

# Pre-Claim Intervention of Long Duration Workers' Compensation Claims

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## Abstract

Historical reviews of all workers' compensation systems worldwide show a small group of claims representing the majority of costs within systems. Closer investigation of these claims reveals numerous psychosocial factors, rather than injury that prevent the injured employee from returning to the workforce. Prevention of long duration claims will be beneficial to systems worldwide and assist employers with the significant burden these claims have on the organisation. Some would be aware of the concept of Yellow Flags for predicting potential long term disability post injury. If the worker is already injured is it too late? Can this model be adopted to ensure that prevention is better than cure? This paper explores the effects of psychosocial factors on organisational wellness and injured employee recovery and aims to explore research being conducted to investigate the practicality of adopting the Yellow Flag concept for the pre-claim intervention of long duration workers' compensation system.

## Background to the Study

Workers compensation, social security or employer's liability cover (workers' compensation) for workers, is pertinent to many countries worldwide. In most countries including Australia insurance cover for injuries to employees and workers is compulsory.

The notion for compensating bodily injury dates back to approximately 2050 BC, when the then king of the ancient Sumeria passed the Ur-Nammu law which provided monetary compensation for specific injury to workers' body parts including fractures (Guyton. G. 1999)

The Code of Hammurabi from 1750 B.C. provided a similar set of rewards for specific injuries and their permanent impairments (Guyton. G. 1999). Ancient Greek, Roman, Arab and Chinese law provided sets of compensation schedules, with specified payments for the loss of a body part.

The origins of the current workers' compensation systems stem from Germany where legislation was passed in 1838 to protect railroad employees and passengers in the event of accident. Further legislation was passed in 1854 requiring certain classes of employers to contribute to sickness funds and in 1876 a Voluntary Insurance Act was enacted (Harger).

"It is the duty of the state to provide sustenance and support for those citizens who cannot provide substance for themselves was Fredericks the Great comment of the early social justice system' (Harger).

Whilst the nature and extent of the cover and entitlements may alter significantly throughout systems, the fundamental principles of providing compensation in the form of income support, medical expenses indemnity and rehabilitation (benefit costs) for workers who suffer a work related disability is common to all schemes.

The significant increasing costs within workers' compensation systems worldwide are seen to be multi-factorial in nature, however a significant proportion as result of the escalating number of a small number of claims where workers are off work for extend periods of time, known as long duration claims [LDC].

Despite the implementation of best practice techniques to prevent claims from becoming long in duration; they continue to be a problem in all systems within Australia and internationally. An integral question, therefore that needs to be posed - Are long duration workers' compensation claims preventable?

Apart from continuous scrutiny of benefits paid to workers it has been established that in order to contain the costs of workers compensation schemes administrators need to focus on so-called long term or Long Duration Workers' Compensation Claims (LDC's). The prevention of long duration claims, usually defined as claims where the workers absence from work exceed 60 days, is vital to the containment of costs paid within any scheme. Long duration workers compensation claims (LDCs) internationally represents billions of dollars in costs to workers compensation schemes and to governments (Carstem 2001, Hashemi et al 1998 as cited in (Workers' Compensation and Rehabilitation Commission by the School of Occupational Therapy Curtin University of Technology Western Australia 2001). The number of workers' compensation claims per million hours worked in Western Australia has decreased by 18.8% between 2000/01 and 2003/04, the number of LDC have increased by 13.7%(WorkCover Western Australia 2006).

The following represents the growth in long duration claims and the associated increase in costs to the system for the period 2000/01 to 2005/06:

Claim Year	Category of Claims	% of Claim Costs	% of Claim Numbers	Claims with LTI of 121 days represented % of costs
2000/01	SDC	25.8	79.2	74.9%
	LDC	74.8	20.8	
2001/02	SDC	21.7%	78.4	74.3%
	LDC	78.3	21.6	
2002-03	SDC	17.2	80.7	74.%
	LDC	82.2	19.3	
2003-04	SDC	20.2%	81.0%	70.3%
	LDC	79.8%	19.0	
2004-05	SDC	17.4%	80.6%	74.1%
	LDC	82.6%	19.4%	
2005-006	SDC	17.7%	80.1%	72.2%
	LDC	82.3%	19.9%	

(WorkCover Western Australia 2008)

Empirical research and literature Linton & Hallenden, 1998; Klenerman, Slade, Stanley, Pennie, Reilly, Atchison, Troup, Rose, 1995; Linton, 2000; Linton & Andersson, 2000; Linton & Myberg, as cited in (Dasinger June 2001) has focused on the prevention of LDC claims post claim, with some success using the concept of psychosocial factors or the concept of Red and Yellow Flags.

The New Zealand Acute Lower Back guide outlines an approach for the assessment and treatment of lower back pain, to prevent chronic pain and disability. This guide uses the terminology of red and yellow flags, where:

- Red Flags indicate physical risk factors; and
- Yellow flags indicate psychosocial risk factors (Kendall 1997)

In the NZ Acute Lower Back Pain Guide yellow flags are considered factors that may increase the risk of developing or perpetuating long-term disability and work loss, where there is little pathology to support or substantiate the injury. The Guide identifies the main categories of psychosocial factors as:

- Attitudes and Beliefs;
- Emotions;
- Behaviours;
- Family;
- Compensation Issues; and
- Work. (Kendall 2002)

A number of thoughts, beliefs and behaviours have been identified which significantly increase disability and chronic lower back pain, these are called Yellow Flags (The Lower Back Pain Toolkit 2008).

