal health locus of control, and the perceived legitimacy of absence. Absenteeism was positively related to task significance, perceived absence legitimacy, and family to work conflict and negatively related to task interdependence and work to family conflict. Those high on neuroticism, the unconscientious, the job-insecure, those who viewed absence as more legitimate, and those experiencing work-family conflict reported more productivity loss. Overall, the results reveal the value of a behavioural approach to presenteeism over and above a strict medical model.

15. **Johns, G., 2010. Presenteeism in the workplace: A review and research agenda. *Journal of Organizational Behavior*, 31(4):519-542.**

This article traces the development of interest in presenteeism, considers its various conceptualizations and explains how presenteeism is typically measured. Organizational and occupational correlates of attending work when ill are reviewed, as are medical correlates of resulting productivity loss. It is argued that presenteeism has important implications for organizational theory and practice, and a research agenda for organizational scholars is presented.

16. **Lack, D.M., 2011. Presenteeism revisited. A complete review. *AAOHN Journal,* 59(2):77-89.**

Although presenteeism is pervasive in the workplace, the effects of the condition on employee health and productivity are less well understood. This paper provides a comprehensive review of the concept of presenteeism, including research and management practices.

Identifying and Overcoming Barriers to RTW/C

Reports

1. **Bloch, F.S. & Prins, R., 2001. *Who returns to work and why? A six-country study on work incapacity & reintegration*. Accessed 25/08/12. Available from http://www.ilo.org/skills/pubs/WCMS_108151/lang--en/index.htm.**

   This report summarises findings from the Work Incapacity and Reintegration (WIR) Project, a cross-national study of work incapacity and return to work which focused on low back pain patients.

2. **Safety, Rehabilitation and Compensation Commission. *2010-2011 Annual Report*. Accessed 13/9/12. Available from http://www.srcc.gov.au/annual_report_2010-11/report_on_performance/rehabilitation_and_return_to_work**

   This is a link to an overview of the section of the Annual report focusing on rehabilitation and return to work.

Journal Articles

3. **Andersen, M.F., Nielsen, K.M. & Brinkmann, S., 2012. Meta-synthesis of qualitative research on return to work among employees with common mental disorders. *Scandinavian Journal of Work, Environment and Health,* 38(20):93-104.**

   This study investigates which opportunities and obstacles employees with common mental disorders (CMD) experience in relation to return to work and how they perceive the process of returning to work. In addition, the study explores what characterizes an optimal RTW intervention and points to possible ways to improve future interventions for employees with CMD. This meta-synthesis found that employees with CMD identify a number of obstacles to, and facilitators of, returning to work related to their own personality, social support at the workplace, and the social and rehabilitation systems. The employees found it difficult to decide when they were ready to resume work and experienced difficulties implementing RTW solutions at the workplace. The RTW process should be seen as a continuous and coherent one where experiences of the past and present and anticipation of the future are dynamically interrelated and affect the success or failure of RTW. This study also illuminates insufficient coordination between the social and rehabilitation systems and suggests how an optimal RTW intervention could be designed.

4. **Bayoumi, A., Chambers, L., Lavis, J., Mustard, C., Raboud, J., Rourke, S.B., Rueda, S. & Wilson, M., 2012. Association of returning to work with better health in working-aged adults: a systematic review. *The American Journal of Public Health,* 102(3):541-56.**

   This paper is a systematic review of the literature on the impact of returning to work on health among working-aged adults. Longitudinal studies that documented a transition from unemployment to employment and included a comparison group were selected. Eighteen studies met the inclusion criteria, including 1 randomized controlled trial.

Fifteen studies revealed a beneficial effect of returning to work on health, either demonstrating a significant improvement in health after reemployment or a significant decline in health attributed to continued unemployment. Evidence was also found for health selection, suggesting that poor health interferes with people's ability to go back to work. Some evidence suggested that earlier reemployment may be associated with better health.

5. **Bose, H.A., 2008. Returning Injured Employees to Work: a review of current strategies and concerns. *Professional Safety,* 53(6):63-68.**

   With healthcare costs rising and production demands skyrocketing in the USA, effective RTW programs are a priority for many companies. This article briefly reviews the history and current issues regarding these programs.

6. **Coutu, M-F., Baril, R., Durand, M-J., Cote, D. & Rouleau, A., 2007. Representations: an important key to understanding workers' coping behaviors during rehabilitation and the return to work process. *Journal of Occupational Rehabilitation,* 17(3):522-44.**

   Workers' understanding/ representations of their disability are associated with coping behaviours aimed at helping them adapt to or solve their health problem. These representations provide a way of understanding what motivates workers during rehabilitation and the return to work process. This article pools the different knowledge available on the illness representation concept from the fields of anthropology, sociology and psychology in order to gain a better understanding of its application in the context of musculoskeletal disorders.

7. **Dekkers-Sanchez, P.M., Wind, H., Sluiter, J.K. & Frings-Dresen, M.H. W., 2010. A qualitative study of perpetuating factors for long term sick leave and promoting factors for return to work: chronic work disabled patients in their own words. *Journal of Rehabilitation Medicine,* 42(6):544-52.**

   This study provides insight, from the perspective of chronic work disabled patients, into the perpetuating factors for long-term sick leave and promoting factors for return to work. Four main obstacles were identified: health-related, personal, social, and work-related obstacles. Four main themes of important factors for promoting return to work were identified: favourable working conditions, positive personal characteristics of the employee, the social environment, and personal economic situation. Besides sickness, several non-medical factors are recognized barriers for return to work. Factors such as illness perceptions and self-efficacy expectations are reported to be factors that promote return to work.

8. **Van Duijn, M., Miedema, H., Elders, L. & Burdorf, A., 2004. Barriers for Early Return to work of Workers with Musculoskeletal Disorders According to Occupational Health Physicians and Human Resource Managers. *Journal of Occupational Rehabilitation,* 14(1):31-41.**

   This study describes barriers for introducing modified work for workers on sickness absence due to musculoskeletal complaints using a model based on health education was used, consisting of six successive stages. Modified work was defined as gradually

increasing the physical demands at work until the worker is ready for full duty in his/her regular job. Despite the assumed positive effects of modified work, the implementation process is hampered by a large number of barriers.

9. **Friesen, M.N., Yassi, A., & Cooper, J., 2001. Return to work: The importance of human interactions and organizational structures. *Work,* 17(1):11-22.**

   The purpose of this study was to gain insight into stakeholder perspectives on barriers and facilitators for return to work. Findings indicated that perceived barriers to RTW included delays of all types in processing or delivery of information or treatment, and ineffective communication among stakeholders. Facilitators to RTW included establishment of RTW programs in the workplace, effective communication and teamwork, as well as trust and credibility among stakeholders. The interdependence of organizational structures and human interactions was evident in successful RTW programs which emphasized teamwork, early intervention, and communication. Differing stakeholder perspectives, however, especially on issues such as worker attitudes and participation, must be acknowledged and addressed if more injured workers are to be successful in returning to full employment.

10. **MacEachen, E., Kosny, A. & Ferrier, S., 2007. Unexpected barriers in return to work: Lessons learned from injured worker peer support groups. *Work,* 29(2):155-164.**

    Some workers who are injured at work have unexpectedly prolonged absences from work. Experiences of workers who constitute a disproportionate cost to the return to work system and the systemic and compliance-related barriers they encounter during the process of returning to work are reported. A qualitative interview-based study was conducted with 37 members of three injured worker peer support groups in a Canadian province. Four dimensions of peer support were identified: worker experience of being misunderstood by system providers, need for advocates, social support, help with procedural complexities of the workers' compensation, and health care systems. Peer support constitutes a partial return to work solution for workers with injuries, but injured workers encounter an uneven playing field. Injured worker peer support groups show that sensitivity to structural and social issues may lead to better return to work outcomes.

11. **Schweigert, M. K., McNeil, D. & Doupe, L., 2004. Treating physicians' perceptions of barriers to return to work of their patients in Southern Ontario. *Occupational Medicine,* 54(6):425-9.**

    This paper aims to understand the treating physician's perspective with respect to the barriers that their patients face returning to work from injury and illness. The main barrier identified was the lack of accommodated work. Treating physicians believe that the most significant barriers for the timely return to work for their patients exist in the workplace, specifically related to lack of knowledge about appropriate modified work. The treating physicians' role in the return to work process is demanding due to insufficient time to deal with return to work issues, lack of training, not enough of the appropriate information, and the treating physicians' role ambiguity.

12. **Strauser, David R., 2008. Trauma symptomatology: Implications for return to work. *Work,* 31(2):245-252.**

Research has suggested that individuals who experience work-related injuries may be at an increased risk for developing trauma symptoms or Post-Traumatic Stress Disorder (PTSD). This article provides a brief overview of PTSD and discusses implications for rehabilitation planning with workers with industrial injuries. The negative impact of trauma symptoms and PTSD is profiled according the following four areas that are important for effective career and vocational behaviour: (a) making occupational adjustments, (b) adjusting performance to meet specific work demands, (c) utilizing appropriate social and interpersonal skills in the work setting, and (d) meeting the production and time requirements associated with the specific job. Recommendations are offered to increase the effectiveness of rehabilitation professionals working with industrial injured workers who may be experiencing trauma symptoms or PTSD.

13. **Tiedtke, C., de Rijk, A., de Casterle, B., *et al*., 2010. Experiences and concerns about 'returning to work' for women breast cancer survivors: A literature review. *Psycho-Oncology,* 19(7):677-683.**

This study explores how female breast cancer patients experience work incapacity during the treatment and return to work phases and how interactions between patients and stakeholders affect this experience. Women with breast cancer receive varied reactions but little advice about returning to work. Women were primarily concerned with disclosing the diagnosis to their employer and to relatives. Uncertainties about physical appearance, ability to work, and possible job loss affected the women's decisions about working during the treatment phase. After treatment, most women wanted to regain 'their normal life', but concentration and arm or fatigue problems potentially interfered. Although supportive work environments were helpful, the individual needs of women differed. Employers and employees need to find a balance in defining accommodating work. Many women received favourable support, but some reported feeling discriminated against. Many women re-evaluated the role of work in their lives after being confronted with breast cancer. Work adjustments could help women to keep their jobs during illness and recovery. To resolve women's concerns about returning to work, employers, physicians, and insurance institutions should consider increasing and improving communication with breast cancer patients and playing a more active and supportive role.

Compensation System Stakeholders

Report

1. **Campbell Research, July 2012. *Australia and New Zealand Return to Work Monitor 2011/12.* Accessed 13/9/12. Available from http://www.hwca.org.au/documents/1227%202011-12%20Australia%20and%20New%20Zealand%20RTW%20Monitor%20FINAL%20Report%20120730.pdf.**

   The RTW Monitor survey is conducted across Australian and New Zealand workers' compensation jurisdictions. This report was prepared for the Heads of Workers' Compensation Authorities. This is a survey of injured workers who have received 10 or more days of compensation and submitted a claim seven to nine months prior to either of the two survey periods of November and May. Self-insured organisations are not included.

Journal Articles

2. **Bloom, M., 2004. The Ethics of Compensation Systems. *Journal of Business Ethics,* 52(2):149-152.**

   Compensation systems are an integral part of the relationships organizations establish with their employees. For many years, researchers viewed pay systems as an efficient way to bring market-like labour exchanges inside organizations. This view suggested that only economic considerations matter for understanding how compensation systems effect organizations and their employees. Advances in organizational research, particularly those focused on issues of justice and fairness, suggest that the fully understanding the outcomes of compensation systems requires examining their psychological, social, and moral effects.

3. **Brunarski, D., Shawb, L. & Doupec, L., 2008. Moving toward virtual interdisciplinary teams and a multi-stakeholder approach in community-based return to work care. *Work,* 30(3):329-226.**

   More efforts are needed to help stakeholders who are geographically isolated from one another become more collaborative in their approach to return to work (RTW). A review of the literature on team processes, and insights from the experiences of a federally funded Round Table Project on "Safe and Timely Return to Function and Return to Work" were used to inform strategies that might enhance collaboration among health professionals and stakeholders in injury and illness management and return to work. A case study serves to highlight the individual, identifies the problem and provides a potential solution at the broader service and system levels. There is a need for a common language as well as policies that emphasize the importance of fostering awareness of inter-professional potentials and contributions of all stakeholders. Establishing shared goals and building capacity for sustaining collaboration when multi-stakeholders do not function in the same physical location, but work virtually, might maximize effectiveness, efficiency and productivity.

4. **Calvey, J. & Jansz, J., 2005. Women's Experience of the Workers Compensation System. *Australian Journal of Social Issues,* 40(2): 285-311.**

   This is a phenomenological study to understand women's experience of the workers' compensation system. Four core themes were found: negative versus positive experiences, the workplace response and the role in the process, women's experiences of payouts, and reasons why women may not claim worker's compensation. Further, women indicated that the workers' compensation process was a disincentive to making a claim. Recommendations for improvements to the workers' compensation system include establishing legal obligations and enforcement of occupational health and safety responsibilities.

5. **Cromie, J.E., Robertson, V.J. & Best, M.O., 2003. Physical therapists who claimed workers' compensation: a qualitative study. *Physical Therapy,* 83(12):1080-9.**

   Although most physical therapists experience work-related musculoskeletal disorders (WMSDs) at some time, only a small minority claim workers' compensation. This article describes the experiences of a group of therapists with WMSDs who made compensation claims. Interviews were used to document the experiences of physical therapists who reported that they had changed their career because of WMSDs. Results and Discussion. Therapists described their experiences in negative terms and found dealing with the workers' compensation system frustrating and unpleasant. They encountered attitudes that labelled them as malingerers and felt their credibility was questioned. Physical therapists' experiences of the workers' compensation system were negative, and they were keen to become independent of it. Those who claimed workers' compensation perceived that a compensable claim could limit their employment opportunities, making confidentiality an important issue when treating other health care professionals.

6. **Eggert, S., 2010. Psychosocial factors affecting employees' abilities to return to work. *AAOHN Journal*, 58(2):51-55.**

   This literature review explored the experiences of workers with on-the-job injuries, and the effect of psychosocial factors on their abilities to return to work. Four common themes were discovered: frustration, depression, discrimination, and obstacles in understanding how the workers compensation system works and in obtaining care. The literature suggests that interventions such as rehabilitation programs and psychosocial interventions help injured workers return to work. Nursing implications, including early, comprehensive, and fair interventions, are discussed.

7. **Kosny, A., MacEachen, E., Ferrier, S. & Chambers, L., 2011. The Role of Health Care Providers in Long Term and Complicated Workers' Compensation Claims. *Journal of Occupational Rehabilitation,* 21(4):582-90.**

   Health care providers (HCPs) play a central role in workers' compensation systems. In most systems, they are involved in the legitimization of work-related injury, are required to provide information to workers' compensation boards about the nature and extent of the injury, give recommendations about return to work capability and provide treatment for injury or illness. This study identifies problems that occur at the interface between the health care system, injured workers, and workers' compensation boards (WCBs)

that may complicate and extend workers' compensation claims and the mechanisms that underlie the development of these problems. Four domains related to injured workers' interface with the health care system were identified that played a key role in complicating and prolonging compensation claims. These problems, related to health care access, conflicting or imperfect medical knowledge, limited understanding of compensation system requirements. Confusion on decision-making authority resulted in frustration, financial difficulties and mental health problems for injured workers. Recommendations are made about how compensation system parties can find better ways to serve injured worker health care needs and facilitate a smooth relationship between the compensation board and HCPs.

