The Outcome of Occupational Rehabilitation of Injured NSW Nurses

THE UNIVERSITY OF NEWCASTLE AUSTRALIA

STUDY REPORT

N.S.W. NURSES' ASSOCIATION

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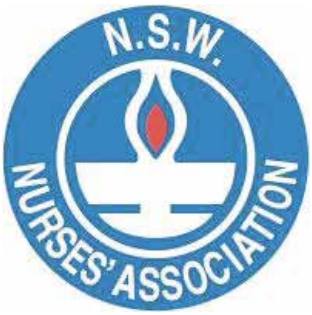

THE OUTCOME OF OCCUPATIONAL REHABILITATION OF INJURED NSW NURSES

STUDY REPORT

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Executive Summary

The nursing workforce has a high risk of injury in the workplace due to a very active and heavy manual handling workload and associated hazards(1). Previous studies have focused on the problem of manual handling injuries in a range of professions. This study focused specifically on the nursing workforce and the experience of occupational rehabilitation from two perspectives: Return to work coordinators and injured nurses.

Occupational rehabilitation is a complex process involving several stakeholders. The employer, insurer, return-to-work coordinator, various medical and allied health service providers, the injured person and their colleagues all contribute to this process. The study has included participants representing a range of health care facilities and working environments. Nurse participants were recruited from a range of specialty areas of practice and across a range of nursing roles or classifications.

This study was designed to provide evidence about current practices associated with the rehabilitation of injured nurses in New South Wales from:

1. Nurses' perspectives regarding factors that helped or hindered their successful rehabilitation and
2. Employers' perspectives regarding factors that aided or impeded the successful rehabilitation of nurses.
3. To achieve these aims, the objectives of the study were:
4. To identify the practices and processes used in the return-to-work of injured nurses.
5. To evaluate the perceptions and experiences of injured nurses and workplace return-to-work coordinators with respect to these practices.
6. To identify if any differences in practices between rural, regional and metropolitan geographical areas exist.
7. To identify if any differences in practices between aged care, public and private sectors exist.
8. To identify types of nursing activities employed as suitable duties in a return-to-work program for injured nurses.
9. To recommend desirable practices to facilitate the return-to-work of injured nurses.

The study was designed, and is reported in two parts:

Part 1 was a series of focus groups conducted with return-to-work coordinators from a range of health care facilities and work environments to determine the practices and

processes used in the return-to-work of injured nurses; and their perceptions and experiences of these practices.

Part 2 was a cross sectional survey of injured nurses to determine the practices and processes used in the return-to-work of injured nurses; and their perceptions and experiences of these practices.

The response rate in the survey was low (14.2%) however, these data provide a unique insight into the practices and processes involved in the occupational rehabilitation of injured nurses, that has not previously been reported from the injured nurses' perspective.

The key results of this study were as follows. The organisational context in which the return-to-work process is conducted varies substantially and is more challenging in rural areas due to distance, isolation and access to services. This is complicated by a lack of clarity about case management and barriers within the process and anxiety on the part of injured workers. Most employers were notifying insurers about injuries in a timely manner and most injured nurses reported a successful return-to-work. The key person in the return-to-work process is the return-to-work coordinator. Most nurses were provided with a graded return-to-work program that was developed in consultation with the injured nurse, employer, return-to-work coordinator and nominated treating doctor. Most nurses reported returning to work with the same employer and in the pre-injury area of practice, however ten percent reported being unable to return-to-work. Most nurses returned to work on suitable duties and reported being supported and valued by management and co-workers. Numerous factors contributed to delayed return-to-work and a negative rehabilitation experience for injured nurses. Nurses, who sustained psychological injury, worked longer hours, were older or who worked in aged care facilities were less supported and had more negative experiences. Nurse shortages were an incentive for successful return-to-work of injured nurses. Travel is a key factor involved in access to health services and arranging return-to-work shifts and suitable duties – particularly in rural areas. General practitioners were perceived by some to create barriers in the return-to-work process. Nurses working in aged care have reduced odds of returning to work with the same employer and have more manual handling injuries.

Nurses who had a high manual workload (enrolled nurses and assistants in nursing) and highly specialised nurses (intensive care and operating theatre nurses) had more difficulty being provided with suitable duties, however the highly specialised nurses were more likely to be able to return to work. Suitable duties were also difficult for nurses who had suffered psychological injuries or worked alone, such as community

nurses. Nurses with supervisory or management roles were more able to be assigned suitable duties. A range of light clinical and administrative (suitable) duties were reported by participants – most of whom were registered nurses. Some also returned to work on modified or restricted duties – especially if they had been involved in manual handling pre-injury – for example assistants in nursing and enrolled nurses. One quarter of nurses found that the suitable duties assigned were not suitable and some were not supported by their colleagues resulting in a less-than-ideal return-to-work experience. Nurses who suffer workplace bullying are usually unable to remain in workplace teams. Nurses who are subject to negative attitudes and expectations by management and staff often have difficulty undertaking suitable duties and returning to work.

The data reported in this study indicate that occupational rehabilitation of injured nurses is a complex process involving several stakeholders and may be even more challenging in rural areas and for some nurse classifications and some work environments. This evidence may inform numerous groups (including nurses, their employers, the NSWNA, WorkCover and insurers) about practices that contribute to the successful rehabilitation of injured nurses. The implications for future research and improving this process and related practices are described below as recommendations based on the results of this study.

Key recommendations

In synthesising the results from the two arms of the study a number of recommendations for facilitating the return-to-work of injured nurses emerge. These can be considered in two main groups; possible changes to the current process and suggestions for further research.

Changes to the current process

1. There is clearly and commonly confusion on the part of the injured nurse regarding the rehabilitation process. There is a need for clear guidelines on the roles and responsibilities of the key players in the process, particularly those related to case management.
2. Casual employees, and nurses with several employers, are not adequately considered in the current rehabilitation processes. Suitable duties are not necessarily always made available to such individuals, and responsibility for their occupational rehabilitation is often not defined across multiple employers.
3. Suitable duties should be appropriate to the level of training and experience of the injured nurse. Similarly, further consideration is needed regarding mechanisms for

successfully retraining injured nurses into other nursing roles rather than effectively forcing them to leave the profession.

4. There is an urgent need for nationally recognised training for return-to-work coordinators as the present levels of training and skill vary substantially across some jurisdictions, with an extension of the harmonisation achieved between NSW, Queensland and Victoria required.
5. The relative invisibility of psychological injuries is associated with the risk of accusations of malingering and non-validation of injury, as well as workplace bullying. It is important that workplaces are accountable in their organisational processes in relation to rehabilitating nurses with occupational mental health issues.

Directions for future research

1. Elucidating differences in experiences in the occupational rehabilitation process between the various nursing roles and the factors that lead to these differences may help inform the development of more successful occupational rehabilitation processes.
2. There is an urgent need to further explore the reasons why some injured nurses are not being offered suitable duties.

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1. Introduction

Occupational Rehabilitation is a managed process that involves appropriate, adequate and timely services based on assessed needs, and which is aimed at maintaining an injured worker in, or returning them to suitable employment.

This study was conducted by the University of Newcastle in collaboration with the NSW Nurses' Association (NSWNA) to determine the return-to-work practices for injured nurses in the health care sector in NSW by evaluating the perceptions and experiences of injured nurses and the perceptions and experiences of workplace return-to-work coordinators. The study was undertaken in two parts:

Part 1 – qualitative focus groups with workplace return-to-work coordinators were conducted to identify current practices, as well as the experiences and perceptions of the rehabilitation process from the employer perspective. Return-to-work coordinators of employers of nurses within rural, regional and metropolitan geographical areas and public, private and aged care sectors were invited to participate.

Part 2 – a cross-sectional survey study of injured nurses to determine their experiences and perceptions of the rehabilitation process. The sample was nurses who experienced a workplace injury and for whom a claim was submitted in two financial years 2005/07.

2. Literature Review

Workplace Injuries in Australian/NSW Nurses

Occupational Rehabilitation is the restoration of ...injured worker(s) to the fullest physical, psychological, social, vocational and economic usefulness of which they are capable, consistent with pre-injury status. It is a managed process aimed at maintaining injured or ill workers in/or returning them to suitable employment. It involves early intervention with appropriate, adequate and timely services based on assessment of the injured workers' need (2). The outcome of occupational rehabilitation is often considered in relation to return-to-work rates for those who sustain an injury at work; however specific rates for NSW nurses are not readily available in the literature.

Data available for the Health and Community Services industry in NSW indicate that this sector had an rate of 16.5 employment injuries per 1000 employees during the 2008/2009 financial year(3). While this rate is substantially lower than that reported in several other industries including Mining, Agriculture, Forestry and Fishing and

Manufacturing, it is greater than the state average of 14.2 injuries per 1000 employees (3).

National statistics available from Safe Work Australia's on-line statistical database(4) indicate that the rate of employment injuries for the occupation group 'Nursing Professionals' was 12.7 per 1000 employees for the 2007/2008 financial year. Importantly, the term Nursing Professionals does not include Enrolled Nurses (ENs), whose injury rate is reported as 23.4 per 1000 employees for the same period. The employment injury rate over the same period for the occupation group Carers and Aides, which includes Nursing Assistants, was 20.0 per 1000 employees.

Manual handling is the most common cause of injury in NSW workers accounting for 29% of occupational injuries sustained in 2008/2009 (3). Although the rate of manual handling injuries has declined in NSW by 46% in the past 10 years(3), it remains the single largest cause of injury reported in NSW nurses (5). Occupational injuries resulting in sprain and strain impairments accounted for 48%, 66.4% and 61.8% of all national claims made by registered nurses, enrolled nurses and personal care / nursing assistants respectively in 2007/2008(4).

Although recent statistics specific to NSW nurses are unavailable, preliminary national statistics for the 2007/2008 financial year indicate that the back is the most commonly injured bodily region, accounting for 36.2%, 34.3% and 38.2% of all registered nurse, enrolled nurse and personal care / nursing assistant injury claims respectively(4). The proportion of back injury claims for workers in the NSW Health and Community Services industry approximates this figure (34%)(3). The relative proportion of back occupational injuries reported for Australian nurses appears much greater compared to the national mean proportion of 22.7% for all occupations(4). This observation is consistent with international data that report the prevalence of work related back injury in nursing to be amongst the highest of any profession(6).

Claims made for mental disorders represented a small proportion (7.9%) of the total claims made nationally by nursing professionals in 2007/2008(4). Statistics available for NSW for the same period suggest that this proportion of claims for mental disorders is close to that of the state average of 6.3% for all occupational groups (7).

Preliminary national data for 2007/2008 indicate that slightly more than one quarter of registered nurses, enrolled nurses and personal care / nursing assistants returned to work within two weeks of an occupational injury, with between 70-75% returning before twelve weeks post-injury(4). This is comparable to the national statistics for all occupations over the same period of 31.1% returning within two weeks and 75.7% returning within twelve weeks(4).

Barriers and Facilitators of Return-To-Work

A substantial number of literature reviews, in both the peer-reviewed and grey literature, have been conducted upon the dimensions, processes, and practices of workplace-based return-to-work as well as the facilitators and barriers which affect timely return-to-work. Based upon the body of evidence, it has been hypothesised that there are seven key 'principles' for successful return-to-work that may hold the key to the duration of work disability, costs of work disability, and quality of life of workers (8-11). The seven principles are as follows:

3. The workplace has a strong commitment to health and safety which is demonstrated by the behaviours of the workplace parties.
4. The employer makes an offer of modified work (also known as work accommodation) to injured/ill workers so they can return early and safely to work activities suitable to their abilities.
5. Return-to-work planners ensure that the plan supports the returning workers without disadvantaging co-workers and supervisors.
6. Supervisors are trained in work disability prevention and included in return-to-work planning.
7. The employer makes an early and considerate contact with injured/ill workers.
8. Someone has the responsibility to coordinate return-to-work
9. Employers and health care providers communicate with each other about the workplace demands as needed and the worker's consent.

In a report prepared for the South Australian WorkCover Corporation, Foreman et al (12) conducted a systematic review of peer-reviewed studies investigating the facilitators and barriers of return-to-work published between 1995 - 2006. Due to the anticipated heterogeneity of the included studies, no attempt was made by the authors to quantitatively synthesize the results. Among the key findings of this review, the outcome of return-to-work was found to be determined by numerous factors that extend well beyond the underlying medical impairment. Worker characteristics, aspects of medical and rehabilitation interventions, job requirements, workplace factors, insurance schemes, legal frameworks and broader socioeconomic conditions were all demonstrated to influence a worker's return-to-work. The authors of this review recommended effective management of each of the determining variables and emphasised a coordinated approach between stakeholders. As a result of the search strategy employed in this review, the included primary studies were conducted across many different geographic regions with variations in legislative requirements and

occupational rehabilitation practices. Further, the studies reflect a range of industries and occupations in mixed populations across a relatively broad time-frame.

To explore the barriers of return-to-work in NSW, Kenny (1995) (13) conducted in-depth semi-structured interviews with a purposeful sample of 49 workers with injuries and 23 employers from the Newcastle-Hunter region. The four key findings of this study were;

1. Poor knowledge of the legislated requirements
2. Poor communication and information pathways among key stakeholders
3. A generally negative perception toward the injured worker and
4. Organisational difficulties in the implementation of occupational rehabilitation.

This study found that injured workers reported experiencing negativity and discrimination from one or more of the stakeholders. This occurred in various forms, including being treated with disrespect, being told that their injuries 'were all in their heads', and being threatened both directly and indirectly with the loss of their jobs if they did not return to their full duties. Furthermore the injured workers believed they were being alienated by their co-workers and experienced a lack of support from the workplace which was difficult to overcome.

Kenny (13) identified a perception of issues related to the provision of suitable duties with an apparent inflexibility of some employers in accommodating a worker with an injury. Factors associated with finding suitable duties were restricted finances, no alternative productive work and the belief that workers preferred time off work rather than suitable duties and that worker attitude to suitable duties was negative, thus creating a barrier to their successful provision.

Kenny (14) adds that the worker's perception of the return-to-work coordinator is that they lack authority within the workplace to be in an advocate role for the injured worker or to implement the appropriate workplace modifications. The injured worker often perceived a conflict of interest inherent in the role of the return-to-work coordinator when they are concurrently an employee of the company and an advocate of the worker who has been injured within the company. Furthermore, injured workers indicated that the structural problem of this role conflict should be addressed at the policy level within management. Workers often expressed bitterness and anger regarding the way they were treated by their return-to-work coordinator, frequently feeling threatened or insecure and returning to work because of intimidation by the return-to-work coordinator. As a result, the perception of the injured worker was that

the return-to-work coordinator and the employer were in a triangulated relationship working against them(13).

While informative to the discussion upon the experiences of injured workers and the barriers of return-to-work in NSW, this work produced by Kenny (13, 14) is reflective of the knowledge, attitudes, beliefs of injured workers in NSW during the early 1990's. Furthermore, legislative, policy and practice change in occupational rehabilitation since this time significantly limits the generalisability of these findings.