The prevention of LDC is thought to lie with preventing Yellow Flags that exist with employees at their workplace prior to an injury occurring. If this is to occur employers need to be provided education and support to prevent LDC from occurring, before an injury or incident occurs by ensuring appropriate management of employee relations and employment conditions.

According to (Bigos 1991) the key-determining factor as to whether a worker will return to work after injury is how much he likes his job and how well he gets on with his supervisor, rather than the nature and extent of the injury itself. Highlighting the importance of psychosocial factors and the above categories that effect injured workers recovery and the incidence of LDC.

(Mussett 2001) found that organisations that had a mission and culture of caring for everyone who came onto the business premises had minimal occupational injuries, minimal employee sick leave and high level of employee commitment to the organisation that increased organisational profitability. In these 'best practice' organisations the research found no long duration workers' compensation claims, and that good management practices demonstrated in these organisations contributed to preventing workers' compensation claims from occurring.

In the research conducted by Barling the research consistently identified negative perceptions of safety climate, both at the individual and group level (Griffin & Neal, 2000; Hofmann & Stetzer, 1996; Zolar 1980, 2000), pay-for-performance schemes (Kaminski, 2001), and job insecurity (Probst & Brubaker, 2001) as predictors of workplace injuries. Barling went on to elaborate that in contrast, supportive supervision and leadership (Barling, Loughlin & Kelloway, 2002; Butler & Jones, 1979, Dunbar, 1975; Hofmann & Morgeson, 1999; Parker, Axtell & Turner, 2001), team work (Kaminski, 2001) and empowerment and job autonomy (Alampay & Beehr, 2001; Parker et al., 2001) all affect safety performance positively (Barling 2003).

In his research on Occupational Wellbeing Cotton highlights the psychosocial flag model as becoming influential framework for identifying potentially complicating psychosocial factors that are predictive of poor return to work and long-term disability after injury. It was found that individuals and work teams with higher levels of morale are more resilient in managing their operational demands and pressures and exhibit less withdrawal behaviours including absenteeism and stress related workers' compensation claims (Cotton 2003).

Poor supervisory and organisational support is now increasingly recognised as a significant psychosocial barrier contributing to both psychological and physical injury outcomes. Organisation health research suggests that when individual's morale declines beyond certain levels, individuals start to disengage and begin to actively seek evidence of lack of organisation support and unfair treatment in the workplace. Supervisory support or lack thereafter has been shown to influence the submission of workers compensation claims for musculo-skeletal injuries and sufficiently mitigate the effect of chronic pain on performance (Cotton 2008).



<b>Table 1 A brief Modern history of back pain task forces and guidelines</b>	
<b>1987 The Quebec task Force on Spinal Disorders (QTFSD), Canada (Spitzer et al)</b>	<ul style="list-style-type: none"> <li>• Emphasized the magnitude of the problem</li> <li>• Identified the major obstacle presented by the lack of consistent classification or diagnoses;</li> <li>• Psychosocial issues were perceived as merely secondary reactions and not relevant to early management.</li> </ul>
<b>1993 WorkCover South Australia (WorkCover Corporation)</b>	<ul style="list-style-type: none"> <li>• Made an attempt to simplify classification with a frequently overlooked major new proposal that the classification of “back strain” should only be allowed for a maximum of 8 weeks</li> <li>• Otherwise, it was a description of usual clinical practice, with no attempts to provide critical reasoning analysis;</li> <li>• Psychosocial assessment appended, with an untested scale to indicate risk of work loss.</li> </ul>
<b>1994 Agency for Health Care Policy and Research (AHCPR), US (Bigos et al)</b>	<ul style="list-style-type: none"> <li>• Large Scale literature review using an expert panel methodology;</li> <li>• Review of scientific evidence based on operationalised criteria with recommendations made on the basis of evidence;</li> <li>• Psychosocial issues acknowledged and emphasized, but not well articulated.</li> </ul>
<b>1994 Clinical Standards Advisory Group (CSAG), UK (Clinical Standards Advisory Group)</b>	<ul style="list-style-type: none"> <li>• Strong statements about the magnitude of the problem, and the economic costs;</li> <li>• Recommendations based on the AHCPR (US) literature review</li> <li>• Acknowledgement of psychosocial issues, with the recommendation to adopt a biopsychosocial model;</li> <li>• Recommendation for comprehensive (biopsychosocial) assessment at 6 weeks.</li> </ul>
<b>1995 Pain in the Workplace Task Force (PIW), International Association for the Study of Pain (task Force on Pain in the Workplace)</b>	<ul style="list-style-type: none"> <li>• Emphasis on new category called “nonspecific LBP”;</li> <li>• Controversial recommendations to purchases of compensation systems, including cessation of payments for treatment and transfer to unemployment status at 7 weeks.</li> </ul>
<b>1995 Quebec task Force on Whiplash Associated Disorders (QWAD), Canada (Spitzer et al)</b>	<ul style="list-style-type: none"> <li>• Emphasis on classification, followed by management plans;</li> <li>• Recommendations for mandatory compulsory assessment either at 6 or 12 weeks depending on the classification of severity grade;</li> <li>• Mandatory multidisciplinary assessment to include expertise and psychosocial expertise.</li> </ul>
<b>1996 Accident Rehabilitation &amp; Compensation Insurance Corporation (ACC) and National Health Committee (NHC), NZ</b>	<ul style="list-style-type: none"> <li>• Reprint of the AHCPR guidelines at “Spin in Action” Conference in Christchurch January 1996;</li> <li>• Post-conference seminars emphasized the prevention of chronicity;</li> <li>• Feedback from the interested group resulted in the formation of task force to develop New Zealand version of the guides, including psychosocial factors.</li> </ul>
<b>1996 Royal College of General Practitioners (RCGP), UK (Waddell et al)</b>	<ul style="list-style-type: none"> <li>• Revised edition of CSAG guidelines</li> <li>• Stronger recommendation about return to usual activities</li> <li>• Recognition at the highest level of evidence that psychosocial factors are important in chronic low back pain and disability;</li> <li>• Recognition that psychosocial factors are more important at 6 early stages than previously considered.</li> </ul>
<b>1997 Accident Rehabilitation &amp; Compensation Insurance Corporation (ACC) and National Health Committee (NHC), NZ (ACC and National Health Committee)</b>	<ul style="list-style-type: none"> <li>• Publication of the New Zealand Acute LBP Guide;</li> <li>• Publication of the Guide to Assessing Psychosocial Yellow Flags: Risk Factors for Long-Term Disability and Work Loss.</li> </ul>
<b>1999 Royal College of General Practitioners (RCGP), UK (Royal College of General Practitioners)</b>	

