An integrated early intervention model produces results

A report for the Productivity Commission

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Executive Summary

A model of early intervention at the workplace level has been shown to reduce lost time to one third, halve total claims costs, and have a major impact on reducing long term off work claims.

This model is based on ensuring high quality medical care, timely intervention, a non adversarial approach, and a strong level of support for the employee at the workplace level.

Culture change at the workplace level is a key to the outcomes and has proven to be scaleable and sustainable.

Introduction

Workers compensation costs are rising in most jurisdictions within Australia. Much of the focus of compensation systems is on level of benefits and legislative framework, with intermittent discussions on national consistency.

Policy makers and authorities managing workers compensation have endeavoured to support return to work and reduced lost time. Most, however, have struggled to find

a model that is scaleable and effective in reducing lost time and improving return to work rates.

We have developed and implemented an innovative injury management model to manage WorkCover injuries. The objective is to improve clinical and cost outcomes. We believe our program has the potential to provide not only substantial monetary savings to the business community and employees, but ultimately to the wider community through reduction in incidence and duration of work related injuries. Our intervention strategies were anecdotally highly successful and after discussion with the Victorian WorkCover Authority we proceeded to evaluate our program and methodologies using rigorous, scientific evaluation.

Reduction in claims costs through effective management of injuries is the key to substantive and sustainable reduction in workers compensation costs. It is our belief that culture change is the key to this, both at the employer and community level. This model has now been implemented across a range of employers in a variety of industries and within a variety of industrial relations settings. The culture change at a workplace level typically takes 3-6 months to occur, once in place it is our experience the process and system can become self sustaining.

In the current climate of rising workers' compensation premiums and increasing employer responsibility for workplace health and safety, cost savings and strategies aimed at minimising costs are more important than ever before. Assessment of this integrated model of workplace injury management is thus timely.

Background to the model

The aim of our program is to decrease the total time lost from work due to injury and to therefore decrease the total costs to the employer, employee and the community. It has long been recognised that an early return to work after injury occurrence lessens the impact of the injury although little is currently known about successful programs.[i]

Our interventions begin as soon as possible after the injury occurs and involve as many layers of personel as is needed to facilitate best practice medicine and best practice human

resources management. We believe these to be the key aspects of our model.

Involvement of the employer in case management has been found to increase return to work and decrease costs which is not surprising given that failed social transaction is often a significant reason for not returning to work [ii]. It has been noted too that more research needs to be undertaken to focus on the interaction between the factors that influence and indeed optimise return to work strategies. [iii]

We believe that getting all the 'players' to work together is crucial to improving outcomes for all parties when workplace injury is examined. It has been suggested in the literature [ii] that the first 3-4 weeks after the onset of a work related problem, at least for low back pain, are crucial for halting the decline into chronicity and long term reliance on compensation/benefits. This is probably also the case with other injuries. In the first 4 weeks many people get better and return to work but the next 4-12 weeks may be crucial. [iv v] It is in the initial phase therefore, that we aim to be particularly involved in the management of the injury.

The literature consistently shows a 30-40% decrease in duration of lost time given managerial amenability. [vi vii viii] We aim to bring about a change in work culture related to injury that then allows and in-fact encourages people to respond with a change in attitude. This, coupled with a non-adversarial attitude towards WorkCover claims, a can do attitude, sympathetic and adequate communication and the provision of appropriate modified short-term duties leads to changes in worker and management attitudes. These elements have been reported to be effective, but no evaluation of a comprehensive injury management model such as ours has been undertaken in a scientifically valid manner. [ix] In the past, relationships between workers, managers and insurers have been seen as being strained and for many workers there has been little incentive to return to work. It is well documented that after months off work, the prospects for return to work are poor. [i ii] The more quickly we can intervene and get people better and back into the workforce, the more likely we are to limit the negative sequel of workplace injury.

Extent of the Problem

Unemployment in all forms represents a substantial cost to society. Both the human and economic costs of workers' compensation are substantive. Employer premiums in the manufacturing and service sectors are generally from three to

ten percent of payroll. Other direct costs include the initial ten days of lost time from work and first $450 of medical expenses, indirect costs are estimated to be three times direct costs. [x] Costs to the Victorian community are substantive, with an estimated 1.2 billion paid by Victorian employers in direct WorkCover premium in 2001. [xi]

Estimates of the costing for workers' compensation suggest that the costs for employers have been at least matched by similar amounts for the individual. [x] Disability is frequently associated with isolation and depression, with family disruption, loss of self-esteem and quality of life. [xii] [xiii]

If, as we believe to be the case, our methods substantially reduce the costs of injury, this project has the potential to have far reaching effects. It has been shown in the literature that workers offered modified duties return to work twice as often as those who are not. It also has been reported to halve the number of workdays lost due to workplace injury.[i] Our program needs to be evaluated to quantify the contribution our model may be able to make in the area of workplace injury management.

