

final report

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Improving return to work outcomes

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Abstract

This study was designed to test whether providing training in evidence based treatment and rehabilitation techniques to occupational health and safety (OHS) teams, medical practitioners and treatment providers would improve rehabilitation outcomes for injured red meat industry workers. Five Meat Processing Plants participated in the study. Statistical data was pooled to generate mean results for return to work data taken before, and again 10 months after the training. Noteworthy improvements were seen in 9 of the 10 work related outcomes after training. This is pioneering research being the first study, to our knowledge, to have brought evidence-based injury management training to a range of stakeholders in the NSW Workers Compensation System and then measured outcomes. This report contains both industry specific recommendations, and a summary of information recommended for presentation to WorkCover NSW with the aim of helping to improve the system on a broader scale.

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1 INTRODUCTION

Musculo-skeletal (muscle and joint) pain is a major cause of long-term disability, suffering and economic loss following work-related injury¹. Internationally, it has been estimated that 100 million occupational injuries occur each year² with sprains and strains being the most common diagnosis³. While the majority of workers who suffer these injuries recover quickly, a small proportion develop long term pain and disability. This group of injured workers account for a disproportionately high percentage of workers' compensation costs⁴.

As a result of these findings, work disability is now recognised a "major public health problem"⁵, prompting funding committees world wide to support research into methods of reducing its impact. In recent years there has been an increase in high quality research providing evidence about which injury management approaches are most likely to produce best outcomes for pain, disability and return to work.

In an effort to improve outcomes and reduce overall costs, WorkCover NSW commissioned an extensive review of this research⁶. Documents outlining how stakeholders (including employers, insurers, medical practitioners, and treatment providers) could approach the management of injured workers to provide evidence-based rehabilitation were published. The most recent at the time of this study was "Management of Soft Tissue Injuries – Guidance Material" (2006)⁶. Implementing research findings into real life practice is recognised as a difficult step⁵. To achieve the outcomes reported in the scientific literature, the research must first be disseminated to stakeholders who are directly responsible for managing injured workers, and then be implemented by them into regular practice.

Research Aim:

The aim of this study was to identify whether training medical practitioners, treatment providers and OHS officers, in an evidence based treatment approach - and supplying each of them with a customised "Injury Management for Compensation Professionals" © CD-ROM - would improve injury management outcomes and the associated costs for injured meat industry workers with simple sprains/strains.

2 METHOD

The study was jointly funded by Meat and Livestock Australia and the Australian Meat Processor Corporation. Five red meat processing plants volunteered to participate in the study. To maintain confidentiality they will be referred to as Plant A, B, C, D and E throughout this report.

The initial research protocol included each plant selecting one representative from their OHS team, one local medical practitioner and one physical treatment provider (eg physiotherapist/chiropractor) to attend a combined "Evidence-based Injury Management" seminar in Rehab One's head office in Sydney. Using this protocol the training was to be delivered to a total of 15 participants (3 from each plant). The budget allowed sufficient funds to cover travel expenses and to reimburse the medical practitioners and treatment providers for their time.

After extensive communication however, it appeared that medical practitioners were most likely to take part in the training seminar if it was provided in their local area. In four of the five participating plants (A, B, C, D) the local medical practitioners reported a preference for after hours training in a convenient location with a meal provided, rather than being paid an hourly rate and attending within their clinic's operating hours. Training sessions were therefore organised in

the closest town to each of these plants. Function centres able to provide a private room for the event and full catering were selected. Audio-visual equipment was borrowed from the Plant or leased from local suppliers as necessary. Most physical treatment providers also reported a preference for this approach.

Bringing the training seminars to each town, instead of running it centrally, allowed invitations to be extended beyond the 15 participants originally planned while still remaining within the project budget. Personalised invitations describing the aims of the study were posted or faxed to local general practitioners and treatment providers using lists provided by the OHS team at each Plant. To further encourage attendance the Regional Divisions of General Practice were also contacted. The Divisions associated with Plants A, B and C agreed to promote attendance to the seminar by fax or newsletter to their members.

Continuing Professional Development Points were allocated to medical practitioners who attended the session from the town associated with Plant B.

The Medical Practitioner interested in the study from the fifth plant (E) requested that the training be provided in his clinic during his meal break. The allied health professionals from this town attended a 3-hour training session at the plant within work hours, and submitted an invoice for their time.

Each plant organised at least one member of their OHS team to be present at the medical and physical treatment provider training sessions. An additional training session was delivered the following day at the Plant to the remaining members of the OHS team if they had been unable to attend the evening session. By using this approach, all members of the OHS team for each Plant received the training. Plant B organised that their Supervisors also attend the training session provided at the Plant.

By changing the original study protocol the training sessions were delivered to 63 participants instead of the 15 first planned. An additional 6 medical practitioners requested the CD-ROM but were unable to attend the training session. A description of the distribution of training participants is provided in Table 1.

2.1 The Training Sessions

The format of the medical and treatment practitioner training evening included (1) Introduction and welcome (2) A meal (3) A combined medical and allied health practitioner training session (4) A tea/coffee break (5) A specific session for physical treatment providers.

The training sessions were presented in tutorial form using a PowerPoint presentation. Each participant was provided with a training manual and a copy of the customised "Injury Management for Compensation Professionals" © CD-ROM.

The references used to develop the training sessions were from a wide range of medical, scientific and occupational rehabilitation journals, and the WorkCover NSW Guidance Material⁶. The basis of the training included information regarding the benefits of activity after simple soft tissue injury and the disadvantages of rest. Information about using review points (4, 12 and 26 weeks)⁶ was provided along with tools to help identify the presence of psychosocial issues (yellow flags). All medical practitioners and physical treatment providers were presented with an update on the neurophysiology of persistent pain in order to help them to feel more comfortable about upgrading work duties in patients who report ongoing pain. The need for increased

collaboration and communication with the workplace was emphasised. Techniques to assist managing injured workers using a “cognitive behavioural” approach were presented.

In the training segment specific to physical treatment providers, additional information regarding directing treatment towards achievement of work goals was introduced. Practitioners were presented with evidence supporting a transition from traditional “hands on” treatments after 6 weeks to a more active or exercise-based approach. Practical examples of the use of work-simulated activities that can be prescribed within the treatment clinic were given. The principles of pacing, upgrading and encouraging self-management were included.