More recently in 2004, WorkCover NSW in conjunction with Unions NSW investigated the barriers to returning to work in a cohort of 1000 seriously injured NSW workers (15). Thirteen percent of the sample included workers within the Health and Community Services industry. The perceived barriers of return-to-work were multi-factorial and included communication with stakeholders, the development and implementation of injury management plans, return-to-work plans, approval of treatment, receipt of payment and support throughout the process. The results of this study highlighted that workers with mental disorder injuries had significantly more barriers to return-to-work than any other occupational injury group.

The Return-To-Work Experiences of Injured Nurses

Nurses comprise the largest proportion of the Australian health workforce (40.5%) (16). Although much is known about the number and nature of occupational injury claims made by Australian nurses, reports upon the occupational rehabilitation experiences of this population are quite limited. A 2007 review of the literature by the Australian Nurses' Federation in Victoria identified that there was limited information available specifically in regard to nurses both in Australia and internationally in the return-to-work process following workplace injuries or illnesses (8).

The Nursing and Health Services Consortium (17) compiled a report for the NSW Health Department Nursing Branch in 2000. The report outlined that injured nurses felt that there was often a lack of support from co-workers and management, in addition to a perception of abandonment. Little if no assistance in providing alternative duties raised concerns of diminished value as a nurse if unable to perform the modified duties. Furthermore, nurses believed there is a need to address the cause of injuries sustained.

Sager and James(18) used a qualitative phenomenological study design to examine the perspectives of injured workers within a large regional health service in NSW. Six women, including three nurses, were interviewed to explore their experiences of the rehabilitation process and their interactions with Occupational Therapists. Four major

themes were identified. Interviewees perceived that they had poor knowledge of the rehabilitation process including the roles and responsibilities of involved parties. Participants in this study also reported a lack of support and a feeling of being alone. The duties performed by some interviewees upon their return-to-work were perceived to be unsatisfying and did not accurately reflect their abilities or match their level of skill. The fourth theme that emerged from this study was a perception of negativity toward the injured worker from co-workers, management and the insurer.

Outside of New South Wales, several other Australian reports have identified similar themes to those of Sager and James(18). A 1997 report by Elizabeth Langford detailed the experiences of injured nurses within the Victorian health service industry(19). Based upon the results of a survey of injured and ill nurses, the report found that often nurses were unaware of the available rehabilitation services within their workplace. Injured nurses receiving rehabilitation considered that confidentiality was not being maintained and their best interest was not the primary reason for rehabilitation. Distress and pain from their injuries was not the only problem that nurses had to endure, with many fearing that they would lose their jobs after the rehabilitation process was completed. The injured nurses expressed concern over the lack of support at the workplace stating that they were being treated unfairly by their work colleagues. The perception by the injured nurses was that the employer could not wait to get rid of them and of the added resentment by their co-workers due to the extra work load that they were required to endure. Comments were made by distressed younger nurses regarding the disappointment of losing careers that they value and enjoy, and the implication that their degrees were considered worthless because they were unable to return to their normal duties. Langford recommended that the health industry negotiate with stakeholders and develop a meaningful, integrated rehabilitation system that could address the specific issues that injured nurses' face (19).

More recently the Victorian Nurses Recruitment and Retention Committee (20) reported nurses were leaving the profession and not seeking employment within the nursing industry due to injury and illness. The Committee identified several issues that nurses are confronted with when making these decisions. Contributing factors were management's lack of support and their inability to provide suitable duties, heavy workloads, understaffing and the perception that work injuries are a natural by-product of nursing duties.

The Australian Nursing Federation (Victorian Branch) completed a project in 2007 upon the return-to-work of nurses within hospitals. This was a 36 month project focused upon the identification of the barriers and facilitators of successful return-to-work of

injured and ill nurses. A series of four focus groups involving 37 participants were conducted as part of this project (21) with the primary needs of injured nurses identified as:

1. The opportunity to continue to contribute as nurses
2. Acknowledgement of their injury and/or illness and its impact on their lives
3. Return-to-work to focus on what they can do rather than what they cannot do
4. Return-to-work duties that are identified nursing duties
5. To be seen as a whole person, who have not lost mental capabilities just because they have a physical injury
6. To be seen for who they are not just an injury and/or illness

The documented experiences of injured nurses in other countries highlight several similarities to those reported in Australia. Anne Hudson, founder of the Work Injured Nurses' Group in the United States, advocate for back-injured nurses and a registered nurse herself, sustained a back injury with her employer denying it occurred at the workplace. Anne's rehabilitation process required her to perform suitable duties for the duration of her rehabilitation plan. After this period, Anne was unable to return to her normal nursing duties and as a result her employer did not want her to return-to-work if she was unable to fulfil her normal role within the workplace. During the course of her injury Anne discovered that it was typical of employers, to terminate injured nurses, rather than provide suitable duties. Anne felt that the job was as 'good as long as her back held out' leaving her to believe that all of the study, years of experience and acquired nursing skills meant nothing to her employer (22).

3. Study aims and objectives

1.1 Study aims

The expected benefits of this study were to provide evidence of current practices relating to the rehabilitation of injured nurses; from nurses' perspectives regarding factors that helped or hindered their successful rehabilitation and from employers' perspectives regarding factors that aided or impeded the successful rehabilitation of nurses. This evidence has the potential to inform numerous groups (including nurses, their employers, the NSW Nurses Association, insurers and Australian state and national regulators) about practices that contribute to the successful rehabilitation of injured nurses.

1.2 Study objectives

1. To achieve these aims, the objectives of the study were:
2. To identify the practices and processes used in the return-to-work of injured nurses.
3. To evaluate the perceptions and experiences of injured nurses and workplace return-to-work coordinators with respect to these practices.
4. To identify if any differences in practices between rural, regional and metropolitan geographical areas exist.
5. To identify if any differences in practices between aged care, public and private sectors exist.
6. To identify types of nursing activities employed as suitable duties in a return-to-work program for injured nurses.
7. To recommend desirable practices to facilitate the return-to-work of injured nurses.

Ethical considerations

Ethical approval was obtained from the Human Research Ethics Committee of the University of Newcastle prior to the administration of the questionnaire and focus group interviews. Approval number H-2008-0192.

4. Focus groups with return-to-work coordinators

1.3 Introduction

Located within the broader research literature on workers compensation systems, is a small but growing body of qualitative research which seeks to highlight barriers and facilitators in the return-to-work process. The strength of qualitative research lies in its ability to identify physical, social and organisational factors which facilitate or impede return-to-work from the perspectives of different stakeholders in the process (10, 23). This necessarily entails theorising issues of power, control and conflict in the return-to-work process, and critically examining contextual and structural factors that constrain or enable the behaviour of individuals and groups.

This chapter reports on findings from the qualitative study of the experiences of return-to-work coordinators in New South Wales (NSW), Australia. Under State legislation, Return-to-work coordinators facilitate the return-to-work of injured employees. This study focused on the experiences of return-to-work coordinators who manage this process with injured nurses. The broad aim of the study was to identify, from the

perspective of return-to-work coordinators, enabling factors and barriers in the return-to-work process for injured nurses.

1.4 Background

Nursing injury and return-to-work

There are several important reasons for investigating factors that impact on the return-to-work process for injured nurses. Firstly, while it is difficult to pinpoint the exact incidence of workplace injury for nurses in Australia (due to differential methods of categorising injury for professional groups by compensation reporting systems), there are indications that the nursing profession is significantly affected by workplace injury(6). Data available for the Health and Community Services industry in NSW indicate that this sector had an rate of 16.5 employment injuries per 1000 employees during the 2008/2009 financial year (3). It can be assumed that nurses constitute a reasonable proportion of this group. The 2006 census indicated that the rate of growth in the nursing workforce has decreased slightly since 1986. However, as with other health professionals, demand for nurses has increased. Amongst the health occupations, nurses are the single largest group, with some 219,788 nurses counted as working in 2006 in Australia (24). It is reasonable to assume that, in “raw number” terms, there are likely to be hundreds of nurses affected by workplace injury in Australia at any one time.

The second reason for investigating the return-to-work process for injured nurses relates to workforce issues. There is currently a critical shortage of nurses, nationally and internationally (25, 26). This workforce shortage has been attributed to a range of factors associated with high attrition rates from the profession (27); an historical lack of education places (28) and an ageing workforce (29). The ageing of the workforce is of current concern, with 33.6% of Registered Nurses (RNs) being aged 45-54 years, and 15.6%.being aged 55 and over (29). Some research suggests that as the workforce ages, rates of workplace injury and length of disability will rise(30). The ageing of the nursing workforce coupled with existing shortages, highlights the importance of identifying factors that facilitate the successful return-to-work of injured nurses. Getting injured nurses back to work in a timely, safe and sustainable manner, benefits not only individual nurses, but the health care system including clients.

Anecdotally, there is a view that nursing as a profession represents a challenge to the return-to-work process because of its holistic clinical focus. This holistic focus means that nurses are responsible for all facets of patient care rather than a task-based approach(31). This holistic perspective emphasises the “heavy” nature of nursing work;

that is, that nursing patients involves a high level of manual handling. This manual handling emphasis within a holistic care model it thought to impede the return-to-work of nurses with physical injuries. Further investigation of this assertion is required.

The unique perspective of return-to-work coordinators

In a number of industrialised nations, the workers compensation systems mandate that a designated person (internal or external to an organization) facilitate the return-to-work process for injured workers(30). In NSW, Category 1 must have a designated return-to-work coordinator. Category 1 employers are defined as:

Basic tariff premium exceeding $50,000 per annum

Self insured

Insured by a specialised insurer and who employs more than 20 workers

The RTW coordinator role can be held by an employee or a contractor engaged specifically for the role. The return-to-work coordinators' role focuses on assisting injured workers to return-to-work in a safe and timely manner and includes such duties as developing workplace policies and procedures; developing and implementing return-to-work plans for injured workers; coordinating and monitoring progress in treatment and rehabilitation; and education of workers and supervisors. Return-to-work coordinators in NSW must complete a mandatory two day training course (or equivalent) run by the statutory body WorkCover NSW(32).

Research indicates that return-to work interventions that include return-to-work coordinators results in shorter durations of disability for injured employees and lower costs for employers(33). A recent review of the literature on the role of return-to-work coordinators suggests that successful return-to-work coordination may depend on a core set of competencies, including ergonomic job accommodation, communication and conflict resolution skills, with less certainty surrounding medical knowledge(30). The authors of this literature review indicate that future studies, using qualitative research methods such as focus groups, should explore these competencies and document the influence of specific settings or contextual factors on the effectiveness of the return-to-work coordinators' role(30). The present study directly responds to this imperative. In this chapter we report on findings from focus groups held with return-to-work coordinators in NSW responsible for coordinating the return-to-work of injured nurses.

1.5 Theorising the return-to-work process

The value of the micro-meso-macro social theory framework as an analytic and explanatory tool is well recognised amongst public health researchers (34-36). This systems theory framework provides a unique perspective on where and how "blockages" or "obstacles" occur (37). A number of researchers have argued that there is a need for a theoretically informed, multilevel approach to research on occupational health and safety, and rehabilitation (10, 22, 38-40), including Friesen and colleagues who used a similar framework to highlight the importance of human interaction and organisational structure in return-to-work processes (41).

Close attention to movement in and between micro-meso-macro levels is required. For example, the return-to-work coordinators must understand and negotiate the micro-level world of the injured individual with their particular life circumstances and specific work (team) environment. They must also negotiate the meso-level or organisational context of the employees' organisation, with its specific workforce composition, mode of governance and management structures, and approach to human resource management. Finally they must move through the macro domain which encompasses not only the legislative realm but the many and varied stakeholders involved in the rehabilitation process (insurer, nominated treating doctor and medical specialists, allied health professionals and the statutory organisations). Figure 1 exemplifies the micro-meso-macro realms return-to-work coordinators mediate in their everyday work:

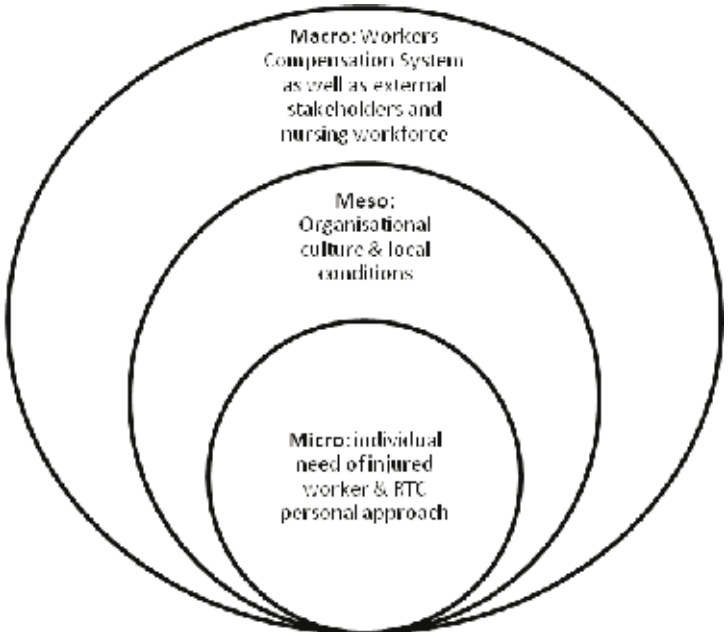

Figure 1 Micro-meso-macro social theory framework.

This multilevel framework should be viewed as a heuristic device or a tool to assist with analysis (42). As a device, the framework assists in identifying enabling factors and barriers in the return-to-work process for injured nurses from the perspective of return-to-work coordinators. It is however, only a “thinking” tool. As a device it does not merely describe the phenomena under study; it brings it into being (43). From a sociological realist perspective, the framework has great explanatory power, in that it effectively highlights blockages and obstructions within the complex workers compensation system. However, to treat the device as a reflection of “reality” belies the complexities of the social world. This is exemplified in decisions about the organisation of particular themes within this chapter. For instance, while gender is a recognised structural issue, that is, it is a recognised key social phenomenon at a macro level; it has been primarily treated at the micro level in this analysis because the thematic flow of the analysis best placed it there. Furthermore, the systems analysis is taken from one perspective – that of the return-to-work coordinators. The perspectives of other stakeholders are equally important and may create very different versions of the micro-meso-macro framework (41, 44).

Despite this theoretical “warning”, it is useful to view the return-to-work coordinators’ role as one of mediator and conduit in and between the levels. Return-to-work coordinators constantly move in and between the multiple contexts or levels in which the return-to-work process occurs with differential levels of influence based on personal and contextual factors. Return-to-work coordinators are simultaneously accountable to the employees, employer and the insurers. In the return-to-work process, Return-to-work coordinators are wedged between the conflicting demands of the injured worker and management or the insurer. They are required to deal with a range of stakeholders internal and external to their organisation, in situations which often require a combination of tenacity, diplomacy, inventiveness and pragmatism. Their constant movement in and between micro-meso-macro levels, puts return-to-work coordinators in a unique position to not only identify obstacles and facilitators to a timely and successful return-to-work, but also to describe the intricacies of doing so.

1.6 Method

Aim

The aim of conducting the focus groups was to identify enabling factors and barriers to return-to-work for injured nurses, from the perspective of return-to-work coordinators.