Objectives

To evaluate the costs of integrated case management for work related injuries, examining costs before and after the intervention.

The intervention

The intervention is a multifaceted approach with the following components.

Early appropriate Medical intervention – (including management of yellow flags)

- Injury notification within between 20 and 60 mins of a workplace injury occurring
- More than 24 hrs is a delayed injury report.
- In most instances, a local or company clinic or usual medical practitioner cares for the injured worker.
- Where the person is not satisfied with their medical management support to provide appropriate medical care is offered, eg referral to an appropriate specialist.

- Waiting times for appropriate procedures are minimised e.g. Arthroscopy day 2, versus 2 months as commonly occurs under the current system.

Workplace intervention – (management of blue and black flags).

- The intervention ensures a system of early reporting.
- The worker is involved with the process and the system is explained from the outset.
- The supervisor/line manager is involved from the outset.
- Senior management commitment allows resolution of difficulties if appropriate duties and support are not being provided.
- Integration with HR allows non work injury issues that may impact the outcome to be addressed.

Educating senior management about premium effects of poor case management assists true integration of this program across the workplace.

Supporting the worker

The worker has a regular opportunity to communicate with someone who understands the system, the important outcomes, and who provides a supportive focus on their condition. This may be psychosocial advice / reassurance e.g. to allay fear based avoidance of activity for back pain. As many barriers as possible are removed to identify to the person's successful management of their injury and return to work.

- Liaison occurs with relevant parties
- Treatment providers
- Line managers
- Human Resources
- WorkCover insurer
- Family members
- WorkCover dispute resolution system

Study Design

The study employed a 'quasi experimental' before-after design using historical controls. The case companies are the companies at which the intervention was implemented over the 2001/2002.

The companies represented medium to large employers across a range of industry sectors, namely manufacturing,

health and aged care, retail and civil construction and are all the companies at which this intervention has been implemented.

Data retrieval

The data was extracted from the VWA database, using relevant employer and workplace numbers, through a program written by the VWA for this purpose.

Data collection

Variables examined were those available via the VWA database, such as weekly payments, treatment and rehabilitation costs. Only cases that are over ten days lost time or over $480 in medical expenses are registered as standard claims on the VWA database and included in this analysis.

Data Analysis

To map changes in number, duration and medical and like costs for work injuries over the study period the VWA claims database was analysed allowing a maximum development time for the case and control groups.

At 1-2-03 the costs of all claims with date of injury and date of registration from the time the intervention commenced with that company were compared to the same company for the equivalent number of months directly prior to the intervention. All claims with a date of injury and all claims costs with the date of injury within the respective period were examined.

The comparison will require the same development time for claims, to allow a valid pre post comparison.

For example, in Company A the intervention has been in place from January ’02. The 13 month period 1 January ’02 to 1 February ‘03 was compared with the 13 month period directly prior to this, 1 December ’00 to 1 January ’02.

All costs from the claims that were incurred during those respective time period have been assessed.