- Updated version of UK guide, contained only two differences from the 1996 edition in principle recommendations:
  1. Noted that the optimum timing for the use of the manipulation is unclear
  2. Adoption of the New Zealand –developed concept of Yellow Flags.

**1999 Accident Rehabilitation & Compensation Insurance Corporation (ACC) and National Health Committee (NHC), NZ (ACC and National Health Committee)**

- Updated 1999 version of the New Zealand Acute Low Back Pain Guide based on systematic review of the back pain literature since January 1997.

(Kendall 2002)

### **What is Psychosocial Research or Modeling**

Schultz et al., focused on the identification and testing of potential psychosocial factors that contribute to models of occupational lower back pain and disability. In this research the authors explain the psychosocial predictors originate from five traditions of psychosocial research. These are as follows:

- Psychopathological;
- Cognitive;
- Diathesis – stress;
- Human Adaptation; and
- Organizational psychology.
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(Schultz Dec 2002)

The authors provide further clarification on what is meant by psychosocial and the origins discipline and the characteristics are summarised in the table below:

Table 2: Origins of psychosocial modeling

Psychopathological	Cognitive	Human adaptive	Combination of diathesis-stress, cognitive and adaptive perspectives	Organisational psychology
Includes the following: <ul style="list-style-type: none"> <li>• pre-disposing personality or psychopathological factors</li> </ul>	Includes the following: <ul style="list-style-type: none"> <li>• beliefs,</li> <li>• perceptions,</li> <li>• expectations of control and</li> <li>• self efficacy as they relate to pain and disability</li> </ul>	Includes the following: coping beliefs; Coping styles.	Includes the following characteristics: <ul style="list-style-type: none"> <li>• fear,</li> <li>• catastrophizing;</li> <li>• avoidance;</li> <li>• Greater experiences of pain and disability.</li> </ul>	Includes the following characteristics: <ul style="list-style-type: none"> <li>• Work stress;</li> <li>• Poor job satisfaction; and</li> <li>• Work performance;</li> <li>• Availability of unscheduled breaks;</li> <li>• Job modification,</li> <li>• Job demands;</li> <li>• Work quantity,</li> <li>• Monotony/ work tempo;</li> <li>• Lack of control; and</li> <li>• Problematic relations with co-workers have predictive value on pain and disability.</li> </ul>

(Schultz Dec 2002)

### What Do the Different Colour Flags represent?

Post the Task Force Studies into Psychosocial Factors and the Red/Yellow Flag Research extensive research and study has been conducted and has extended to the reasons post injury screening and intervention does not prevent psychosocial factors being eliminated. Work Performance UK in their articles Flags – what have they got to do with Rehabilitation provide an extensive overview of the Flags model and what the various colours represent.

### Work Performance UK Flag Model

#### Red Flags

These are clinical flags. Signs and symptoms that a clinician would be concerned about finding when carrying out an interview, examination or investigation with an individual. The presence of a red flag usually indicates that there could be something seriously wrong that requires urgent medical attention. An example for back pain would be a person saying that they had lost the feeling in both legs or lost control of their bowel.

**ACTION:** *Usually immediate referral to hospital.*

## Orange Flags

These are also clinical flags but relate to serious psychological and psychiatric illness. For Example, a diagnosis or suspicion of psychosis, suicidal tendencies or addictive behaviours such as alcoholism. Evidence or implications of orange flags would again require full medical assessment by a clinical psychologist or psychiatrist.

**ACTION:** *Referral on to GP or Hospital for further assessment.*

Red and orange flags should be fully investigated and treated, and this may have to be conducted before a RTW program can be planned to know what the full effect on someone's work may be.

## Yellow Flags

These are known as psychosocial factors that can create barriers to recovery from illness or return to work. They are usually beliefs or behaviours that may be related to the health condition and the anxiety and fears it presents, or they may be related to the social situation of the person.

They are not necessarily conscious beliefs, and may be long held and hard to change.

There is a lot of evidence to show that if these factors can be identified and addressed then recovery and return to work can be improved. It is possible to screen for these, post injury, using a questionnaire and via interview with suitably trained clinicians.

Yellow flags are sometimes broken down into (ABCDEFW):

Attitudes  
Behaviours  
Compensations  
Diagnosis  
Emotions  
Family, and  
Work.