8. **Franche, R-L., Baril, R., Shaw, W., Nicholas, M. & Loisel, P., 2005. Workplace-Based Return to work Interventions: Optimizing the Role of Stakeholders in Implementation and Research. *Journal of Occupational Rehabilitation,* 15(4):525-42.**

   This article contrasts the diverse paradigms of workers, employers, insurers, labour representatives, and healthcare providers when implementing and studying workplace-based RTW interventions. Analysis of RTW stakeholder interests suggests that friction is inevitable; however, it is possible to encourage stakeholders to tolerate paradigm dissonance while engaging in collaborative problem solving to meet common goals. We review how specific aspects of RTW interventions can be instrumental in resolving conflicts arising from differing paradigms: calibration of stakeholders' involvement, the role of supervisors and of insurance case managers, and procedural aspects of RTW interventions. The role of the researcher in engaging stakeholders, and ethical aspects associated with that process are discussed. Recommendations for future research include developing methods for engaging stakeholders, determining the optimal level and timing of stakeholder involvement, expanding RTW research to more diverse work settings, and developing RTW interventions reflecting all stakeholders' interests.

9. **Roberts-Yates, C., 2003. The concerns and issues of injured workers in relation to claims/injury management and rehabilitation: the need for new operational frameworks. *Disability and Rehabilitation,* 25(16):898-907.**

   This paper discusses some of the practical considerations from the injured workers' point of view that need to be taken into account when they are registered as claimants for Workers' Compensation. Workers reported a range of impediments experienced in the return to work process that created considerable stress and concern. These included the erratic payment of economic benefits, indifferent case managers, the management of the stigma associated with a registered WorkCover claim, a general lack of information, disrespectful communication from service providers, and a suspicious response to their injury by the employer, co-workers and some professional service providers. Some suggestions are made for improvements to practice.

10. **Young, A. E., Wasiak, R., Roessler, R. T., McPherson, K. M., Anema, J. R. & Van Poppel, M. N. M., 2005, Return to work outcomes following work disability: Stakeholder motivations, interests and concerns. *Journal of Occupational Rehabilitation,* 15(4):543-4556.**

Satisfaction with return to work outcomes is dependent on many factors, including a clear exposition of what people define as a "good outcome" and the information they use to determine if such an outcome has been achieved. This paper defines the key stakeholders involved in the RTW process and discusses the need to understand their motivations, interests, and concerns. A review of the literature and discussions with RTW researchers was conducted by a multidisciplinary group of academic researchers. Analysis suggests that RTW stakeholders can share the goal of a successful RTW; however, this consensus has to be viewed in light of other, sometimes competing, goals and the environments in which stakeholders operate. It is suggested that more clearly articulating and operationalizing stakeholders' perspectives will allow researchers to advance the understanding of RTW interventions and outcomes.

The Impact of Work and Workplace Cultures on Wellbeing & RTW/C

Journal Articles

1. **Andersen, L.P., Kines, P. & Hasle, P., 2007. Owner Attitudes and Self Reported Behavior Towards Modified Work After Occupational Injury Absence in Small Enterprises: A Qualitative Study. *Journal of Occupational Rehabilitation,* 17(1):107-21.**

   Opportunities for modified work after an occupational injury are thought to be limited in small enterprises. This paper explores owner attitudes and self-reported behaviour towards modified work after injury-absence in small enterprises. Twenty-two owners of small construction and metal-processing enterprises were interviewed. Opportunities for modified work were possible in spite of some owners' general objections. Owners found their own solutions here-and-now without help from external stakeholders, and had little knowledge of possibilities for financial or practical support for early return to work initiatives. Initiatives formalizing modified work must be arranged in a way that supports the close social relations in small enterprises. Information to support the return to work process must be given when it is needed, i.e. at the onset of the prospect of lengthy work absence. The actual form of modified work should mainly be left up to the employer and the injured worker.

2. **Cotton, P., 2006. Occupational wellbeing - Management of injured workers with psychosocial barriers. *Australian Family Physician,* 35(12):958-61.**

   Although most injured workers return to work with minimal intervention, approximately 20% show levels of distress and disability beyond that expected for the injury. The level of morale in a workplace seems to play a major role in this. Workers who experience positive emotions leading to increased morale are more likely to be resilient following injury. It is important for general practitioners to recognise the non-clinical factors that exert a significant influence over employee wellbeing and return to work outcomes. Some management strategies are presented. General practitioners who work collaboratively with all major stakeholders; who identify and manage psychosocial barriers early; who take an active role in promoting positive expectations; and who focus on the immediate problem rather than its industrial associations, will achieve better outcomes for their injured patients.

3. **Lysaght, R., Fabrigar, L., Larmour-Trode, S., Stewart, J. & Friesen, M., 2012. Measuring Workplace Social Support for Workers with Disability. *Journal of Occupational Rehabilitation,* 22(3):376-86.**

   Social support in the workplace has been has been demonstrated to serve as a contributor to a worker's ability to manage work demands and to manage stress. Research in the area of disability management indicates that interpersonal factors play an important role in the success of return to work interventions. Prior to this study, there existed no validated quantitative measure of social support for workers who re-enter the workplace following injury or disability. A support measure prototype, the “Support for Workers with Disability Scale”, was tested with 152 workers in accommodated work situations. Four validation tools were used to assess criterion validity. Factor analysis was used to validate the content structure and reduce the total number of response

items. Additional analysis was conducted to determine the ability of the measure to discriminate between groups, and to provide insight into how social support operates in workplaces. Based on this analysis, a reduced measure consisting of 41 items and measuring supervisor, co-worker, and non-work supports was created. Secondary analysis disclosed information concerning the nature of supports in the workplace. Higher levels of support were identified for workers with fewer work role limitations and for those with one versus multiple injury claims. This tool provides a validated outcome measure for research examining the social aspects of workplace disability. It can also serve as a quality management tool for human resource professionals engaged in continuous improvement of disability management programs

4. **Nieuwenhuijsen, K., Verbeek, J.H A.M., de Boer, A.G.E.M., Blonk, R.W.B. & van Dijk, F.J.H., 2004. Supervisory behaviour as a predictor of return to work in employees absent from work due to mental health problems. *Occupational & Environmental Medicine,* 61(10):817-23.**

   This research studied supervisory behaviour as a predictive factor for return to work of employees absent due to mental health problems; and explored the association between conditional factors and supervisory behaviour. Eighty five supervisors of employees were interviewed by telephone. Questionnaires providing information on person-related factors, depressive symptoms, and sickness absence were sent to the employees at baseline, three months, six months, and after one year. Three aspects of supervisory behaviour during the period of absence were measured: communication with the employee, promoting gradual return to work, and consulting other professionals. It was found that better communication between supervisor and employee was associated with time to full return to work in non-depressed employees. For employees with a high level of depressive symptoms, this association could not be established. Consulting other professionals more often was associated with a longer duration of the sickness absence for both full and partial return to work. If sickness absence had financial consequences for the department, the supervisor was more likely to communicate frequently with the employee. Supervisors who were responsible for return to work in their organisation were more likely to communicate better and to consult more often with other professionals. It is recommended that supervisors should communicate more frequently with employees during sickness absence as well as hold follow up meetings more often as this is associated with a faster return to work in those employees.

5. **Reijenga, F.A., 2006. The role of organisational culture in sickness absence. *The International Journal of Disability Management Research,* 1(1):97-106.**

   In the Dutch literature on occupational health and sickness absence many references to organisational culture can be found on factors that influence sickness absence. A simple management tool consisting of 30 questions was developed to explain the organisational culture in relation to sickness absence to enable the organisation to choose interventions in order to prevent or to reduce sickness absence. We tested the tool with seven Human Resource Managers in the government sector. To date, the checklist appears to be helpful in analysing the organisational culture in relation to sickness absence, but still needs to be tested with a larger population.

6. **Rhoades, L. & Eisenberger, R., 2002. Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4):698-714.**

Employers value dedication and loyalty. Committed employees perform better at work, are absent less frequently, and are less likely to quit their job. Employees, meanwhile, also want the organisation they work for to value them. Being valued by the organisation means the employee is given approval and respect, good working conditions, and access to information and other resources to carry out their job, and may be offered better pay and promotion. If an employee feels valued, they are likely to be committed to the organisation. If the employee is committed, the organisation is more likely to value them. Perceived organisational support refers to an employee's beliefs about the organisation they work for: how much it values their contribution, cares about their wellbeing and is ready to offer help when needed. This article is a review of over 70 studies about perceived organisational support and its effect in the workplace. The studies were performed in industries ranging from manufacturing and farming to education, healthcare, government and private enterprise.

7. **Tjulin, A., MacEachen, E. & Ekberg, K., 2010. Exploring workplace actors' experiences of the social organization of return to work. *Journal of Occupational Rehabilitation,* 20(3): 311-321.**

There is a limited body of research on how the actual social exchange among workplace actors influences the practice of return to work. The objective of this study was to explore how workplace actors experience social relations in the workplace and how organizational dynamics in workplace-based return to work extends before and beyond the initial return of the sick listed worker to the workplace. An exploratory qualitative method approach was used, consisting of individual open-ended interviews with 33 workplace actors at seven worksites that had re-entering workers. The workplace actors represented in these interviews include: re-entering workers, supervisors, co-workers, and human resource managers. Analysis identified three distinct phases in the return to work process: while the worker is off work, when the worker returns back to work, and once back at work during the phase of sustainability of work ability. Two prominent themes that emerged include invisibility in relation to return to work effort and uncertainty, particularly about how and when to enact return to work. These findings strengthen the notion that workplace-based return to work interventions need to take social relations amongst workplace actors into account. They also highlight the importance and relevance of the varied roles of different workplace actors during two relatively unseen or grey areas, of return to work: the pre-return and the post-return sustainability phase. Attention to the invisibility of return to work efforts of some actors and uncertainty about how and when to enact return to work between workplace actors can promote successful and sustainable work ability for the re-entering worker.

8. **Tjulin, A., MacEachen, E. & Ekberg, K., 2011. Exploring the meaning of early contact in return to work from workplace actors' perspective. *Disability and Rehabilitation,* 33(2):137-145.**

This paper explores the meaning of early contact in return to work, and how social relational actions and conditions can facilitate or impede early contact among actors in the workplace. An exploratory qualitative method was used, consisting of individual open-ended interviews with 33 workplace actors at seven worksites across three public

employers in Sweden. The workplace actors represented in these interviews included re-entering workers, supervisors, co-workers and human resources managers. Organisational policies on return to work were collected from the three employers. Analysis indicated that early contact is a complex return to work measure with shifting incentives among workplace actors for making contact. For instance, the findings indicated obligation and responsibilities as incentives, incentives through social relations, and the need to acknowledge and balance the individual needs in relation to early contact. These findings strengthen the importance of early contact as a concept with a social relational context that comprises more than just an activity carried out (or not) by the employer, and suggest that early contact with a sick-listed worker is not always the best approach for a return to work situation. This study provides a starting point for a more articulated conceptualisation of early contact.

9. **Wanberg, C.R., 2012. Unemployment and Well-Being. *Annual Review of Psychology.* 63(1).**

   This review describes advances over the past decade in what is known about the individual experience of unemployment, predictors of reemployment, and interventions to speed employment. Research on the impact of unemployment has increased in sophistication, strengthening the causal conclusion that unemployment leads to declines in psychological and physical health and an increased incidence of suicide. This work has elucidated the risk factors and mechanisms associated with experiencing poor psychological health during unemployment; less so for physical health and suicide. Psychologists have begun to contribute to the study of factors associated with reemployment speed and quality. The past decade has especially illuminated the role of social networks and job search intensity in facilitating reemployment. Evidence suggests some individuals, especially members of minority groups, may face discrimination during their job search. Although more work in this arena is needed, several intervention-based programs have been shown to help individuals get back to work sooner.

10. **Wang, J.L., Schmitz, N., Smailes, E., Sareen, J. & Patten, S., 2010. Workplace characteristics, depression, and health-related presenteeism in a general population sample. *Journal of Occupational and Environmental Medicine,* 52(8):836-842.**

    This study investigates the relationships between workplace psychosocial factors, work/family conflicts, depression, and health-related presenteeism in a sample of employees who were randomly selected from the communities. Data were collected on a cross-sectional study of 4032 employees representative of the working population aged 25 to 64 years in Alberta, Canada. Data included workplace characteristics, depression, and health-related presenteeism It was found that 47.3% and 42.9% participants reported some degree of impaired job performance in completing work and avoiding distraction, respectively. Major depression is the strongest factor associated with avoiding distraction. Job strain and effort-reward imbalance seemed to affect job performance through severity of depression but not major depression. A negative work environment may directly and indirectly affect job performance. Workplace health promotion activities should target organizational factors such as job strain and effort-reward imbalance and work/family conflicts so as to reduce the risk of depression and the direct and indirect effects of these risk factors and depression on productivity.

11. **Young, A.E., 2010. Return to work following disabling occupational injury - facilitators of employment continuation. *Scandinavian Journal of Work, Environment & Health*, 36(6):473-83.**

Return to work following occupational injury is an important rehabilitation milestone but does not mark the end of the return to work process. Following a return to the workplace, workers can experience difficulties that compromise their rehabilitation gains. Although there has been investigation of factors related to a return to the workplace, little attention has been paid to understanding what facilitates continued return to work success. This study used data gathered during one-on-one telephone interviews with 146 people who experienced a work-related injury that resulted in their being unable to return to their pre-injury job, but who returned to work following an extended period of absence and after receiving vocational services. Numerous return to work facilitators were reported, including features of the workers' environmental and personal contexts, as well as body function, activities, and participation. Influences that stood out included: a perception that the work was appropriate, supportive workplace relationships, and a sense of satisfaction/achievement associated with being at work. These findings support the contention that initiatives aimed at improving return to work outcomes can go beyond the removal of barriers to include interventions to circumvent difficulties before they are encountered. Together with providing ideas for interventions, the study's findings offer an insight into research and theoretical development that might be undertaken to further the understanding of the return to work process and the factors that impact upon it.