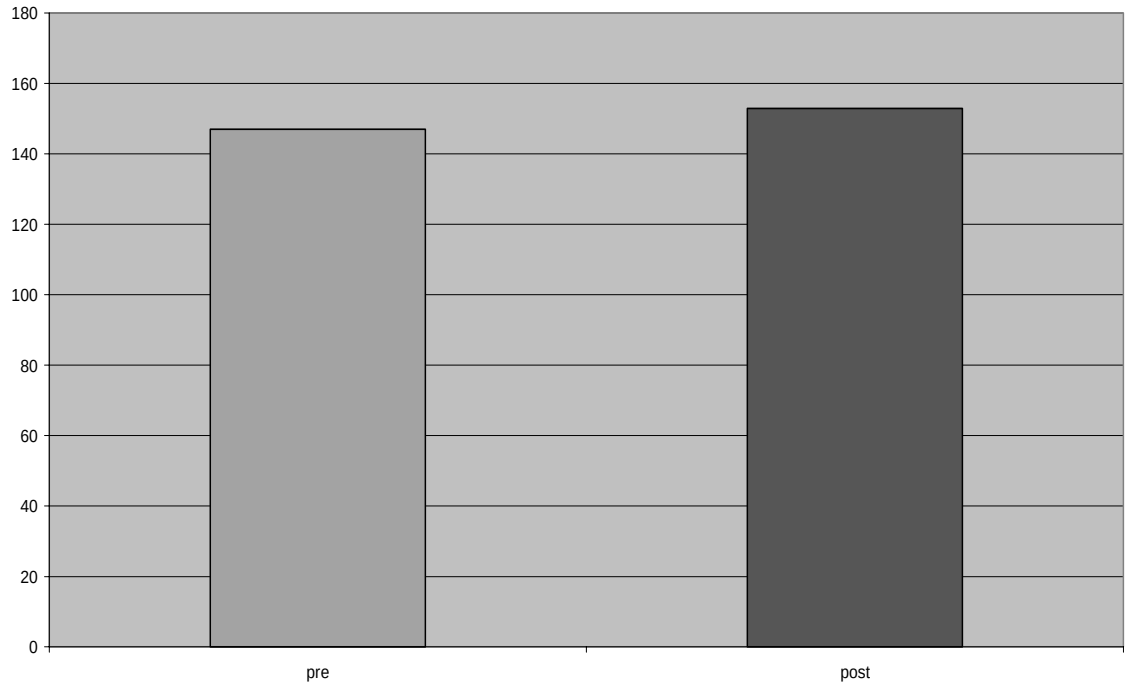
Results

The data has been categorised into types of costs. Graphs have been made for the following categories:

- Number of Cases
- Total Costs
- Weekly payments
- Days of Compensation
- Doctor Costs
- Hospital Costs
- Allied Health Providers
- Occupational Rehabilitation Costs