**ACTION:** *Screening by a suitably qualified health professional using a questionnaire or interview technique, which then informs and rehabilitation planning.*

## Blue Flags

Blue flags are usually considered to be the perceptions of the situation by the employee or the employer. Both the blue and black flags have grown out of the yellow flags, as better understanding of the impact or social environments has been made.

Blue flags are often factors that may be a perception only (i.e an employee feels that his manager is not supportive, but the manager may feel he is supportive), or may be a company policy that inadvertently affects an employee's behaviours – such as policy indicating a belief of the management and employee that a person cannot return to work until they are 100% fit. This example is a classic that actually delays return to work unnecessarily. Usually something constructive can be done to address blue flags.

**ACTION:** *Identify through review of company systems and employee's perceptions, and then make an action plan to address those.*

## Black Flags

Black flags are social or cultural factors that can be an obstacle to recovery and return to work. One clear example is that of a state welfare system where people may be better off staying on benefits rather than returning to work – there is a disincentive to finding a new job. Also widely held beliefs or stigmas around particular types of conditions – for instance the social belief that back pain means someone cannot return to any kind of manual work, or that someone with a mental health problem cannot work. Both of which are untrue, but still remain a widely held belief.

Black flags are extremely difficult to influence and their needs to be change at national or organisational level (if in a large corporation). There is overlap between the blue and black flags.

**ACTION:** *Identify as far as possible where black flags may influence your business management of an absence and make plans to control for these as much as possible. Take an active interest in political debate on the subject of welfare reforms, because even if they do not affect your business directly they will be having a considerable indirect effect on your current and future workforce.*

## Pink Flags

These have been recently invented as light relief by a physiotherapist, Louis Gifford who specialises in pain management. In summary, he felt that all the other flags were very negatively orientated, so he decided that instead of always looking for “bad Flags” he would also look for “good flags”. So pink flags are about positive things that will help a person to return to work and recover. An example might be that the person really enjoys their job, and that they are prepared to put in all the effort needed to get back to work.

**ACTION:** *Be cheerful that there is something positive to go on when all else seems doom and gloom and make sure that use them to their full advantage.*

(Work Performance UK 2009)

## The IUA/ABI Rehabilitation Working Party Flags Model

The International Underwriting Association of London(IUA) and Association of British Insurers (ABI) Rehabilitation Working Party has found that in about 20-30% of personal injury cases, the victim suffers disability and distress significantly greater than might be expected from the injury alone. In about 5% of cases, the physical and social outcomes are seriously adversely affected to an extent that cannot be explained by the initial or remaining injury. The report refers to these outcomes as ‘Apparently Disproportionate Outcome’ (ADO), and notes that it can have a significant effect on the cost of treatment, complexity of case handling, rehabilitation and compensation outcomes (The IUA/ABI Rehabilitation Working Party 2004).

The report describes the mechanisms for developing ADO in some detail—noting that the main factors are psychosocial, based on individual beliefs and perceptions, together with practices in medicine, employment and compensation systems. It notes that in the worst cases, the operation of these factors can lead to permanent incapacity for work and profound withdrawal, even in cases where the initial injury was apparently minor.

However, the report suggests that *all cases of ADO can be prevented*. Monitoring and responding to psychological and social factors can produce faster, better recovery. Cases at high risk of developing ADO can be identified early on using the ‘flags model’ so that appropriate interventions are programmed in to the treatment and rehabilitation process. In most cases, signs of difficulty can be detected within three months of an injury or disease.

Table 1 summarises the flags model which can be used to predict and avoid disproportionate outcomes.

The report believes that poor outcomes or delayed recovery can be anticipated where a serious injury/disease is diagnosed, other injuries/diseases co-exist or there have been treatment failures—these clinical factors are known as '**red flags**'.

Psychosocial risk factors (or '**yellow flags**') have a strong effect on expectations and behaviours, and have been found to be predictive of poor outcomes. These factors can be addressed by appropriate guidance, information and discussion.

'**Blue flags**' are perceived features of the work or social environment that are generally associated with higher rates of symptoms; ill-health and time off work, which in the context of injury may delay recovery or present an obstacle to it.

'**Black flags**' include policy concerning conditions of employment, sickness and working conditions, and certain other factors related to financial security, litigation/disputation and work contact. These factors are not a matter of perception and affect all workers in a workplace or occupation equally.

Table 1: Indicators of poor outcomes or delayed recovery—

the flags model	
<b>Red Flags</b>  (clinical factors)	Serious pathology/diagnosis
	Co-morbidity (i.e. co-existence of other diseases)
	Failure of treatment
<b>Yellow flags</b>  (psychosocial risk factors)	Beliefs about pain & injury (i. e. that there is a major underlying illness/disease, that avoidance of activity will help recovery, that there is a need for passive physical treatments rather than active self-management)
	Psychological distress (i. e. depression, anger, bereavement, frustration)
	Unhelpful coping strategies (i.e. fear of pain and aggravation, catastrophising, illness behaviour, overreaction to medical problems)
	Perceived inconsistencies and ambiguities in information about the injury and its implications
	Failure to answer patients' and families' worries about the nature of the injury and its implications
<b>Blue flags</b>  (perceived features of work or the social environment)	High demand/low control
	Unsupportive management style
	Poor social support from colleagues
	Perceived time pressure
	Lack of job satisfaction
	Work is physically uncomfortable
<b>Black flags</b>  (not matters of perception – affect all workers equally)	Employer's rehabilitation policy deters gradual reintegration or mobility
	Threats to financial security
	Litigation/disputation over liability or contribution
	Qualification criteria for compensation (i.e. where inactivity is a qualification criterion)
	Financial incentives
	Lack of contact with the workplace
	Duration of sickness absence
	Poor co-ordination between employers and those responsible for medical care