Managing Difficult/Complex Cases

Report

1. **Eakin J., MacEachen E., Mansfield L. & Clarke J., 2009. *The logic of practice: An ethnographic study of front-line service work with small businesses in Ontario's Workplace Safety and Insurance Board*. Institute for Work & Health, Working Paper #346. Accessed 3 September 2012. Available from http://www.iwh.on.ca/working-paper/wp-346.**

   This study characterizes and explains the nature, logic and social relations of front-line service work at Ontario's Workplace Safety and Insurance Board (WSIB), particularly in relation to the institutional context in which it takes place. Individual interviews with adjudicators, nurse case managers and customer service representatives, and managers working with small businesses, "go-along" observations of routine activities, and documentary materials (e.g. electronic forms, policy manuals, performance tools) were collected from two WSIB offices (urban and regional) during 2005-2007 and analysed using interpretive qualitative methodology. The WSIB has deep-set competing institutional accountabilities that frame work at the front-line. Front-line work is a "professional assembly line" where judgment and flexibility are required within a highly standardized process. Strategic discursive (language/talk) and strategic discretionary practices enable staff to "keep things moving," solve problems, manage clients, and handle conflicting expectations. Work with small businesses has distinctive challenges within an administrative and policy system designed for larger organizations, and is affected by the marginal, oft-changing status of small business within the WSIB. Front-line staff mediates the competing objectives of the WSIB and manage a delicate set of "disciplinary" relations with involuntary clients in a context of limited, uncertain, and changing rules, policies and resources. Findings have implications for injured/ill workers, employers, WSIB administrators, front-line workers themselves, and the occupational health system as a whole.

Journal Articles

2. **Blank, L., Peters, J., Pickvance, S., Wilford, J. & MacDonald, E., 2008. A Systematic Review of the Factors which Predict Return to Work for People Suffering Episodes of Poor Mental Health. *Journal of Occupational Rehabilitation,* 118(1):27-34.**

   Poor mental health is responsible for a large percentage of long term work absence, and only 50% of those who are off work for 6 months or more return to work. This paper describes the factors which predict or restrict return to work for people suffering episodes of poor mental health. A literature review was conducted to identify all papers relating to long term mental illness absence. Fourteen papers of varying methodological quality considered mental health in relation to psychiatric morbidity, depression, stress, and body weight. Successful return to work is predicted by factors related to work, family history, health risk behaviours, social status, and medical condition. This study identifies a range of factors which are important in preventing return to work for people with mental health conditions. The factors affecting RTW after a period of sickness absence due to poor mental health are wide ranging and in some cases studies have produced opposing results (particularly in the case of demographic factors).

3. **King, R., Meadows, G. & Le Bas, J., 2004. Compiling a caseload index for mental health case management. *Australian and New Zealand Journal of Psychiatry,* 38(6):455-62.**

   This study explores methods of determining an appropriate caseload for mental health case managers. Seven factors that may impinge on case manager performance and impact on caseload were identified, having reference to published literature and service practice in Victoria and Queensland. The advantages and disadvantages of including these factors in a caseload index were evaluated. Three caseload index methodologies are presented. Each method makes use of different data and has advantages and disadvantages. There is a trade-off between simplicity and ease of application and the comprehensive use of relevant information. Methods vary in their implications for service efficiency and equity in workload distribution. Caseload is a key issue in service planning and staff management. Factors that have the potential to contribute to caseload can be readily identified. However, there is likely to be disagreement as to the weight assigned to any factor and the approach taken may depend on the purpose and context of the caseload calculation.

4. **MacEachen, E., Kosny, A., Ferrier, S. & Chambers, L., 2010. The "Toxic Dose" of System Problems: Why Some Injured Workers Don't Return to Work as Expected. *Journal of Occupational Rehabilitation,* 20(3):349-66.**

   Most workers who incur an injury on the job follow a relatively straightforward path through a workers' compensation claim, recovery and return to work. However, a minority of compensation claims is prolonged and can be disproportionately costly. We conducted this qualitative study in order to gain an understanding of systemic, process-related problems affecting injured workers who had failed to return to work as expected. We identify problems with return to work and extended workers' compensation claims in dysfunctions in organizational dynamics across RTW systems including the workplace, healthcare, vocational rehabilitation and workers' compensation. These system problems are difficult to identify because they appear as relatively mundane and bureaucratic. These appeared to have damaging effects on workers in the form of a toxic dose affecting the worker beyond the initial injury. Worker's problems with extended claims were linked to RTW policies that did not easily accommodate conflict or power imbalances among RTW parties and by social relations and processes that impeded communication about RTW situations and problems. Avenues for intervention are located in a shift to a critical lens to RTW process that addresses differences of knowledge, resources, and interests among different parties.

5. **MacEachen, E., Kosny, A., Ferrier, S., Lippel, K., Neilson, C., Franche, R.L. & Pugliese, D., 2012. The 'Ability' Paradigm in Vocational Rehabilitation: Challenges in an Ontario Injured Worker Retraining Program. *Journal of Occupational Rehabilitation*, 22(1):105-17.**

   In recent years, a focus on workers' ability, rather than impairment, has guided disability management services. However, a challenge with the notion of ability is identification of the border between ability and inability. This article considers this grey zone of disability management in the case of a workers' compensation vocational retraining program for injured workers in Ontario. Concepts such as maximum medical rehabilitation distracted attention from workers' ongoing chronic and unstable health situations, and incentive

levers to employers directed some of the least capable workers into the program. As well, communication pathways for discussing health problems were limited by rules and provider reluctance to reveal problems. Therefore, workers completing the program were deemed 'employable', while ongoing and problematic health conditions preventing employment remained relatively uncharted and invisible. This study reinforces how the shift in disability management paradigm to a focus on ability and return to work requires consideration of environmental conditions, including policies and programs and implementation. A focus on the environment in which worker ability can be enacted might be as important as a focus on improving individual worker characteristics.

6. **Meijer E.M., Sluiter J.K., & Frings-Dresen, M.H., 2005. Evaluation of effective return-to-work treatment programs for sick-listed patients with non-specific musculoskeletal complaints: a systematic review. *Int Arch Occup Environ Health,* 78(7): 523-32.**

   This systematic review seeks to gain insight into the effectiveness of return to work treatment programs among sick-listed patients with non-specific musculoskeletal complaints. The focus is on the composition of effective treatment programs, itemized for regional non-specific musculoskeletal complaints. None of the studies reviewed reported negative findings. What appeared to be essential to effective treatment was knowledge conditioning, psychological, physical and work conditioning, possibly supplemented with relaxation exercises. Most of the high quality studies (64%) reported on a low back pain population. The findings were inconsistent regarding the effectiveness of treatment programs in enabling sick-listed patients with non-specific musculoskeletal disorders to return to work. Except for low back pain, none of the studies explicitly itemized the effects of treatment programs on return to work by regional musculoskeletal disorders, such as upper extremity musculoskeletal disorders.

7. **Muscat, A.C., 2005. Ready, set, go: the transtheoretical model of change and motivational interviewing for “fringe” clients. *Journal of Employment Counseling,* 42(4):179-191.**

   This study explores the applicability of the Transtheoretical Model of Change (TTM) and motivational interviewing (MI) as a collaborative approach in counselling “resistant” or ambivalent clients. The TTM and MI provide an empirically tested framework for employment counsellors to assess and empower clients who appear resistant or ambivalent about change. Examples are given on how the TTM and MI may be practiced.

8. **Rapp, C.A. & Goscha, R.J., 2004. The principles of effective case management of mental health services. *Psychiatric Rehabilitation Journal,* 27(4):319-333.**

   This paper identifies ten principles or active ingredients of case management that are common to interventions that produced statistically significant positive outcomes for people with serious psychiatric disabilities. Twenty-two studies employing experimental or quasi-experimental designs were selected for inclusion in this review. The use of the principles for systems design is briefly discussed.

9. **Trifiletti, B, 2006. Getting the at risk patient back to work: a strategy. *Australian Family Physician,* 35(12):952-6.**

Achieving best outcomes in occupational injury management requires an emphasis upon identifying and managing those factors which, in addition to the medical condition, lead to progression to chronicity. The most studied common musculoskeletal workplace injury is low back pain. While the majority of patients resume working with minimal medical intervention, this article highlights the early identification and management of factors in the workplace that can result in poorer outcomes for patients. After exclusion of serious red flag conditions, the majority of patients with musculoskeletal injuries can resume suitable work. Factors impacting adversely upon the likelihood of a durable return to work include poor quality workplace relationships, lack of a return to work culture, patient distress regarding their condition, behaviours and beliefs about the injury such as activity avoidance, reliance on passive treatment modalities, pain focus, and time off work. It is acknowledged that workplace factors may appear beyond the influence of general practitioners, but their role is crucial to preventing chronic disability, facilitating patient self-management and engaging with the workplace.

10. **Xu Wen, L. & Yan Wen, X., 2008. Effectiveness of problem solving skills in case management on return to work for workers with injuries. *Work*, 30(1):47-53.**

This study explores the case management model using problem solving skills in assisting workers with injuries in returning to work. A total of five workers with injuries were enrolled and there were four stages during the whole case management process including a medical rehabilitation stage (stage I), a compensation stage (stage II), a return to work stage (stage III) and a follow-up stage (stage IV) respectively. Case managers provided services by using problem solving skills to tackle the problems which workers with injuries may encounter during all four stages. Outcome measurement showed one case return to the same company same job, two returns to different companies and different jobs, the others have self-employed work. This study suggested that case management using the problem solving skills of occupational rehabilitation was beneficial to workers with injuries on return to work.

Evaluating RTW/C Programs

Journal Articles

1. **Bronner, S., Ojofeitimi, S., & Rose, D., 2003. Injuries in a modern dance company: effect of comprehensive management on injury incidence and time loss. *American Journal of Sports Medicine*, 31(3):365-373.**

   Professional dancers experience high rates of musculoskeletal injuries. This retrospective/prospective cohort study analyses the effect of comprehensive management (case management and intervention) on injury incidence, time loss, and patterns of musculoskeletal injury in a modern dance organization. Injury data were analysed over a 5-year period, 2 years without intervention and 3 years with intervention, in a modern dance organization (42 dancers). The number of workers' compensation cases and number of dance days missed because of injury were compared across a 5-year period in a factorial design. Comprehensive management significantly reduced the annual number of new workers' compensation cases from a high of 81% to a low of 17% and decreased the number of days lost from work by 60%. The majority of new injuries occurred in younger dancers before the implementation of this program. Most injuries involved overuse of the lower extremity, similar to patterns reported in ballet companies. Benefits of comprehensive management included early and effective management of overuse problems before they became serious injuries and triage to prevent overutilization of medical services. This comprehensive management program effectively decreased the incidence of new cases and lost time. Both dancers and management strongly support its continuance.

2. **Colledge, A.L. & Johnson, H.I., 2000. The SPICE model for return to work. *Occupational Health & Safety* 69(2):64-9. Also available from**

   Delayed recovery is a recognised problem for work related injuries. A significant proportion of cases end up in delayed recovery, suggesting to the authors that the current system for managing return to work is ineffective, and may be promoting disability. A range of studies have found that most people experience and expect some soreness as part of life. In some circumstances, particularly when there are high levels of anxiety, or reduced coping abilities, the pain and functional limitations can become more substantial, and out of proportion to the defined medical condition. The authors of this study provide information from return to activity and work in the military. They indicate that the military has a much longer level of experience with these issues.

3. **Franche, R.L., Cullen, K., Clarke, J., Irvin, E., Sinclair, S., Frank, J., Cole, D. *et al*., 2005. Workplace-based return-to-work interventions: A systematic review of the quantitative literature. *Journal of Occupational Rehabilitation*, 15(4):607-631.**

   A systematic review was conducted to review the effectiveness of workplace-based return-to-work interventions. Seven databases were searched for peer-reviewed studies of RTW interventions provided at the workplace to workers with work disability associated with musculoskeletal or other pain-related conditions. This review provides the evidence base supporting that workplace-based RTW intervention can reduce work disability duration and associated costs; however the evidence regarding their impact on quality-of-life outcomes was much weaker.

4. **Ireys, H.T. & Wehman, P., 2011. The Evaluation of the Demonstration to Maintain Independence and Employment. *Journal of Vocational Rehabilitation*, 34(2):67-69.**

The Demonstration to Maintain Independence and Employment (DMIE) program was established in November 1999. The aim was to determine whether a program of medical assistance and employment supports for workers with potentially disabling conditions can prevent or postpone the loss of employment and subsequent enrolment into federal disability benefit programs. This paper is an introduction to papers examining results from four participating states of Kansas, Minnesota, Texas and Hawaii.

5. **Higgins, A., O'Halloran, P. & Porter, S., 2012. Management of Long Term Sickness Absence: A Systematic Realist Review. *Journal of Occupational Rehabilitation,* 22(3):322-32.**

The increasing impact and costs of long term sickness absence have been well documented. However, the diversity and complexity of interventions and of the contexts in which these take place makes a traditional review problematic. A systematic realist review was conducted to identify the dominant programme theories underlying best practice, to assess the evidence for these theories, and to throw light on important enabling or disabling contextual factors. It was found that the dominant programme theories in relation to effective management related to: early intervention or referral by employers; having proactive organisational procedures; good communication and cooperation between stakeholders; and workplace-based occupational rehabilitation. Significant contextual factors were identified as the level of support for interventions from top management, the size and structure of the organisation, the level of financial and organisational investment in the management of long-term sickness absence, and the quality of relationships between managers and staff. Consequently, those with responsibility for managing absence should bear in mind the contextual factors that are likely to have an impact on interventions, and do what they can to ensure stakeholders have at least a mutual understanding (if not a common purpose) in relation to their perceptions of interventions, goals, culture and practice in the management of long term sickness absence.

6. **Mitra, S.e, 2009. Temporary and partial disability programs in nine countries: What can the United States learn from other countries? *Journal of Disability Policy Studies,* 20(1):14-27.**

This article reviews and compares disability benefit systems in nine countries-Australia, Germany, Great Britain, Japan, the Netherlands, Norway, South Africa, Sweden, and the United States. It focuses on temporary and partial disability benefit programs and on how such programs may help return persons with disabilities to work. An analysis of the general advantages and disadvantages of temporary and partial disability programs is presented. Specific concerns if such programs were to be implemented in the United States are addressed. Time-limited programs seem to have the potential to improve return to work among persons with disabilities and reduce program costs. Caution is needed in adopting such a program, as implementation would be complex and the employment outcomes of recently adopted time-limited programs overseas are yet to be evaluated. In contrast, the study found that partial disability benefit programs are complex to administer and appear to offer little potential to encourage return to work.

7. **Poulain, C., Kerneis, S., Rozenberg, S., Fautrel, B., Bourgeois, P. & Foltz, V., 2010. Long-term return to work after a functional restoration program for chronic low-back pain patients: a prospective study. *European Spine Journal* 19(7):1153-61.**

Low-back pain is a major health and socio economic problem. Functional restoration programs (FRP) have been developed to promote the socio-professional reintegration of patients with important work absenteeism. The aim of this study was to determine the long-term effectiveness of FRP in a group of 105 chronic low-back pain patients and to determine the predictive factors of return to work. One hundred-and-five chronic LBP patients with over 1 month of work absenteeism were included in a FRP. Pain, professional status, quality of life, functional disability, psychological impact, and fear and avoidance beliefs were evaluated at baseline, after 1 year and at the end of follow-up. Main effectiveness criterion was return to work. Fifty-five percent of the patients returned to work after mean follow-up time of 3.5 years, compared with 9% of the patients at work at baseline. Quality of life, functional disability, psychological factors, and fear and avoidance beliefs were all significantly improved. Three predictive factors were found: younger age at the onset of low-back pain, practice of sports, and shorter duration of sick leave at baseline. FRP show positive results in terms of return to work for chronic LBP patients with prolonged work absenteeism. Efforts should be made to propose such programs at an earlier stage of the disease.