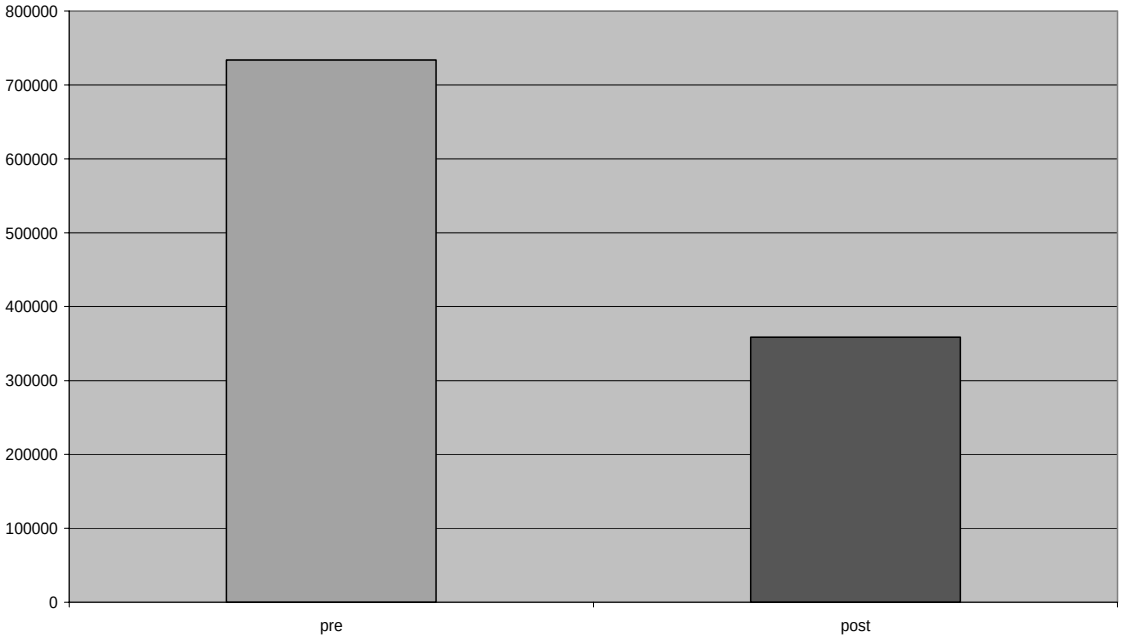
Number of Cases

A similar number of claims have been managed



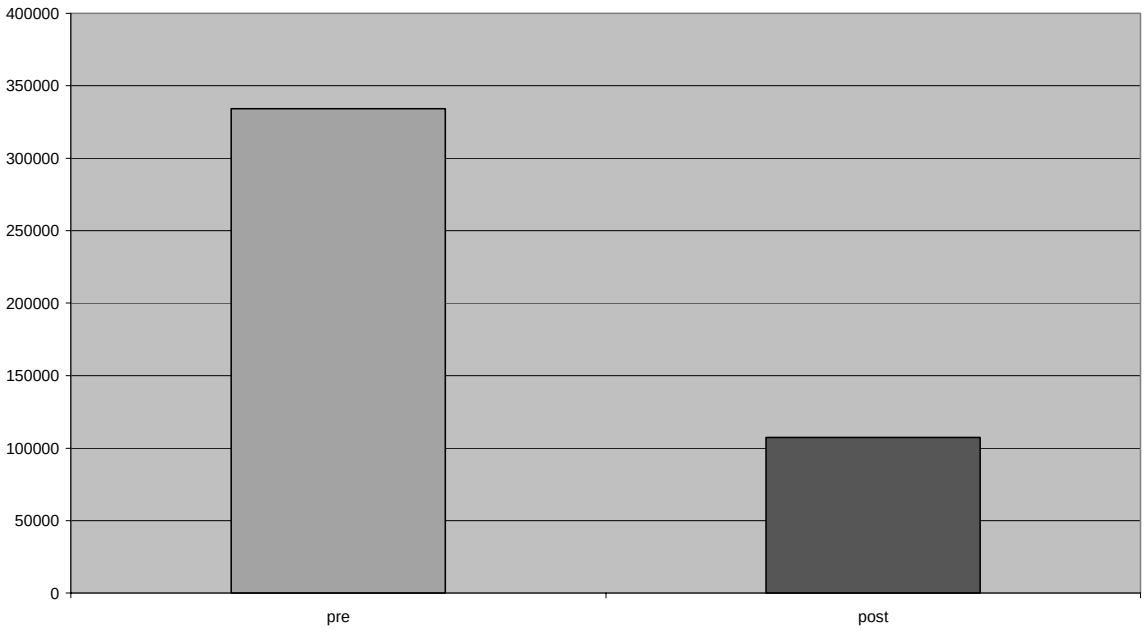
Total Costs

Across the board claims costs have been halved



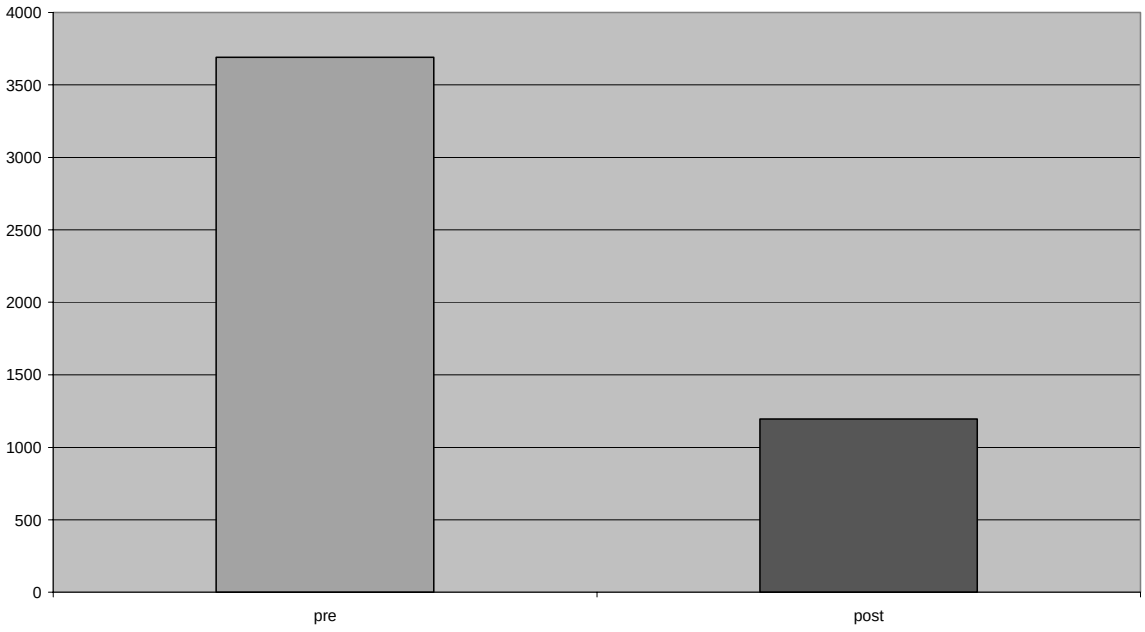
Weekly Payments

The greatest impact has been through supporting employees back to appropriate duties