Training for the OHS team members included an overview of the doctors/therapists training session and a detailed review of workplace factors that may delay return to work/upgrade.

All three groups were provided with information about the importance of psychosocial issues (yellow flags) with the dual aim of helping participants ensure they do not inadvertently contribute to an injured workers psychosocial issues AND understanding how to identify when yellow flags are present and relevant. The Orebro Musculo Skeletal Pain Questionnaire⁷ and FACTOR WEB⁶ were described and scoring methods demonstrated.

2.2 The CD-ROM

Rehab One Physiotherapy summarised the research onto a customised CD-ROM called “Injury Management Guidelines for Compensation Professionals”©. The CD-ROM is designed to help stakeholders identify their own (and others’) roles and responsibilities, according to evidence based treatment principles at various timeframes after injury. It also includes a device that automatically scores and summarises results from the screening tools recommended in the WorkCover NSW Guidance Document⁶- the OMPQ and FACTOR WEB. Permission was granted by the WorkCover NSW and S. Linton⁷ to include these tools and the automatic scoring device on the software.

Ongoing support via phone or email contact with senior physiotherapists at Rehab One was encouraged for all training participants. Regular contact was maintained with nominated members of the OHS team at each plant to discuss practical issues with the implementation of the evidence based approach.

2.3 Additional Support

One aim following training was that the OHS staff at each plant would become familiar enough with the processes recommended to enable them to implement the evidence-based approach long term. A case conference was scheduled in Sydney midway through the study period to discuss difficult cases and the practical implementation of the training principles for each case. Four of the plants replied that they were managing their cases well enough to require phone conferencing only. A representative from Plant D accepted the invitation and brought their Rehabilitation Provider to this session.

Following the training sessions, a number of plants suggested that their On-site Supervisors would benefit from hearing the information presented. As the study budget did not extend to cover a Rehab One representative re-visiting each plant to provide this training, a "Supervisor Training Package" was prepared. This was designed to allow one of the plant’s staff that had attended the training to deliver the session in-house. The package included both a Training Script and PowerPoint presentation (on CD). This Training Package was sent to all 5 participating plants.

The training was designed to coincide with the introduction of the new Guidance Material⁶. WorkCover NSW made a decision to withdraw “The Guides” from their website and initiate a review process from June 2006. To keep the medical and physical treatment providers that had attended the training seminars informed of this development, all participants were contacted. They were encouraged to continue to support the Processing Plants in their endeavours to provide injured workers with Evidence Based Rehabilitation.

2.4 Outcome Measures

Statistical information was collected from each plant for the 10-month period before the training sessions (June 01, 2005 to March 31, 2006). Data included the number of workers who lost time and the number of hours lost during specified time frames post-injury. Data regarding the number of workers being paid normal wages while performing a lesser-paid job was also collected. Information relating to total claims and treatment costs was requested from each plant for the period. For comparison, identical information was collected for the same 10-month period after the training sessions (June 01, 2006 to March 31, 2007).

Qualitative data was collected from the plants and participating medical practitioners and physical treatment providers on completion of each training session. Surveys were also posted to all participants 10 months after the training sessions requesting information about their experiences with implementing the material presented into real life practice.

3 Results

(1) Qualitative feedback from participants immediately following the training session.

All participants in the training sessions were asked to complete an evaluation form on completion of the session. Table 2 details responses. In summary 100% of participants agreed that what they had learnt was current and relevant; 90% agreed that their understanding of the subject had been increased; 95% agreed that they anticipated the CD-ROM would help them to work within the new WorkCover Guides; and 90% agreed that they anticipated using the CD-ROM for the OMPQ and FACTOR WEB tools.

(2) Qualitative feedback from medical and treatment providers 10 months after the training session.

Follow up surveys were sent to all participating medical practitioners and treatment providers 10 months after the training sessions had been completed (total 41 surveys). Most chose the option to keep their responses anonymous. Follow-up phone calls and emails were sent to those for whom we could be sure that no response had been given. Responses were obtained from 18 participants, 9 doctors and 9 treatment providers.

Table 3 details the responses given to each question, five main areas of interest were identified for follow-up (i) the use of a review point at 4 weeks post-injury (ii) screening for yellow flags (iii) managing yellow flags identified (iv) upgrading activity in persistent pain (v) the CD-ROM.

(i) Review Point

94% of respondents reported using the 4-week milestone to review whether injured workers are progressing towards pre-injury duties and to understand the physical requirements of the injured worker's pre-injury job. 89% agreed that communication with the plant is required at this time if

the worker is not progressing at work. 100% of the physical treatment providers report attempting to change the treatment approach from “hands on” treatment to an exercise-based approach at 6 weeks post-injury either all or most of the time. 89% of doctors reported questioning their patients about whether there has been a change in treatment approach at this time (pooled result is 95% for this variable).

(ii) Screening for Yellow Flags

All doctors and physical treatment providers report having “kept an eye out” for the presence of yellow flags since attending the training and 72% have used the OMPQ and FACTOR WEB screening tools some or all of the time – despite the fact that the new WorkCover Guides had not been introduced during the study period.

(iii) Managing Yellow Flags

In general both medical practitioners and treatment providers reported less confidence managing yellow flags than identifying them. Only 50% of respondents reported feeling confident to manage psychosocial issues and 56% reported feeling comfortable to refer to a psychologist if indicated. 89% of medical practitioners and treatment providers felt that additional training may/would help improve their confidence. 95% agreed that public education may help their patients accept the importance of psychosocial issues (yellow flags).

(iv) Upgrading activity in persistent pain

83% of practitioners accepted the research presented about the benefits of upgrading activity in chronic pain states and reported feeling confident to do so if relevant pathology had been excluded. Only 61% felt assured however that the plants would adhere to their guidelines if they did certify an upgrade. The majority of respondents were not overly concerned about litigation if they encouraged upgrading activity despite ongoing symptoms.

(v) The CD-ROM

94% of respondents use a computer in their practice. 76% reported having used the CD-ROM and 94% anticipated using it when the new WorkCover Guides are introduced.

(3) Comparison of Return to Work Data Before and After The Training Sessions.