(Work Performance UK 2009)

According to Hom, employees perform withdrawal acts such as reducing work output and productivity; participating in group activities or absenteeism; do not quit because the alternative acts help them to adjust to job frustrations. Supervisors and management may punish employees who express dissatisfaction by being late or absent, which exacerbates their hostile and pushes them along the withdrawal path (Rosee & Hulin as cited in Hom, 2001, p. 977). Withdrawal of employees from their employment or job avoidance is both relevant and of significant concern to workers' compensation systems. If employees are dissatisfied with their employment and work prior to their injury, the injury itself may be a catalyst to job avoidance and withdrawal from their employment (Hom 2001).

It is therefore anticipated that the psychosocial factors that prevent injured workers from returning to work do not simply arise when the injury or ill-health occur. Rather these psychosocial factors existed prior to the onset of the injury/ill health and with prevention and good management of employee relations can be eliminated with pre-injury intervention.

### **Focusing on Putting the H back into Health and Safety**

Traditional health and safety focus on the prevention of workers compensation claims by enhancing the organisation health and safety practices and performances. However most of literature previously discussed indicates that injuries do not always result from accidents or traumatic events but rather everyday exposures in the workplace and gradual onset injuries.

Organisations spend considerable resources, time and efforts on the prevention of accidents and ill health in the workplace by analysing traumatic event and hazard report forms; however fail to see the significance of the effect of every day work and working with others, or how the job work structure may affect the individual's physical and psychological health.

Research and review has been made on how small minor incidents or ill-health has resulted in significant or catastrophic compensation claims. The cause of the injury or ill-health may not result from an actual incident, but rather the culmination of events that leads up to the incident.

This indicates that organisations place great emphasis on the **S** in Health and Safety, but fail to recognise or understand the **H** in Health and Safety.

Currently organisations may have a system in place to monitor/evaluate the Health of employees prior to them entering the workplace in the form of a pre-employment medical. This can be often the only means of evaluating the health of employees that the organisation utilizes.

Managing the health of employees is often complex and a legislative minefield. Currently in Western Australia employers have to have a thorough understanding of several pieces of legislation of navigate and manage employee ill-health and fitness for work issues. These legislations include:

- Disability Discrimination Act 1992(Commonwealth)
- Equal Opportunity Act 1995 (WA)
- Privacy Act 1998 (Commonwealth)
- Occupation Health and Safety Act 1984 (WA)
- Minimum Conditions of Employment Act 1993 (WA)
- Workplace Relations Act 1996 (Commonwealth)
- Industrial Relations Act 1996 (WA)
- Worker's Compensation and Injury Management Act 1981 (WA).

Often people managing this process are overwhelmed by the extensive amount of legislation and the conflicting nature of the various requirements imposed by the legislation. Often employers make the following comments about managing the ill-health of employees:

- I know my employee is not healthy but I do not know how to manage the process;

- What is the process, What can I do? What can I not do?;
- If employee is deemed not fit for work they do not get paid and I do not want to place them in this situation.
- If I tell someone they are not fit for their job, then I will have to defend the matter in the unfair dismissal tribunal;
- It is hard to manage psychological health as you cannot see it like a broken bone or amputation;
- People may not always understand people's perception of why a particular situation causes a person to be distressed, excited, scared, fearful etc. Everyone is different and hence the need to ensure that employees in the workplace are managed on an individual level.

If people are all different this then highlights the need to manage both Health and Safety individually and on a one-on one basis. Currently organisations try and manage Health and Safety activities collectively to save time and resources. However if these activities are going to be truly effective then the organisation needs to understand how and why employees react to certain events or situations, how they best interrelate with the team and group members, how the team best learns, and what makes the team safe and productive.

Currently Safety trends have diversified to consider the effects on such issues as:

- family work balance;
- Affect of working long hours;
- bullying in the workplace;
- Violence and aggression in the workplace; and
- Some minor focus on psychological and psychosocial factors.

Currently health and safety documents and manuals of organisations fail to specifically address practices and procedures to address the health and wellbeing of individuals. These documents provide detail on addressing physical risks and hazards but are silent on how to address psychological or physiological hazards that may be caused from everyday working life and situations.

Organisations look for support in the development of their Health and Safety documents and manuals in the form of industry Audit Tools such as the WorkSafe Plan and AS/NZ 4801. With note such documents may mention the importance of injury management; injury prevention and rehabilitation however provide no guidance or specific instruction to companies on how to manage this complex function and process. Likewise such audit tools also are silent and lack detail on managing and dealing with the physiological, psychological and psychosocial factors that contribute and cause ill-health and illness in the workplace.

### **Long duration claims – defining the problem**

Long duration workers compensation claims (LDCs) internationally and nationally represents billions of dollars in costs to workers compensation schemes and to governments (Carstem 2001, Hashemi et al 1998, Fritz, J, George, S 2002, Bernacki, E. Yuseph, L. Tao, X. 2007).

Bernacki et al (2007) identified that of 729 claims lodged with Louisiana Workers Compensation Corporation identified that were thought to be low cost claims, it was established that the most significant predictors of cost escalation in these claims was multi- factorial and included male gender, small company size, high premium, reporting delays, older age, claim duration and attorney involvement. Whilst these injuries accounted for 2% of all claims, they accounted for 32.3% of the costs of claims in the system (Bernacki July 2007).