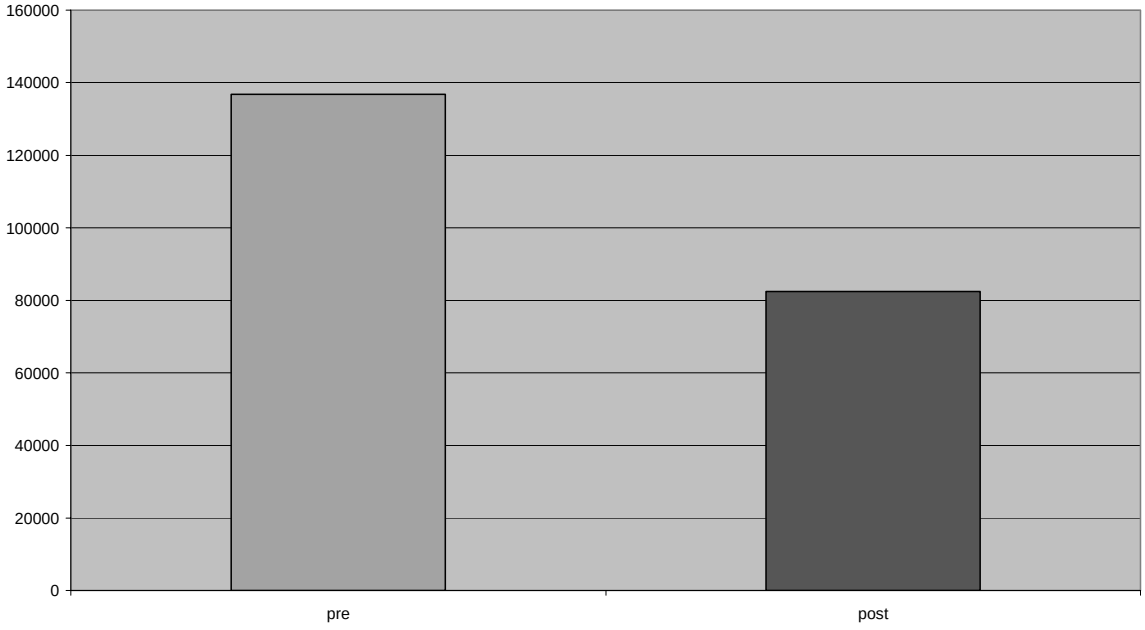
Number of Days where Compensation was Paid