8. **Shaw, L., Domanski, S., Freeman, A. & Hiffele, C., 2008. An investigation of a workplace-based return-to-work program for shoulder injuries. *Work*, 30(3):267-276.**

The purpose of this study was to investigate and evaluate the current workplace management of rotator cuff injuries in a manufacturing plant. The secondary aims were to examine the impact of the company's return-to-work processes, compare outcomes to current industry standards for work (re)entry and to identify the components that characterized this workplace--based return-to-work (RTW) program. This investigation involved a case study approach comprised of an examination of the program context using interviews, onsite visits, a document review and a retrospective analysis of the RTW experiences of 184 workers with shoulder injuries. Findings revealed that the workplace-based RTW program was consistent with and shaped by the organizational culture of problem solving, knowledge exchange and equitable participation of workers, supervisors and health professionals. These components contributed to the program in achieving the following outcomes for workers with shoulder injuries. One-third of workers were placed on modified duties within three days, 56% of workers who engaged in an early RTW program returned to work within one month. Overall, 87.8% of workers with rotator cuff injuries successfully returned to pre-injury work. The implications of developing capacity for workplace-based programs to manage injuries at work are discussed.

9. **Tschernetzki-Neilson, P.J., Brintnell, E. S., Haws, C. & Graham, K., 2007. Changing to an Outcome-focused Program Improves Return to Work Outcomes. *Journal of Occupational Rehabilitation*, 17(3):473-86.**

The purposes of this study were to: (1) evaluate the effectiveness of changing a Return to Work (RTW) program's focus to one that was outcome-focused; and (2) determine which factors collected in the facility's database were most predictive of RTW. A total of

13,428 client files were extracted from Millard Health's database which included data on two cohorts of subjects: those in the program before and after the change in focus had been made. Changing to an outcome-focused program improved various outcomes in this RTW program. Several factors predict the outcome of RTW and these should be considered in treatment planning.

10. **Welch, L., Haile, E., Boden, L. I. & Hunting, K.L., 2009. Musculoskeletal disorders among construction roofers – physical function and disability. *Scandinavian Journal of Work, Environment and Health,* 35(1):56-63.**

    This study investigated the relationships between work demands, chronic medical and musculoskeletal conditions, aging, and the ability to remain on the job in a longitudinal study of 979 construction roofers between the ages of 40 and 59 years. In a phone interview at baseline and 1 year later, participants were asked about the presence of medical conditions and musculoskeletal disorders, work limitations and work accommodations, and social and economic functioning. Musculoskeletal conditions among roofers are strongly associated with work limitation, missed work, and reduced physical functioning, factors that are predictive of premature departure from the workforce. Job accommodation was provided for 31% of the roofers with a musculoskeletal disorder, and it was associated with a reduced likelihood of subsequently leaving roofing for health-related reasons.

11. **Yassi, A., Tate, R., Cooper, J. E., Snow, C., Vallentyne, S., and Khokhar, J. B., 1995. 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. *Occupational Medicine*, 45(4):209-214.**

    This study evaluated a two-year multidisciplinary early intervention pilot programme for back-injured nurses employed at a large teaching hospital, using a pre- versus post-programme analysis. The purpose was to ascertain whether this programme could reduce the incidence, morbidity, time lost and cost due to back injuries in the 250 nurses employed on ten targeted high-risk wards. Injuries in the remaining 1395 nurses employed on the other 45 wards were monitored concurrently for comparison. The programme consisted of prompt assessment, treatment and rehabilitation through modified work. Evaluative data were gathered by one research nurse on standardized forms at the time of injury, weekly until return to work, and at a six-month follow-up. Time lost and cost data for up to one-year post-injury were derived from workers' compensation statements. Compared to the two years prior to introduction of the programme, the rates of back injuries and lost-time back injuries decreased by 23% and 43%, respectively, on the targeted wards, while these increased on the control wards. Combined expenditure was 32% lower per injury and 34% lower per lost-time injury for those in the targeted group who consented to take part in the programme compared to their counterparts on the control wards, as the increased assessment and treatment costs per case attributable to the programme were more than offset by the savings in lower compensation (wage loss) costs. This programme thus reduced the incidence and time lost due to back injuries and was cost-beneficial.

Managing Compensable Injury Claims

Measurement and Differences in Defining Health Outcomes

Reports

1. **The Australasian Faculty of Occupational & Environmental Medicine, 2001. *Compensable Injuries and Health Outcomes*. The Royal Australasian College of Physicians, Health Policy Unit. Accessed 19/9/12. Available from http://www.racp.edu.au/index.cfm?objectid=27360CD5-E6E8-3B21-E6846626DD8C3C43**

   This document reports on a research project aimed at identifying whether it should be expected that people with compensable injuries have poorer health outcomes than those with similar but non-compensable injuries, and if so, why. The report includes a literature review, interviews with stakeholders in the compensation process and the outcome of a multi-disciplinary seminar.

2. **World Health Organization, (nd). International Classification of Functioning, Disability and Health (ICF). Accessed 19/9/12. Available from http://www.who.int/classifications/icf/en/**

   The International Classification of Functioning, Disability and Health, is a classification of health and health-related domains. These domains are classified from body, individual and societal perspectives by means of two lists: a list of body functions and structure, and a list of domains of activity and participation. Since an individual's functioning and disability occurs in a context, the ICF also includes a list of environmental factors. The ICF is WHO's framework for measuring health and disability at both individual and population levels.

Journal Articles

3. **Fulton-Kehoe, D., Gluck, J., Wu, R., Mootz, R., Wickizer, T.M. & Franklin, G.M., 2007. Measuring work disability: what can administrative data tell us about patient outcomes? *Journal of Occupational & Environmental Medicine,* 49(6):651.**

   The purpose of this study was to assess the association between administrative measures of work disability and self-reported work, pain, and functional status. Baseline and follow-up interviews were conducted to assess pain, functional status, work status, and demographic factors in workers with low back injuries, carpal tunnel syndrome, and upper and lower extremity fractures. Administrative measures of work disability were obtained from the Washington State Department of Labor and Industries. Pain intensity and impairment levels were lowest in those who had not received any disability payments, somewhat higher for those who were no longer receiving time loss benefits, and highest for workers receiving time loss payments at the time of interview. Administrative measures of work disability are significantly associated with self-reported outcomes and can be an efficient tool for tracking and evaluating outcomes of medical treatments, surgical procedures, and occupational health programs.

4. **Gabbe, B.J., Cameron, P.A., Williamson, O.D., Edwards, E.R., Graves, S.E. & Richardson, M.D., 2007. The relationship between compensable status and long-term patient outcomes following orthopaedic trauma. *Medical Journal of Australia,* 187(1):14-7.**

   This study aimed to determine the relationship between compensable status in a "no-fault" compensation scheme and long-term outcomes after orthopaedic trauma. Participants were blunt trauma patients aged 18–64 years, admitted between September 2003 and August 2004 with orthopaedic injuries and funded by the no-fault compensation scheme for transport-related injury, or deemed non-compensable. Patients covered by the no-fault compensation system for transport-related injuries in Victoria had worse outcomes than non-compensable patients.

5. **Keegel, T., Ostry, A. & La Montagne, A.D., 2009. Job strain exposures vs. stress-related workers' compensation claims in Victoria, Australia: Developing a public health response to job stress. *Journal of Public Health Policy*, 30(1):17-39.**

   This paper presents a comparative analysis of patterns of exposure to job stressors and stress-related workers' compensation (WC) claims to provide an evaluation of the adequacy of claims-driven policy and practice. Job strain prevalence in a 2003 population-based survey of Victorian workers was assessed and compared to stress-related WC statistics for the same year. Job strain prevalence was higher among females than males, and elevated among lower vs. higher occupational skill levels. In comparison, claims were higher among females than males, but primarily among higher skill-level workers. There was some congruence between exposure and WC claims patterns. Highly exposed groups in lower socio-economic positions were underrepresented in claims statistics, suggesting that the WC insurance perspective substantially underestimates the job stress problems for these groups. To provide a sufficient evidence base for equitable policy and practice responses to this growing public health problem, exposure or health outcome data are needed as an essential complement to claims statistics.

6. **Pransky, G., Gatchel, R., Linton, S.J. & Loisel, P., 2005. Improving return to work research. *Journal of Occupational Rehabilitation*, 15(4):453-457.**

   Despite considerable multidisciplinary research on return to work, there has been only modest progress in implementation of study results, and little change in overall rates of work disability in developed countries. Thirty RTW researchers, representing over 20 institutions, assembled to review the current state of the art in RTW research. The aim was to identify promising areas for further development and to provide direction for future investigations. Six major themes were selected as priority areas: early risk prediction; psychosocial, behavioural and cognitive interventions; physical treatments; the challenge of implementing evidence in the workplace context; effective methods to engage multiple stakeholders; and identification of outcomes that are relevant to both RTW stakeholders and different phases of the RTW process. Understanding and preventing delayed RTW will require application of new concepts and study designs, better measures of determinants and outcomes, and more translational research. Greater stakeholder involvement and commitment, and methods to address the unique challenges of each situation are required.

7. **Spearing, N. M., Connelly L. B., Gargett S. & Sterling, M., 2012. Does injury compensation lead to worse health after whiplash? A systematic review. *Pain,* 153(6):1274-82.**

It might be expected that injury compensation would leave injured parties better off than they would otherwise have been, yet many believe that compensation does more harm than good. This study systematically reviews the evidence on this "compensation hypothesis" in relation to compensable whiplash injuries. A number of databases were searched from the date of their inception to April 2010 to locate longitudinal studies, published in English, comparing the health outcomes of adults exposed/not exposed to compensation-related factors. Unless ambiguous causal pathways are addressed, conclusions from statistical associations cannot be drawn, regardless of their statistical significance and the extent of measures to address other sources of bias. Consequently, there is no clear evidence to support the idea that compensation and its related processes lead to worse health.

8. **Vogel, A. P., Barker, S. J., Young, A. E., Ruseckaite, R. & Collie, A., 2011. What is return to work? An investigation into the quantification of return to work. *International Archives of Occupational and Environmental Health*, 84(6):675-82.**

This study discusses RTW outcome metrics in common use among clinical researchers and injury compensation organisations. It also describes a framework to capture relevant RTW information including current employment status and data on participation and maintenance. Data showed that different impressions of rehabilitative success can be obtained depending on the criterion used to define RTW suggesting that reliance on a single RTW index (e.g. 'are you currently working?') will not represent important characteristics of employment. A multi-layered approach to measuring RTW that includes data on reasons for not working, length of continuous employment, hours and duties performed after injury provides greater insight into the vocational status of injured individuals compared to single metrics or outcomes that fail to capture key detail on motives and participation. This information can assist clinicians to more accurately monitor the progress of rehabilitation following injury and compensation schemes to more effectively monitor their performance.

9. **Winefield, H. R., Saebel, J. & Winefield, A.H., 2010. Employee perceptions of fairness as predictors of workers' compensation claims for psychological injury: An Australian case-control study. *Stress and Health,* 26(1):3-12.**

Australian workers suffering from work-related stress may apply for compensable leave and treatment costs under the category of 'psychological injury'. Little is known about the predictors of such claims, but one might expect psychological vulnerability in terms of negative affectivity to distinguish workers who lodge psychological injury claims. In a large longitudinal study of white-collar workers, claimants were compared to non-claimants to compare those who subsequently made a workers' compensation claim for psychological injury with matched controls. Perceived characteristics of the work environment, in particular those relating to procedural justice, differentiated cases from controls. Not only human resource managers but also all whose work includes supervisory responsibilities need to take into account that perceived injustice at work predicts future workers compensation claims for psychological injury.

Video Presentation

1. **Black, Dame Carol, 2010. The Journey so far: insights and lessons learnt. Accessed 21/9/12. Available from http://www.racp.edu.au/page/racp-faculties/australasian-faculty-of-occupational-and-environmental-medicine/realising-the-health-benefits-of-work/october-2010-stakeholder-meeting-professor-dame-carol-black/**

   This is a video (51mins:24 secs; 29/10/10) of Dame Carol's presentation to the RACP's Stakeholder Meeting "Working for a healthier tomorrow in Australia and the United Kingdom" held in October 2010. A copy of her power point presentation is also available via this link.

Journal Articles

2. **Carroll L.J., Holm L.W., Hogg-Johnson S., *et al*., 2009. Course and Prognostic Factors for Neck Pain in Whiplash-Associated Disorders (WAD). Results of the Bone and Joint Decade 2000-2010 Task Force on Neck Pain and Its Associated Disorders. *Journal of Manipulative and Physiological Therapeutics*, 32(2 Supplement):S97-S107.**

   This paper presents a best evidence synthesis of the course and prognostic factors for neck pain and its associated disorders in Grades I–III whiplash-associated disorders (WAD). Knowledge of the course of recovery of WAD guides expectations for recovery. Identifying prognostic factors assists in planning management and intervention strategies and effective compensation policies to decrease the burden of WAD. The Bone and Joint Decade 2000–2010 Task Force on Neck Pain and its Associated Disorders (Neck Pain Task Force) conducted a critical review of the literature published between 1980 and 2006 to assemble the best evidence on neck pain and its associated disorders. The evidence suggests that approximately 50% of those with WAD will report neck pain symptoms 1 year after their injuries. Greater initial pain, more symptoms, and greater initial disability predicted slower recovery. Few factors related to the collision itself (for example, direction of the collision, headrest type) were prognostic; however, post-injury psychological factors such as passive coping style, depressed mood, and fear of movement were prognostic for slower or less complete recovery. There is also preliminary evidence that the prevailing compensation system is prognostic for recovery in WAD. Recovery of WAD seems to be multifactorial.

3. **Galizzi, M. & Boden, L.I., 2003. The return to work of injured workers: evidence from matched unemployment insurance and workers' compensation data. *Labour Economics*, 10(3):311.**

   This study analyses the return to work of an entire population (USA) of workers with job-related injuries. Duration estimates indicate that returning to the pre-injury employer is one of the main determinants of the speed of return to work. The worker's pre-injury employment history also plays a large role, while the elasticity of the economic incentives varies across injury lengths and model specifications. The length of time off

work is an important determinant of the probability of being employed 1 year after the first return to work. Results do not differ by gender.

4. **Harris, I.A., Young J.M., Dalaludin, B.B. & Solomon, M.J., 2008. The effect of compensation on general health in patients sustaining fractures in motor vehicle trauma. *Journal of Orthopaedic Trauma,* 22(4):216-20.**

   The receipt or pursuit of compensation after injury has been associated with poor outcomes. This study aims to determine the association between compensation-related factors and general health in patients with fractures sustained in motor vehicle trauma. The study population was patients aged 18 years and older, presenting acutely with at least one fracture involving the long bones, pelvis, patella, talus, or calcaneus, resulting from motor vehicle trauma, and presenting acutely to 1 of 15 hospitals. The use of a lawyer in relation to the injury was the most significant variable associated with poor physical and mental health, after adjusting for other factors. Lawyer involvement, rather than pursuit of compensation, is associated with poor general health after fractures sustained in motor vehicle injuries. Although this may represent a direct effect, further research is recommended to determine the cause for this association.