Fritz and George (1997) explore the psychosocial variables associated with low back pain. Their research identifies that the majority of patients with work-related low back pain are able to return to work within 4 to 8 weeks after the onset of pain (Hashemi, Webster, Clancy, 1998). Hashemi et al (1998),

identifies that workers who do not return work after this time become increasingly unlikely to return to work. In a study of 16987 people with work related low back pain requiring absence from work in 1996, it was established that 66% of the workers returned to work in 4 weeks. After 1 year, 95% of the workers had returned to work, but those remaining off work accounted for 65% of total costs of all workers compensation claims.

Williams, Feuerstein, Durbin, Pezzullo (1998) studied approximately 29,000 injured workers and found that 66% return to work within 8 weeks, but those that did not accounted for 75% of the costs of all claims (Workers' Compensation and Rehabilitation Commission by the School of Occupational Therapy Curtin University of Technology Western Australia 2001).

Saunders in his article Risk Factors for Chronic, Disabling Low-Back Pain indicates factors that attribute to the development of low-back pain are:

- Depression and poor coping skills;
- Job dissatisfaction and blue collar /heavy physical work;
- Age;
- Severe psychological stress and abuse;
- Substance Abuse;
- Compensation and unemployment.

(Saunders 2000)

Main and Williams in their research confirm the view of Sanders (2000), in so far as commenting:

Research has shown that there are many different reasons for patients to consult their doctor with pain – seeking cure or symptomatic relief, diagnostic clarification, reassurance, “Legitimation” of symptoms, or medical certification for work absence or to express distress, frustration, or anger. Doctors need to clarify which of these reasons apply to an individual and to respond appropriately. (Main 2002)p. 534).

### CAUSAL DIAGRAM

SOCIETAL	
<b>Economic Climate</b>	<p>The economic climate can influence the labour market and compensation systems in many ways. In a booming economy employees can often be happy to work with injuries to reap the benefits that a thriving economy has to offer.</p> <p>Where the economic climate is in recession workers are often less likely to jeopardise their employment and will often not report injuries or incidents in the fear that they may lose their employment.</p> <p>When positions are being retrenched in organisations, there is often a fear with management that employees may lodge compensation claims with injuries that they have carried in an attempt to secure ongoing compensation payments.</p> <p>The economic climate can affect the climate of the organisation. A thriving economy can often see management and employees agree to work extended hours to meet ends or alternative compromise time consuming safety and health training, report and management system to focus on delivering on targets and meeting deadlines.</p>
<b>Migrant Workers</b>	<p>In recent times where there has been a depleted labour market and due to the success in the resources sector, organisations faced the challenge of getting employees on site and in a position, often compromising and scrimping of timely induction, training and detailed learning of the relevant safety management and</p>

	<p>systems of work.</p> <p>The introduction of Migrant workers to meet the demands of the labour shortages and limited resources and time to spend training employees creates problems with knowledge of the work environment, language barriers, in some case exploitation of workers who were expected to work extended hours and problems to organisation culture. The introduction of migrant workforce often creating a rift or us and them mentality to organisational culture.</p>
<b>GOVERNMENT</b>	
<b>Legislation</b>	<p>Legislation sets the parameters for employers to manage their operations, penalties and fines that are imposed should organisations breach legislation and the level of compensation that employees are entitled to in the event of an injury. Entitlements and inclusions and exclusions can often provide for the legislation to be beneficial (such as no fault system), generous or have areas open for debate and disputation.</p>
<b>International Qualifications</b>	<p>Government policy on the recognition of International Qualifications may see highly educated workers having to work in semi-skilled or manual positions due to the non-recognition of degrees, diplomas and other qualifications. A worker from China trained as a medical practitioner may find himself working as a cleaner in Australia. In this situation apart from not making benefit from the qualification that the employee brings, often the employee does not have the experience or physical conditioning to do the manual position and subsequently is at risk of injury or ill-health. Further a person trained as a medical practitioner would have motivation and job satisfaction issues associated working as a cleaner.</p>
<b>Education and Training</b>	<p>The Government policy on education and training can affect the availability of jobs, the entrance educational levels required and whether education and training is available for specific jobs and industries. Due to the recent resource boom a lack of skilled trade's people saw semi-skilled people in associated work being trained to work in supporting roles. In some situations apprentices normally serving 3 year apprenticeship were offered the opportunity to finish the apprenticeship in 2 years or less.</p>
<b>COMPANY</b>	
<b>Orgainsational Climate</b>	<p>The organisational climate has been shown to be more important than individual difficulties or stressors in determining an employee's wellbeing. Improving management styles and overall workplace practices reduces stress more effectively than teaching employees individual coping skills (Cotton, 2008).</p> <ul style="list-style-type: none"> <li>• Organisational Philosophy and culture;</li> <li>• Limited HR and Safety Personnel ;</li> <li>• Lack of training to tradesman;</li> <li>• Profit to shareholders;</li> <li>• Focus on Production Meeting business expectations.</li> </ul> <p>According to Cotton (2006), the most important factor that influenced employee wellbeing was 'Organisational climate', which is a term that refers to the employees overall impression of how the organisation is run, the leadership practices, standard procedures, workplace culture etc.</p> <ul style="list-style-type: none"> <li>• The organisational climate has been shown to be more important than individual difficulties or stressors in determining an employee's wellbeing.</li> </ul>