Quantitative assessment was made by requesting return to work data from each of the plants. Data was pooled from all 5 plants to identify mean/average figures and help to correct for individual factors within each plants that may skew outcomes. Information regarding injury rates, time lost from work, return to work rates and number of workers being paid normal wages while performing lesser paid work was collected. Claims costs and total treatment costs for the study period were requested. As the study including only 5 plants, inferential statistics were not considered suitable. All information is presented as descriptive statistics. Figures for the pre-training period were taken from June 01, 2005 to March 31, 2006 and compared to the same data collected from June 01, 2006 to March 31, 2007. Identical annual periods were selected as injury rates reportedly vary seasonally. Training was delivered between mid May 2006 and early June 2006 to all 5 plants.

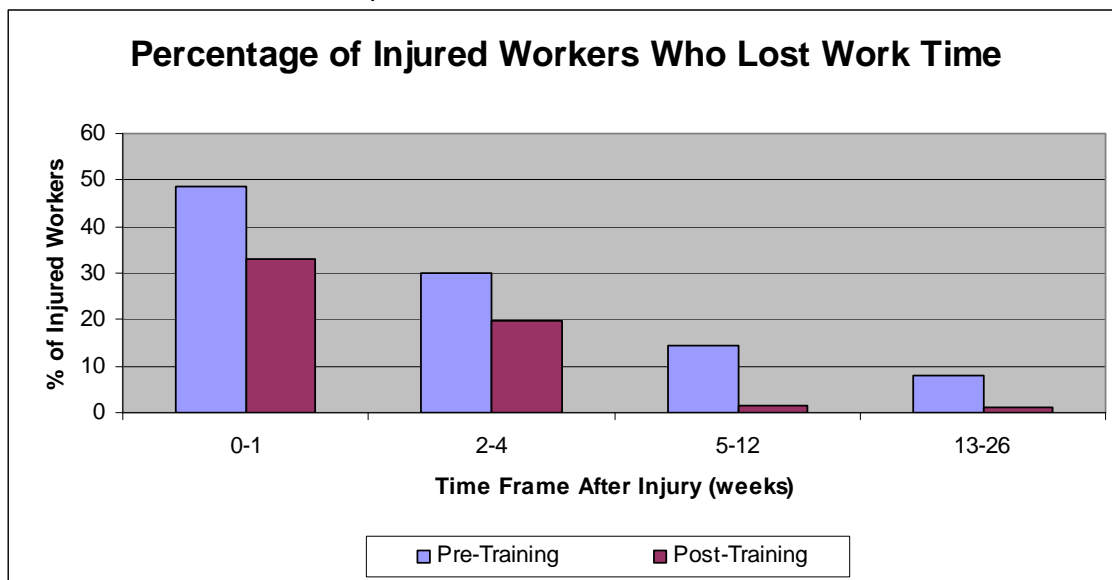
The total number of employees across all plants during the pre-training period was 2823. Of these, 333 (11.8%) consulted a doctor for a work related illness/injury. 48.0% of those that consulted a doctor were diagnosed with a simple strain/sprain. Figures were comparable in the post-training period: of the total 2960 employees, 411 (13.9%) consulted a doctor, 49.2% of whom were diagnosed with a simple strain/sprain. The data below relates to these groups of injured workers with simple strains/sprains, as they were the target group covered in the training sessions.

Table 4 displays the raw data for the total number of workers who lost time and the number of hours lost for specific time frames. To allow comparison of pre- and post-training data (obtained from different base totals in the raw data) figures were calculated in terms of percentages and averages. The formulae used to arrive at these figures are displayed in Table 5.

Variable 1 – Proportion of Injured Workers Who Lost Work Time during Specified Timeframes.

The mean proportion of injured workers that lost time from work in the first week following injury was 48.8% in the pre-training period and 33.2% in the post-training period. Between weeks 2 and 4 after injury 30% of injured workers lost work time in the pre-training period compared with 19.8% after training. Data from the pre-training period shows that 14.4% of workers lost time during the period between 5 and 12 weeks post-injury compared with 1.5% in the same timeframe post-training. In the final timeframe measured (13-26 weeks post-injury) 8.1% of injured workers lost time in the pre-training period, compared with 1.0% post-training. This data is displayed graphically in Figure 1. It should be noted that it is possible for an injured worker to return to work for one timeframe then be off work again in a subsequent period, for this reason cumulative figures may not total 100%.

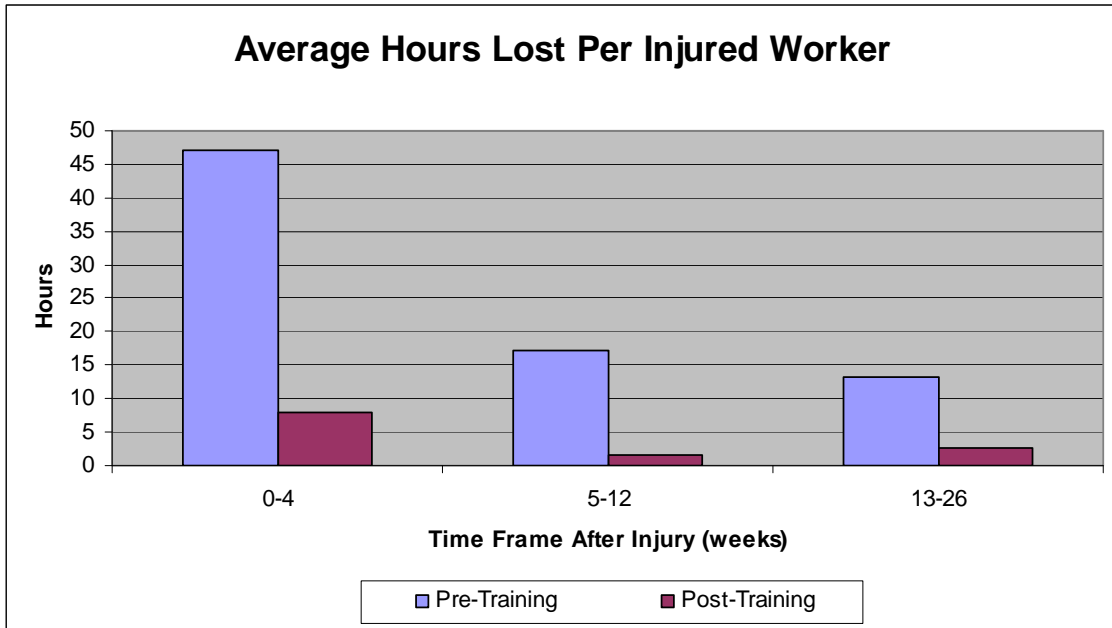
Figure 1 – Pooled data from all 5 plants:



Variable 2 – Number of Work Hours Lost Within Specified Timeframes.