5. **O'Donnell, M.L., Creamer, M.C., McFarlane, A.C., Silove, D. & Bryant, R.A., 2010. Does access to compensation have an impact on recovery outcomes after injury? *Medical Journal of Australia*, 192(6):328-33.**

   This descriptive study investigates the effect of access to motor vehicle accident (MVA) compensation on recovery outcomes at 24 months after injury for a longitudinal cohort of two Level 1 trauma hospitals in Victoria, Australia. Compensable and non-compensable patients were compared at 24 months after injury on a number of health outcomes. Medical records identified two groups of compensation patients: MVA-compensable and non-compensable patients. After controlling for baseline variables, the MVA-compensable patients, at 24 months, had higher levels of post-traumatic stress disorder, anxiety and depression, and were less likely to have returned to their pre-injury number of work hours. However, some patients in the non-compensable group had accessed other forms of compensation (e.g., private health care or compensation for victims of crime). When these were removed from the non-compensable group, the differences between MVA-compensable and non-compensable groups all but disappeared. Findings do not support previous research showing that access to compensation is associated with poor recovery outcomes. The relationship between access to compensation and health outcomes is complex, and more high-level research is required.

6. **Roberts, K., 2003. The Relationship between the Administration of Workers' Compensation and Program Outcomes. *Journal of Insurance Regulation,* 22(1):49-73.**

   This paper reports on a study of the relationship between the activities of the various United States State agencies that administer workers' compensation claims and the program outcomes. The National Commission on Workmen's Compensation Laws has identified specific functions that State agencies should perform. State agencies should: 1. take the initiative in administering the law, 2. continually review program performance and request statutory changes from the legislature, 3. advise workers of

their rights and assure they receive benefits to which they are entitled, 4. apprise employers and carriers of their obligations, 5. assist in informal dispute resolution, and 6. adjudicate claims that cannot be resolved voluntarily. Using two different types of data sources, this study examines the degree to which states are performing those functions. The study had two parts. The first was to develop a measure of State agency activism in the claims process. State rankings are included in the results. The second was to examine the distributional consequences of State activism by addressing the question of whether State involvement in claims helps or hurts the three primary workers' compensation stakeholders - employees, employers and insurance carriers.

7. **Westmorland, M.G. & Buys, N., 2004. A comparison of disability management practices in Australian and Canadian workplaces. *Work*, 23(1):31-41.**

   The health, well-being and productivity of workers and employers in today's society are becoming increasingly important. The social, emotional and economic costs of injury and illness are such that governments throughout the world are attempting to implement policies and practices to contain these costs. One response in this area is Disability Management (DM). DM focuses on the management of employees with work injuries or illnesses in the workplace rather than offsite in rehabilitation centres. Regional interest in the DM approach has now gained momentum in North America, Europe and the Asia-Pacific. This article briefly reviews two studies that were conducted in Australia and Canada. Although the two studies were not designed for comparison purposes they provide interesting and useful information about the similarities and differences in the practice of DM in Australia and Canada. Findings are compared in terms of five primary principles of DM and it is argued that it is important to understand the ecological contexts in which DM occurs as well as share trans-national research in this area to help inform policy and practice.

Managing Expectations

Report

1. **Barnett, K., Spoehr, J. & Parnis, E., 2009. *Exploring the Impact of an Ageing Workforce on the South Australian Workers' Compensation Scheme*. The Australian Institute for Social Research, University of Adelaide. Accessed 21/9/12. Available from http://www.sapo.org.au/pub/pub13563.html**

   The ageing of South Australia's workforce is one of the State's major policy challenges over the next decade. By early next decade labour demand is expected to exceed supply. To manage this it will be necessary to introduce a range of policies and strategies designed to boost labour force participation and manage skill shortages in innovative ways. Injury prevention and the timely and successful return to work of injured workers will be important elements in achieving this.

   Understanding the implications of an ageing workforce for workers compensation arrangements in South Australia is timely in the face of such significant demands. This report prepared by the Australian Institute for Social Research (AISR) is designed to assist WorkCover SA to better understand and respond to the benefits and challenges associated with an ageing workforce in South Australia.

Journal Articles

2. **Biddle, J., 2001. Do High Claim Denial Rates Discourage Claiming? Evidence from Workers' Compensation Insurance. *Journal of Risk & Insurance,* 68(4):631.**

   If individuals decide whether to file an insurance claim based in part on the expected value of the benefits they will receive, then changes in the probability that a claim will be denied by the insurer will influence the probability that a claim is filed. Increasing claim-denial rates to reduce claim rates and cut costs would be a questionable strategy for an insurance company that marketed policies to the individuals who will file claims. But in the workers' compensation insurance market, insurers sell policies to employers, while it is workers who file claims that may be denied. This article examines evidence from a period in the state of Oregon during which workers whose employers were covered by different workers compensation carriers faced different claim-denial rates at the same point in time, and during which the State's largest carrier changed its claim-denial rate dramatically over time. Using this evidence, the author finds that higher denial rates were associated with lower rates of claim filing. Furthermore, this relationship was strong and significant for claims arising from back injuries but insignificant for claims arising from traumatic injuries. Possible reasons for this latter finding are explored.

3. **Brunarski, D., Shaw, L., & Doupe, L., 2008. Moving toward virtual interdisciplinary teams and a multi-stakeholder approach in community-based return-to-work care. *Work*, 30(3):329-336.**

   More efforts are needed to help stakeholders who are geographically isolated from one another become more collaborative in their approach to return-to-work. A review of the literature on team processes, and insights from the experiences of a US federally

funded Round Table Project on Safe and Timely Return to Function and Return to Work were used to inform strategies that might enhance collaboration among health professionals and stakeholders in injury and illness management and return-to-work. A case study serves to highlight the individual, identifies the problem and provides a potential solution at the broader service and system levels. There is a need for a common language as well as policies that emphasize the importance of fostering awareness of inter-professional potentials and contributions of all stakeholders. Establishing shared goals and building capacity for sustaining collaboration when multi-stakeholders do not function in the same physical location, but work virtually, might maximize effectiveness, efficiency and productivity.

4. **Cameron I.D., Rebbeck T. & Sindhusake D., *et al*., 2008. Legislative change is associated with improved health status in people with whiplash. *Spine*, 33(3):250-4.**

   This study aims to assess whether a change in legislation improved health status and quality of life for people with whiplash. Whiplash was the most prevalent injury in a compulsory, fault based, third party motor vehicle insurance scheme in New South Wales, Australia. Legislative change removed financial compensation for "pain and suffering" for whiplash, introduced clinical practice guidelines for its treatment; and changed regulations to permit earlier acceptance of compensation claims, and earlier access to treatment, for all types of injury. Three independent groups of people with whiplash were identified from insurance data (before legislative change-the 1999 group and, after legislative change-the 2001 and 2003 groups). Health status was assessed 2 years after injury by a telephone interviewer blinded to the study hypotheses. The main outcome measure was disability, as assessed by the Functional Rating Index (FRI). Pain and health-related quality of life was also assessed. The health status of people with whiplash improved after legislative change. Design of compensation schemes should be undertaken with the understanding that the scheme structure may have substantial effects on the long-term health of injured people.

5. **Carroll, L.J., Connelly, L.B., Spearing, N.M., Cote, P., Buitenhuis, J. & Kenardy, J., 2011. Complexities in Understanding the Role of Compensation-Related Factors on Recovery from Whiplash-Associated Disorders: Discussion Paper 2. *Spine*, 36(25) Supplement: S316-21.**

   There is divergence of opinion, primary research findings, and systematic reviews on the role of compensation and/or compensation-related factors in WAD recovery. This paper discusses some of the complexities in conducting research on the role of compensation and compensation-related factors in recovery from whiplash-associated disorders (WAD) and suggests directions for future research. The topic of research of compensation/compensation-related factors was discussed at an international summit meeting of 21 researchers from diverse fields of scientific enquiry. It is important that researchers and their audiences are clear about what aspect of the compensation system is being addressed, what compensation-related variables are being studied, and in what social/economic environment the compensation system exists. In addition, summit participants also recommended that non-traditional, sophisticated study designs and analysis strategies be employed to clarify the complex causal pathways and mechanisms of effects. Care must be taken not to overgeneralize or confuse different aspects of WAD compensation. In considering the role of

compensation/compensation-related factors on WAD and WAD recovery, it is important to retain a broad-based conceptualization of the range of biological, psychological, social, and economic factors that combine and interact to define and determine how people recover from WAD.

6. **Guthrie, R., 2002. Negotiation, Power in Conciliation, and Review of Compensation Claims. *Law & Policy*, 24(3):229-268.**

   Workers' Compensation claims are not interpersonal disputes. Almost always they are disputes between individuals and corporations. Compensation insurers are "repeat players" in the system. Workers are often "one–shotters" who have little or infrequent contact with the system. Power inequality between the worker, employer, insurer, and those who are required to facilitate negotiations and resolve and settle disputes under compensation legislation are matters of considerable importance. This paper examines the effects of the implementation, in 1993, of informal dispute resolution processes in the Western Australian workers' compensation system under the Workers' Compensation and Rehabilitation Act 1981(WA), which excluded lawyers from the process. It argues that pre-existing power imbalances have been aggravated by these procedural changes, and in particular, by the exclusion of legal practitioners from the dispute resolution process. The issues raised herein have general application to most workers' compensation systems.

7. **Guthrie, R., Purse, K. & Lurie, P., 2006. Workers' Compensation in Western Australia: A Case Study 1993-2004. *Australian Bulletin of Labour*, 32(1):62-73.**

   In Australia the last two decades have witnessed increased conflict over workers' compensation policy. At the heart of this conflict has been the issue of who should pay for the rising costs associated with work-related injury. In Western Australia during the last decade this distributional clash has been played out primarily through efforts to curtail workers' common law rights against a background of heightened employer demands for lower workers' compensation premiums. This article outlines, and evaluates the effectiveness of, the different legislative measures adopted by the Court Coalition government and, subsequently, the Gallop Labour government to achieve this objective.

8. **Richard, R.L.L., 2006. How important are Insurers in Compensating Claims for Personal Injury in the U.K.? *Geneva Papers on Risk & Insurance - Issues & Practice,* 31(2):323-339.**

   To what extent does the institution of insurance influence a system of compensation for personal injury? Some academics have suggested that insurance has been no more than a "makeweight" argument in the development of tort liability. Others have claimed that insurance has had a substantial effect, even if this is often hidden or not discussed openly. This article lends support to one side of the debate by describing the enormous importance of insurers to personal injury litigation in the United Kingdom. It argues that all cases, in their wider context, have been affected by the practices of insurance companies. The article examines statistics relating to the number of tort claims brought each year and it notes the extent of insurer involvement. The scope for compensating those injured very much depends upon the incidence of insurance protection, and the amount of damages paid can only be understood against the insurance background.

Finally, the article considers the influence of insurers upon potential changes in the law. The importance of insurers ought not to be underestimated; without insurance, the system of compensation for personal injury would have collapsed long ago.

9. **Murgatroyd, D.F., Cameron, I.D. & Harris, I.A., 2010. Understanding the effect of compensation on recovery from severe motor vehicle crash injuries: a qualitative study. *BMJ Injury Prevention*, 17:222-227.**

   This study explores the factors that influence recovery from serious injuries sustained in motor vehicle crashes, particularly differences between those with compensable and non-compensable injuries. Themes identified from participants claiming compensation were a strong sense of entitlement and injustice, a difficult claims and settlement process, an inability to move on with life during the claims process, an extreme dislike of medico-legal assessments, the necessity of legal representation to assist with the claims process, and a perceived lack of trust about having to prove an injury or disability. The themes common to all participants were the significance of the trauma experience, the importance of family and social support, and, if self-employed, financial hardship and difficult experiences in returning to work. The injury recovery experience was difficult for all subjects, but it was particularly stressful for those claiming compensation. Based on this study, the claims process, particularly medico-legal examinations, and other factors that could impact on injury recovery, are targets for further research, possible policy review, or legislative change.

10. **Roberts-Yates, C., 2003. The concerns and issues of injured workers in relation to claims/injury management and rehabilitation: the need for new operational frameworks. *Disability & Rehabilitation*, 25(16):898-907.**

    This paper discusses some of the practical considerations from the injured workers' point of view that need to be taken into account when they are registered as claimants for Workers' Compensation. Workers reported a range of impediments in the return to work process that created considerable stress and concern. These included the erratic payment of economic benefits, indifferent case managers, the management of the stigma associated with a registered WorkCover claim, a general lack of information, disrespectful communication from service providers, and a suspicious response to their injury by the employer, co-workers and some professional service providers. On this basis some suggestions can be made for improvements to practice.

11. **Söderberg, E., Vimarlund, V. & Alexanderson, K., 2010. Experiences of professionals participating in inter-organisational cooperation aimed at promoting clients' return to work. *Work*, 35(2):143-151.**

    In Sweden, the activities initiated to promote RTW are performed in parallel by four different public organisations: the health services, the social services, the employment and the social insurance authorities. The aim of this study was to gain a deeper understanding of the experiences of professionals involved in cooperative projects that promoted RTW among unemployed sickness benefit recipients. Analysis identified that: (1) daily collaboration on the same cases enabled development of good relationships and cooperative competence, which improved contact with clients; (2) cooperative projects also made it possible to include only clients perceived as motivated to RTW; (3) closer and more frequent interaction with clients proved to be constructive in that it

facilitated recognition and mobilisation of strengths and abilities; and (4) the differences in rules and regulations between the social insurance and the unemployment insurance standards were often thought to induce problems (for example, on how to assess the work capacity of clients). The assessments of work capacity represent important and complex tasks that professionals must perform without having access to either scientific knowledge or consensus agreement on which to base their decisions.

12. **Yueng-Hsiang, H., Pransky, G.S., Shaw, W.S., Benjamin, K.L. & Savageau, J.A., 2006. Factors affecting the organizational responses of employers to workers with injuries. *Work*, 26(1):75-84.**

    The purpose of this study was to systematically explore, based on employee perceptions, those factors that might influence the organizational responses of employers to injured workers. Cross-sectional survey data were collected from 2,943 subjects with work-related injuries which had occurred less than eight weeks prior to survey completion. Analysis showed that age, gender, job dissatisfaction before injury, prior difficulty performing job tasks, injury severity, back injury and lost time were all associated with negative organizational responses.