Study design

The focus group method involves assembling groups of individuals to discuss and comment on specific topics (45). This study consisted of five focus groups conducted in metropolitan and rural areas of New South Wales. The focus groups involved return-to-work coordinators who had responsibility for the return-to-work of injured nurses. While the limitations of focus groups are well recognised (46), the method was chosen because it allowed for interaction between professionals who, while undertaking the same role, had wide variance in their qualifications, work experience, and the type of health organisation in which they were employed. The collective, interactive aspects of the method enabled participants to query each other and prompt explanations of practices, beliefs and attitudes(47).

Ethical considerations

The research was approved by The University of Newcastle Human Research Ethics Committee. The Information Statement forwarded to potential participants explained the voluntary nature of participation and participant confidentiality and anonymity. During the telephone conversation with potential participants the above was re-iterated. Prior to the commencement of each focus group, participants were provided with a consent form and invited to discuss any issues with the researchers. The participants were then invited to sign the consent form. Focus groups were audio recorded and transcribed. Transcripts were “cleaned” of any identifiers (people, place or organisation names). The cleaned transcript was used for analysis. Participants had the right to withdraw from the study at any time including during and after the focus group and could have their comments erased from the final transcript.

Sample recruitment and population

The focus group study used purposive sampling which uses criterion based selection in order to locate rich cases from which a researcher can gain critical insight into the area of study (48). In this case return-to-work coordinators were recruited from a selection of large public, private, and/or charitable health organisations. Large organisations were targeted because under NSW legislation, as Category 1 employers they are more likely to have on-site workplace return-to-work coordinators. Moreover, larger organisations were more likely to employ reasonable numbers of nursing staff; giving the return-to-work coordinators we recruited more experience in dealing with injured nurses. We aimed to capture a breadth of experience across several differentiating factors: Ownership (public, private and charitable); type of health organisation (government health service, private hospitals, aged care facilities and disability services); and

geographic location (metropolitan/regional and rural) correlated with ABS Australian Standard Geographic Classifications (49).

In all, return-to-work coordinators from 25 large organisations located through the yellow pages directory were invited to participate in the study. These organisations were spread across metropolitan/regional and rural areas. A letter with an information sheet inviting participation in the study was sent to the return-to-work coordinator and chief executive officer of the organisation (see Attachment 1, Attachment 2, Attachment 3 and Attachment 4). If no response was received, a follow-up phone call was made a week later, and an invitation to participate was reiterated.

Return-to-work coordinators were required to meet the following eligibility criteria for inclusion in a focus group:

1. Be currently employed as a workplace return-to-work coordinator in either an government health service, private hospital, aged care facility or a disability service;
2. Have worked within the last 12 months on a rehabilitation matter with a registered nurse;
3. Be reasonably proficient in spoken English.

Prior to the commencement of the focus groups, participants were supplied with an information sheet and completed a consent form (See Attachment 3 and Attachment 5).

In all 25 return-to-work coordinators from 14 different organisations participated in the study. These return-to-work coordinators had a mean number of 6 years experience in this role (range 6 months – 15 years). The following table represents the profile of return-to-work coordinators who participated in the study.

Table 1 Study Participants

Location	Employer category	Number of participants
Metropolitan/regional	Public Hospital	3
	Private Hospital	5
	Aged Care Facility	3
	Disability Services	4
Rural	Public Hospital	5
	Private Hospital	3
	Aged Care Facility / Disability services	2

All return-to-work coordinators who took part in this study were employees of the organisations we contacted. No external contractors participated in this study.

Procedure

The focus groups were held during business hours and the return-to-work coordinators had permission from their employer to attend. It was originally anticipated that 3 focus groups would be conducted. However, a further 2 groups were conducted in rural areas to ensure better representation across ownership and type of health organisation. In all 5 focus groups consisting of 25 return-to-work coordinators, were held between September 2008 and October 2008. Three focus groups were held in rural areas and two in metropolitan/regional areas. Focus groups were 1-1.5 hours in duration and were conducted according to a schedule of questions and prompts (see Attachment 6). A moderator and scribe from the research team attended each focus group. The research team consisted of one experienced focus group moderator, who trained two other members of the team in scribing and moderation skills. The positive influence of a skilled moderator on the quality of focus group data has been noted in research (50).

Data analysis

The focus groups were audio recorded and transcribed for analysis and cleaned of identifying information. This includes the use of pseudonyms for people and organisations in this report. The focus group data was initially analysed according to a group meeting process, where the researchers who took part in the focus group study read the transcripts, and coded them according to key themes, categories and issues. The group continued to meet to discuss and debate the categories they had created. This ongoing dialogic process lead to what Kvale calls “inter-subjective agreement” on final codes (51). Key themes were checked for “confirming and disconfirming evidence” within the data set to check the validity of the interpretation (52). As with qualitative research generally, the theoretical framework for the study also informed the interpretative process (53).

1.7 Findings

The micro level - responding to individual need

At a micro or individual level, return-to-work coordinators noted that successful return-to work often involved addressing the unique needs of individual nurses. They were very much aware that, while a sound and consistent organisational (meso level) approach to the issue was essential, it was often the one-on-one attention paid to individuals that made the real difference in timely return-to-work.

While recounting difficult workers compensation cases (or “doozies”), all return-to-work coordinators did articulate a genuine respect for nursing as a profession and the

injured nurses they dealt with in their professional lives. Return-to-work coordinators provided a range of possible explanations why some nurses did not initially report injury, continuing to work until the pain became unbearable (19). They noted that despite widespread education on the need to report workplace injuries, some nurses were sometimes reluctant to report because of their dedication to the job and their team. Return-to-work coordinators thought that some nurses did not immediately report their injury for fear of leaving their work teams short-staffed (particularly where supernumerary provisions are limited or not available). Return-to-work coordinators also thought that some nurses were reluctant to report for fear of getting "a black mark" on their human resources file and because their cultural/linguistic background acted as a barrier to them understanding the importance of reporting an injury (23, 54). There was also speculation about whether older nurses were less likely to report, and continue working with an injury, because they were "tougher" and did not possess the same feelings of "entitlement" to workers compensation as their younger counterparts.

Dealing with the emotional and financial impacts of injury

Part of this focus on individual responses and need, involved understanding and validating the trepidation, fear and frustration nurses may experience as part of the return-to-work-process:

> Our philosophy is…to get to people immediately and say, 'Look, it is a complicated system, it can be quite worrying, so don't panic…We'll take you through everything that you need to know, and you need to ask a lot of questions.' We've got lots of leaflets and things with information, but we just try and make them feel like there's no problem …they can't come to us about…So we just like put people at ease as a first step, because it can be scary. A (workers compensation) claim can be a very scary place to be. [*Clare, Private Hospital, Metropolitan*]

> I think from what the nurses have said to me is that they've suddenly got an injury and they've been dedicated and looking after patients (and) they find it frustrating not to be able to step into that role immediately again. (I give) them permission (and say it's okay to have time to recover, and take it a bit slower. [*Nicole, Private Hospital, Rural*]

A primary fear related to the financial impacts of injury. Once injured, nurses can be financially disadvantaged as a result of receiving only the award rate of pay: they lose out on shift penalty rates and overtime opportunities. Return-to-work coordinators suggested that early and frank discussion of financial matters related to treatment and

rehabilitation was important. Furthermore, nurses needed to be informed about loss of wages in order to make personal and familial adjustments. In some cases, return-to-work coordinators suggested that in some cases, early knowledge about loss of wages acted as an incentive to full recovery:

> (I) think (injured nurses) mostly want to know, are they still going to get paid. That is a huge issue for them…The ones that work weekends and penalties, they only get the base rate, so they realise 'Oh, I'm not going to get my penalties, so therefore I want to get back to work as soon as possible. [*Iris, Government Health Service, Aged and Disabilities Sector, Rural*]

> You lose them (injured nurses) when there's surprises. Be upfront about their wages; upfront about what will be covered (and what won't be covered…We give them a document…It gives them an outline of what we pay for, what we won't pay for, how long the insurer's got to make a decision (and) a rough guideline on wages. [*Frances, Private Hospital, Metropolitan*]

> There's nothing worse than when you're injured and you're off, and you're not getting your correct pay and your entitlements. [*Queenie, Government Health Service, Rural*]

Tailoring return-to-work plans

Return-to-work coordinators emphasised that knowledge of an individual's life circumstances allowed them to tailor return-to-work plans to suit the lifestyle needs and personal circumstances of individuals. This knowledge was acquired by forging an early supportive relationship with the injured nurse(30). A range of individual circumstances that might impede the return-to-work process were identified. For example, while a shift change may initially seem appropriate after injury, this might be reconsidered as the injured nurse has set child care arrangements or commitments to care for children, grandchildren or older relatives. The importance of understanding the impact of personal circumstances on return-to-work is encapsulated in the following quote:

> I suppose the fact that some nurses are used to working across seven shifts and the weekends, and when you look to return-to-work being five days, of course some issues with the arrangements (of) childcare and family personal circumstances arise. That is something we work together through and we'll work around and try to accommodate as much as possible. But certainly from a nurse's point of view, often

> the barriers come from what's going on in their personal circumstances. (You need to work) through that with the worker first before you can actually focus on moving them forwards with their injury. [*Nicole, Private Hospital, Rural*]

Several RTW coordinators suggested that gender might act as a barrier to timely return-to-work, a factor identified in various studies on the rehabilitation process (40, 55-57). Female nurses with caring responsibilities for children, grandchildren or elderly relative, and traditional housework duties, were thought to exacerbate injuries because of the manual demands of these domestic jobs:

> But nurses as a group, I think, have a social risk built in because they're predominantly women. And women when they get home don't stop doing things. I think that has a big impact on injured nurses because you don't go home and go, "Well I'll just be good now and do a bit of home physio and nothing else.' You pick up the kids and make beds and wash and run around like a mad woman…when you really should be resting, and then come back to work. It's one of our biggest problems. [*Wendy, Private Hospital, Metropolitan*]

Return-to-work coordinators considered it important to address, earlier rather than later, how travel arrangements might impact on return-to-work. These personal travel needs included taking into account the distance and time travelled, the type of travel surface or mode of transport, and individual travel arrangements, in order to determine shifts and suitable duties. This was particularly true for injured nurses living in rural and remote areas. Flexibility and inventiveness in addressing individual needs was considered key to a successful outcome, as exemplified by this dialogue between two return-to-work coordinators:

> I often think of one which was a shoulder injury, and they lived on a farm, and they had a four wheel drive, and they couldn't drive the (car)…They could actually work. They were actually a nurse manager role. [*Queenie, Government Health Services, Rural*]

> The first stage of (her) coming back to work was their daughter (who also worked at the hospital gave her)…a lift, and (she) only worked the daughter's hours and then (got) a lift back (home) again. [*Xavier, Government Health Service, Rural*]

Some return-to-work coordinators arranged for injured nurses to be given extra resources (often above those paid for by the insurer) to maintain their connection to the workplace and assist them in their recovery:

(We had a clinical care coordinator) fall out of a car…and fracture her hip…(She was) a single mum, so no other person (could bring her in (to work). (We) sent the IT boys out and set her up at home – she's still working, she's still valued. [*Tanya, Aged Care, Government Health Service, Metropolitan*]

(We had an injured nurse) at one of the big hospitals who had a great deal of difficulty being in traffic…even on a train…or in a car. So we went to extreme lengths to rearrange her so that she…had the least peak period on the road. And we paid for childcare. [*Clare, Private Hospital, Metropolitan*]

(The nurse severed an artery at work on the Saturday). On the Monday I went to see her and said, 'What do you need? What support?' That woman was back in the workplace within four weeks…I think it was because we visited her at home. We provided her with cabs to all her doctor's appointments. (We) offered childcare assistance for her. I mean we offered her as much support as we could give to help her rehabilitation. [*Lisa, Private Hospital, Metropolitan*]

The benefits of case management

Return-to-work coordinators identified a need for sensitivity to the emotional impacts of injury, an understanding of the importance of early and ongoing open communication and support, and an open-minded approach to tailoring return-to work programs to suit the life circumstances of an individual as important factors in facilitating successful return-to-work for injured nurse (23, 30). While not verbalised as such, what return-to-work coordinators are describing is a particular style of case management. This style of case management not only acknowledges the need for timely information provision and support for injured workers, but is fundamentally driven, by a "*collaborative* process of assessment, planning, facilitation and advocacy for options and services to meet an individual's health needs"(58). Certainly, return-to-work coordinators recognise that collaboration with injured workers is moderated by financial, organisational, legal and clinical factors. Nevertheless, the collaborative approach adopted by many of the return-to-work coordinators revealed a preference for negotiation with and empowerment of injured nurses. The empowerment of injured workers is recognised in the literature as important in facilitating successful return-to-work (23, 54, 59). This style of case management, which included a preference for negotiation and empowerment, was generally considered to be very effective by the return-to-work coordinators who took part in our focus groups:

> The key emphasis (in our organisation) is the relationship between the worker and the (return-to-work coordinators), and we try to push that relationship – that we are their advocate, we are here to guide them through the process. [*Zac, Government Health Service, Metropolitan*]

> Communication at the first point and then all the way through it is important…Don't isolate them (injured workers)…Let them think they've got some control in the process…Let them have some buy-in…to make…decisions. [*Frances, Private Hospital, Metropolitan*]

> I think one of the hardest parts, when you mention all the players that are involved, is that sometimes the injured worker is just totally overwhelmed. And it's sort of trying to keep the injured worker focused, and trying to keep them in control of what's happening. [*Helen, Government Health Services, Aged and Disabilities, Metropolitan*]

This "validate, accommodate and collaborate" approach to case management is similar to the "good will" factor identified in international research as significant in promoting timely, safe, sustainable return-to-work (40). Good will is of course generated at many levels of the return-to-work process. At a macro level, good will involves the promotion a workplace cultures where there is blame-free (and guilt-free) reporting of injuries via legislative and educational processes. At the meso level, organisations themselves need to adopt this attitude and marry it with flexible and inventive responses to provision of suitable duties. Acceptance of the legitimacy of claims is a key component of good will (60). At a micro level, return-to-work coordinators identify the need to imbue their role with good will in order to build positive, collaborative relationships with injured nurses:

> I've had some good success making the key focus the relationship with (the) worker. So one nurse I can think of…had been off for eighteen months (with a psychological injury) and I rang him up and I said, 'Meet me for a coffee." He said, 'What do you mean?' "I said, 'Just come and meet me for a coffee and we'll have a chat.' ….(T)he first meeting I did nothing but chat, and he said, 'You're the first person that that's met with me that hasn't had a sub agenda of getting me back to work. So after that…the focus was on the relationship with him, and he started to become personally accountable to me as a person, not me as an organisational

representative. He's now back doing six hours a week, and starting to get back into the habit of being back at work. [*Frances, Private Hospital, Metropolitan*]