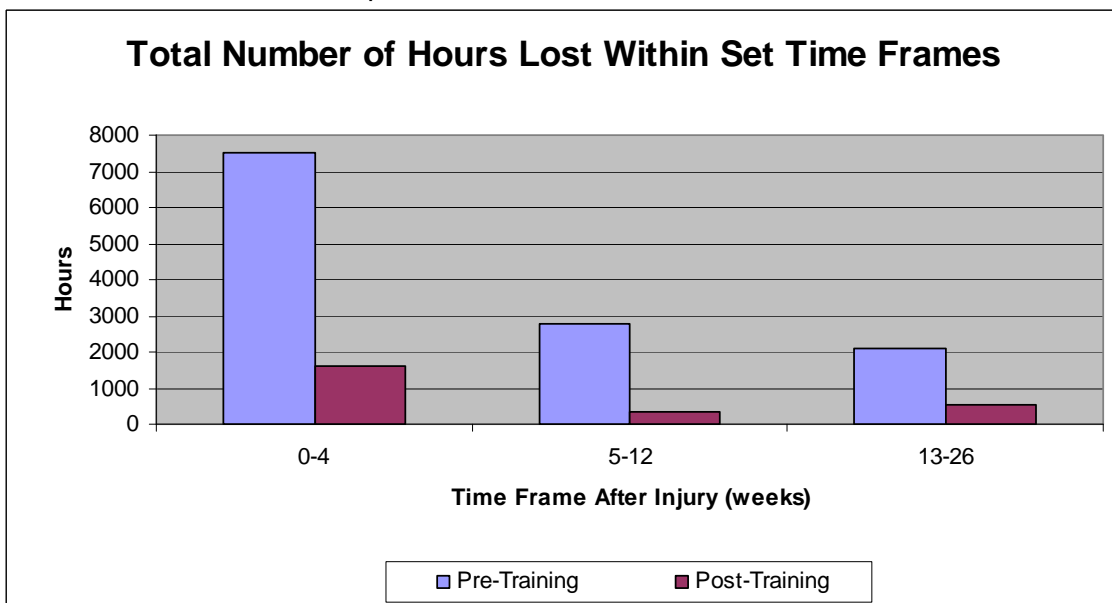
Pooled data from all plants show that injured workers lost on average 47.1 hours each during the first 4 weeks after injury, before the training. Post-training they lost on average 8.1 hours each during this timeframe. Between weeks 5-12 post-injury, an average of 17.3 hours per person was lost before training compared to 1.6 hours per person in the post-training period. Average hours lost between weeks 13-26 for the pre- and post-training periods were 13.2 hours and 2.8 hours per person respectively. This information is displayed graphically in Figure 2.

Figure 2 – Pooled data from all 5 plants.



The raw number of hours lost across all plants for the specified timeframes is demonstrated in Figure 3. It should be noted that the raw number of lost hours was lower at each timeframe in the post-training period despite the raw number of workers with simple sprains/strains being higher in this period.

Figure 3 – Pooled data from all 5 plants.

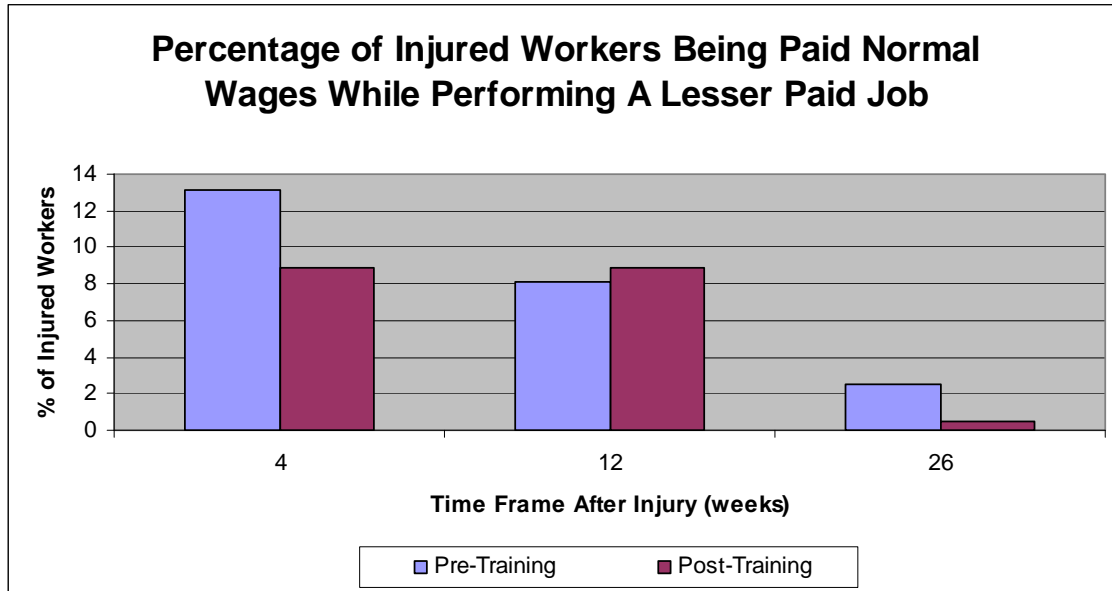


Variable 3 – Proportion of Injured Workers Being Paid Normal Wages While Performing Lesser Paid Work.

Information was also collected to reflect proportions of injured workers who had returned to work and/or upgraded their hours but were unable to upgrade duties to their pre-injury status. Figure 4 demonstrates a trend towards gradually reducing proportions of injured workers being paid

normal wages while performing lesser-paid work during both the pre-and post-training periods. The proportions were lower in the post-training period at both 4 weeks and 12 weeks post-injury. The proportions were similar however at the 12 week point, 8.1% in the pre-training period and 8.9% in the post training period.

Figure 4 – Pooled data from all 5 plants



The information presented below is specific to Plant B. This plant uses an early reporting and intervention system for all workers with soft tissue injuries. Following the training sessions they also implemented a preferred provider system whereby every worker injured consulted at least one health care practitioner (doctor or physical treatment provider) that had attended the training. They also extended the training in-house to include plant supervisors. The OMPQ and FACTOR WEB were routinely administered on site and findings were used as a starting point for phone calls to nominated treating doctors (whether or not they had attended the training). Photographic descriptions of suitable duties for each department were made to demonstrate the range of upgrade options available and promote further opportunities to collaborate with doctors and treatment providers.