Reduction in days lost reflect support with return to work

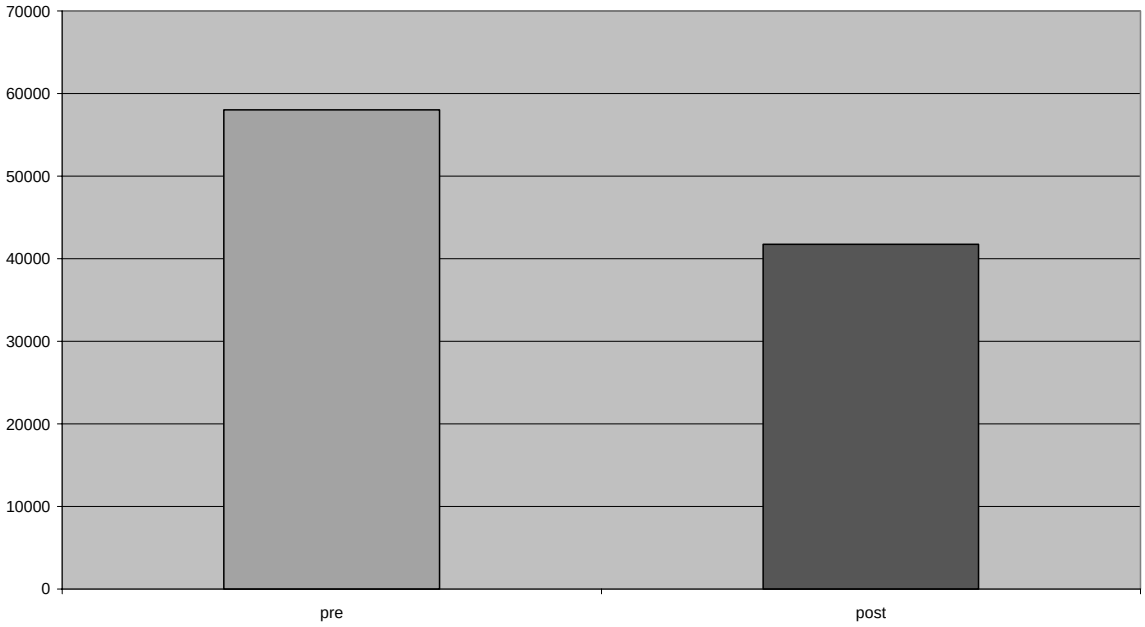


Doctor Costs

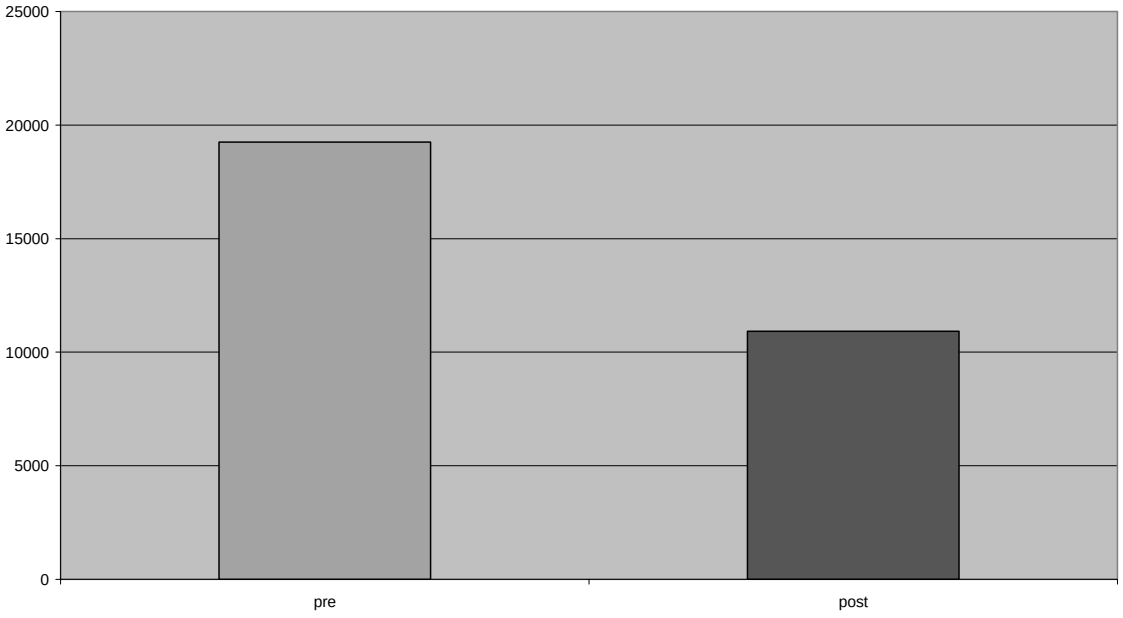
Research shows that when people are distressed they have more investigations and more treatment. It seems that care of the employee results in less medical and investigation treatment costs, even when they are offered and assisted to obtain all appropriate treatments for their condition.