The return-to-work coordinator role and its impact on return-to-work

Return-to-work coordinators identified a range of professional qualities that they felt were key to building positive relationships with injured nurses, which in turn facilitated success in return-to-work. Some return-to-work coordinators, who were nurses themselves, thought that that their professional background gave them credibility with injured nurses. Others disputed this and thought that more generic professional qualities were essential to the job(30). These included the ability to openly and empathetically communicate with injured workers, coupled with "broad shoulders" capable of carrying the emotional outpourings of people who are distressed and in pain. Maintenance of confidentiality was considered paramount. Moreover, return-to-work coordinators considered that they needed excellent negotiation skills and tenacity in dealing with the many and varied stakeholders in the workers compensation process, particularly medical practitioners. The ability to withstand being the "meat in the sandwich" between the often differing (and conflicting) interests of these stakeholders was also mentioned. There was also a need to "follow through" with actions so that trust was maintained with the injured worker (61). A proactive, "can do" attitude was considered vital in achieving good results for all involved:

(I) think…we're so proactive. I mean…we get the employee back come hell or high water. It's only in rare cases we don't. And I think because you're there like from the minute something happens and you've followed it through and you're dogmatic about it, you usually get them back. [*Sharon, Private Hospital, Rural*]

A number of the return-to-work coordinators described how the role involved an "after hours" commitment, where injured workers could phone them anytime to receive support. In a few cases, return-to-work coordinators described the stress of having to manage injured nurses who were severely depressed and even suicidal due to injury. Indeed, the stressors placed on return-to-work coordinators cannot be underestimated. return-to-work coordinators undertake a specialised form of "emotional labour" where they are often required to manage high levels of distress and conflict (62). The role often involves dealing with degrees of conflict from both internal (managers, supervisors, team members) and external stakeholders (insurer, treatment providers, union representatives). Moreover, the return-to-work coordinators role is itself imbued with a conflict of interest (14, 19). The return-to-work coordinators in our focus groups were employees attempting to represent the interests of both injured workers and

employers. They suggested that anyone taking up the role needed to be able to manage conflict and the emotional impacts of the job:

> And when things aren't successful, or are difficult, don't take it personally because there are a lot of processes beyond your control. [*Wendy, Private Hospital, Metropolitan*]

The complexity and demands of the return-to-work coordinators role are not commensurate with the formal training required to undertake the role. In NSW, return-to-work coordinators are required to undertake a two day training course in order to do the role(32). Access to professional development is haphazard. While some return-to-work coordinators in our focus groups were very experienced, had professional qualifications and were well situated within a supportive team environment, some were isolated, inadequately resourced and supported and bereft of professional development opportunities. These issues will be explored further in the next section on meso-level organisational culture.

The meso level: organisational culture and local conditions

The meso or mid level is situated between the realm of everyday interaction between individuals and small groups (micro level) and the realm of broad, societal and institutional forces that shape responses to return-to-work (macro level). In this model, the meso-level is conceptualised as the organisational setting in which return-to-work occurs, and how this setting is shaped by local conditions. This section focuses on the influence of organisational culture and structure on timely, safe and durable return-to-work for injured nurses, and the importance of local conditions in shaping process and outcomes.

Variations in organisational models for return-to-work

The return-to-work coordinators we interviewed came from a variety of organisational contexts including public and private hospital systems and public and private organisations operating aged care facilities and disability services (residential and community-based). The focus groups highlighted significant differences between organisational approaches to return-to-work, including the model for return-to-work within the organisation; managerial and supervisory attitudes; and resourcing. Some studies have attempted to crack open the "black box" of organisational culture in order to understand how it impacts upon return-to-work (63-67). For example, Baril (64) and colleagues found that early return-to-work was determined by the structural characteristics of companies (size and sector), but that significantly more research was required. Furthermore there is limited research on organisational factors and return-to-

work in the health care sector (11, 12, 68). Within this section we consider return-to-work coordinators descriptions of how their organisations operate in terms of return-to-work. These insights are particularly important given the return-to-work coordinators we spoke to worked in the health care sector where organisations are differentiated by ownership (public, private, or charitable sector); sector specialisation (for example hospital, aged care and disability services); location (metropolitan/regional versus rural); and different workers compensation insurance arrangements (WorkCover scheme agents, self-insurers, specialised insurers)(69).

The model for integrating return-to-work within organisations varied significantly. For example, return-to-work coordinators from one Government Health Services described how they operated within an integrated occupational and health and safety (OH&S) model, where return-to-work was just one aspect of their broader OH&S duties. In this model, they not only responded to the needs of injured nurses but used their investigation of the cause of the injury as an opportunity to improve workplace safety:

> (We) focus on return-to-work for the injured worker and OH&S….I suppose the OH&S is looking at why the injury occurred and doing some preventative stuff so we don't have further injuries. (We can identify) if there's a particular fault in our OH&S system. [*Alice, Government Health Services, Aged and Disabilities, Metropolitan*]

This integrated approach was not, however, the norm. Indeed the variation between organisational approaches to return-to-work was considerable. Organisational approaches varied from well-resourced and highly supported return-to-work systems to poorly resourced return-to-work coordinators who were simply unable to do the job effectively due to their part-time status or because the return-to-work position was just one of many "hats" or roles they assume in the workplace.

The contrast between organisations is exemplified in the following organisational snapshots. One private health care provider had established a centralised return-to-work system that provided fast, ongoing support to their return-to-work coordinators operating in regional or rural settings (away from the metropolitan head office). Within this model, return-to-work coordinators were connected electronically and personally to head office, with the State Manger of the section supporting them with regular visits to their site. This particular organisation had made a substantial investment in return-to-work "tools" such as generic critical job demand descriptions designed to assist doctors in assessing the return-to-work potential of injured workers. The high status, and concomitant resources, given to within this organisation can be contrasted with other organisations which relegated the area to a marginalised human resource function. This is exemplified by one not-for-profit organisation which, despite having many

hundreds of employees, relegated the return-to-work coordinators position to a part-time role in which the return-to-work coordinators was also expected to undertake OH&S, payroll and other human resources duties. It was not unusual for return-to-work coordinators to have "several hats" or multiple roles within an organisation. For some this was not considered an issue. While others considered that 'juggling many jobs" detrimentally affected their ability to effectively perform the return-to-work coordinators role. Adequate resourcing of the return-to-work coordinators was considered key, particularly in large, complex or multi-site organisations. Adequate resourcing meant that full-time return-to-work coordinators could concentrate on timely and innovative case management of injured workers instead of "juggling" competing job demands and large workloads:

> (Our organisation) took on a state-wide focus four years ago. (P)rior to that …I was the return-to-work coordinator for 300 odd claims…(So after the state-wide focus when they) actually reviewed the process. We now have three positions to look after those claims. So that's good. [*Helen, Government Health Services, Aged and Disabilities, Metropolitan*]

> I'm managing about 700 workers at the moment…We were pretty similar to other return-to-work coordinator situations where they have a predominantly full time role, and the return-to-work coordinator (is) an additional role to their full time job. So we've implemented a full time return-to-work coordinator role and that seems to have piloted well over the last (year or so). The return-to-work rates are now very high within our service and the focus of the employer group is retaining the workers. [*Nicole, Private Hospital, Rural*]

While some return-to-work coordinators felt isolated within their organisation and from networks of peers outside of their organisation, a number were fortunate enough to operate within a supportive team environment. These return-to-work coordinators remarked that there were numerous benefits to this. For instance, other team members and immediate managers could not only lessen the work load but offer ongoing personal and professional support, particularly with emotionally difficult cases. Team work could also produce positive and innovative solutions to difficult return-to-work cases. As one return-to-work coordinator suggested:

> That's one of the strengths of the unit (I work in)…We have regular meetings as a group and we look at the difficult (return-to-work) cases as a group…There's nurses around the table, but we've got (a) physio, we've got OTs and we've got people from non-medical backgrounds as well. So everyone (in the team) brings different ideas

> to the table…So I think that's another strength of the Unit, is that ability to share. [*Alice, Government Health Services, Aged and Disabilities, Metropolitan*]

The ability of return-to-work coordinators to effectively perform their role was also influenced by the level of support they received from executive and supervisory management within an organisation. The importance of managerial and supervisory support for return-to-work is supported in the research literature (9, 12, 65). Return-to-work coordinators considered managerial support key to getting out the return-to-work message. They noted that when executive management support the return-to-work philosophy this usually results in adequate resourcing for the return-to-work coordinators role and investment in the development of "tools" to assist timely, safe and durable return-to-work. For example, organisations committed to the return-to-work philosophy invested in the development of substantial return-to-work policies and procedures; information packages for injured workers; generic critical job demand descriptions to assist treatment providers; education and training programs for supervisors and staff; and electronic reporting systems that allowed for almost instant notification of incidents. This latter point is significant as there is evidence to suggest that, early supportive communication is key to successful return-to-work (10, 70).

Secondly, the commitment of executive management imbues the role of return-to-work coordinator with legitimacy, something that was required when dealing with supervisory level managers who were less than supportive of injured workers. This is illustrated in a story told by one return-to-work coordinator who was required to intervene on behalf of an injured nurse who, while recovering at home, was contacted by her immediate supervisor and performance managed:

> How silly would it have been when that (supervisor) rang her up and performance managed her over the phone…But then again how crucial is it that you've got senior management support to say, OK we now need to sit down with that (supervisor), so that the situation doesn't get repeated. [*Jeremy, Government Health Services, Metropolitan*]

The significance of executive management support for a return-to-work approach is also captured in the following quote:

> (Our) chief executive says, 'This is how it is.' So we're coming from a very strong point (with our commitment to return-to-work) and I think that's so important…. There's a policy behind it. (It) isn't just (return-to-work coordinators) going on and saying this is what we're going to do. I suppose I do negotiations with (supervisory management)…So (the) worst possible scenario is that the (injured) worker gets the flak or the negativity from (their supervisor)….You know we really need to have got

> through those barriers. And they can yell and scream at me as much as they like…So long as by the time the worker get there it's OK." [*Ursula, Government Health Services, Rural*]

Thirdly, return-to-work coordinators point out that the philosophical and financial commitment of executive management appreciably contributes to the development of an organisational culture that valued a return-to-work approach. A key aspect of developing this culture is the provision of meaningful suitable duties for injured workers:

> I'd say I noticed in the three years, I've been doing this role…(that there has been) a big change. We now have a culture, I mean culture is an easy word, but we do have a culture within management that suitable duties are a given…We have a culture I think in our workers now that suitable duties are going to be looked at. And there's an obvious culture out there with workers and worker's comp (that) you hit a certain age, you go on compo, they retire you or you just get paid forever, or you just sit around and do nothing. And I think we are losing that culture, which is great. [*Xavier, Government Health Services, Rural*]

Suitable duties

The importance of work accommodation or suitable duties is documented in the research literature (9, 71). The provision of suitable duties allows injured workers to return to the workplace in a timely manner. Research indicates that longer durations off work, lower the chances of workers returning to their pre-injury duties (12). All the return-to-work coordinators we interviewed were committed to the provision of meaningful suitable duties for injured nurses. As one return-to-work coordinators remarked, "Our guide is that we always have suitable duties." Some organisations had invested in "tools" to reinforce the necessity of suitable duties. For example, one organisation had a register of suitable duties attached to each position description. They used this with treatment providers to ensure injured workers were provided with suitable duties. Other organisations had developed systems where injured nurses carried their work accommodation schedule with them so that restrictions were clearly specified should the injured nurse be challenged by supervisors (and work colleagues). Innovative, flexible and meaningful work accommodation for injured nurses was considered vital in aiding recovery. Return-to-work coordinators maintained that early provision of suitable duties helped alleviate some of the negative feelings associated with workplace injury:

> And (I) talk to them from day one, about the importance of coming back on suitable duties as well. So that they get that in their head that it's not about being off work for

> a long period of time. It's about actually trying to come back to work and how we can accommodate them with their injury no matter what the restrictions are. [*Barbara, Private Hospital, Rural*]

> I mean the longer you're out the harder it is to come back. People need to see you back contributing. You need to feel good about yourself. People are worried about losing skills. They are petrified about coming back and losing skills, which is where light duties are so important. To get people back in a capacity that's manageable. (It's) giving them self worth. [*Xavier, Government Health Services, Rural*]

The return-to-work coordinators we spoke to all stated that the suitable duties they provided to injured nurses were nursing duties. Some of these were clinical nursing duties while others were administrative tasks commonly undertaken by nurses in their everyday work. Some return-to-work coordinators considered it important to provide a mix of nursing administrative and clinical suitable duties:

> I think …when nurses start to get disgruntled is if their restrictions don't allow them even to do some light clinical duties. [*Patricia, Private Hospital, Metropolitan*]

This practice of return-to-work coordinators in providing suitable nursing duties, administrative and clinical, contradicts anecdotal suggestions that injured nurses are often given less meaningful, non-nursing suitable duties. This goes against the idea that the holistic approach to nursing (or total patient care) precludes the return of nurses to the clinical coalface:

> For a registered nurse…no matter what the injury is, unless they've fallen and fractured both wrists, they can still do admissions, discharges, patient education, observations, medications, documentation. For an enrolled nurse, sometimes it gets a little bit harder, because often they're doing the more physical tasks; but they can still do patient education, admissions, discharges, observations, feeds…and they can spend the time with the patients. We have a lot of follow-up…discharge phone calls…And I sell it to them by saying, 'You know when you sit there and you say, we don't have time to do this. Now's your time to do it. You don't have time to go through…your drug cupboard. You've got time now because you've got a couple of extra hours on the ward'. [*Frances, Private Hospital, Metropolitan*]

Return-to-work coordinators expressed varying opinions on the importance of keeping injured nurses within their regular work teams and shifts. Some return-to-work coordinators thought that, where possible, it was important to maintain the regular team/roster work patterns of the injured nurse in order to minimise disruption to lifestyle

and allow nurses to undertake their familial caring commitments. Furthermore, keeping nurses within their usual team provided important levels of collegial support. The significance of psycho-social support for injured workers in the workplace is acknowledged in research (72). Some return-to-work coordinators stated while it was easy to provide a range of accepted nursing duties, that they only allowed weekend or night shift work under particular circumstances:

> We don't usually put them on weekends, unless by chance they ask for a Saturday…Because we're sort of an extended family for our staff, because we know them all so well, we tend to be a little bit more lenient. And because I work shift work and I do weekends…it's not such a hassle to have them doing the non-heavy work at a weekend because there's still admissions, discharges, ECGs. And they love learning something new, especially enrolled nurses…They get to do medication rounds more often when they're on return-to-work…(our injured nurses) are still doing nursing things…They're not doing admin. They're on the ward. They're not put in any other department. [*Barbara, Private Hospital, Rural*]

Return-to-work coordinators suggested that there are a complex range of factors come into play when making decisions about keeping injured nurses with their team on their regular roster. Some return-to-work coordinators felt that placing nurses with physical injuries on their usual weekend or night work put them at risk as these shifts were staffed on a "skeleton" basis and injured nurses may feel they need to do "heavy" jobs that could exacerbate their condition. Others felt that some injured nurses needed close supervision (supplied on Monday to Friday shifts) in order to prevent them exacerbating injury. Others considered that it was the nurse's level of qualification or specialisation that affected the provision of suitable duties and the decision to keep them on the usual teams and roster. Return-to-work coordinators remarked that in the case of psychological injury due to workplace bullying, it was often difficult to maintain the worker in their original work team and roster.