In the pre-training period, 100% of injured workers lost work time in the first 4 weeks, these figures were reduced during the post-training period to 30% in week 1 and 25% during weeks 2-4. The average number of hours lost per person dropped from 52.7 hours in the pre-training period to 7.6 hours post-training over the first 4 weeks then to 0 hours over the subsequent post-training timeframes (Figure 6). The total number of hour lost during the first 26 weeks after injury was 2430 during the pre-training period, and 52.67 during the post-training period (for distribution of lost hours across specific timeframes see Figure 7).

Figure 5– Data Specific To Plant B

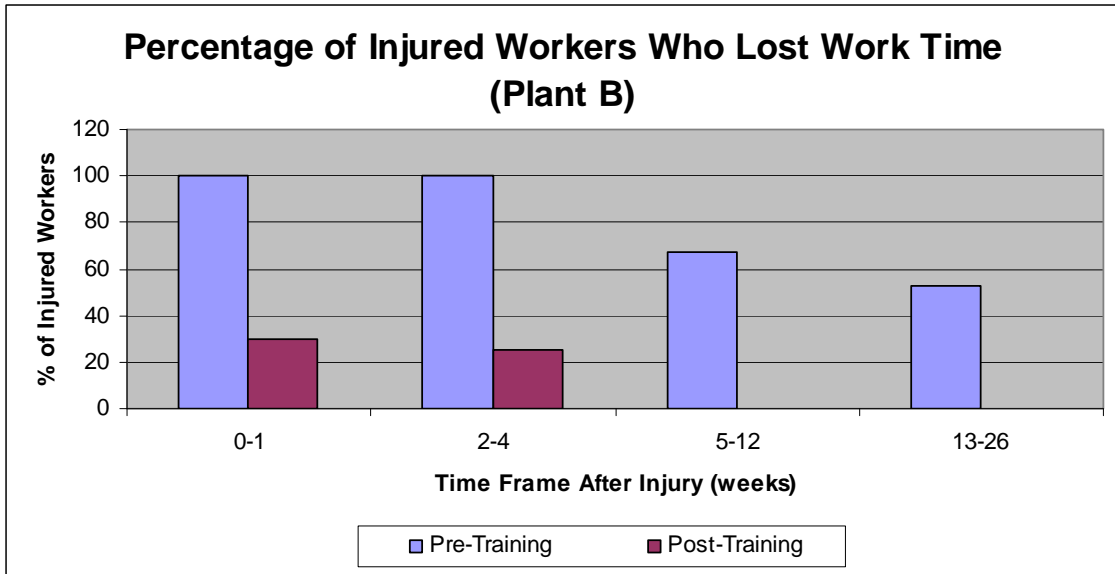


Figure 6– Data Specific To Plant B

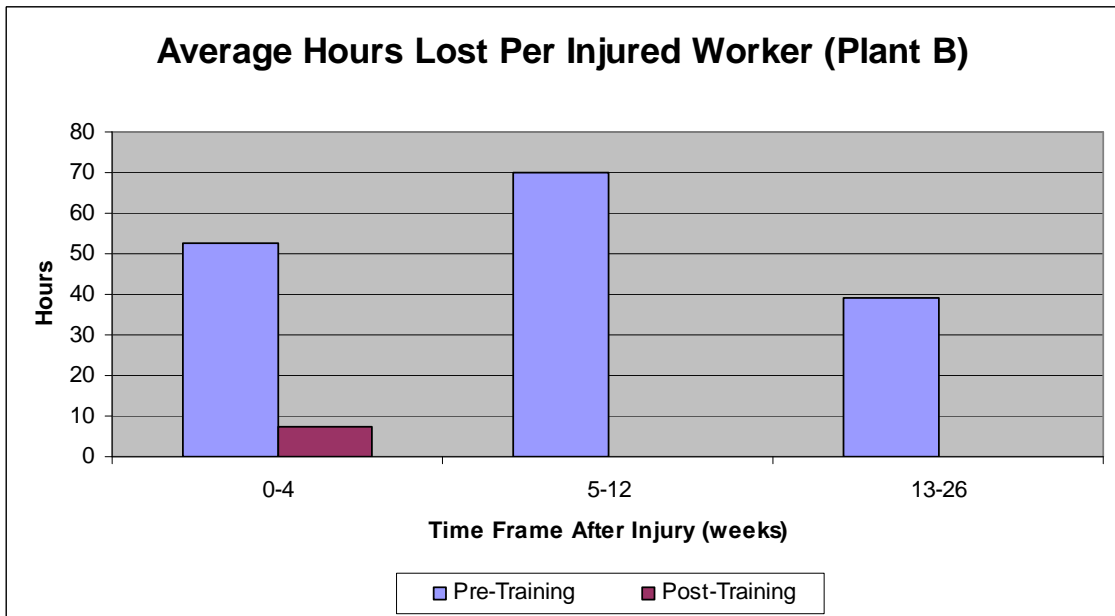
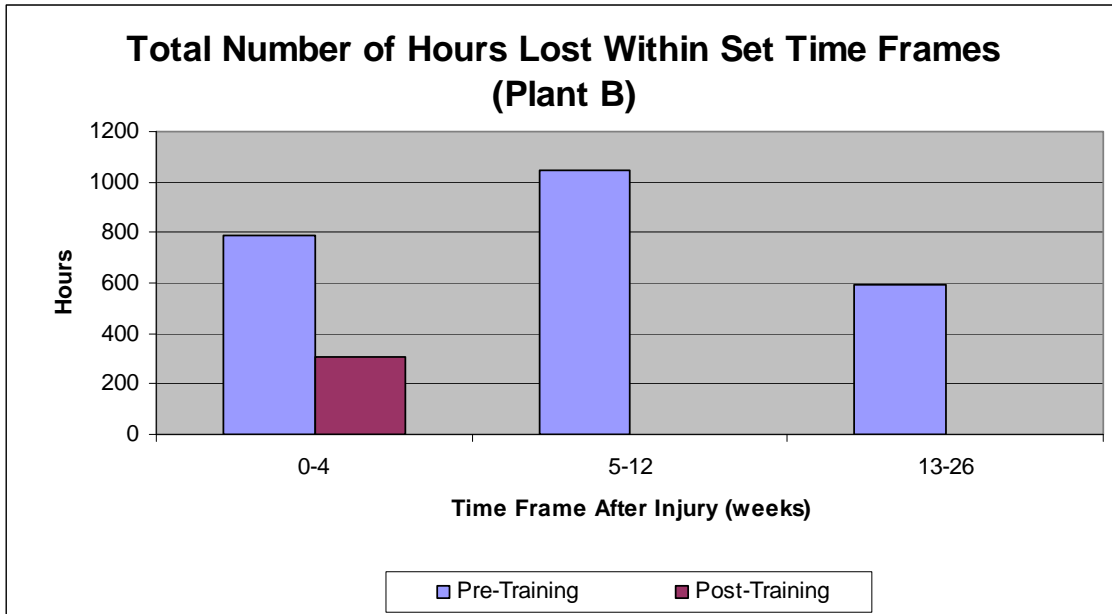
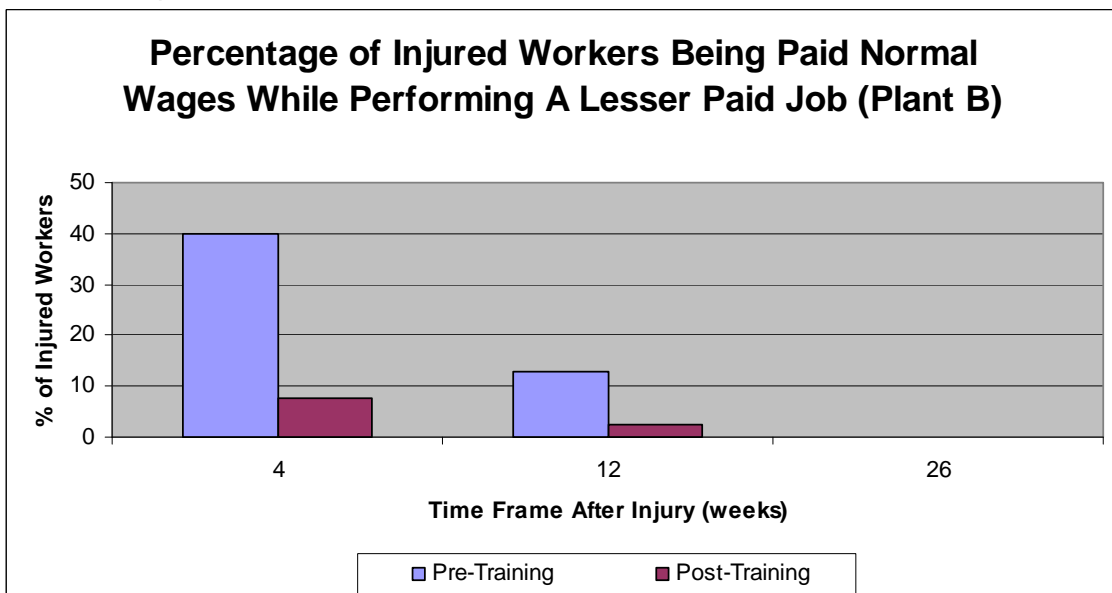


