

BIOPSYCHOSOCIAL INJURY MANAGEMENT

Introduction

This paper outlines HWCA's position on a biopsychosocial approach to injury management and recognises work undertaken by Workers Compensation Authorities in this area.

HWCA recognizes the World Health Organisation's generic biopsychosocial model of health, illness and disability as applicable to worker's compensation regulation, policy, and scheme administration.¹ This approach is accepted as critical to improving outcomes when managing injured workers.^{2 3 4}

Injury management encompasses all the activities associated with ensuring the safe and early return to work of an injured worker to the workplace. It includes treatment, claims management, retraining of injured workers and employment practices as well as occupational rehabilitation.⁵

The traditional medical model

The traditional medical model which is the basis for traditional health care and rehabilitation assumes a linear relationship between disease, symptoms and disability, and incapacity for work. Health care and rehabilitation is traditionally based on a medical model. It is based on the following elements:

- Recognize patterns of symptoms and signs— medical history and examination
- Infer underlying pathology—diagnosis
- Apply therapy to that pathology—treatment and rehabilitation
- Expect the patient to recover—cure or residual impairment⁶

However, this model falls short in many cases. It is too simplistic, over emphasizes impairment and incorrectly assumes a direct causal link between impairment and disability. It fails to take sufficient account of the personal and social dimensions of disability. There is now broad

¹ World Health Organisation (2001) International classification of functioning, disability and health. Geneva: World Health Organisation <http://www.who.int/classifications/icf/en>.

² Accident Compensation Corporation. New Zealand Acute Low Back Pain Guide October 2004 edition

³ Burton AK, Kendall NAS, Pearce BG, Birrell LN, Bainbridge LC. Management of upper limb disorders and the biopsychosocial model. Health and Safety Executive RR 596: Norwich 2008.

⁴ Clinical Framework for the Delivery of Health Services, Worksafe Victoria/TAC, 2008 modified from Mayou, main and Auty (2004), Psychology, personal injury and rehabilitation, The IUA/ABI Rehabilitation Working Party, UK.

⁵ Planning Occupational Health and Safety; a guide to OHS Risk Management 8th edition. CCH Australia Ltd. 2009.

⁶ Preventing incapacity in people with musculoskeletal disorders, Gordon Waddell. Unumprovident centre for Psychosocial and Disability Research Cardiff University, UK, 2006

agreement that human illness and disability is best understood and managed according to a biopsychosocial model that includes biological, psychological and social dimensions.⁶

The biopsychosocial model

Put simply, biopsychosocial injury management is an individual-centred model that considers the person, their health problem and their social context:

Biological refers to the physical or mental health condition.

Psychological recognizes that personal/psychological factors also influence functioning.

Social recognizes the importance of the social context, pressures and constraints on functioning.⁶

The biopsychosocial model forms the basis of the World Health Organization International Classification of Functioning, Disability and Health (ICF), which is now widely accepted as the framework for disability and rehabilitation. Day to day functioning and disability is dependant on the dynamic interaction between the individual's health condition and contextual factors that include both personal/psychological and social/occupational factors.¹

Understanding and preventing incapacity requires a biopsychosocial model that addresses all the physical, psychological and social factors involved in human illness and disability. Rehabilitation should be directed to overcome biopsychosocial obstacles to recovery and return to work. These principles are fundamental to better clinical and occupational rehabilitation management.

Implementing a biopsychosocial approach

A biopsychosocial approach to injury management which provides programs tailored to the worker's individual needs, is the best method of maximising recovery and RTW and minimising the likelihood of persistent pain developing.