	<ul style="list-style-type: none"> <li>• Improving management styles and overall workplace practices reduces stress more effectively than teaching employees individual coping skills.</li> <li>• Organisational climate is the strongest influence, apart from an emotional personality, on an employee's level of distress.</li> <li>• Stress is more likely to be caused by overall organisational problems than by individual negative experiences.</li> <li>• When it comes to preventing withdrawal from work (including absence and stress-related compensation claims), increasing morale in the workplace is more effective than decreasing distress.</li> </ul>
<b>Resourcing and Policy development</b>	The company sets policy on how business will be managed and operated. Systems of work, how the work is structured, and the layout of the premises and resources available can all affect the labour market and possible workers compensation systems.
<b>Organisational</b>	
<b>Systems of Work / Job Design</b>	<p>Bongers in 1993 conducted a literature review on the Psychosocial Factors at Work and Musculoskeletal Disease. In this review it was concluded that:</p> <ul style="list-style-type: none"> <li>• monotonous work,</li> <li>• high perceived work load,</li> <li>• time pressure,</li> <li>• low control on the job and</li> <li>• lack of social support;</li> </ul> <p>are all affiliated with musculoskeletal diseases and symptoms (Bongers, 1993).</p>
<b>Autonomy / Self Governance</b>	<p>In their research Spector (1986), et al, investigated the perceived control of employee's and more specifically job design or autonomy and participative decision making. This research highlights numerous studies conducted on perceived control and their findings. Perceived control was found to be associated with:</p> <ul style="list-style-type: none"> <li>• High levels of job dissatisfaction;</li> <li>• Commitment;</li> <li>• Involvement;</li> <li>• Performance and Motivation;</li> <li>• Low level of Physical Symptoms;</li> <li>• Emotional Distress;</li> <li>• Role stress;</li> <li>• Absenteeism;</li> <li>• Intent to Turnover;</li> <li>• Turnover.</li> </ul> <p>The study concluded that job design will:</p> <ul style="list-style-type: none"> <li>• Help to improve performance and job satisfaction.</li> <li>• Allowing employees autonomy to structure and control how and when they do their particular job tasks improves positive emotions. This research outlines that a high amount of autonomy allows employees to: <ul style="list-style-type: none"> <li>➤ Determine the order and pacing of job task;</li> <li>➤ Specific procedure for completing the task;</li> <li>➤ Scheduling;</li> <li>➤ Coordination with other employees other conditions of work;</li> <li>➤ This in turn enhances performance and job satisfaction.</li> </ul> </li> </ul>

	<p>(Spector 1986)</p> <p>Astrand et al (1989) concluded that studies have shown that hectic and psychologically demanding work, low decision latitude making and combinations of psychosocial factors are results of mental strain and cardiovascular morbidity and mortality. Demands on health can be moderated by the degree of control the employee has over their work with a combination of high work demands and low level of permitted discretion in the control of ones own work comes the highest risk for ill health (Astrand 1989).</p>
<b>Limited / Inappropriate Supervision</b>	<p>According to Heaney et al (1993), New industrial relations system that are characterized by work roles in which employees participate in solving work-related problems, both as individuals and as members of work groups. Labour and management relations that incorporate elements of joint problem solving have become breaking ground for stress management and stress reduction interventions.</p> <p>Traditional-known as the mass production Para design is characterized by narrow task description for employees with few formal opportunities to influence the work process or participate directly in work related decisions (Marshall and Tacker, 1992 as cited in Heaney 1993). Employees represented by unions, labour and management resulting in primarily conflicting inter relationships and poor working relationships.</p> <p>Participation in decision-making with co-workers in making decisions that affected the department and the plant as a whole can have a positive effect on work place stressors. Social Support has Positive effects on health, buffer determinates and effects of exposure to worksite stressors.</p> <p>According to Heaney (1993) lack of participative supervisory approaches can cause failures to enhance control in a meaningful way.</p>
<b>Simplified Job to make up for lack of skilled workforce</b>	<p>There are a number of working conditions encounter on a daily basis which contributes to ill health and stress. These working conditions are called "stressors" and consist of those things that have a negative effect on a worker's physical or emotional well-being. In addition these working conditions or stressors are associated with two job characteristics: job control and demand.</p> <p>Job control determines how much or how little control a worker has over her/his job. It can be defined in terms of one's ability to make decisions about how work is done and the ability to use a range of skills on the job. Job demand determines how much or how little production or productivity pressures there are on the worker and the quality of the physical work environment.</p>
<b>Pressure on Employees to do additional work</b>	<p>Studies (Mobley, Griffeth, Hand, Meglino 1979, Steers &amp; Mowday 1981 as cited Hom, 2001) have explored the relationship of how inter-role conflict, extra work values cause employee dissatisfaction translates into exits or withdrawal from the workplace. Despite the growing reports of inter-role conflict extra work commitments, many organizations do not consider the effects of this on exiting employees or conduct studies/exit interviews to gauge.</p>
<b>EMPLOYEE</b>	
<b>Job Dissatisfaction</b>	<p>Schultz et al.(2002), indicate that poor job satisfaction, availability of unscheduled breaks, job modification, job demands, work quantity, monotony, work tempo, lack of</p>