The issue of educational qualification and suitable duties prompted different responses from the return-to-work coordinators. There was agreement that enrolled nurses (ENs) and assistants in nursing (AINs) were likely to do the lifting work in clinical situations, with registered nurses generally undertaking supervisory roles. Some thought that placing ENs and AINs with physical injuries back on their wards presented a challenge, as they were unable to lift (a key part of their job). It should be noted that while there was much talk of "no lift" policies within their organisations, there was also an acknowledgment that physical injuries did occur because of lifting and that ENs and AINs were at increased risk of this because they undertook the "heavier work". This

area certainly warrants further investigation as there is a fundamental tension between the “no lift” discourse and the lifting practices of clinical settings which are influenced by a hierarchy of nursing qualifications. Further research is required on the provision of suitable duties for ENs and AINs as there was a general consensus that the provision of suitable duties for these types of nurses was more problematic than for RNs. There has been a call for more research to be conducted on the situation of less qualified workers, particularly in relation to risk and the workplace(40). Increasing our understanding of the qualification hierarchies in the nursing profession and their possible impact on risk and the return-to-work process is vital.

Return-to-work coordinators offer a fascinating insight into the way nursing specialisation can impact on provision of suitable duties. Nurses in intensive care units (ICU) and operating theatres were considered especially difficult to find suitable duties for as they represented a kind of separate culture within clinical settings. return-to-work coordinators commented that these types of nurses were used to working within their own team, roster and clinical milieu making it difficult for them to undertake suitable duties outside of their usual work context. Return-to-work coordinators conceded that they often had to “think outside the square” to accommodate ICU and theatre nurses, but that it was worth being innovative as it kept the expertise of these nurses on site:

> I’ve had the issue where in ICU…I’ve had a highly specialised nurse who had a back injury who couldn’t do any lifting, but we needed her mental skills and her knowledge within the unit. So what happened is we actually brought an EN in to work with her, who did all the physical work, but she was there with the knowledge to be able to function. So you know, sometimes we can’t afford for these people not to be in the workplace either. I mean, we are limited in the knowledge, so we can’t afford to lose the knowledge. But we need to support them, that we’re not, because sometimes people will work outside their limitations because they feel the workplace needs it, they hate to see their co-workers overdoing it so they push themselves past their limitations. [*Queenie, Government Health Services, Rural*]

There were a number of other specialised areas of nursing which were mentioned as offering challenges to the provision of suitable duties within the nurses existing work context. These included community nursing where physical injury restricted the extensive car travel required by the job and aged care or disability nursing where physical assaults by clients posed a risk to nurses with physical injuries.

Broadly speaking, psychological injuries posed unique challenges to provision of suitable duties. Return-to-work coordinators considered this area to be fraught with difficulties including their inability to discuss the issue with the injured workers

colleagues, who may be less supportive than if the injury was physical. Cases of workplace bullying were considered exceedingly difficult because the injured worker was often unable to return to their team for suitable duties. Psychological injury claims were thought to often cause a ripple effect, where all parties, the injured nurse, work colleagues and supervisory management, were affected. There is an urgent need to further investigate the challenges faced by all in this area. The complex factors impacting upon return-to-work for psychological injury is captured in this vignette:

> I look after (aged care facilities) and I mean they only have one nurse on at night….I recently had one nurse that was assaulted fairly badly by a client when she was on night duty, and it took some time for help to get to her, so it was a fairly traumatic thing, as you'd imagine. …The assault was both a physical and psychological injury…Like that was an RN who's been (a nurse) for 25-30 years. She found it difficult to admit that psychologically she wasn't coping. She really did…because she had nursed these types of clients for many years, so she found it very hard to admit…But it's really hard to get through, because of the amount of time that she's been nursing, and that she really doesn't want to give in. And getting her to agree to go to (physical and psychological) treatment is another issue. (*Helen, Area Health, Aged and Disabilities, Metropolitan)*

Providing supernumerary positions

A key mediating factor regarding the provision of suitable duties was the organisation's financial commitment to supernumerary positions. This involved the provision of a budget to pay for the injured nurse to undertake suitable duties without creating a burden on their work mates. Research indicates the importance of supporting return-to-work without disadvantaging co-workers and supervisors(40). Most return-to-work coordinators viewed the provision of supernumerary positions as important in facilitating return-to-work for injured nurses, as it allowed these workers to remain with their regular team and on their usual roster. There were widely divergent supernumerary practices within the organisations represented in our focus groups. For example, some organisations fully supported the supernumerary decision making of their return-to-work coordinators as it was seen to increase psychosocial support for injured workers and alleviated the pressure their colleague may feel to "pick up the slack." Others organisations provided supernumerary positions if the injury was "finite" or likely to have a fairly quick recovery time. Still, others had decentralised decision making where the manager of the unit decided, on budgetary ground, whether a supernumerary position was offered. The following quotes illustrate some of the different organisational positions on the provision of supernumerary positions:

> I say to the managers, even while the person is still off, I anticipate that this person will come back on a supernumerary basis. And I say it, even if the nursing admin says, "Well, we can't afford that.' The reality is they can, because if they don't then the premiums push up. It's actually cheaper to bring the person back on supernumerary, than not to have them back on at all. [*Zac, Government Health Services, Metropolitan]*

> I leave (the supernumerary decision) to the managers. The managers have to have some buy-in and that's the manager's decision to make. They're the ones who have to wear…the cost of the budget. [*Frances, Private Hospital, Metropolitan*]

> Nursing in (our organisation)…is the only area that does this supernumerary thing for people in suitable duties. All other departments don't get that luxury, so they just run short. [*Glenn, Government Health Services, Aged and Disabilities, Metropolitan*]

Rural issues

Organisational approaches to return-to-work are influenced by local conditions. The geographic location of an organisation can have a profound effect on a range of factors linked to successful return-to-work. This is particularly true for organisations operating in rural or remote locations. For example, injured workers in rural or remote locations may have to travel great distances in order to be diagnosed and treated:

> You know some of the people that live in really remote locations are much harder to get to rehab, because…the treatments not accessible. But where it is accessible, there's a huge amount of travelling. We've had people who've had to travel basically a day to get to physio, and then a day home, which undoes all the good the physio does. [*Queenie, Government Health Services, Rural*]

As stated above, travel to treatment providers can involve long journeys that exacerbate the injury. Indeed, trying to get injured nurses back to work is sometimes problematic as they are required to travel long distances under less than ideal conditions:

> People are travelling 50kms on dirt roads to get to work. (T)he car trip is a killer. [*Xavier, Government Health Services, Rural*]

> We had one (nurse) with an ankle injury that couldn't drive. But it turned out that the cost of getting her driven to work each day (because of the distance) was almost

> exactly the same as what her wages were…(A)nd there seems to be other issues with actually getting her (to work). Like you can't send another employee out to pick them up…because then there are other issues involved…She ended up, she had a friend who could drop her by. Yeah, that was a bit tricky'. [*Kelly, Government Health Services, Aged Care and Disabilities Sector, Rural*]

There were differing views amongst return-to-work coordinators about whether working in smaller, more isolated communities created better relationships with general practitioners (GPs), who generally diagnosed and treated injured nurses. Some return-to-work coordinators thought that they were able to forge closer relationships with GPs because of the small communities in which they worked and that these relationships supported a timely return-to-work ethos. Others however did not think that rural GPs were any more accessible or supportive than their urban counterparts. In fact one return-to-work coordinators remarked that there were some GPs in her area that had a grudge against her employer and were therefore less likely to support timely return-to-work.

Most return-to-work coordinators working in these settings agreed that they needed to do everything possible to retain their injured nursing staff as there was a dire shortage of nurses in these areas. Unlike their urban counterparts, most did not have the option of calling in agency nurses to fill the gap if someone was injured. Some return-to-work coordinators felt that because their organisations were located in rural and remote areas, that they adopted a different attitude towards return-to-work and that this was intimately linked to the issue of staff retention:

> The other aspect is from an employer perspective, because I've worked in the city…and lots of different regions. The readiness for the employer to judge a claim by its premium impact is not prevalent from what I can see in this region. To the greater extent insofar as that the prime focus of the employers (here) is that, you know, we've got this pool of available staff, this pool of expertise, we've invested this amount of money with our staff, we've invested time, we're a family, you know. They are about retaining staff, looking at every way possible to have those staff come back to work and stay with them, and the impact too on the families, the community, the small region and the feedback from the community about that employer, with regards to not retaining staff, you know. There are all these sort of corporate issues that they look at, and the onus in these regions, that I can see, is that employers are more ready to have a look at the best way they can retain. In the city, because there are so many other employment opportunities available in varied amounts, you know, if they're not, going to complain here, and they're not happy to do this role, they can

> get a job elsewhere. But, you know, that tends to be more readily so in the city. [*Nicole, Private Hospital, Rural*]

The focus groups conducted in rural areas highlighted the isolation of some return-to-work coordinators. The focus group was the first opportunity for some return-to-work coordinators to connect with other return-to-work coordinators. These return-to-work coordinators were not in contact with other return-to-work coordinators either within their own organisation or from other organisations. A lack of peer support was considered detrimental to ongoing professional development, affecting knowledge and skill acquisition and the ability to innovate. This in turn was thought to impact on the effectiveness of the return-to-work coordinators role. Given the demands of the role and the pivotal part it plays in the return-to-work process, closer attention needs to be paid to professional development, peer support and mechanisms to promote ongoing education and innovation in the field.

The macro level - negotiating with external stakeholders and issues with the nursing workforce

The macro level deals with the broader social (or structural) realm in which individuals, groups and organisations are situated. In our analysis this includes the legislative environment and the range of external stakeholders and institutions involved in the return-to work process. The macro level analysis also takes into account structural issues such as workforce composition and change.

Negotiating the workers compensation system

Return-to-work coordinators conceded that they found the workers compensation process, with its many and varied stakeholders and detailed legislative requirements, complicated and often difficult to negotiate. The complicated nature of the workers compensation system has been noted elsewhere, mainly by injured workers (23, 59). Return-to-work coordinators observed that nurses often found the system confusing and frustrating. The combination of a painful injury, loss of income and having to come to terms with a complex compensation system involving multiple stakeholders, and delays in treatment, increased the stress on nurses:

> The main barrier is that they (injured nurses) want everything to happen like that and you have to explain that…for certain procedures, I have to get the OK for it (from the insurer)….Say it's some specialist they may have to go to that the insurance company has had trouble with in the past…. They don't want (the injured nurse to) go to this person because he overcharges, but then you have an

> orthopaedic (doctor) who has referred (the injured worker) to this person and you know. (Injured nurses) do find this difficult. [*Barbara, Private Hospital, Rural*]

For those suffering from a psychological injury, the workers compensation system often created further frustration and confusion (73). For example, once a claim is lodged for a psychological injury, the insurer sends the injured worker to a psychiatrist for an initial consultation to determine liability. This often caused confusion for the injured worker who thought they were seeing the psychiatrist for treatment purposes. Return-to-work coordinators remarked on the fundamental tension between the injured nurse's desire for rapid and effective therapy to treat the psychological injury and the delay that liability determination created. Confusion regarding treatment, existing mental suffering and financial duress can combine to exacerbate the nurse's mental condition. Some return-to-work coordinators remark that, when dealing with psychological injury, it is best to be "honest" in explaining the complicated process so that negative impacts are mitigated:

> Those (initial psychological) assessments are purely about liability. What they're saying is, this person meets a DSM-IV[1] (and) then the next bit is, if they meet the DSM-IV, the workplace was a significant contributing factor to that, or it's a constitutional issue and it's not work related. They don't offer, they should never offer opinion on treatment or anything, because it's very clear in their opening statement they are not a treatment, they are purely looking at liability. And that's where the worker's get really confused, because obviously they think they're going to a psychiatrist, you know, there's going to be some outcomes, but it's purely from an insurance perspective, it's a liability issue only….It has a negative impact on (injured workers)….(W)e tell people up front… so if I then have a psychological injury, (they) don't feel like, 'I'm being picked on.'…I say these (initial consultations) are fact finding issues around liability. It's an insurance company's way of determining whether they are liable or not liable for this claim. It still has a negative impact but I think if you're honest, it mitigates that negativity. [*Queenie, Government Health Services, Rural*]

The relationship between different return-to-work coordinators and their insurance companies was variable, complex and riven with conflict and tension. Some return-to-

[1] The Diagnostic and Statistical Manual of Mental Disorders (DSM) is published by the American Psychiatric Association and provides a common language and standard criteria for the classification of mental disorders. The last major revision was the fourth edition ("DSM-IV")

work coordinators felt that the insurer drove the process, sometimes to the detriment of the return-to-work process. Other return-to-work coordinators took a very proactive approach, "managing" the relationship with the insurer. They did this to maximise the best outcome for the injured worker and iron out tensions between insurer and return-to-work coordinators roles. These tensions sometimes resulted in unnecessary "angst" for injured workers:

> "We have a bit of a different emphasis. The key emphasis is the relationship between the worker and the rehab coordinator, and we try to push the relationship that we are their (the injured worker's) advocate. We are here to guide them through the process. We find a lot of conflict between us and the insurer, because claims analysts from the insurers ring up and say (to the injured worker), 'I'm managing your case', and that's not true. They are managing the injury management; we are managing the return-to-work rehabilitation, and workers can't tell the difference. So when somebody on the phone rings up and says, 'I'm from the insurance company and I'm managing your case." They immediately think (that) this person, whom I've never met and is only ever on the phone, (is) the one calling the shots. So we always make an effort…to contact the worker ASAP and say, "I'm the one that will be supporting you.'…And we never over complexitise (sic) the process'. [*Zac, Government Health Services, Metropolitan*]

Doctors and the return-to-work process

Research suggests that the care provided by the nominating treating doctors is key to the successful rehabilitation of injured workers (73, 74). However, Australian research conducted in the 1990s points out that there are often conflicts between return-to-work coordinators, workplace rehabilitation providers and nominating treating doctors (75). Our focus groups indicate that fundamental tensions still exist between doctors and return-to-work coordinators. Nominated treating doctors, in particular general practitioners (GPs), were described as a key barrier in the return-to-work process. Only a couple of return-to-work coordinators indicated they had positive relationships with doctors. Generally, return-to-work coordinators thought that doctors had minimal knowledge of the workers compensation system and were poor at completing the required paperwork. Some GPs were thought to deliberatively obstruct the return-to-work process (76). Return-to-work coordinators bemoaned the fact that there were no consequences for doctors who did not comply with the spirit and legislative requirements of the workers compensation system:

> The hardest thing and how it's negatively affecting nurses, is you see people's lives destroyed….And the hardest thing is the GPs that just will not return people to work.