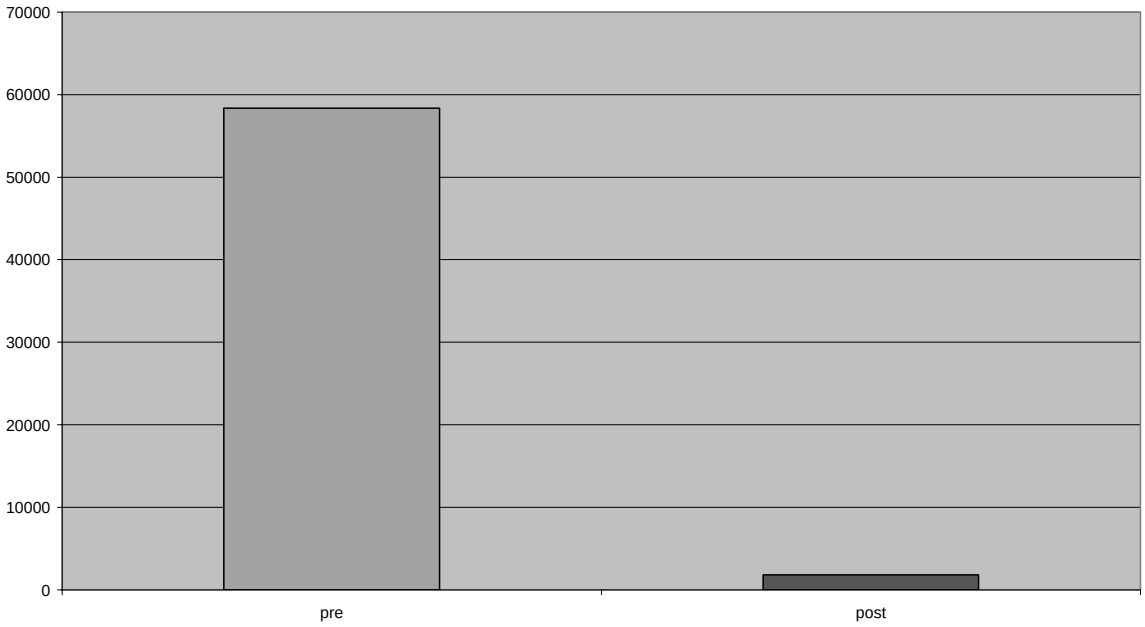
Hospital Costs



Allied Health Providers

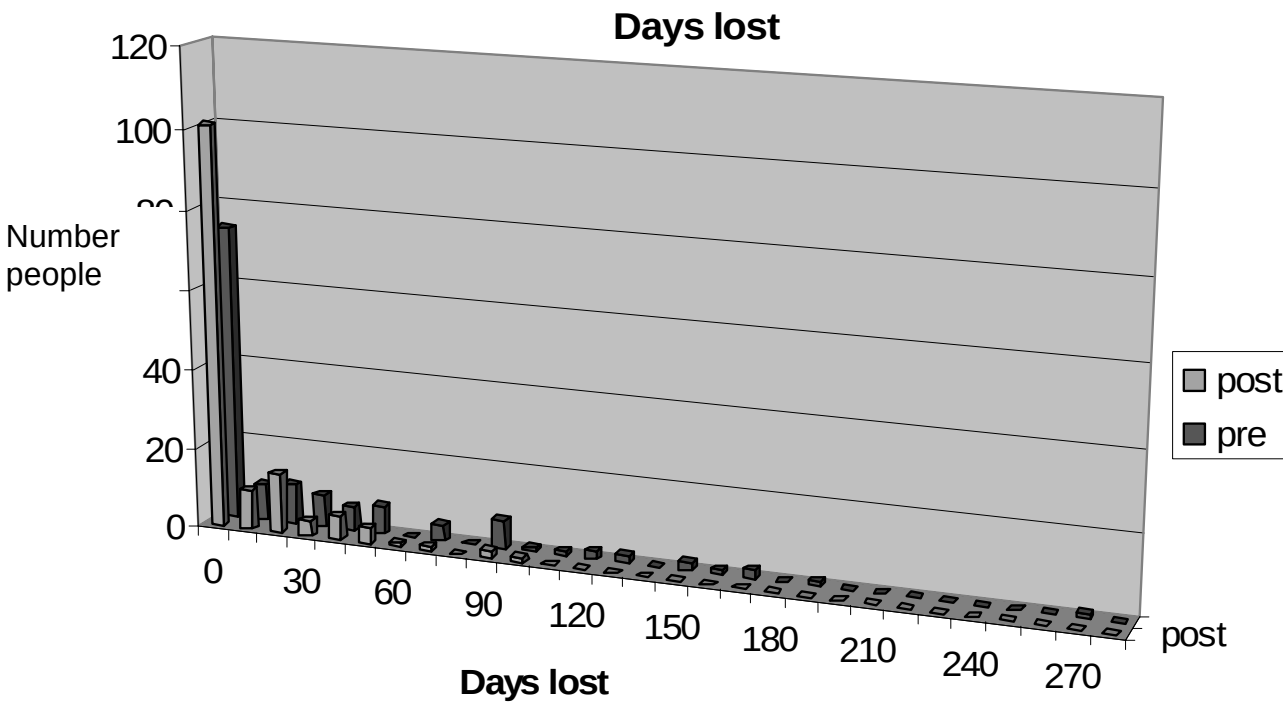


Occupational Rehabilitation Costs



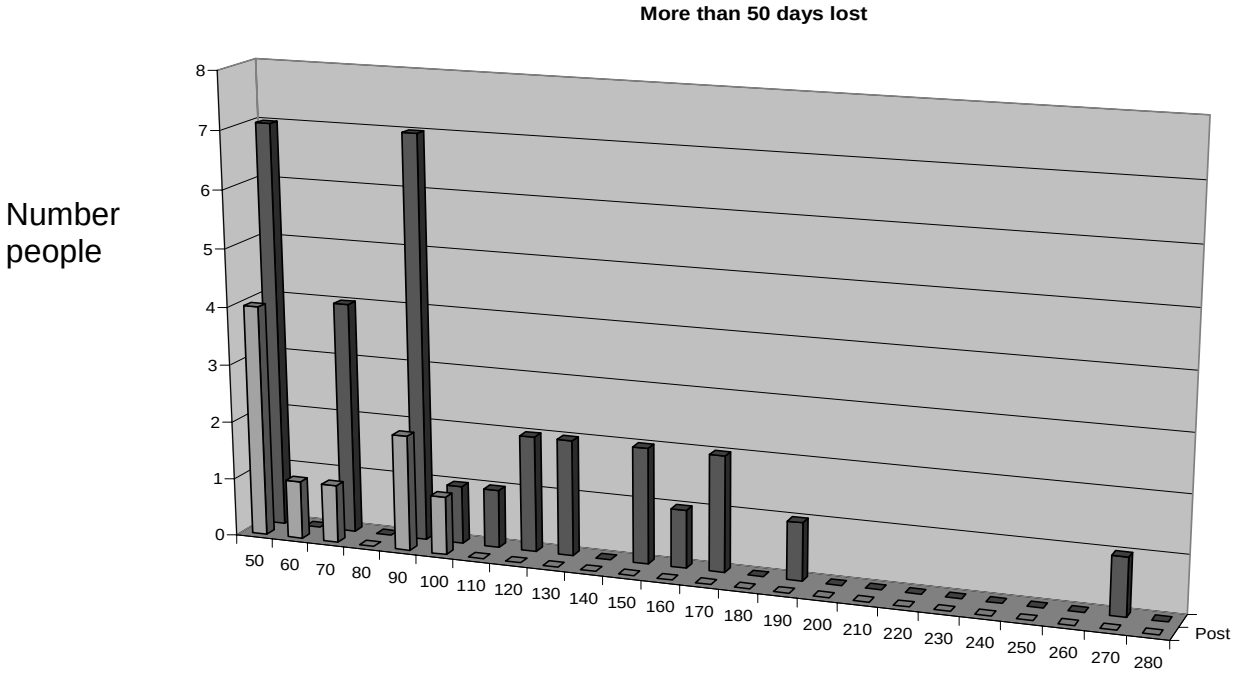
Number of days lost

The number of people with x days lost compared pre and post OccCorp



Long term cases

The number of 'long term' cases (defined here as more than 50 days) is explored further with this part of the graph expanded. The key result from OccCorp's model is the reduction in long term off work cases, with the consequent reduction in the human and economic costs arising from these cases.



The major results are reduction in time lost to one third, reduction in total costs to one half, in association with reduction in treatment costs. Medical and allied and hospital costs have all been reduced, in line with appropriate and timely care of those with injuries.

Reduction in lost time occurs simply through communication with all relevant parties. This commences with the employee with an injury, seeking their input on what they feel they are able to manage. Treating doctor and supervisor input are also important.

The reduction in long term off work cases will have an ongoing role in improving the results to date. As the period of time that the claims are able to be assessed increases, the comparative reduction in costs will increase. The mean time the cases from date of injury to the date the time period being assessed finished was approximately 7 months. As this time increases there will be a greater gap between the two samples.

In the pre intervention sample there were twelve cases that had been off work for greater than 100 days, but no cases greater than 100 days in the intervention group. Many of these cases were still off work at the time of the study, reassessing the data in one years time would likely show an increasing difference in days lost and costs.

Whilst not presented here, a satisfaction survey of a random sample employees with injuries has shown universal appreciation and acceptance of this approach and the support provided. Similarly, managers have been grateful for assistance and direction in managing their staff with injuries.

Conclusion

A workplace intervention based on simple effective communication and the key issues to address within workers compensation has resulted in a major reduction in costs, long term lost time and disability and medical treatment costs.