	control and problematic relations with co-workers have predictive value on pain and disability (Bigos et al., 1991; Coste et al., 1994; Hemingway et al., 1997; Infante Rivard and Lortie, 1996; Krause et al., 2001 a, b; Thomas et al., 1999; van der Weide et al., 1999).
<b>Repetitive Work</b>	Analysis of studies into work-related stress and industrial relations in Portugal revealed 47% of organisations indicated that the main risk in the workplace were not of a physical nature, but rather a psychosocial nature and that health problems in the workplace had a multi-faceted cause such as stress, fatigue, repetitive movement and other factors (European Industrial Relations Observatory (EIRO) 2001)
<b>Affect on Health / Family</b>	<p>Wellbeing also influences employees voluntary performance – that is, the work they do that supports the organisation, but isn't part of their main responsibilities. Some examples are: dedication and making an effort, volunteering to do tasks, helping others in the workplace and promoting the organisation to other people. Voluntary performance is increased by improving wellbeing.</p> <p>Organisation's that improved wellbeing in a work place find that they have:</p> <ol style="list-style-type: none"> <li>1. Higher morale (more positive emotions) amongst their employee's,</li> <li>2. Less distress,</li> <li>3. Higher job satisfaction, and</li> <li>4. Productivity Improvement.</li> </ol> <p>(Cotton &amp; Hart, 2003)</p> <p>Employee wellbeing involves both emotional factors and job satisfaction. An employee's job satisfaction is similar to weighing up the positive and negative experiences they have had at work. Positive emotions towards work are known as 'morale', and involve energy, enthusiasm and pride. Negative emotions involve guilt, anxiety and anger and are also known as 'distress'. Employee's emotions are influenced by their overall mood within their workgroup, and vice-versa. Other factors that can influence wellbeing are coping strategies, personality traits and conditions and culture in the workplace (Cotton, 2006).</p>
<b>JOB AVOIDANCE</b>	
<b>Job Avoidance</b>	According to Hom, incumbents who perform withdrawal acts such as reducing work output, productivity, participating in group activities or absenteeism, do not quit because the alternative acts help them to adjust to job frustrations. Supervisors and management may punish employees who express dissatisfaction by being late or absent, which exacerbates their hostile and pushes them along the withdrawal path (Rosee & Hulin as cited in Hom, 2001, p. 977). Withdrawal of injured employees from their employment or job avoidance is both relevant and of significant concern to workers' compensation systems. If employees are dissatisfied with their employment and work prior to their injury, the injury itself may be a catalyst to job avoidance and withdrawal from their employment.

## How to Prevent Long Duration Workers' Compensation Claims

- Recommendation psychosocial barrier screening early with injured workers and prior to injuries;
- Barriers to RTW can be enhanced through on moral maintenance, establishing positive recovery expectations, working together
- Educating management and employees;
- Climate Surveys- Document the link between working conditions and negative health effects.
- Regular Medical Screenings- screenings for vision, hearing problems, fitness for work and general wellbeing can generally be arranged with local occupational health clinics or doctors.
- Conduct regular inspections to include observations,
- Review health, absenteeism, and other available records, implement suggested strategies to identify and minimize/eliminate job stressors will help improve members' health and well-being (Communication Workers of America Occupational Safety and Health Department);
- Provide a positive expectation that the individual will return to work.
- Keep the individual active and at work.
- Acknowledge difficulties of daily living.
- Help maintain positive co-operation.
- Communicate that having more time off work reduces the likelihood of a successful return.
- Promote self-management and self-responsibility.
- Encourage people to recognise that pain can be controlled.
- If barriers are too complex, arrange multidisciplinary referral.
- Health companies are more likely, more often and over a long period of time to make healthy profits and to have healthy returns on investments;
- **Effective Leadership**
  - Respect for the individual and their diverse need;
  - Recognition and support for individuals and their well being;
  - Encouragement and role modeling of effective behaviours (wellbeing health and work life balance)
- **Post environment**
- Well designed roles within the opportunity to make a positive opportunity to make a positive contribution and be recognised and rewarded;
- A safe and comfortable working environment;
- Opportunities for social intervention;
- Rest and Relaxation at work;
- **Focus on Health**
  - Occupational health programs that resources health and well being.
  - Encouragement of healthy lifestyles (including diet and exercise)
  - Beneficial RTW procedures where illness affect personal well being.
- **Optimum work/home balance**
  - Opportunities to discuss and agreed flexibility in working patterns (e.g. job shearing, flextime, term time contracts, reduced hours and working from home.)
  - Family – friendly policies (including business travel, maternity/paternity leave and child care provision.

(Health Safety Executive 2006)

## Conclusion

A small proportion of workers' compensation claims incur the majority of the costs and expenses in systems worldwide. Of these claims there appear to be a number of claims that have 'Apparently Disproportionate Outcome' (ADO) (The IUA/ABI Rehabilitation Working Party 2004) where the level of disability or inability to return to gainful employment does not correlate with the injury sustained.

Significant research and discussion has focused on the concept of the Flags Model and more specifically Yellow Flags to identify claims post injury or incident in an attempt to mitigate the injury and level of disability. Despite the efforts of practitioners to treat and manage these claims, the level of loss and disability continues.

This raises the question rather than the intervention being wrong, it is the timing. Prevention is better and cure and it is for this reason that the concepts of the Yellow Flags should be adopted prior to the injury or incident.

Hom in his research identified that employees perform withdrawal acts such as reducing work output and productivity; participating in group activities or absenteeism in an attempt to escape work; It is believed that the withdrawal of employees from their employment or job avoidance is both relevant and of significant concern to workers' compensation systems.

It is therefore anticipated that the psychosocial factors that prevent injured workers from returning to work do not simply arise when the injury or ill-health occur. Rather these psychosocial factors existed prior to the onset of the injury/ill health and with prevention and good management of employee relations can be eliminated with pre-injury intervention.

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