> And it's the worst thing in my job….There are doctors in (a specific suburb) that are WorkCover accredited (that) won't answer calls (and) will never return a worker to work. I've got one; she's been off work for three years. She's got a neck strain. And it does not matter what I do…I know that's a waste of my time. (T)he GP will not respond to the WorkCover, IMEs[2] and… all that sort of thing, because they think they're fantastic, and from my side of things that's frustrating, because our premiums have got to go up to pay for this strained neck, but the other thing is that nurse's life is destroyed. She's off work, she's now saying that she's in permanent pain, she's going to pain clinics, she's on an enormous amount of medication….(She) won't ever come go back to work. She's 45, 46….Yes I'm frustrated…and that's life, but the other side of it is, that woman's life is destroyed because that doctor has, no accountability under the WorkCover scheme. [*Jeremy, Government Health Services, Metropolitan*]

Some return-to-work coordinators thought that family GPs were the most reluctant to support timely return-to-work. Return-to-work coordinators argued that family doctors had long term relationships with the injured worker and were therefore more likely to recommend extended time away from work in order to "protect" their patient (76):

> I've had the experience where a company that was very generous (to an injured worker), who had an injury but there was a psychological component to it. And the GP, because they had a long term relationship, was very protective, which was understandable, of her patient. And she said to me, 'Companies like yours just chew up people and spit them out, and that's what you're trying to do.' And it really wasn't the case at all, because we'd done everything we could for this lady. [*Wendy, Private Hospital, Metropolitan*]

In order to manage the perceived recalcitrance of doctors, some employer organisations had developed relationships with particular general practitioners and devised rapid payment mechanisms for these doctors. They recommended these doctors to their injured staff. Some organisations had devised information packs to promote the return-to-work message to doctors treating their injured workers. This paperwork included lists of suitable duties, critical job demand sheets or functional assessment tools, all designed to alert the doctor that the employer supported timely return-to-work. Despite this, return-to-work coordinators thought that some injured nurses gave the impression to their treating doctor that there were no suitable duties

[2] Independent Medical examiner (IME)

available. Moreover, some doctors continued to believe that all nursing was "heavy work" and that there were no "lighter duties" on offer:

> If I do have a person that has been declared unfit, and I think that they can return-to-work, I will then refax or try and contact that doctor and say look, we've got this that we can offer, make it a very reasonable offer, and then see whether I can get that certificate changed. Often workers will go to the doctor and say, 'Oh look, I couldn't possibly, there are no light duties in my job.' [*Kelly, Government Health Services, Aged Care and Disabilities Sector, Rural*]

> Speaking for myself I think one of our major barriers is the actual doctors themselves. The treating doctor still sees that all a nurse does is wipe people's backsides and help them to the shower and back, and when you start saying look, there's patient care, there's admissions, there's discharges, there's paperwork, patient care plans, we've got quality improvement stuff going on, there's education stuff going on. But trying to actually physically sit a doctor down and say look…if you tell us they can't lift more than 5kgs and they can't be on their feet for more than an hour at a time, that's fine, we'll then we'll work with that. But you know, give us a bone so that we can go and actually see if we can modify the workplace or find these duties. [*Xavier, Government Health Services, Rural*]

Many return-to-work coordinators had adopted the strategy of accompanying injured workers to their initial medical consultations with treating doctors. They did this in order to understand the diagnosis and relay their return-to-work message, in person.

> There are some GPs…who still grapple with the WorkCover system, and really don't like it, really have an opinion that the employers are never supportive of their workers. So it's an educative process, and that's why we've chosen to attend the doctor's visits certainly in the first few sessions, to let the doctors know that our agenda is to keep the employment pathway open, keep the duties flowing the best we can, you know, get a clear understanding of the diagnosis so that we're all on the same page and we can help the worker get back to work. [*Nicole, Private Hospital, Rural*]

According to return-to-work coordinators the practice of accompanying injured workers often created friction between return-to-work coordinators and the nominated treating doctor who saw it as intrusive and an attack on professional judgment. Indeed return-to-work coordinators, who were not trained as nurses or allied health professionals, remarked that they often found doctors rude and difficult to communicate with, while some with medical backgrounds remarked that this was to be expected:

> I attended one session with an employee. The doctor felt I shouldn't be there. And I said, well I feel that this is her duties. You haven't sort of done much with her return-to-work…Why haven't you signed off (one her return-to-work plan) and he just looked at me as if to say – you're nothing…So that was a really bad experience…(H)e said to me, 'You wait outside. I want to talk to this person first.' I said "Fine, not a problem.' And then he sort of asked me to come in and completely ignored me…So I got onto the insurance company and said that I found that the doctor was not cooperating…The insurance company agreed with me and so followed it on from there'. [*Iris, Government Health Services, Aged and Disabilities Sector, Rural*]

We have been unable to locate any research on the effectiveness of the practice of return-to-work coordinators or workplace rehabilitation providers attending doctor's consultations with injured workers. Many return-to-work coordinators felt that despite the tensions it often produced, the practice was beneficial in promoting timely return-to-work. The effectiveness of the practice and its impact on injured workers warrants further investigation. At face value it is difficult to make the case that injured workers would benefit from attending medical consultations which were tense or even hostile, without evidence of any benefits.

Return-to-work coordinators complaints about doctors highlight some fundamental areas of conflict that exist within the return-to-work framework. There is conflict inherent in the role of return-to-work coordinators. The multiple strands to the role; injured worker advocate, case manager and employee, are sometimes at odds, even when return-to-work coordinators themselves attempt to balance out conflicts of interest. Conflict is most apparent when the stakeholders involved in workers compensation are unsure about diagnosis or disagree about the best path to recovery. In workers compensation cases, doctors not only treat patients, but also advocate on behalf of them. Doctor's advocacy is sometimes at odds with return-to-work coordinators advocacy, the latter of which is called into question given that return-to-work coordinators are the employer representative. Further conflict arises around notions of judgement, roles, and the place of cooperation, an area intimately linked to the status of professions (77). Return-to-work coordinators use their professional judgment to tailor return-to-work plans for injured workers within medical restrictions provided; their right to use this judgement is embedded within the legislative framework of workers compensation, however despite this, the status of this judgement is sometimes challenged by doctors who, with their high professional status and concomitant specialist knowledge, can effectively delay the return-to-work process (78).

Using professional judgment to prevent injured workers returning to work is a legitimate part of a doctor's job. So too is protecting patient privacy and confidentiality (76); hence the possible reluctance of some doctors in allowing return-to-work coordinators to attend patient consultations. However, the point that return-to-work coordinators make, and it is one worth considering given the legislative framework in which they operate, is that there appears to be no accountability for some doctors who, at best, refuse to engage with the idea of suitable duties, and at worst, actively obstruct the return-to-work process. It appears that the only option return-to-work coordinators have is to put pressure on doctors via the insurance companies. This produces variable outcomes. Without resolution, conflicts between return-to-work coordinators (or employers) and doctors can seriously undermine the case management or best practice approach to rehabilitation. Understanding the interplay between professional judgement and status is vital if inter-professional cooperation solutions are to be devised in response to the long standing "doctor problem" in the return-to-work literature (76).

The nursing workforce

The focus groups highlighted a number of structural workforce factors affecting return-to work. Return-to-work coordinators were aware of the ageing of the nursing workforce, although there were differing opinions on whether older nurses were more prone to physical injury than younger ones. Some return-to-work coordinators thought that older nurses were more likely to be physically injured because of a combination of their age and their reliance on outdated lifting practices. Others thought that older nurses were more likely to "struggle on" through injury and not report it. Many return-to-work coordinators thought that younger nurses or those trained in the University system were much more likely to report injury and that these nurses were much less aware than their older, hospital trained counterparts, of correct manual handling practices:

> I think that one of the issues with the ageing workforce is that I find a lot of the older nurses, unlike the younger ones, have learned how to lift or move safely, whereas the younger ones haven't got the work experience. They've been taught in uni, and maybe they've gone through a manual handling course, but they haven't had the education and the experience that the older nurses have in terms of…like years ago there was the emphasis on good lifting moving technique, especially when I trained as a nurse, and you did know how to brace, how to move, how to do those things, whereas the younger ones are not taught those techniques….They're taught there's a no lift technique, or they're not taught them to the same extent, that would be my

> experience. [*Glenn, Government Health Services, Aged and Disabilities Sector, Metropolitan*)

Current research does not supply a definitive answer to the age issue and workplace injury amongst nurses, although one Australian study indicated that younger nurses, despite their high level of fitness, were more likely to be injured than older nurses(1). One return-to-work coordinators made the observation that the change from hospital to University trained nurses had negatively influenced a protective element in traditional nursing culture. He suggested that older, more experienced nurses traditionally looked out for those who were less experienced and that the loss of a culture of care had adversely affected injury prevention and management:

> I have one little philosophical thing that's probably related but probably not, but coming from a nursing background I trained in the hospital system, when it was hospital trained, not University. One of the key things I think nursing lost when that happened was a culture of nurses looking after each other, you know? Much as the senior nurse was revered in the day, nurses always have a culture that they trained their junior nurses, and they looked after them, and they were responsible for them. And they've lost that, because it's now somebody else's job - it's the University's job to pump them out. I think it's irretrievable, but I think it's had a big impact on the way we do our business as well. And in terms of injury I think some strategy for nurses to reacquaint themselves with a philosophy that says, less experienced staff are my responsibility to help and nurture and work with, would be a good thing in general, and for injury management specifically. [*Zac, Government Health Services, Metropolitan*]

While the gendered nature of the nursing workforce has already been discussed in the previous section on micro-level factors, it is important to reiterate that the caring and home duties traditionally undertaken by women can exacerbate the work injuries of female nurses. To maximise return-to-work outcomes there is a need for the rehabilitation processes to take into account the total workload undertaken by a person, including paid and unpaid (domestic) work. There is also a need to understand if trends towards workforce casualisation impact on increased vulnerability to injury, efficacy of injury prevention and rehabilitation outcomes. Furthermore the casualisation trend is associated with broader social factors such as socio-economic status, gender and, in some instances, ethnicity, all of which require investigation as a whole(40). It is worth noting that some return-to-work coordinators mentioned that their most difficult return-to-work cases involved nurses from non-English speaking backgrounds. More research is required to uncover the experiences of injured nurses from these

backgrounds, particularly given the relatively recent increase in the Australian context of the proportion of nurses from culturally and linguistically diverse backgrounds (79). Furthermore, return-to-work coordinators, mainly from urban areas, observed that agency staff presented special challenges to injury prevention:

> The other issue to us which you might touch on as well is the increasing use of agency staff who come into an organisation without a good orientation or induction, who don't know the local policy on lift and move and all those things, and so they cause an injury to another staff member because they tend to stop…halfway through a trained or a set move that is safe, and (our full-time nurse is) left with the weight of the patient. [*Glenn, Government Health Services, Aged and Disabilities Sector, Metropolitan*]

Internationally, there is concern that the reliance on agency staff may result in organisations shifting more hazardous jobs and tasks to members of this alternative workforce and that casual staff are more likely to be at increased risk of stress because of their more precarious employment position(40). Research is required that looks at the use of agency nurses across a range of health sectors, including the issue of less qualified nurses undertaking heavier work. It would be also worth investigating if casual nurses are more reluctant to report injury because of their more precarious employment positions.

The final workforce issue involves the need to provide adequate initial training and ongoing professional development for return-to-work coordinators. It was not unusual for return-to-work coordinators to have been "thrown into the job" with minimal support, their only formal professional training opportunity being the mandatory two-day WorkCover course. Previous research has documented the return-to-work coordinators role is both complex and demanding (63). This is confirmed by the return-to-work coordinators who participated in our focus groups. Research indicates that their role and the interventions they initiate have significant positive effects on disability outcome(30). Therefore it makes sense that there is serious consideration given to providing return-to-work coordinators with ongoing, evidence-based education and professional development opportunities.

1.8 Discussion

This study responds to a call in the international literature for theoretically informed qualitative research on the return-to-work process(30). Return-to-work coordinators who participated in this study volunteered and all were employed by specific organisations and were not contractors. All were interested in the return-to-work

process, and keen to discuss their experiences and to hear the views of others within this field. Whilst some return-to-work coordinators highlighted problems with resourcing of return-to-work within their organisations, most presented positive views of their organisations approach to return-to-work. The small sample of return-to-work coordinators we captured was passionate about their jobs and this may not be indicative of all coordinators.

This study indicates that there are similarities between the NSW Workers compensation and Workplace Injury Management system and other systems both nationally and internationally (80). Furthermore many of the barriers to return-to-work identified in the literature were also identified in this study. For example, the present study revealed that doctors are still considered a barrier in the return-to-work process and that the complexity of the workers compensation system and the confusion and fear felt by injured workers, continues to impede successful return-to-work (76). Existing research highlights that psychological injury is often the most difficult to deal with and often coexists with physical injury – the present study reinforces this for injured nurses(31).

In addition to these barriers our research identified factors that influence the return-to-work process that are not well documented in the literature.

While the literature highlights the importance of responding to individual needs, our research identified that there is often confusion and conflict surrounding case management. While technically the insurer is considered the designated case manager, the return-to-work coordinators we spoke with characterised their role as case managers. This created confusion and anxiety for many injured workers who were unsure who was actually managing their best interests. The return-to-work coordinators thought that the combination of anxiety with this lack of clarity constituted a major barrier for the injured worker. There needs to be more clarity about which of the stakeholders takes on primary case management responsibility.

Recent literature indicates the return-to-work coordinators role is important in facilitating an early return-to-work; however, there is little research which looks at the professional backgrounds and approaches of return-to-work coordinators (30). The present study addresses this gap and finds that there is significant variation in the professional backgrounds, experience and training of these key personnel. Our research highlights the complexities and demands of this role which is often given limited resources and part time status within large organisations. The effectiveness of this role is dependent upon adequate support within the organisation, appropriate resourcing, initial training and ongoing professional development.

There has been limited research on the effects of organisational structure, resourcing and culture on the return-to-work process (81). This includes a lack of research on organisational culture in health settings and return-to-work. The present study describes a wide variation and differences within the organisational context in which the return-to-work coordinators operate. This includes wide variation in the way return-to-work is valued and resourced; the model for injury prevention and management; the leadership and supervisory commitment to the process; the commitment to education of return-to-work process within the organisation and professional development for the return-to-work coordinators. In particular there were large differences in the financial commitment the organisation made, and budgetary arrangements for funding both the return-to-work coordinators role and supernumerary staffing positions.

Other issues highlighted by the present study related to the differences between rural and metropolitan areas. Availability of resources, and the distances to access services in rural areas both for treatment and rehabilitation impact upon the timely injury management process. Return-to-work coordinators in rural areas recognise that the reputation of their organisation rested upon fair management of injured workers. This factor and the lack of nurses in rural areas (both permanent and agency) contributed towards a creative and committed approach to return-to-work for injured nurses.

Our research identified nursing workforce issues that impact upon return-to-work. These include a general shortage of qualified nurses. Amongst the return-to-work coordinators in the present study there was a real commitment to achieving a successful return-to-work for injured nurses because of workforce shortages. However, return-to-work coordinators highlighted that factors such as qualification and specialisation can affect the successful return-to-work. For example, RN's are the most valued because there are fewer of them and they often have a supervisory / management role in many settings. Return-to-work coordinators identified that it was often more difficult to find appropriate suitable duties for ENs and AINs due to the nature of the manual work they are required to complete.