The model (Figure 1) highlights the interactive nature of variables that are likely to impact on recovery and return to work including the legislative and regulatory context and locates particular injury management issues within a broader context of health and disability. Adopting this model recognises that the worker's fears and beliefs about their injury and the impact on their return to work on their health, are critical domains to be included in injury management approaches. Likewise, the level of motivation to return to work is influenced by workplace variables such as the

presence or absence of support from managers and co-workers, flexible accommodation and the availability of suitable duties, and the organisation's willingness to invest in health and safety.⁷

Dimensions of disability	Obstacles to (return to) work	Corresponding rehabilitation intervention	Interactions Communication
Bio-	Health condition (+ health care) Capacity + activity level -v- job demands	Effective and timely health care Increasing activity levels & restoring function Modified work	
Psycho-	Personal / psychological factors Psychosocial aspects of work	Shift perceptions, attitudes & beliefs Change behaviour	
Social	Organisational + system obstacles Attitudes to health and disability	Involvement of employer critical Social support Organisational policy, process & attitudes.	

Figure 1: Biopsychosocial obstacles to return to work are classified, and the corresponding rehabilitation interventions are shown Waddell and Burton⁸.

The biopsychosocial approach provides an evidence based framework for the prevention and management of ongoing pain and disability. It recognises that pain is not felt in accordance with the amount of injury to the tissues (damage to body structures and function). People's perception of pain differs according to the influence of psychosocial factors. Therefore, application of a biopsychosocial approach that considers the physical, social, psychosocial & emotional needs of the worker, underpins effective injury management.

Biopsychosocial injury management principles

The biopsychosocial model is being promoted through the work of workers compensation authorities in Australia and New Zealand. In particular the broad principles in the Victorian WorkCover/TAC *Clinical Framework for the Delivery of Health Services*⁹, the NSW WorkCover program and guidance *Improving Outcomes: Integrated Active Management of Workers with Soft tissue Injury*¹⁰, the ACC *Pain Management Services*¹¹ in New Zealand, and the workplace rehabilitation principles being adopted by HWCA in the *Nationally Consistent Approval Framework for Workplace Rehabilitation Providers*¹².

⁷ The Role of the Workplace in Return to Work: Discussion Paper 2008, Australian Institute of Social research for Workcover SA.

⁸ Waddell G, Burton AK. Concepts of Rehabilitation for the Management of Common Health Problems. London: The Stationery Office, 2004.

⁹ Clinical Framework for the Delivery of Health Services Health Service Group, Worksafe Victoria & Transport Accident Commission Victoria, 2008.

¹⁰ Improving Outcomes : Integrated , Active Management of Workers with Soft Tissue Injury, NSW WorkCover, 2008

¹¹ ACC Pain Management Services Operational Guidelines 2008

¹² HWCA Nationally Consistent Approval Framework for Workplace Rehabilitation Providers. Final draft 2009

The following principles are common to these frameworks:

Early intervention and tailored programs

Commencing injury management, as soon as practicable after an injury demonstrates a commitment to the injured worker and enables early support and assistance to be provided. Immediate thought needs to be given to the full range of issues that may impact on recovery and return to work. Early, accurate identification of risks and needs ensures the most appropriate intervention is applied to achieve a safe return to work.

- workers receive prompt attention and intervention appropriate to their needs
- early identification of the psychosocial barriers to recovery and RTW assists in determining the most effective treatment and rehabilitation approach
- return to work barriers, risks and strengths are addressed in rehabilitation planning and strategies promptly implemented
- injury management is actively coordinated so treatment, and return to work activities are integrated
- the workplace takes action to ensure further workplace injuries are prevented including assessment and management of the risks arising from the psychosocial working environment

A focus on increasing activity and return to work

Injury management is underpinned by a shared understanding of all stakeholders that better health and return to work outcomes are achieved by identifying what will assist the injured employee to more easily resume their former lifestyle including work activities and minimise incapacity. Provision of work within the capabilities of the injured employee (suitable duties) increases the opportunity for an injured employee to remain at work or enable the employee to safely return to work sooner than would otherwise be possible.

- goals focussing on return to work and function are developed in collaboration with the injured worker at the commencement of program provision
 - treatment goals are developed that relate to return to work and function
 - appropriate services are identified and delivered to maximise return to work
 - activities focus initially on return to work in the worker's pre-injury employment or, if that is not possible, with another employer
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- design of treatment and rehabilitation promotes transition to independence and self management
- workplaces promote positive health at work strategies, recognise and respond to early symptoms, are flexible in accommodating return to work through provision of suitable duties and accommodating workers with persistent or recurring symptoms

Active engagement of injured employee and working towards a common goal

Good communication improves everyone's understanding of the issues affecting return to work and is associated with greater participation and improved return to work outcomes.