Figure 7 – Data Specific To Plant B



The final variable measured related to the percentage of injured workers being paid normal duties while performing a lesser-paid job. 40% of injured workers fell into this category at the 4-week milestone, pre-training, compared with 7.5% post-training. At week 12 the figures were 13% in the pre-training period and 2.5% post training. No injured workers fell into this category at 26 weeks during either the pre- or post-training periods.

Figure 8 - Data Specific To Plant B



3.1 Claims and Treatment Costs

As part of data collection process we attempted to collect data about claims and treatment costs for the pre-and post-training periods. Obtaining consistent information across the 5 plants proved very difficult. One of the plants reported of being unable to obtain the required data from their

insurer. Another was self-insured and was able to give detailed data including actual costs and estimated costs for the life of the claims. The remaining plants submitted only the actual figures for the time periods studied. Unfortunately isolated figures specific to those injured workers who had sustained simple strains/sprains was not collected – all figures were given as lump sums for all work related illnesses or injuries during the specified time frames. As such we were unable to pool data to give average cost changes or report on data specific to the target group of injured workers. Of the 4 plants that did provide the information, all demonstrated a reduction in average treatment costs per person in the post-training period. Claims cost data was considered too heterogeneous to analyse accurately.

3.2 Feedback From Participating Plants

Feedback from participating plants was conducted via a written survey and phone contact. All plants had implemented some change to their procedures following the training. All reported being more aware of yellow flags and attempting to identify and manage workplace barriers early. All plants had used the yellow flags screening tools, some used them routinely others only in cases where the injured worker was not progressing towards pre-injury duties. Some plants commented that the use of the screening tools gave them a starting point for conversations with nominated treating doctors when the worker was not progressing as expected. Others reported that unless the doctor had attended the training they found it difficult to discuss findings.

All plants surveyed answered that they would definitely recommend the training sessions and CD-ROM to other colleagues in the red meat industry.

4 Interpretation of results and recommendations

This pilot study has demonstrated a consistent trend towards a reduction in the number of injured workers who lost time and the number of hours lost per person after work related sprain/strain post-training. Noteworthy improvements were seen in 9 of the 10 work related variables measured. The remaining variable (proportion of injured workers receiving normal pay while performing lesser paid work at week 12) was similar in the pre- and post-training periods (8.1% and 8.9% respectively).

Although we were unable to determine whether there were specific cost reductions from the data collected, reducing the number of workers losing time and the number of hours lost from work should have the effect of reducing both wage expenses and individual claims estimates. It is reasonable to anticipate that a cascade effect of reduced premiums would also occur.

Information obtained from the study can be used to make preliminary recommendations to the red meat industry to help improve return to work outcomes after work related sprain/strains. This is pioneering research, being the first study, to our knowledge, to have brought evidence-based injury management training to a range of stakeholders in the NSW Workers Compensation System and then measured outcomes. The knowledge gained, therefore, would also be valuable to WorkCover NSW and may assist them as they roll out their new Guides and training programs throughout 2007. This report will, therefore, contain both industry specific recommendations, and a summary of information recommended for presentation to WorkCover NSW with the aim of improving the system on a broader scale.