Socio-economic Consequences of "Worklessness"

Reports

1. **The Australasian Faculty of Occupational & Environmental Medicine, The Royal Australasian College of Physicians, 2010. *Realising the Health Benefits of Work: A Position Statement.* Accessed 19/9/12. Available from http://www.racp.edu.au/index.cfm?objectid=2735E355-C737-9494-1AF0D1C8D5E54D0C**

2. **Black, Dame Carol, March 2008. *Working for a healthier tomorrow: Dame Carol Black's Review of the health of Britain's working age population*. Presented to the Secretary of State for Health, and the Secretary of State for Work and Pensions. Accessed 25/9/12. Available from http://www.dwp.gov.uk/docs/hwwb-working-for-a-healthier-tomorrow.pdf**

   In the Foreword to this report, Dame Carol notes that the aim of her report is to identify "…the factors that stand in the way of good health and to elicit interventions, including changes in attitudes, behaviours and practices – as well as services – that can help overcome them". She recommends "…an expanded role for occupational health and its place within a broader collaborative and multidisciplinary service available to all" (p5).

3. **Black, Dame Carol, 2008. Dame Carol Black's Review of the health of Britain's working age population: Summary of evidence submitted. Accessed 25/9/12. Available from http://www.dwp.gov.uk/docs/hwwb-healthier-tomorrow-evidence-summary.pdf**

   This document summarises the evidence from the variety of responses to Dame Carol Black's call for a discussion on the health of Britain's working age population. It also shows how it informed the recommendations in Dame Carol's report (above).

Journal Articles

4. **Bambra, C., 2011. Work, worklessness and the political economy of health inequalities. *Journal of Epidemiology and Community Health*, 65(9):746-750.**

   This essay argues that work, and the socioeconomic class polarities it creates, plays a fundamental role in determining inequalities in the distribution of morbidity and mortality. This is by means of uneven exposure to physical hazards and psychosocial risks in the workplace, as well as by inequalities in exclusion from the labour market and the absence of paid work. This paper argues that the relationships between work, worklessness and health inequalities are influenced by the broader political and economic context in the form of welfare state regimes. This leads to the development of a model of the political economy of health inequalities, and how different types of public policy interventions can mitigate these relationships. This model is then applied to the case of work and worklessness.

5. **Bambra, C. & Eikemo, T., 2009. Welfare state regimes, unemployment and health: A comparative study of the relationship between unemployment and self-reported health in 23 European countries. *Journal of Epidemiology and Community Health,* 63(2):92-98.**

The relationship between unemployment and increased risk of morbidity and mortality is well-established. However, what is less clear is whether this relationship varies between welfare states with differing levels of social protection for the unemployed. Data were the first (2002) and second (2004) waves of the representative cross-sectional European Social Survey (37 499 respondents, aged 25-60 years). Data for 23 European countries were classified into five welfare state regimes (Scandinavian, Anglo-Saxon, Bismarckian, Southern and Eastern). In all countries, unemployed people reported higher rates of poor health than those in employment. There were also clear differences by welfare state regime: relative inequalities were largest in the Anglo-Saxon, Bismarckian and Scandinavian regimes. The negative health effect of unemployment was particularly strong for women, especially within the Anglo-Saxon and Scandinavian welfare state regimes. The negative relationship between unemployment and health suggests that levels of social protection may indeed have a moderating influence. Policy-makers need to pay attention to income maintenance, and the extent to which the welfare state is able to support the needs of an increasingly feminised European workforce.

6. **Broom, D.H., D'Souza, R.M., Strazdins, L., Butterworth, P., Parslow, R. & Rodgers, B., 2006. The lesser evil: Bad jobs or unemployment? A survey of mid-aged Australians. *Social Science & Medicine,* 63(3):575-586.**

Paid work is related to health in complex ways, posing both risks and benefits. Unemployment is associated with poor health, but some jobs may still be worse than no job at all. This research investigates that possibility using cross-sectional survey data from Australians aged 40-44 (N = 2497). Health measures were depression, physical health, self-rated health, and general practitioner visits. Employees were classified according to their job quality (strain, perceived job insecurity and marketability). Employee health was compared to people who were unemployed, and to people who were not in the labour force. It was found that unemployed people reported worse health when compared to all employees. However, distinguishing in terms of employee's job quality revealed a more complex pattern. Poor quality jobs (characterized by insecurity, low marketability and job strain) were associated with worse health when compared to jobs with fewer or no stressors. Furthermore, people in jobs with three or more of the psychosocial stressors reported health no better than the unemployed. In conclusion, paid work confers health benefits, but poor quality jobs which combine several psychosocial stressors could be as bad for health as being unemployed. Workplace and industrial relations policies that diminish worker autonomy and security may generate short-term economic gains, but place longer-term burdens on the health of employees and the health-care system.

7. **McCrimmon, S., & Oddy, M., 2006. Return to work following moderate-to-severe traumatic brain injury. *Brain Injury*, 20(10):1037-1046.**

This study investigates the role of cognitive functioning, fatigue, mood and behaviour in return to work following moderate-to-severe traumatic brain injury. Between-groups

comparisons were conducted with 20 participants who had RTW and 13 who had not. Participants were well matched for age, pre-morbid intellectual functioning, years of education, injury severity and time since injury. The unemployed group reported significantly higher levels of fatigue and depression and significantly more problems on self-report questionnaires. A significantly higher proportion of this group was seeking compensation. No significant differences were obtained on neuropsychological measures of cognitive functioning. Mood, fatigue and behavioural problems may impede a person's ability to RTW. Subjective measures may be more superior to objective measures in predicting RTW. The litigation process may affect people's motivation to RTW.

8. **McKee-Ryan, F., Song, Z., Wanberg, C.R. & Kinicki, A.J., 2005. Psychological and Physical Well-Being during Unemployment: A Meta-Analytic Study. *Journal of Applied Psychology*, 90(1):53-76.**

   This study examines the impact of unemployment on worker well-being across 104 empirical studies. Unemployed individuals had lower psychological and physical well-being than did their employed counterparts. Unemployment duration and sample type (school leaver vs. mature unemployed) moderated the relationship between mental health and unemployment, but the current unemployment rate and the amount of unemployment benefits did not. Within unemployed samples, work-role centrality, coping resources (personal, social, financial, and time structure), cognitive appraisals, and coping strategies displayed stronger relationships with mental health than did human capital or demographic variables. The authors identify gaps in the literature and propose directions for future unemployment research.

9. **Morrison, T.G., O'Connor, W.E., Morrison, M.A. & Hill, S.A., 2001. Determinants of psychological well-being among unemployed women and men. *Psychology & Education*, 38(1):34-41.**

   Variables that may influence the psychological well-being of unemployed Canadian women were examined to investigate the effects of age, previous unemployment experience, problem-and symptom-focused coping, appraised controllability, and re-employment optimism on 2 measures: psychological health and life satisfaction. Results indicated that appraised controllability (i.e., the extent to which an individual believes that he or she has control over an event) and re-employment optimism (i.e., the degree to which unemployment is viewed as temporary) were moderately powerful predictors of psychological health and life satisfaction for both women and men.

10. **Price, R.H., Choi, J.N. & Vinokur, A.D., 2002. Links in the chain of adversity following job loss: How financial strain and loss of personal control lead to depression, impaired functioning, and poor health. *Journal of Occupational Health Psychology*, 7(4):302-312.**

    The authors tested hypotheses concerning risk mechanisms that followed involuntary job loss resulting in depression and the link between depression and poor health and functioning. A 2-year longitudinal study of 756 people experiencing job loss indicated that the critical mediating mechanisms in the chain of adversity from job loss to poor health and functioning are financial strain (FS) and a reduction in personal control (PC). FS mediates the relationship of job loss with depression and PC, whereas reduced PC

mediates the adverse impacts of FS and depression on poor functioning and self-reports of poor health. Results suggest that loss of PC is a pathway through which economic adversity is transformed into chronic problems of poor health and impaired role and emotional functioning.

11. **Scanlan, J. N., Bundy, A. C. & Matthews, L.R., 2011. Health and meaningfulness of time use for unemployed individuals: Associations with involvement in education. *Leisure Studies*, 30(1):21-31.**

    Unemployed people often experience poor health and frequently report unsatisfying leisure experiences. Previous literature has identified the importance of meaningful activities (such as education) in supporting the overall health of unemployed individuals. This exploratory study investigated the difference in health and access to elements of meaningful time use between two groups of unemployed 18- to 25-year-olds: those who were involved in educational activities ('unemployed but in education') and those who were not ('unemployed'). Individuals in the 'unemployed but in education' group reported better health and more meaningfulness in their time use. For individuals in the 'unemployed' group, engaging in activities because 'there was nothing else to do' was correlated with poorer psychological health. For females in the 'unemployed but in education' group, engagement in personally valued activities was highly correlated with better psychological health. No significant correlations between access to elements of meaningful time use and psychological health were present for males in the 'unemployed but in education group'. Results suggest that activity-based interventions may be useful for supporting better health in unemployed individuals.

12. **Waddell, G., Burton, K. & Aylward, M., 2007. Work and common health problems. *Journal of Insurance Medicine,* 39(2):109-20.**

    This paper reviews the evidence on the relationship between work and health. It concludes that, overall, the beneficial effects of work outweigh the risks of work, and are greater than the harmful effects of long-term worklessness. That contrasts with increasing trends of sickness absence, long-term incapacity and ill-health retirement attributed to common health problems. It suggests that there needs to be a fundamental shift in how we think about common health problems and work in health care, the workplace and society.

13. **Wanberg, C.R., 2012. The Individual Experience of Unemployment. *Annual Review of Psychology,* 63(1):369-396.**

    This review describes advances over the past decade in what is known about the individual experience of unemployment, predictors of reemployment, and interventions to speed employment. Research on the impact of unemployment has increased in sophistication, strengthening the causal conclusion that unemployment leads to declines in psychological and physical health and an increased incidence of suicide. Psychologists have begun to contribute to the study of factors associated with reemployment speed and quality. The past decade has especially illuminated the role of social networks and job search intensity in facilitating reemployment. Evidence suggests some individuals, especially members of minority groups, may face discrimination during their job search. Although more work in this arena is needed,

several intervention-based programs have been shown to help individuals get back to work sooner.

14. **Winkelmann, R., 2009. Unemployment, social capital, and subjective well-being. *Journal of Happiness Studies*, 10(4):421-430.**

Past research suggests that unemployment has a largely negative impact on subjective well-being of individuals. This paper explores whether, and to what extent, people with more social capital are sheltered from the harmful effects of unemployment. Using data from the German Socio-Economic Panel 1984-2004, this study concludes that social capital is an important predictor of well-being levels, but there is no evidence that it moderates the effect of unemployment on well-being. Possible reasons for these findings are discussed, and suggestions for future research given.

Biopsychosocial Models of Recovery

Report

1. **Stratil, R., & Swincer, M., 2012. *Work-related back pain study: measuring biopsychosocial risk factors: A Discussion Paper*. WorkCoverSA. Accessed 21/9/12. Available from http://www.workcover.com/workcover/resources/research**

   The negative impact of chronic pain-related compensable injuries on costs, quality of life, work productivity and poor health outcomes is well documented. Recent evidence highlighted the role of psychosocial issues in the transition from acute injury to a chronic condition. WorkCover has conducted a longitudinal prospective study that assessed relevant risk dimensions (using the "flags model" of yellow, blue and black flags) and determined the applicability of using specific psychosocial tools and strategies at acute to chronic stages of back injury to identify key risk drivers of chronicity over time. The project also evaluated the accuracy of current risk assessment by clinicians and the nature of and impact of current treatment on long term health and work outcomes.

Journal Articles

2. **Clay, F.J., Newstead, S.V., Watson, W.L., Ozanne-Smith, J., & McClure, R.J., 2010. Bio-psychosocial determinants of time lost from work following non-life threatening acute orthopaedic trauma. *BMC Musculoskeletal Disorders*, (5).**

   Although most patients with low back pain (LBP) recover within a few weeks a significant proportion has recurrent episodes or will develop chronic low back pain. Several mainly psychosocial risk factors for developing chronic LBP have been identified. However, effects of preventive interventions aiming at behavioural risk factors and unfavourable cognitions have yielded inconsistent results. Risk-tailored interventions may provide a cost efficient and effective means to take systematic account of the individual risk factors, but evidence is lacking. This study will be a cluster-randomised controlled trial comparing screening and a subsequent risk tailored intervention for patients with low back pain to prevent chronic low back pain compared to treatment as usual in primary care. A total of 600 patients from 20 practices in each study arm will be recruited in Berlin and Goettingen. The intervention comprises the following elements: Patients will be assigned to one of four risk groups based on a screening questionnaire. Subsequently they receive an educational intervention including information and counselling tailored to the risk group. A telephone/email consulting service for back pain related problems are offered independent of risk group assignment. The primary outcomes will be functional capacity and sick leave. This trial will evaluate the effectiveness of screening for risk factors for chronic low back pain followed by a risk tailored intervention to prevent chronic low back pain. It will contribute new evidence regarding the flexible use of individual physical and psychosocial risk factors in general practice.

3. **Cohen, D.A., Scribner, R.A. & Farley, T.A., 2000. A Structural Model of Health Behavior: A Pragmatic Approach to Explain and Influence Health Behaviors at the Population Level. *Preventive Medicine*, 30(2):146-154.**

   Behaviour is influenced by individual-level attributes as well as by the conditions under which people live. Altering policies, practices, and the conditions of life can directly and indirectly influence individual behaviour. This paper builds on existing ecological theories of health behaviour by specifying structural mechanisms by which population-level factors effect change in individual health behaviours. Four categories of structural factors are identified: (1) availability of protective or harmful consumer products; (2) physical structures (or physical characteristics of products); (3) social structures and policies; and (4) media and cultural messages. The first three can directly influence individuals through facilitating or constraining behaviour. The fourth, media, operates by changing individual-level attitudes, beliefs, and cognitions, as well as group norms. Interventions that target the four identified structural factors are a means to provide conditions that not only reduce high-risk behaviour but also prevent the adoption of high-risk behaviours. Structural interventions are important and underutilized approaches for improving health.

4. **Dunstan, D.A. & Covic, C., 2006. Compensable work disability management: a literature review of biopsychosocial perspectives. *Australian Occupational Therapy Journal,* 53(2):67-77.**

   Minimising work disability and facilitating work participation are a major focus of occupational therapy, and the specific brief of therapists working as case managers in the occupational injury arena. This paper reviews and discusses the empirically supported critical factors in the development, maintenance and management of work disability, and outlines the essential components of multidisciplinary biopsychosocial rehabilitation. By implementing the biopsychosocial model as the framework in which work disability is conceptualised and occupational rehabilitation plans are developed, case managers can play a key role in promoting evidence-linked practice to reduce the cost and suffering associated with long-term work disability.

5. **Noonan, J. & Wagner, S.L.P., 2010. A Biopsychosocial Perspective on the Management of Work-Related Musculoskeletal Disorders. *AAOHN Journal*, 58(3):105-14.**

   This article provides an overview of current literature about workplace-related musculoskeletal disorders from a biopsychosocial perspective. The authors conclude that disability management and early intervention efforts can only be meaningful within the context of targeted interventions; including mechanisms for psychosocial screening. In addition, they suggest that return to work should be considered an integral, rather than superficial, contribution to the rehabilitative process.