Culture change within the workplace to an environment where support, communication and care are the keys allows the introduction of clear parameters for managing work injuries, such that each person within the team is clear about the system, expectations and outcomes.

References

[i] Krause N, Dasinger LK Neuhauser F. Modified work and return to work: A review of the literature. J Occ. Rehab. 1998; 8(2):113-140.

[ii] Frank J, Sinclair S, Hogg-Johnson S et al. Preventing disability from work-related low-back pain: New evidence gives new hope – If we can just get all the players onside. CMAJ. 1998 ;158(12):1625-1631.

[iii] Tate RB, Yassi A, Cooper J. Predictors of time lost after back injury in nurses. Spine. 1999;24(18):1930-1936.

[iv] Agency for Health Care Policy and Research. Acute low back problems in adults. Clinical Practice Guideline 14. Rockville (MD): US Department of Health and Human Services; 1994

[v] Frank JW, Brooker A DeMaio SE Kerr MS Maetzel A Shannon HS, et al. Disability resulting from occupational low back pain. Part II: What do we know about secondary prevention? A review of the scientific evidence on prevention after disability begins. Spine 1996;21: 2918-29

[vi] Fitzler SL, Berger RA. Chelsea back program: one year later. Occup Health Saf 1983;52(7): 52-4

[vii] Cooper JE, Tate RB, Yassi A, Khokhar J. Effect of an early intervention program on the relationship between subjective pain and disability measures in nurses with low back injury. Spine

1996;21:2329-36

[viii] Yassi A, Tate R, Cooper JE, Snow C, Vallentyne S, Khokhar JB. 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. Occup Med 1995;45:209-14.1995 #1574

[ix] Wood DJ. Design and evaluation of a back injury prevention program within a geriatric hospital. Spine 1987;12:77-82

[x] Industry Commission Report. Work Safety and Health: An Inquiry into Occupational Health and Safety September 1995. Report No. 47. Commonwealth of Australia.

[xi] Victorian WorkCover Authority Statistical Report 485 LaTrobe St Melbourne 485 LaTrobe St Melbourne.

[xii] Philips HC, Jahanshahi M. The components of pain behaviour report. Behaviour Research & Therapy 1986;24(2):117-25.

[xiii] Zarkowska E, Philips HC. Recent onset vs. persistent pain: evidence for a distinction. Pain 1986;25(3):365-72