Recommendations for the Red Meat Industry

1. Providing training in evidence-based injury management to members of the Occupational Health and Safety Team is recommended. This is supported by the improved outcomes demonstrated in this study, feedback from participating plants and a vast body of research. It is possible that such training sessions will be implemented across the state as part of the new WorkCover NSW Guides (due later in 2007) – updates on this may be found by checking the website www.workcover.nsw.gov.au. Alternatively the specific training that was provided in this study by Rehab One could be delivered at central locations.
2. Feedback indicated that the customised CD-ROM “Injury Management Guidelines for Compensation Professionals”© was a helpful tool in understanding roles and responsibilities of various stakeholders according to evidence-based principles. The identification and measurement of yellow flags was also reported to be beneficial. Additional copies of the CD-ROM could be manufactured and provided to other plants in the red meat industry.
3. Yellow flags (psychosocial issues) are recognised in the research as playing an important role in return to work. It is important that people managing injured workers are familiar with these⁶. Any barriers identified (particularly workplace barriers) should be addressed as a priority to achieve improved return to work outcomes.
4. It is recommended that any training attended by the OHS team be passed on to other employees that work directly with injured workers. One plant in this study (Plant B) extended the training to include supervisors and subsequently reported less difficulty organizing selected duty options. A “Supervisor Training Package” (training script and PowerPoint Presentation on CD) was developed for this study with the aim of allowing representatives, who had attended the training, to pass on relevant information to supervisors at their own plants.
5. To ensure that consistent information is being provided to injured workers it is recommended that the treatment providers caring for them are also up to date with the research. This is very difficult to achieve in the real world. As a starting point it is recommended that Plants set up a Preferred Provider system. Researching which practitioners have attended training specific to the management of work related injuries may assist in determining a preferred provider status. A list of WorkCover approved treatment providers is available at www.workcover.nsw.gov.au/ServiceProviders/HealthCare/default.htm. All treatment practitioners listed are required to attend a training course that covers similar material to that presented in this study. Unfortunately, at this stage, medical practitioners are not required to attend training to achieve their WorkCover Provider Number – we will be recommending against this in our feedback to WorkCover. N.B. Legally, injured workers have the right to choose their own treating doctor/ treatment provider.
6. Collaboration and communication are key principles of the injury management approach studied. Making contact with local health care providers is recommended. A range of possibilities exist to achieve this, including inviting them to visit the processing plant to view suitable duties, or making detailed written descriptions of the range of suitable duties available to help them with upgrade options. Hand delivering these may assist in breaking barriers. If planning a doctors/treatment provider dinner, it is recommended that the Regional Division of General Practitioners be contacted to support the event and that it be conducted in the largest nearby town. Possible content of the information presented on the night could be: an introduction of the OHS team; a photographic display of the range of suitable duties the plant can offer; an overview of how the Workers Compensation system works (many

doctors and physical treatment providers asked basic questions about the system in our training sessions); the plant's rehabilitation providers may be able to speak about upgrade options and the research behind keeping active to promote recovery after injury. It is important that practitioners gain confidence in the plant's commitment to safe upgrades, in this study only 61% of doctors surveyed felt assured plants would adhere to their guidelines if they did certify an upgrade.

7. Return to pre-injury hours and duties needs to be recognised by all stakeholders as the ultimate goal of treatment and rehabilitation programs. Upper management and human resources departments within each plant should be wary of terminating an injured worker for an unrelated breach of duty or moving them to a different department before they have been certified fit to return to pre-injury duties. Such actions may ultimately result in large financial penalties through increased premiums.
8. Statistics: Tracking the application of any new procedure is important. Keeping statistical records is the best way to determine whether a plant is heading in the right direction with injury management procedures. In this study records were taken at various milestones or timeframes post-injury. This is in keeping with other return to work literature. Some of the plants involved in the study have now implemented the data collection and analyses used in the study. The development of standard statistical measures across plants associated with the MLA would lend much more power to statistical analysis. Recommended data for collection may include: the proportion of injured workers who lost time between date of injury and week 4; the proportion of injured workers who lost time between weeks 5 and 12; the proportion of injured workers who lost time between weeks 13 and 26. Number of hours lost within the same specified timeframes is also recommended. Formulae for calculating average figures can be found in Table 5. In this study we collected data on the proportion of injured workers being paid normal wages while performing lesser-paid work. It is recommended instead that the "proportion of workers on suitable duties" at the specified times (4, 12 and 26 weeks) be recorded.
9. It is recommended that insurers be requested to provide plants with detailed information about actual and estimated costs for claims and treatment. It is not possible to calculate figures across the industry without consistency of this information.

In summary the use of supportive, research based injury management procedures and collaboration between employer and health care provider are recommended to assist in improving return to work outcomes.

4.1 Summary of Recommendations to WorkCover NSW

It is recommended that a meeting be scheduled with WorkCover NSW including representatives from the MLA, AMPC and Rehab One to highlight several important findings. This study has piloted the approach of training stakeholders and measuring outcomes, our feedback and results are likely to be of interest to WorkCover NSW as they roll out their Guides and the related training sessions for treatment providers later in 2007.

4.2 Study Overview and Relevant Findings

Outcomes measured 10 months after the introduction of an evidence based injury management approach and training for stakeholders demonstrated a consistent trend towards a reduction in the proportion of injured workers who lost work time, and the number of hours lost per person, after work related sprain/strain. During the course of this study a number of relevant points were

learned about difficulties in the practical implementation of the evidence based injury management approach. A summary of the main points is given below.

- Medical Practitioners hold the power to determine when an injured worker will return to work and upgrade hours and duties. If the nominated treating doctor does not follow an evidence-based approach, it is difficult for the other stakeholders to implement it, regardless of their training. It is recommended that Medical Practitioners be included in the training schedule under the new Guides.
- Studies have shown that medical practitioners are more likely to embrace the change when their training coincides with a publicity campaign that encourages the general public to be more active when recovering from injury. It is recommended therefore that injured workers also receive education and reassurance to adhere to the more active approach recommended in the research, rather than holding on to the outdated perception that rest is the best treatment. It is well documented that patient confidence and patient expectations about treatment can impact on the outcome⁸.
- In this study, when psychosocial issues were identified, there was a reported lack of knowledge of evidence-based techniques for injured workers amongst counseling professionals. Identifying psychosocial issues alone is insufficient to achieve outcomes. Support and training of psychologists and other counseling professionals is required to enable appropriate management of these issues, particularly in rural areas.
- Return to pre-injury hours and duties needs to be recognised by all stakeholders as the ultimate goal of treatment and rehabilitation programs. In recent years, there has been a trend towards improved return to work rates, however, many workers remain “stuck” on selected duties long-term. This creates human resource issues and financial penalties for the employer who continues to pay another worker to cover the pre-injury duties. Treating health professionals need to be encouraged to explore safe methods of upgrading their injured workers or early reporting if they form the opinion that this will not be achievable.
- Feedback was obtained from participating medical and health care practitioners immediately after the training sessions then again 10 months later. The follow-up feedback is particularly important as it reflects the opinions of motivated practitioners who not only took the time to attend the training sessions but also answered the survey posted to them 10 months later. Detailed descriptions of responses are given in Table 3. A summary of important findings is given in the Results section of this report under the heading “Qualitative feedback from medical and treatment providers 10 months after the training session” on page 7 of this report.