6. **Schulman, B.M., 1994. Worklessness and disability: Expansion of the biopsychosocial perspective. *Journal of Occupational Rehabilitation*, 4(2):113-122.**

   This study summarizes the biopsychosocial processes that may characterize the injured worker's reaction to separation from the workplace following injury/illness.

Based on clinical observation of 7,500 cases over 15 years, the author suggests that worklessness is a dynamic process involving 3 fundamental changes: the development of anxiety separation from the workplace, the erosion of skills and loss of opportunity occasioned by absenteeism and the propensity toward the medicalization of disabilities. The occupational physician (as well as those involved in occupational restoration and rehabilitation) is in a unique position to monitor, assess, and ultimately prevent disability.

7. **Sullivan, M.J.L., Adams, H., Martel, M., Scott, W. & Wideman, T., 2011. Catastrophizing and Perceived Injustice: Risk Factors for the Transition to Chronicity after Whiplash Injury. *Spine* 36(25) Supplement: S244-24.**

   The article summarizes research supporting the role of pain catastrophizing and perceived injustice as risk factors for problematic recovery after whiplash injury. It focuses on two psychological variables that have been shown to impact on recovery trajectories after whiplash injury; namely pain catastrophising and perceived injustice. Although research has yet to systematically address the mechanisms by which perceived injustice might contribute to prolonged disability in individuals with whiplash injuries, there are grounds for suggesting the potential contributions of catastrophising, pain behaviour and anger. A challenge for future research will be the development and evaluation of risk factor-targeted interventions.

8. **Sullivan, M.J.L., Feuerstein, M., Gatchel, R., Linton, S.J. & Pransky, G., 2005. Integrating psychosocial and behavioral interventions to achieve optimal rehabilitation outcomes. *Journal of Occupational Rehabilitation*, 15(4):475-489.**

   Psychosocial factors are important contributors to work disability associated with musculoskeletal conditions. The primary objectives of this paper were to: (1) describe different psychosocial interventions that have been developed to prevent prolonged work disability; and (2) identify future research directions that might enhance the impact of programs targeting psychosocial risk factors for work disability. Most prior interventions focus on psychosocial risk factors that exist primarily within the individual (e.g., pain catastrophising, beliefs, and expectations). Successful disability prevention will require methods to assess and target psychosocial risk factors “outside” of the individual (e.g., interpersonal conflict in the workplace, job stress, etc.) using cost-effective, multipronged approaches. Research to explore interactions among different domains of psychosocial risk factors in relation to RTW outcomes is needed. Challenges to effective secondary prevention of work disability include developing competencies to enable a range of providers to deliver interventions, standardization of psychosocial interventions, and maximizing adherence to intervention protocols.

9. **Truchon, M., & Fillion, L., 2000. Biopsychosocial Determinants of Chronic Disability and Low-Back Pain: A Review. *Journal of Occupational Rehabilitation*, 10(2):117-142.**

   It is well known that the human and financial costs related to sick leave due to Low-Back Pain (LBP) are substantial in a small percentage of workers. A better understanding of the predictive factors for chronic disability would allow interventions to be adapted and costs to be reduced. This paper is a critical review of recent prospective studies on the biopsychosocial factors predictive of non-return to work due

to LBP. A sample of 18 prospective studies was systematically analysed. Despite the limited number of prospective studies and their differences, some factors are promising indicators. These include a previous history of LBP, results of certain clinical tests, a subjective negative appraisal of one's ability to work, and job dissatisfaction. The role of certain psychological variables, including attitudes and beliefs, as well as coping strategies, is also emerging. Additional studies are necessary to confirm the importance of these factors, to specify the nature of the interrelationships among them, and to integrate them into a conceptual framework.

Specialised Treatment Programs

Reports

1. **Institute for Work & Health, Toronto, Canada. This link provides a list of a number of systematic reviews completed by the IWH on preventing work-related injury or disease. Accessed 17/9/12. Available from http://www.iwh.on.ca/systematic-reviews**

   Reviews are:

   Preventing work-related injury or disease

   - Interventions to address depression in the workplace (2011)
   - Training and education for the protection of workers (2010)
   - Health and safety in small enterprises (2008)
   - Upper extremity musculoskeletal disorders (2008)
   - Injury/illness prevention and loss control (IPC) programs (2008)
   - Participatory ergonomic interventions: implementation and process (2008)
   - Occupational health and safety interventions with economic evaluations (2007)
   - Interventions in health-care settings to protect musculoskeletal health (2007)
   - Factors associated with occupational disease among young people (2006)
   - Risk factors for work injury among youth (2006)
   - Workplace interventions to prevent musculoskeletal and visual symptoms and disorders among computer users (2006)
   - The effectiveness of participatory ergonomic interventions (2005)
   - The effectiveness of occupational health and safety management systems (2005)
   - Occupational health and safety management audit instruments (2005)

   Preventing and managing disability

   - Return-to-work prognostic factors following acute low-back pain (2011)
   - Interventions to address depression in the workplace (2011)
   - Workplace-based return-to-work interventions (2004)

Journal Articles

2. **Bernacki, E.J., Guidera, J.A., et al., 2000. A Facilitated Early Return to Work Program at a Large Urban Medical Center. *Journal of Occupational and Environmental Medicine,* 42(12):1172-1177.**

   An Early Return to Work Program was initiated at The Johns Hopkins Hospital and Associated Schools of Medicine, Hygiene and Nursing in Baltimore, Maryland, in April 1992 as part of a comprehensive effort to control the incidence and costs of work-related illnesses and injuries. The program was similar to others that incorporate employee and supervisory training and job accommodation, but it also included an industrial hygienist trained in ergonomics to facilitate the placement of individuals with restrictions. The program was studied over a 10-year period, comparing the number of

lost workday cases, lost workdays, and restricted duty days before (1989 to 1992) and after (1993 to 1999) initiation of the program. A significant decrease (55%) was observed in the rate of lost workday cases before versus after the return to work program. The study suggests that a well-structured early return to work program is an integral part of a comprehensive effort to control the duration of disability associated with occupational injuries and illness. It also indicates that to be most effective, an early return to work program must include participation by medical providers, safety professionals, injured employees, and supervisors. In addition to these elements, the effectiveness of return to work programs may be further increased by including an individual trained in ergonomics to facilitate the job placement process.

3. **Cole, D.C., Mondloch, M.V. & Hogg-Johnson, S., 2002. Listening to injured workers: how recovery expectations predict outcomes—a prospective study. *Canadian Medical Association Journal*, 166(6):749-754.**

   Evidence on factors affecting the prognosis of work-related soft-tissue injuries remains limited. Although shown to be important for a wide variety of clinical conditions, recovery expectations have rarely been assessed as prognostic factors for workers with soft-tissue injuries. This study examined the predictive role of various measures of recovery expectations among workers with injuries resulting in time off work with 1566 injured workers just after they filed a claim for their injury with the Ontario Workers' Compensation Board (OWCB). Self-reported measures of pain, health-related quality of life and functional status, obtained up to 4 times during the year following injury, were both independent predictors and secondary outcomes. Expectations regarding recovery may provide useful information on the complex process of recovering from work-related soft-tissue injuries. For clinicians, patients' negative or uncertain expectations may indicate the need for further probing and intervention on psychosocial factors to facilitate recovery.

4. **Harris, E., & Harris, M.F., 2009. Reducing the impact of unemployment on health: revisiting the agenda for primary health care. *Medical Journal of Australia,* 191(2):119-122.**

   A narrative review was undertaken of articles on PHC-based interventions for unemployed people published during the period January 1985 to February 2009. Interventions included in this review were based in Australia, Canada and Europe. Most described interventions that incorporated strategies aimed at increasing general practitioners' awareness of the health problems of unemployed people and providing guidance on the management of these problems. There have been few formal scientific investigations into the effectiveness of PHC-based interventions for unemployed people. GPs and other community health workers have a central role in preventing, and providing early management of, the health problems of unemployed people, and supporting return to work. People who are unemployed have poorer physical and mental health than those who are employed. Research needs to move from describing these health problems to developing interventions that are subject to rigorous evaluation.

5. **Guzman, J., Haldeman, S., Carroll, L.J., et al., 2008. Clinical Practice Implications of the Bone and Joint Decade 2000-2010 Task Force on Neck Pain and Its Associated Disorders: From Concepts and Findings to Recommendations. *European Spine Journal*, 17 Supplement (1):199-213.**

   This paper identifies a need to translate the results of clinical and epidemiologic studies into meaningful and practical information for clinicians. It provides a best evidence synthesis that aims to provide evidence-based guidance to primary care clinicians about how to best assess and treat patients with neck pain. Based on published studies on the risk, prognosis, assessment, and management of people with neck pain and its associated disorders, plus additional research projects and focused literature reviews reported in this supplement, the 12 member multidisciplinary *Scientific Secretariat of the Neck Pain Task Force* followed a 4-step approach to develop practical guidance for clinicians. The best available evidence suggests initial assessment for neck pain should focus on triage into 4 grades, and those with common neck pain (Grade I and Grade II) might be offered the listed non-invasive treatments if short-term relief is desired.

6. **J. Kucan, J., Bryant, E., Dimick, A., Sundance, P., Cope, N., Richards. R. & Anderson, C., 2010. Systematic Care Management: A Comprehensive Approach to Catastrophic Injury Management Applied to a Catastrophic Burn Injury Population-Clinical, Utilization, Economic, and Outcome Data in Support of the Model. *Journal of Burn Care & Research,* 31(5):692.**

   The new standard for successful burn care encompasses both patient survival and the burn patient's long-term quality of life. To provide optimal long-term recovery from catastrophic injuries, including catastrophic burns, an outcome-based model using a new technology called systematic care management (SCM) has been developed. SCM provides a highly organized system of management throughout the spectrum of care that provides access to outcome data, consistent oversight, broader access to expert providers, appropriate allocation of resources, and greater understanding of total costs. When compared with other burn research outcome data, results support the value of the SCM model of care.

7. **Nicholas, Michael K.; Linton, Steven J.; Watson, Paul J.; Main, Chris J., 2011. Early identification and management of psychological risk factors ("yellow flags") in patients with low back pain: a reappraisal. *Physical Therapy*, 91(5):737.**

   Originally the term "yellow flags" was used to describe psychosocial prognostic factors for the development of disability following the onset of musculoskeletal pain. The identification of yellow flags through early screening was expected to prompt the application of intervention guidelines to achieve secondary prevention. In recent conceptualizations of yellow flags, it has been suggested that their range of applicability should be confined primarily to psychological risk factors to differentiate them from other risk factors, such as social and environmental variables. This article addresses 2 specific questions that arise from this development: (1) can yellow flags influence outcomes in people with acute or subacute low back pain; and (2) can yellow flags be targeted in interventions to produce better outcomes? Consistent evidence has been found to support the role of various psychological factors in prognosis, although questions remain about which factors are the most important, both individually and in

combination, and how they affect outcomes. Published early interventions have reported mixed results, but, overall, the evidence suggests that targeting yellow flags, particularly when they are at high levels, does seem to lead to more consistently positive results than either ignoring them or providing omnibus interventions to people regardless of psychological risk factors. Psychological risk factors for poor prognosis can be identified clinically and addressed within interventions, but questions remain in relation to issues such as timing, necessary skills, content of treatments, and context. In addition, there is still a need to elucidate mechanisms of change and better integrate this understanding into the broader context of secondary prevention of chronic pain and disability.

8. **Nicholson, P.K., Nicholas, M.K. & Middleton, J., 2011. Multidisciplinary cognitive behavioural pain management programmes for people with spinal cord injury: design and implementation. *Disability and Rehabilitation*, 33(13-14):1272080.**

   This article outlines the design and implementation of cognitive behavioural pain management programmes (PMPs) for people with spinal cord injury (SCI), illustrated by the experiences in a recently evaluated programme (SpinalADAPT). It is hoped that this will provide an easily accessible account of the relevant design and implementation issues for those who seek to deliver such programmes to persons with a SCI.

9. **Schultz, Z., Stowell, A.W., Feuerstein, M. & Gatchel, R.J., 2007. Models of return to work for musculoskeletal disorders. *Journal of Occupational Rehabilitation*, 17(2):327-352.**

   Musculoskeletal pain disorders are the most prevalent, costly, disabling, and commonly researched conditions in the workplace, yet the development of overarching conceptual models of return to work in these conditions is less developed. A critical review of the literature was performed to evaluate the evolution and the state of the art of health and disability models with a focus on specific models of RTW. The main tenets, implications for diagnosis, treatment, and disability compensation, are the key perspectives analysed for the following specific models of RTW: biomedical, psychosocial, forensic, ecological/case management, biopsychosocial, and two more recent models developed by the *Institute of Medicine* and the *World Health Organization*, respectively. Future development of models that are truly trans-disciplinary, and address temporal and multidimensional aspects of occupational disability, remains a goal.

Treatment Coordination

Journal Articles

1. **Banja, J.D., 2005. Case management and the standards of practice. *The Case Manager,* 17(1):21-23. (Commentary).**

   This article is based on the assumption that certain case managers working in certain case management organizations occasionally find themselves ethically compromised. In particular, they find that, although their organization might contractually hold out a particular promise in the form of an outcome or goal to clients, such as a "safe and successful return to work" or "reaching an optimal level of independence," the case manager believes that the financial limitations under which s/he works are so severe that s/he cannot fulfil those goals. He/r frustration is even more painful when s/he believes that the situation is chronic and irreversible: that there is no way that any competent case manager, working with such constrained economic resources, can believe that s/he is delivering what is "owed" to clients (or that they are receiving what they are due) by way of the various promises made in the contract language. This article discusses two dimensions of this dilemma: the ethical comprehension of this problem and what a case manager might do about it.

2. **Bernacki, E.J. & Tsai, S.P., 2003. Ten Years' Experience Using an Integrated Workers' Compensation Management System to Control Workers' Compensation Costs. *Journal of Occupational & Environmental Medicine*, 45(5):508-16.**

   This work presents 10 years of experience using a US Integrated Workers' Compensation Claims Management System that allows safety professionals, adjusters, and selected medical and nursing providers to collaborate in a process of preventing accidents and expeditiously assessing, treating, and returning individuals to productive work. The hallmarks of the program involve patient advocacy and customer service, steerage of injured employees to a small network of physicians, close follow-up, and the continuous dialogue between parties regarding claims management. The integrated claims management system was instituted in fiscal year 1992 servicing a population of approximately 21,000 individuals. The system was periodically refined and by the 2002 fiscal year, 39,000 individuals were managed under this paradigm. Data suggest that workers' compensation costs can be reduced over a multi-year period by using a small network of clinically skilled health care providers who address an individual worker's psychological, as well as physical needs and where communication between all parties (e.g., medical care providers, supervisors, and injured employees) is constantly maintained. Furthermore, these results can be obtained in an environment in which the employer pays the full cost of medical care and the claimant has free choice of medical provider at all times.