Another factor that was highlighted was the differences with nurse specialisation. Some specialisations were more difficult to provide suitable duties for as a result of the nature of their work. For example, intensive care unit and theatre nurses are highly specialised and are not easily placed in more general or administrative nursing roles. The other group of nurses that presented issues for return-to-work duties were community nurses, as a result of the nature of the job that requires extensive travel and work alone. For community nurses with physical injuries driving poses a significant barrier to return-to-work, as does psychological injury with the solitary nature of the job. For other

nurses particularly in residential facilities, limited staffing numbers and the physical arrangement of these facilities can impede return-to-work where nurses are normally working alone.

The present study found that casual and agency staff present different challenges for return-to-work, particularly where they have several jobs. There is some evidence to suggest that nurses from culturally and linguistically diverse backgrounds have some difficulties in negotiating the return-to-work process. Finally the gendered nature of the profession cannot be underestimated as many nurses have caring duties outside of work which may impact upon injury recovery and therefore timely and successful return-to-work.

Areas for further study

At a micro level larger studies of the return-to-work coordinator role are needed. This should include investigation in relation to the professional backgrounds and experiences of the return-to-work coordinators and the initial training needs and ongoing professional development for return-to-work coordinators.

At a meso level, the black box of industry specific organisational structure and culture needs to be systematically explored to provide an understanding of the efficacy of different organisational approaches to return-to-work. It is noted the seven ‘principles’ of return-to-work (9) provide a framework for industry; however, it is unknown to what degree these are being interpreted, resourced, applied and supported within industry. Large scale multi-sited comparative studies into organisational practices in specific industries such as health, are required in order to provide a robust evidence base for the development of best practice guidelines for the return-to-work process. The focus of this type of study would be on organisational scale, specialisation and practice and outcomes of return-to-work. While this study has touched on the issue of geographical isolation and return-to-work, further study of this issue is required.

At a macro level there are aspects of the nursing workforce that require further qualitative study. This includes study to highlight the impact of nurse specialisation and qualification on the provision of suitable duties and the casualisation of the nursing workforce, with the increase in part-time workers with multiply jobs. Another area of study should focus on the needs of nurses from culturally and linguistically diverse backgrounds. Case management practices within the Workers Compensation system need exploration in order to clarify roles and to determine which stakeholders are best positioned to undertake case management and to establish best practice. The efficacy of return-to-work coordinators attending medical appointments with injured workers also requires investigation to assess the value of this practice.

In line with international literature, more research is required on the impact of psychological injury. This would include investigating psychological injury and provision of suitable duties; psychological injury and coexistence with physical injury; and the organisation of nursing work and exposure to workplace stressors.

5. Cross-sectional study of injured nurses

1.9 Introduction and background

Nursing has a high rate of injuries (82-84); however details of rehabilitation processes for nurses are limited. The nursing profession has moved from task based nursing to holistic care increasing the complexity of the job in the context of increased demands on resources (18, 85). Sager and James found that injured workers within a health service (including some nurses) had limited understanding of the rehabilitation process, felt unsupported, often experienced negative attitudes from key stakeholders and had unsatisfying return-to-work duties (18).Anecdotally, suitable duties for nurses are considered not to include significant patient related nursing duties, particularly for those suffering back injury, as a result of the physical demands of working with patients. This chapter reports on findings from a cross sectional survey study of injured nurses to determine their experiences and perceptions of the rehabilitation process in NSW Australia.

1.10Method

Aim

The aim of conducting the postal survey was to identify current practices and processes as well as the experiences and perceptions of the return-to-work process from the injured nurses' perspective.

Study design

The study design consisted of a cross sectional study of injured nurses completing a questionnaire to determine their experiences and perceptions of the rehabilitation process.

Study population and recruitment

Selection of study sample

The study sample was nurses (Australian Standard Classification of Occupation code 2320, 2321, 2322, 2323, 2324, 2325, 2326, 3111, 3411 or 6314) who had experienced a major workplace injury or illness and for whom a claim had been submitted in the

2005/06 and 2006/07 financial years. The WorkCover NSW definition of a major claim is as follows:

1. The injury resulted in death, permanent disability, or temporary disability when five or more days were paid for incapacity, and
2. The claim entered the insurer's/scheme agent's computer system within the reporting period (e.g. on or after 1 July 2006 and on or before 30 June 2007, for 2005/06) (86)

The sample size was 5067. To select the study sample WorkCover NSW extracted all nurses from their claims database as detailed above.

Table 2: Number of Injured Nurses 2005-2006 and 2006-2007

Type of Nurse	Major Claims 2005/2007
2321: Nurse Managers	760
2322: Nurse Educators and Researchers	30
2323: Registered Nurses	1317
2324: Registered Midwives	39
2325: Registered Mental Health Nurses	27
2326: Registered Developmental Disability Nurses	14
3111: Medical Technical Officers	136
3411: Enrolled Nurses	696
6314: Personal Care and Nursing Assistants	2030
6314: Unknown	18
Total	5067
Based on the number of major claims received from those in designated occupations	
Source: WorkCover's statistical files, 2005/06 and 2006/07	

Study Instrument

Data relating to the occupational rehabilitation of NSW nurses was collected using a purpose constructed seven section questionnaire instrument (See Attachment 8).

The development of the questionnaire was conducted in three stages (to meet the aims and objectives of the study with reference to the current literature and following consultation with an expert panel). The stages are as follows:

Stage 1

1. Question 1 is an inclusion of study eligibility question to assist the respondent to determine if they meet the criteria for participating and responding to the questionnaire.

2. Objective numbers 1 and 2 is to evaluate the perceptions and experiences of injured nurses with respect to practices and processes used in the return-to-work of injured nurses. The questions in Section G: 1 through to 84 are likert scale questions designed to measure factors that are considered to impact on nurses' and their rehabilitation experiences with all stakeholders involved in the process. Questions G85 to G91 are open ended questions that require a written response. In particular question G91 allows the respondent to provide a personal account of their perceptions and experiences of the rehabilitation process. The Australian Nursing Federation (Victoria Branch) completed a study in 2007 on nurses' return-to-work in hospitals (21). Questions in this section were developed using this resource and also the findings from our review of the literature (14, 19, 65, 75).
3. Questions 11 through to 13b provide details of the injury/illness. The questions in this section provide information on nurses' experiences with their initial injury such as how and where the injury/illness occurred and the response of the employer. The literature review revealed that nurses are encountering difficulties with their employers with particular reference to their employer's attitudes towards their injury/illness. (13, 14, 87)
4. Questions 18 through to 23b provide details of the experiences and perceptions of the initial management of the injury/illness. The questions identify if any barriers were experienced in the initial management of their injury such as delays in seeking medical assistance, reasons for delays and whether they were able to return-to-work immediately after their injury/illness (19, 23, 87).
5. Objective number 3 is to identify any differences in practices between rural/regional and metropolitan geographical areas. Question 2 requests the respondents provide the postcode of their principal place of employment at the time of their injury/illness occurred. Young, Wasiak, Webster, Shayne (2008) used this method to distinguish between urban and rural areas (44).
6. Objective number 4 is to measure the differences in practice between aged care, public and private hospitals exist. Question 3 allows the respondent to provide the type of health facility in which they were employed in at the time of the injury.
7. Objective number 5 of the study is to identify the activities employed as suitable duties in a return-to-work program for injured nurses. This provides the basis for questions 32 through to 45. The questions have been developed using the information provided in the literature review and have been designed to produce appropriate responses in reference to suitable duties.

8. Objective number 6 seeks to develop recommendations that will benefit and encourage practices to facilitate the return-to-work of injured nurses. The results of the questionnaire will assist with identifying both the perceptions and experiences of nurses during their rehabilitation process.

Additional Questions:

1. Questions 14 through to 17 were taken from the Australian Standard AS1885.1 Workplace injury and disease recording standard (88). This allows for identifying the type of injury/illness, bodily location, principal area of practice and how the injury was sustained.
2. Demographic questions such as Q4 gender and Q5 age were included to determine if there was any relationship between gender, age and injury/illness.

Stage 2:

This stage included a search of the literature and identification of previous studies relevant to this project. Each study and associated instruments were analysed and where relevant items were identified, they were either added or modified for use in this study.

Injured workers reported difficulties with the nature, support, supervision and provision of suitable duties. (18) The key issue related to provision of suitable duties is the apparent inflexibility of some employers in accommodating a worker with an injury.(14) This information was measured with questions 32 through to 45 in section F, the rehabilitation process.

Kenny (14) reviewed employer-employee experiences and was able to deduce some of their perceptions. Injured workers felt they were being left stranded in a complex system with little support. Injured workers believed the return-to-work coordinator and the employer were working a triangulated relationship against them**.** Questions G1 to G84 were designed for the respondents to rate their experiences and perceptions with a scale ranging from strongly agree to strongly disagree. Furthermore questions G85 through to G91 allowed the respondents to provide their personal experiences and perceptions through written responses.

The literature reports nurses are experiencing many difficulties within the rehabilitation process with the stakeholders. Injured workers often experienced negativity and discrimination from one or more stakeholders.(14) Questions in Section E were designed to identify the underlying issues relating specifically to the stakeholders involved in the process.

Stage 3:

This stage involved an expert panel of nurse clinicians and academics, which was convened to test and provide feedback and advice about the draft questionnaire. This process provided face and content validity of the questionnaire. The questionnaire was revised on the basis of the expert panels' advice. Subsequently minor changes were made to a number of questions and it was resubmitted for ethical approval.

Optical mark readable scanner

To facilitate speed and accuracy of data entry an Optical Mark Readable Scanner was utilised. The ethics approved questionnaire was formatted by an external organisation. In addition a ScanTools Plus program was produced to enable the scanner to read the questionnaire forms.

Distribution of questionnaire

When ethical approval was received and potential participants had been selected from the WorkCover NSW database, WorkCover NSW mailed potential participants a study package which included: an invitation to participate in the form of an Information Statement, a questionnaire and a pre-addressed reply paid envelope (see Attachment 7 and Attachment 8). Participation was voluntary, with consent deemed to be given through the completion and return of the questionnaire to the researchers. The returned questionnaire was non-identifiable.

Allocation of Study Numbers

Questionnaires were sequentially numbered at the time of printing. A participant's study number was the questionnaire number. Therefore the study numbers were not linked to individuals, and there was no individual follow-up. If the response rate was below 30% a thank you reminder postcard was sent to all study participants (see Attachment 9). Study numbers would only be used for the purpose of logging the receipt of questionnaires and for data checking (i.e. to check electronic data with paper records for possible data entry error, etc).

Promotion of the study

Prior to the distribution of the questionnaire, an article appeared in the NSW Nurses' Association publication, "The Lamp" (see Attachment 10). This article announced the study to the membership, and included a description of the study encouraging members who received an invitation to participate.

Data storage

Data security was maintained by ensuring that study records were held on password protected computers with hard copies stored in locked filing cabinets in secure offices of the researchers.

Data analysis

Statistical analysis was performed using statistical/data analysis software (STATA V10, Statacorp, College Station, Texas USA) by a qualified statistician.

The following data analysis plan was used:

1. Simple associations were examined using a Chi-squared or Fishers Exact Test.
2. Multiple logistic regression models were used to examine the association between type of health facility and employer's response on notification of injury/illness, ability to return-to-work, ability return-to-work on pre-injury injuries, and ability to return-to-work with same employer adjusting for potential risk factors (gender, nursing role, workload, geographical region, area of practice and type of injury). Final parsimonious models were determined for each endpoint.
3. Analysis of Section G: an exploratory analysis of each question in Section G by tabulating by nursing role and area to explore differences in responses across these two variables of interest. A factor analysis was conducted using Questions 1 to 59 to reduce the amount of information and identify common themes. Differences in the main factors across nursing roles and area were tested using linear regression. Firstly we explored the simple association between the two predictor variables and the factors and then included the additional predictors (type of health facility, gender, nursing role, workload, geographical region, area of practice and type of injury) to adjust for potential confounding.

Advisory Panel

An advisory panel was established to assist the investigators with specialist advice when required. The members included:

1. Velma Gersbach from the NSW Nurses Association
2. Mary McLeod from the NSW Nurses Association
3. Dr. Patrick McElduff from the University of Newcastle for statistical consultation
4. Dr. Erica Southgate from the University of Newcastle for qualitative focus group expertise (method, facilitation, analysis and write up)

1.11 Results

Sampling results

A total of 5067 nurses had made a claim to WorkCover NSW between 1 July 2006 and 30 June 2007. Each nurse was sent a study package to the address provided.

Participation rate

The final figures for participation are shown in Table 3. From the assembled sample of 5067, 332 were returned to sender. A total of 674 participants from the 4734 contactable participants responded yielding a response rate of 14.2%. Of these, 170 were ineligible and 20 did not consent to participate.

Table 3: Participation rates

	Numbers	Number of Participants
Study package sent	5067	
Returned to sender	332	
Potential Participants		4734
Participants responses	674	
Ineligible	115	
Ineligible by date of injury	55	
Returned blank, non-consenting	20	
Eligible participants – returned completed questionnaire		484

Characteristics of participants

The characteristics of the participants are reported in Table 4 below. Sixty four percent of participants worked in facilities in a major city or regional locations, with almost half (48%) working in a public hospital. Twenty six percent worked in aged care facilities. Fifty two percent were registered nurses and 91% were female. The mean age of participants was 48.4 years and the mean years of experience were 20.3 years. Thirty nine percent of participants reported working between 30-39 hours per week at the time of their injury. A further 29% reported working 40-49 hours and this suggests that one third of participants regularly worked overtime. Ninety percent of participants reported their employment status as permanent at the time of their injury with equal proportions reporting full and part time work. A further 6.6% reported being a casual employee. Eighty six percent of injuries were classified as physical.

Table 4: Characteristics of participants

Variable	Category	Total (N=484)*	Variable	Category	Total (N=484)*
Geographic region	Major city	196 (41%)	Gender	Male	44 (9.1%)
	Inner and outer regional	106 (23%)		Female	440 (91%)
	Remote and very remote	138 (29%)	Mode of employment	Full time (permanent)	216 (45%)
	Not reported	44 (9.1%)		Part time (permanent)	220 (45%)
Employment sector	Public hospital	230 (48%)		Casual	32 (6.6%)
	Private hospital	36 (7.4%)		Not reported	16 (3.3%)
	Aged care	128 (26%)	Principal area of practice	Medical/surgical	80 (17%)
	Disability / community	65 (13%)		Emergency, intensive care, operating theatre	75 (16%)
	Other	23 (4.8%)		Aged care	149 (31%)
	Not reported	2 (0.4%)		Mental health, drug & alcohol	46 (9.5%)
Nursing role	Assistants in nursing	125 (26%)		Other	115 (24%)
	Enrolled nurses	76 (16%)		Not reported	19 (3.9%)
	Registered nurses	250 (52%)	Injury type	Physical	414 (86%)
	Other nurses	28 (5.8%)		Psychological	38 (7.9%)
	Not reported	5 (1.0%)		Other	31 (6.4%)
Hours worked/week	less than 9 hours per week	2 (0.4%)		Not reported	1 (0.2%)
	10-19 hours	24 (5.0%)			Mean (S.D.)
	20-29 hours	98 (20%)		Age	48.4 (10.5)
	30-39 hours	190 (39%)		Years of experience	20.3 (12.4)
	40-49 hours	142 (29%)			
	greater than 49 hours	13 (2.9%)			
	Not reported	15 (3.1%)			

Please note: data presented in the following tables are reported by nursing role for a total of 479 participants. Numbers in tables may not always total 479 due to unanswered questions or if a sub-set of participants were required to answer a question.