5 Conclusion

This pilot study suggests that providing training to plant staff, medical and allied health practitioners (and the provision of a customised CD-ROM) improve rehabilitation outcomes for injured meat industry workers. Noteworthy improvements were seen in 9 of the 10 work related outcomes post-training for data pooled from the five participating plants. Specific recommendations to the red meat industry and WorkCover NSW have been made to help improve the management of work related sprains/strains both within the meat industry and on a broader scale.

6 Acknowledgements

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7 Tables

Table 1: Breakdown of Training Session Attendees by Plant.

PLANT	Doctors	Physical Treatment Providers/ Rehab Providers	OHS Team Members	CD-ROM only
A	2	3	3	
B	6	5	3 + (6 Supervisors)	1
C	5	4	3	
D	3	9	5	5
E	1	3	2	
TOTALS	17	24	22	6

Table 2: Summary of results from Training Session Evaluation Form – given immediately after completion of training session

Comment	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
THE TRAINING SESSION					
What I learnt was current and relevant	60	40			
The topics covered met my expectations	40	59	1		
My understanding of the subject was increased	42	48	10		
The training has made me more confident to manage workers compensation patients	24	56	20		
I now understand my roles in the workers compensation system more clearly	28	50	21	1	
I now understand the roles of other in the workers compensation system more clearly	33	54	12	1	
The amount of material presented in the allocated time was appropriate	40	51	10		
THE CD-ROM					
I anticipate that the CD-ROM will help me work within the WorkCover NSW Guidance Material	47	48	5		
I anticipate that I will use the CD-ROM for the OMPQ and FACTOR WEB tools	43	47	10		

Table 3: Summary of results from Medical and Treatment Providers 10 months after Training Session.

Comment	YES (%)	SOMETIMES/ MAYBE (%)	NO (%)
REVIEW POINTS			
I now review injured workers at 4 weeks to assess if they are progressing towards pre-injury duties (PIDs)	94	6	
I attempt to understand the injured worker's job if not on PIDs at 4 weeks	94	6	
If s/he is still having treatment @ 6 weeks I attempt to withdraw "hands on" and introduce exercise based treatment/investigate same if GP	78	17	5
I believe I should communicate with plant @ 4 weeks if worker not back to PIDs	89	11	

I will do these things when WorkCover Guides Introduced	78	17	6
SCREENING FOR YELLOW FLAGS			
I am more aware of yellow flags since attending the training session	44	44 "Already"	12 knew"
I have "kept an eye out" for yellow flags since attending the training session	100		
I have used OMPQ/other screening tool	61	11	28
I believe yellow flags are important	83	17	
MANAGING YELLOW FLAGS			
I feel confident managing yellow flags	50	39	11
I am comfortable referring for psychological assessment if screening tools indicate	56	33	11
I believe more training is needed to help GPs/ Treatment Practitioners manage yellow flags	61	28	11
I believe more public education is needed for patients to accept yellow flags	67	28	5
I believe that patients will resist referral until psychological treatment is de-stigmatised	73	22	5
UPGRADING ACTIVITY IN PERSISTENT/CHRONIC PAIN			
I accept the research on the benefits of upgrading activity despite pain in persistent pain patients	83	17	
I am confident to upgrade activity despite pain if tests are clear in these patients	83	17	
I am confident the processing plant will adhere to my guidelines when upgrading	61	28	11
I am concerned about litigation if I recommend an upgrade in activity despite pain	11	44	45
THE CD ROM			
I use a computer in my practice	94		6
I have used the Injury Management CDROM	76		24
I intend to use CDROM when the new WorkCover Guides are introduced	81	13	6

Table 4: Raw Data Pooled from 5 Plants

Variable	Pre Training	Post Training
Total Number of Employees	2823	2960
Total Number To See A Doctor	333	411
Number with Simple Strain/Sprain	160	202
Number IW* who lost time in Week 1	78	67
Number IW who lost time Between Weeks 2-4	48	40
Number IW who lost time Between Weeks 5-12	23	3
Number IW who lost time Between Weeks 13-26	13	2
Total Number Work Hours Lost To Week 4	7531	1627
Total Number Work Hours Lost Between Weeks 5-12	2760	322
Total Number Work Hours Lost Between Weeks 13-26	2116	560
Number IW Receiving Normal Pay While Performing Lesser paid Job At Week 4	21	18
Number IW Receiving Normal Pay While Performing Lesser paid Job At Week 12	13	18
Number IW Receiving Normal Pay While Performing Lesser paid Job At Week 26	4	1
* IW = injured workers		

Table 5: Formulae used To Calculate Proportions

Measurement	Formula
Injury Rate (%)	$\frac{\# \text{ IW to see a doctor}}{\text{total \# employees}} \times 100$
Simple sprain/strain rate (%)	$\frac{\# \text{ diagnosed with simple strain/sprain}}{\# \text{ IW to see a doctor}} \times 100$
% IW who lost time (in specified time frame)	$\frac{\# \text{ IW who lost time (in time frame)}}{\# \text{ IW with simple strain/sprain}} \times 100$
Average Hours Lost Per Person (in specified time frame)	$\frac{\# \text{ Work Hours Lost (in time frame)}}{\# \text{ IW with simple strain/sprain}}$
% IW Paid Normal Wage while Performing Lesser Paid Job (in specified time frame)	$\frac{\# \text{ IW on normal pay with lesser job (in time frame)}}{\# \text{ IW with simple strain/sprain}} \times 100$

8 References

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