Communication between treating practitioners and injured workers can be improved by exploring their concerns, preferences and expectations. ¹³ Managing a return to work is a cooperative process that needs the input of all the stakeholders to achieve results.

- adequate and consistent information is provided to ill or injured workers about their injury and the return to work process
- effective communication establishes agreed goals and a shared understanding of what support and assistance is necessary to facilitate a safe and early return to work including agreed strategies to address factors that may delay recovery
- workers are empowered to participate in their recovery through targeted education regarding the nature of their injury and appropriate self management strategies as part of the treatment and rehabilitation program

Regular review of progress and management of risk factors

Regular review is needed to assess effectiveness of injury management interventions and the progress of return to work. This process plays an integral role in ensuring that programs are responsive to return to work barriers that have been identified; match the injured worker's needs and are effective for their stage of recovery.

- relevant outcome measures relating to functional goals of injury management are employed and regularly reviewed
- close management and monitoring of return to work programs occurs in consultation with all parties

¹³ Pransky G, Shaw W, Franche R-L, Clarke A. Disability prevention and communication among workers, physicians, employers, and insurers--current models and opportunities for improvement. *Disability & Rehabilitation* 2004;26(11):625-34. Cited in Return to Work Knowledge Base at rtwknowledge.org.

- when recovery has not progressed as expected or when risk factors have been identified a standardised screening tool is used to identify/review risks of longer term incapacity ¹⁴
- where recovery is delayed all parties should work together to consider and act on new information and ensure that the program for treatment and RTW addresses psychosocial factors and aims to reactivate functional activity to minimise the likelihood of persistent pain and functional loss
- pain of longer than three months duration can be referred to as persistent pain, and is usually the result of a complex relationship between physical and psychosocial factors. Multi- disciplinary activity focused programs are indicated to address persistent pain related disability

Evidence based decisions

Extensive research literature exists on the efficacy of different treatments and clinical and rehabilitation decision making should therefore be directed by this evidence.

- assessments demonstrate need for particular treatment and rehabilitation interventions.
- the most appropriate and effective of available interventions are offered
- the type of treatment/service selected is linked to functional outcomes i.e. an improvement in ability to perform usual daily activities including work activities
- measurable effectiveness is demonstrated by injury management interventions

Role of Workers Compensation Authorities

HWCA recognises that Workers Compensation Authorities play a key role in strengthening national policies, strategies and programmes for implementation of Biopsychosocial Injury Management.

Work is underway to increase awareness of stakeholders of the importance of a broader model of health and disability management and developing the knowledge base for biopsychosocial rehabilitation with a view to reducing dependence on a medical model. Australian and New Zealand Workers' Compensation Authorities are sharing information and progress of initiatives at the working party level across the key areas of:

- guidance and resources
- stakeholder training
- assessment and reporting of risks

¹⁴ The costs and benefits of active case management and rehabilitation for musculo-skeletal disorders. Hu –Tech Associates Ltd for the Health and Safety Executive 2006. Research Report 493

- regulation of rehabilitation providers
- claims management
- service delivery
- outcome measurement
- research

Areas for consideration of further work include to:

- promote the reduction of workplace biopsychosocial risk factors contributing to illness and injury
- integrate biopsychosocial principles in HWCA's workers compensation strategy and jurisdictional policies and programmes
- where appropriate to coordinate research and development programmes on rehabilitation and injury management
- integrate into relevant performance measurement and collection of more reliable data on relevant aspects, including cost-effectiveness of interventions for disability prevention, rehabilitation and RTW
- organize meeting of experts to review progress and further actions to be taken to meet the health and rehabilitation requirements injured workers through a biopsychosocial approach
- report on progress in implementation of this approach and liaise with national partners and international bodies that are aligned with this work.