3. **Garrett, M., 2005. Medicare chronic care improvement progam puts the spotlight on case management. *The Case Manager*, 16(4):56-58. (Commentary).**

   A 3-year initiative to provide chronic care services for Medicare fee-for-service (FFS) beneficiaries with diabetes or congestive heart failure is putting the spotlight on how case management teamed with disease management can improve clinical outcomes, generate cost savings, and improve patient and provider satisfaction.

4. **Lemstra, M. & Olszynski, W.P., 2004. The Effectiveness of Standard Care, Early Intervention, and Occupational Management in Workers' Compensation Claims: Part 2. *Spine,* 29(14):1573-1579.**

   This study compared the effectiveness of standard care, early intervention treatment, and occupational management in the management of Workers' Compensation injury claims. A prospective cohort looked at the effect of one company with access to standard care (primary care) changing to occupational management (worksite encouragement to resume activity and work as soon as safely possible) and then to early intervention treatment (offsite work hardening). This information was then compared with the control company with access to early intervention treatment, which later changed to a combined occupational management/early intervention treatment approach. Survival analysis was used to attempt to explain differences in time to injury claim closure. It is recommended that an occupational management approach, in comparison to early intervention treatment and standard care, be considered for management of occupational injuries.

5. **MacEachen, E., Ferrier, S., Kosny, A. & Chambers, L., 2008. A deliberation on "hurt versus harm" logic in early-return-to-work policy. *Policy and Practice in Health and Safety*, 5(2):41-62.**

   In many jurisdictions, early return to work after a workplace injury is considered beneficial for the worker. Past research has shown that when workers spend a long time away from work, there is a link to physical and mental health problems. However, this research hasn't looked at the interactions between work absence and ill health. In this study, researchers explored the experiences, situations and quality of life of workers whose early return to work was *not* successful. The study showed that "hurts" could become "harms" in the following situations when: workers' pain was not accommodated; claimants had to wait for medical diagnoses; claimants had to wait for financial benefits; there was poor communication with claims adjudicators; and employers handled claims incorrectly. In these situations, "hurts" were related to workers' experiences with RTW processes and were linked to "harms" such as stress, poverty and addiction to painkillers. By looking at workers' and providers' descriptions of events, researchers identified the sequences by which negative events in the return-to-work process led to harms. That is, the study showed how different kinds of "hurts" could accumulate and lead to "harms." This study is limited to findings about workers with prolonged and difficult experiences with compensation claims. Findings may not be relevant to the majority of workers whose claims experiences are relatively unproblematic.

6. **Park, E.J., Huber, D.L. & Thana, H.A., 2009. The evidence base for case management practice. *Western Journal of Nursing Research*, 31(6):693.**

   Little is known about the role performance of case managers, who come from a variety of professional disciplines. The purpose of this secondary analysis is to identify and compare case management (CM) activities and knowledge elements by professions and by work settings. In an online field survey conducted by the Commission for Case Manager Certification in 2004, 4,419 case managers rated the frequency and importance of 103 activities (8 domains) and 64 knowledge statements (6 domains). Nursing and social work showed a relatively similar pattern as to their role activities and

knowledge factors for CM practice. Similar patterns were seen in work settings: between hospitals and rehabilitation facilities; health insurance companies and managed care organizations; and CM companies, workers' compensation agencies, and third-party administrators. These results indicate that there is evidence for how to develop CM programs consistent with both organizational characteristics and strengths of the nursing profession.

7. **Purse, K., 2009. Outsourcing Myths and Workers' Compensation Claims Administration. *Australian Journal of Public Administration*, 68(4):446-458.**

   The outsourcing of claims administration is a feature of some Australian workers' compensation jurisdictions. While the benefits of outsourcing in this area of public administration have often been asserted there has been a lack of research into these claims. In this article the South Australian workers' compensation scheme is used as a case study to address whether the supposed benefits of outsourcing are soundly based. A number of other issues associated with the outsourced claims management environment are also considered as they have had an important bearing on the scheme's performance. The main finding to emerge is that outsourcing has failed to meet financial and other key objectives. Outsourcing has also created new tensions that have added to the complexities of scheme management. In light of these findings, there is a strong case that the scheme's business model should be recalibrated to facilitate a return to in-sourced claims management.

8. **Russo, D. & Innes, E., 2002. An organizational case study of the case manager's role in a client's return-to-work programme in Australia. *Occupational Therapy International*, 9(1):57-75.**

   This study examines the case manager's role in a return-to-work programme in Sydney, Australia. Case managers included occupational therapists, physiotherapists, psychologists and rehabilitation counsellors providing occupational rehabilitation services. Files of closed cases (n=172) were examined to investigate the relationship between the case manager's profession and return-to-work outcomes. It was found that the provider of occupational rehabilitation examined in this study achieved above-average return-to-work rates (83%), with no significant difference between case managers. There was, however, a significant relationship between the client's type of injury and the case manager (and case length was significantly different between case managers). The occupational therapist had the largest case management load (43%), followed by the rehabilitation counsellor (23%). There were trends between the case manager's profession and return to the same employer, and return to pre-injury, modified or new duties. The provider allocated cases on the basis of professional expertise and skill, which proved to be successful. The provision of workplace-based occupational rehabilitation services combined with case management provides a comprehensive and attractive package to employers and other referrers. Further research is required to investigate factors associated with case management that improve return-to-work outcomes.

9. **Stephens, B. & Gross, D.P., 2007. The Influence of a Continuum of Care Model on the Rehabilitation of Compensation Claimants with Soft Tissue Disorders. *Spine*, 32(25):2898-2904.**

Musculoskeletal conditions, such as back pain, continue to be leading causes of disability and work loss. From 1996 through 1997, the Canadian Workers' Compensation Board of Alberta (WCB-Alberta) implemented a continuum of care model to guide rehabilitation service delivery for claimants with soft tissue injury. The model was designed as a decision-making tool to promote a consistent, evidence-based approach to care within the jurisdiction. As continuums of care have been little studied, this research evaluated the impact of the WCB-Alberta model on sustained return to work, satisfaction with care, and cost. Implementation of a soft tissue injury continuum of care involving staged application of various types of rehabilitation services appears to have resulted in more rapid and sustained recovery.

10. **Strasser, P.B., 2010. Workers' Compensation Management--Changes in Medicare Regulations. *AAOHN Journal*, 58(5):217-9.**

The US Centers for Medicare & Medicaid Services recently enacted legislation to protect Medicare from paying for health care services that should be covered under workers' compensation benefits. The law requires that Medicare be notified about certain workers' compensation claims and that some workers' compensation settlements include mechanisms to protect Medicare's financial interests. This article outlines the legislative changes and addresses the role of occupational health nurses relative to case management in the context of these changes.

11. **Wickizer, T.M., Franklin, G., Plaeger-Brockway, R. & Mootz, R.D., 2001. Improving the Quality of Workers' Compensation Health Care Delivery: The Washington State Occupational Health Services Project. *The Millbank Quarterly*, 79(1):5-33.**

Researchers and health policy analysts in Washington State set out to determine the extent to which administrative process changes and delivery system interventions within workers' compensation affect quality and health outcomes for injured workers. This research included a pilot project to study the effects of providing occupationally focused health care through managed care arrangements on health outcomes, worker and employer satisfaction, and medical and disability costs. Based on the results, a new initiative was developed to incorporate several key delivery system components. The Washington State experience in developing a quality improvement initiative may have relevance for health care clinicians, administrators, policymakers, and researchers engaged in similar pursuits within the general medical care arena.

Managing Complex Claims

Magazine Article

1. **Reitz, D., June 26, 2012. Handling Employment-Related Injury Claims. *Claims*, 60(7):13-16. Accessed 18/9/12. Available from http://www.claimsmagdigital.com/claims/201207?pg=3#pg14**

   The article looks at the possibility of applying workers' compensation (WC) coverage or employment practices liability to employment-related injury claims in the U.S. It explores the classifications of cases that involve emotional or mental injury (MI), in which WC compensation will apply. It also explains the differences in the policies of states with regards to MI claims.

Book

2. **Schultz, I.Z. & Gatchel, R.J., (eds), 2005. *Handbook of Complex Occupational Disability Claims: Early Risk Identification, Intervention and Prevention*. New York: Springer Science & Business Media.**

   This handbook integrates current theories and findings into a tool for critical thinking, decision making, and effective practice (words taken from cover).

Report

3. **Accident Compensation Corporation, 2004. *New Zealand Acute Low Back Pain Guide: Incorporating the Guide to Assessing Psychosocial Yellow Flags in Acute Low Back Pain.* Accessed 19/9/12. Available from http://www.acc.co.nz/PRD_EXT_CSMP/groups/external_communications/documents/guide/prd_ctrb112930.pdf**

   This report provides a best practice approach for the effectiveness of treatment of acute low back pain for the prevention of chronic pain and disability. It also gives an overview of risk factors for long term disability and work loss and an outline of methods to assess these. Identification of those 'at risk' should lead to appropriate and targeted early management.

Journal Articles

4. **Butler, G., 2002. Getting the tough cases back to work. *Risk Management*, 49(11):28-32.**

   According to the US Bureau of Labor Statistics, in 1998, 5.9 million nonfatal injuries and illnesses were reported in private industry workplaces. Of these, a total of 1.7 million workers - 56% of who were between the ages of 25 and 44 - lost time from work as a result of their injuries or illnesses. Ron Anderson, who currently serves as the workers' compensation claims manager for American Airlines, says that there are plenty of successful return-to-work programs. These typically involve, he says, six best practices: 1. Avoid claims exposure from the onset. Establish safety and training programs. 2. In appropriate states, have panels of medical providers effectively and

aggressively treat injuries. 3. Maintain a good working relationship with claims handlers to identify problematic cases early on. 4. Create a culture and mentality from the top down that is accepting of injured employees. 5. Improve the quality and quantity of data available to injured workers after recovery. 6. An employee must be motivated to return to work. Making the job site interesting and enjoyable will go a long way to keep employee morale high.

5. **Cohen, D.A., Aylward. M. & Rollnick, S., 2009. Inside the fitness for work consultation: a qualitative study. *Occupational Medicine*, 59(5):347-52.**

   The role of the general practitioner (GP) in the management of fitness for work is pivotal. This study aims to understand the interaction between GP and patient in the fitness for work consultation. It forms part of a larger research project to develop a learning programme for GPs in NSW around the fitness for work consultation based on behaviour change methodology. Four major themes emerged: role legitimacy, negotiation, managing the patient and managing the systems. Within these, subthemes emerged around role legitimacy. 'It's not my job', 'It's not what I trained for' and the 'shifting agenda' Negotiation was likened to 'A polite tug of war' and subthemes around decision making, managing the agenda and dealing with uncertainty emerged. This study starts to unravel the complexity of the fitness for work consultation. It illustrates how GPs struggle with the 'importance' of their role and 'confidence' in managing the fitness for work consultation. It addresses the skilful negotiation that is required to manage the consultation effectively.

6. **Ginexi, E.M., Howe, G.W. & Caplan, R.D., 2000. Depression and Control Beliefs in Relation to Reemployment: What Are the Directions of Effect? *Journal of Occupational Health Psychology*, 5(3):323-36.**

   Depressive symptoms, locus of control, and reemployment were assessed over the course of 1 year among 254 recently unemployed men and women. Statistical analyses were used to examine (a) whether reemployment resolved depressive symptoms or affected control beliefs; (b) whether depressive symptoms or control beliefs predicted time to reemployment; and (c) if these relationships changed over time. Depressive symptom declines were predicted by reemployment, but initial depression was completely unrelated to time to reemployment. Control beliefs were stable over time and thus not affected by reemployment. Instead, they predicted early reemployment. These processes varied according to reemployment type and time period. Implications for intervention and for stress and coping theory are discussed.

7. **Iles, R.A., Wyatt, M. & Pransky, G., 2012. Multi-Faceted Case Management: Reducing Compensation Costs of Musculoskeletal Work Injuries in Australia. *Journal of Occupational Rehabilitation*, 21(1):43-53.**

   This study aimed to determine whether a multi-faceted model of management of work-related musculoskeletal disorders reduced compensation claim costs and days of compensation for injured workers. An intervention including early reporting, employee-centred case management and removal of barriers to return to work was instituted in 16 selected companies. Outcomes were evaluated by an administrative dataset from the Victorian WorkCover Authority database. Information on 3,312 claims was analysed. In companies where the intervention was introduced the average cost of

claims was reduced and the number of days of compensation decreased. Medical costs and weekly benefits costs were also lower after the intervention. Reduction in claims costs were noted across industry types, injury location and most employer sizes. The model of claims management investigated was effective in reducing the number of days of compensation, total claim costs, total medical costs and the amount paid in weekly benefits. Further research should investigate whether the intervention improves non-financial outcomes in the return to work process.

8. **Kosny, A., MacEachen, E., Ferrier, S. & Chambers, L., 2011. The Role of Health Care Providers in Long Term and Complicated Workers' Compensation Claims. *Journal of Occupational Rehabilitation*, 21(4):582-90.**

   Health care providers (HCPs) play a central role in workers' compensation systems. In most systems, they are involved in the legitimization of work-related injury, are required to provide information to workers' compensation boards about the nature and extent of the injury, give recommendations about return to work capability and provide treatment for injury or illness. This study identifies problems that occur at the interface between the health care system, injured workers, and workers' compensation boards (WCBs) that may complicate and extend workers' compensation claims and the mechanisms that underlie the development of these problems. Four domains related to injured workers' interface with the health care system were identified that played a key role in complicating and prolonging compensation claims. These problems, related to health care access, conflicting or imperfect medical knowledge, limited understanding of compensation system requirements. Confusion on decision-making authority resulted in frustration, financial difficulties and mental health problems for injured workers. Recommendations are made about how compensation system parties can find better ways to serve injured worker health care needs and facilitate a smooth relationship between the compensation board and HCPs.

9. **Rose, J., 2006. A model of care for managing traumatic psychological injury in a workers' compensation context. *Journal of Traumatic Stress*, 19(3):315-26.**

   Work-related traumatic psychological injuries are a significant health problem that can result in distress and disability. To improve outcomes following a workplace trauma, the Workers' Compensation Board of Alberta (WCB-AB) has developed and implemented an evidence-based care model (CM) to assist its staff to manage these claims. A CM acts as a disability management "road map" that illustrates typical recovery patterns, treatment best practices, and checkpoints where decisions for further service provision can be made. The model was developed from a recent literature review, and the opinions of local and international experts in the field of traumatic psychological injury. A formal evaluation of the effectiveness of this model is being planned.

10. **Sterling, M., Hendrikz, J. & Kenardy, J., 2010. Compensation claim lodgement and health outcome developmental trajectories following whiplash injury: A prospective study. *Pain*, 150(1):22-8.**

    This study aimed to identify distinctive trajectories for pain/disability and posttraumatic stress disorder (PTSD) symptoms following whiplash injury and to examine the effect of injury compensation claim lodgement on the trajectories. Following whiplash injury, there are distinct pathways of recovery for pain/ disability and PTSD symptoms.

Management of whiplash should consider the detrimental association of compensation claim with psychological recovery and recovery of those with mild to moderate pain/disability levels. However, claim lodgement has no significant association with a more severe pain and disability trajectory.