Details of injury/illness

Employees are required to notify their employer that they have sustained an injury as soon as possible following their injury. Sixty eight percent of study participants notified their employer on the same day they sustained the injury (see Table 5).

Table 5: When did you notify your employer of initial injury?

	AIN (n=117)	EN (n=75)	RN (n=240)	Other (n=28)	Total (N=460)
Same day	82 (70%)	50 (67%)	158 (66%)	22 (79%)	315 (68%)
Next day	24 (21%)	12 (16%)	51 (21%)	1 (3.6%)	89 (19%)
Within a week	9 (7.7%)	6 (8.0%)	18 (7.5%)	3 (11%)	36 (7.7%)
More than a week	2 (1.7%)	3 (4.0%)	8 (3.3%)	1 (3.6%)	14 (3.0%)
More than a month		4 (5.3%)	5 (2.1%)	1 (3.6%)	11 (2.4%)

It is acknowledged that it is good practice for the employer to make contact with the injured worker. Sixty one percent of study participants indicated they were contacted either the same day or the following day, however 15.2% were contacted after a week or later (see Table 6).

Table 6: How long after your initial injury did your employer contact you?

	AIN (n=116)	EN (n=68)	RN (n=232)	Other (n=28)	Total (N=444)
Same day	39 (34%)	20 (29%)	78 (34%)	13 (46%)	150 (34%)
Next day	43 (37%)	21 (31%)	50 (22%)	4 (14%)	118 (27%)
Within a week	23 (20%)	22 (32%)	61 (26%)	3 (11%)	109 (25%)
More than a week	5 (4.3%)	4 (5.9%)	25 (11%)	4 (14%)	38 (8.6%)
More than a month	6 (5.2%)	1 (1.5%)	18 (7.8%)	4 (14%)	29 (6.5%)

Question 14 of the study questionnaire required the participant to describe their major injury. Responses were subsequently categorised to physical, psychological or other. Eighty six percent of respondents indicated they had sustained a physical injury (see Table 7).

Table 7: Type of injury/illness

Type of injury	AIN (n=125)	EN (n=76)	RN (n=249)	Other (n=28)	Total (N=479)
Physical	108 (86%)	70 (92%)	208 (84%)	25 (89%)	414 (86%)
Psychological	6 (4.8%)	2 (2.6%)	27 (11%)	2 (7.1%)	38 (7.9%)
Other	11 (8.8%)	4 (5.3%)	14 (5.6%)	1 (3.6%)	31 (6.4%)

Question 17 asked participants to select how their injury/illness was sustained from a list, selecting all that applied. Overall, the most common mechanism of injury was lifting/positioning patients (22%), however as shown in Table 8 proportions differed by type of nurse with AINs reporting 36% of injuries were due to this mechanism.

Table 8: Mechanism of injury

Mechanism of injury	AIN (n=125)	EN (n=76)	RN (n=250)	Other (n=28)	Total (N=479)*
Breaking a fall	17 (14%)	7 (9.2%)	19 (7.6%)	3 (11%)	46 (9.6%)
Taking a patient's weight	28 (22%)	14 (18%)	40 (16%)	3 (11)%	85 (18%)
Lifting/positioning patients	45 (36%)	17 (22%)	40 (16%)	5 (18%)	107 (22%)
Lifting/assembling equipment	10 (8.0%)	10 (13%)	40 (16%)	1 (3.6%)	61 (13%)
Falls on the same level (including trips and slips)	11 (8.8%)	10 (13%)	40 (16%)	6 (21%)	67 (14%)
Falls from height	3 (2.4%)	4 (5.3%)	4 (1.6%)	2 (7.1%)	13 (2.7%)
Contact with objects to a part of the body	7 (5.6%)	2 (2.6%)	10 (4.0%)	1 (3.6%)	20 (4.2%)
Contact with chemical or substance	2 (1.6%)	0	4 (1.6%)	0	6 (1.3%)
Contact with, or exposure to, biological factors	1 (0.8%)	0	5 (2.0%)	0	6 (1.3%)
Patient resistance to care/aggression	30 (24%)	8 (11%)	28 (11%)	0	66 (14%)
Staff bullying/aggression	2 (1.6%)	3 (3.9%)	18 (7.2%)	2 (7.1%)	25 (5.2%)
Exposure to other mental stress factors (not including bully	2 (1.6%)	1 (1.3%)	13 (5.2%)	1 (3.6%)	17 (3.5%)
Vehicle accidents/travelling	4 (3.2%)	5 (6.6%)	20 (8.0%)	3 (11%)	32 (6.7%)

* Respondents could select more than 1 category

Study participants were asked in question 13b to describe "when advised of your injury/illness, how your employer responded?" The descriptive responses were subsequently categorised to either a positive/appropriate or negative response. Sixty eight percents of respondents reported a positive/appropriate initial response from their employer (see Table 9).

Table 9: Employer's response on notification of injury/illness

Response of Employer	AIN (n=110)	EN (n=70)	RN (n=217)	Other (n=26)	Total (N=423)
Positive/appropriate	72 (65%)	51 (73%)	145 (67%)	18 (69%)	290 (68%)
Negative	38 (35%)	19 (27%)	72 (33%)	8 (31%)	138 (32%)

A logistic regression model was constructed to identify if any nurse characteristic could predict a negative response on notification of injury/illness from their employer. As shown in Table 10 below, the only characteristic was type of injury sustained; compared to sustaining a physical injury, those reporting a psychological injury and

receiving a negative response the odds were 70% larger than the odds for receiving a physical injury and positive response. No other nurse characteristics were identified as statistically significant by logistic regression modelling.

Table 10: Logistic regression model for employer's response on notification of injury/illness

Outcome: Q13b Employer response (Positive (1) vs. Negative(0))					
Predictor		Crude		Adjusted	
Variable	Category	Odds Ratio (95% CI)	P-Value	Odds Ratio (95% CI)	P-Value
Type of health facility	Public hospital	1			
	Private hospital	0.8 (0.4, 1.8)	0.6		
	Aged care	0.8 (0.5, 1.3)	0.3		
	Disability / community	1.3 (0.6, 2.5)	0.5		
	Other	0.7 (0.3, 1.8)	0.5		
Gender	Female	1			
	Male	0.9 (0.4, 1.7)	0.7		
Age		1.0 (1.0, 1.0)	0.5		
Nursing role	Registered nurses	1			
	Enrolled nurses	0.9 (0.6, 1.5)	0.8		
	Assistants in nursing	1.3 (0.7, 2.4)	0.3		
	Other nurses	1.1 (0.5, 2.7)	0.8		
Workload	Normal (30-39 hrs)	1		1	
	< 30 hrs	0.9 (0.5, 1.5)	0.7	0.9 (0.5, 1.5)	0.6
	> 40 hrs	0.8 (0.5, 1.2)	0.2	0.8 (0.5, 1.2)	0.2
Geographic region	Major city	1			
	Regional	1.2 (0.7, 2.1)	0.5		
	All other	0.7 (0.4, 1.1)	0.1		
Area of practice	Medical, surgical	1			
	Emergency/ICU/OP	1.2 (0.6, 2.4)	0.6		
	Aged care	0.9 (0.5, 1.7)	0.8		
	Mental health	0.6 (0.3, 1.3)	0.2		
	Other	1.0 (0.5, 2.0)	0.9		
Injury type	Physical	1		1	
	Psychological	0.3 (0.2, 0.7)	<0.01	0.3 (0.2, 0.7)	<0.01
	Other	0.6 (0.3, 1.4)	0.2	0.6 (0.3, 1.4)	0.2

Initial management of injury/illness

Question 18 asked participants to indicate how long after their injury/illness they first sought medical assistance. Overall, the most common time period was less than 3 hours (36%), however as shown in Table 11, 23% did not seek assistance until after 24 hours had passed. There were no statistically significant differences between the various nursing roles in the length of time.

Table 11: Length of time after injury/illness medical assistance sought

Response	AIN (n=122)	EN (n=75)	RN (n=248)	Other (n=27)	Total (N=472)
Less than 3 hours	43 (35%)	31 (41%)	87 (35%)	11 (41%)	172 (36%)
3-6 hours	11 (9.0%)	4 (5.3%)	16 (6.5%)	2 (7.4%)	33 (7.0%)
7-24 hours	47 (39%)	25 (33%)	81 (33%)	7 (26%)	160 (34%)
Greater than 24 hours	21 (17%)	15 (20%)	64 (26%)	7 (26%)	107 (23%)

Question 19 asked participants to indicate which service they first attended for their injury/illness. Table 12 shows that almost two-thirds of participants (63%) first attended a General Practitioner for medical assistance, with approximately one quarter of respondents attending an Emergency Department (24%). There were no statistically significant differences between the various nursing roles in the service first attended.

Table 12: First service attended for medical assistance

Response	AIN (n=119)	EN (n=74)	RN (n=243)	Other (n=28)	Total (N=464)
First aid	4 (3.4%)	3 (4.1%)	7 (2.9%)	2 (7.1%)	16 (3.4%)
Staff health	4 (3.4%)	2 (2.7%)	7 (2.9%)	0	13 (2.8%)
Emergency department	17 (14%)	22 (30%)	63 (26%)	8 (29%)	110 (24%)
General practitioner	83 (70%)	40 (54%)	153 (63%)	16 (57%)	292 (63%)
Occupational physician	3 (2.5%)	0	1 (0.4%)	0	4 (0.9%)
Other	8 (6.7%)	7 (9.5%)	12 (4.9%)	2 (7.1%)	29 (6.3%)

Question 20a asked if participants required further medical assistance to manage their injury/illness, with 95% answering in the affirmative (Table 13).

Table 13: Further medical assistance required to manage injury/illness

Response	AIN (n=124)	EN (n=76)	RN (n=247)	Other (n=28)	Total (N=479)
Yes	118 (95%)	73 (96%)	233 (94%)	27 (96%)	451 (95%)
No	6 (4.8%)	3 (3.9%)	14 (5.7%)	1 (3.6%)	24 (5.0%)

Respondents indicating they required further medical assistance to manage their injury/illness were asked to indicate the type of Nominated Treating Doctor (NTD) who managed their injury/illness in question 20b. As seen in Table 14, 59% were managed by a General Practitioner.

Table 14: Type of Nominated Treating Doctor who managed injury/illness

Response	AIN (n=118)	EN (n=73)	RN (n=233)	Other (n=27)	Total (N=451)
General Practitioner	73 (62%)	46 (63%)	136 (58%)	11 (41%)	264 (59%)
Occupational physician	9 (7.6%)	8 (11%)	20 (8.6%)	4 (15%)	41 (9.1%)
Specialist	45 (38%)	20 (27%)	87 (37%)	13 (48%)	165 (37%)

* participants could answer more than 1 type of treating Doctor

The period after the onset of their injury/illness until they saw the treatment provider was indicated in question 20b. Responses in Table 15 indicate 54% were seen in the first three days, an additional 28% between three and 21 days and 18% waited more than 21 days.

Table 15: Length of time after injury/illness until saw treatment provider

Response	AIN (n=109)	EN (n=71)	RN (n=223)	Other (n=26)	Total (N=439)
On the day of the injury	18 (17%)	13 (18%)	29 (12%)	6 (23%)	66 (15%)
1-3 days	43 (39%)	27 (38%)	97 (42%)	5 (19%)	172 (39%)
3-7 days	14 (13%)	8 (11%)	32 (14%)	5 (19%)	59 (13%)
8-14 days	7 (6.4%)	3 (4.2%)	19 (8.2%)	2 (7.7%)	31 (7.2%)
14-21 days	9 (8.3%)	7 (9.9%)	14 (6.0%)	1 (3.8%)	31 (7.1%)
More than 21 days	18 (17%)	13 (18%)	42 (18%)	7 (27%)	80 (18%)

In question 22 participants were asked to indicate the time period after their injury/illness exposure that they were able to return-to-work in any capacity. Thirty seven percent of respondents reported a return-to-work within two weeks, however, over half (54%) indicated they were unable to return-to-work within two weeks. An additional nine percent of participants were unable to return-to-work at all (see Table 16).

Table 16: Length of time after injury/illness until able to return-to-work

Response	AIN (n=112)	EN (n=69)	RN (n=234)	Other (n=26)	Total (N=441)
Immediately	7 (6.3%)	4 (6.0%)	17 (7.5%)	4 (15%)	32 (7.3%)
For the next rostered shift	6 (5.4%)	4 (6.0%)	10 (4.3%)	2 (7.7%)	22 (5.0%)
Less than one week	5 (4.5%)	3 (4.4%)	23 (9.8%)	1 (3.9%)	32 (7.3%)
1-2 weeks	29 (26%)	8 (12%)	36 (15%)	2 (7.7%)	75 (17%)
More than 2 weeks	53 (47%)	44 (64%)	129 (55%)	14 (54%)	240 (54%)
Unable to return-to-work	12 (11%)	6 (9%)	19 (8.1%)	3 (12%)	40 (9.1%)

Question 23a asked all participants who returned to work whether suitable or pre-injury duties were undertaken following return-to-work. Table 17 shows that over three-quarters (76%) of all respondents returned on suitable duties. Of participants who were able to return-to-work in less than three weeks (n = 158), the proportion changed; 31% returned to pre-injury duties. This indicates that the longer a nurse is away from work in any capacity the less likely they were to return to pre-injury duties.

Table 17: Duties on return-to-work

Response	AIN (n=95)	EN (n=62)	RN (n=214)	Other (n=23)	Total (N=394)
Suitable duties	75 (79%)	51 (82%)	159 (74%)	14 (61%)	299 (76%)
Pre-injury duties	20 (21%)	11 (18%)	55 (26%)	9 (39%)	95 (24%)

The final question in this section (question 23b) asked participants who returned to work to indicate whether they considered that their return-to-work affected their recovery. Forty two percent of respondents reported that they continued to recover when they returned to work. A similar proportion reported that returning to work delayed their recovery (see Table 18). Of participants who were able to return-to-work in less than three weeks (n = 158), 37% reported they continued to recover.

Table 18: Effect of returning to work on recovery

Response	AIN (n=92)	EN (n=60)	RN (n=209)	Other (n=23)	Total (N=384)
No change	22 (24%)	8 (13%)	30 (14%)	3 (13%)	63 (16%)
Continued recovery	38 (41%)	24 (40%)	89 (43%)	10 (43%)	161 (42%)
Delayed recovery	32 (35%)	28 (47%)	90 (43%)	10 (43%)	160 (42%)

Continuing management of injury/illness

Question 24a enquired whether rehabilitation was required following the injury/illness exposure. Table 19 shows that about three-quarters of the sample (76%) underwent rehabilitation, with no significant difference between the nursing groups.

Table 19: Rehabilitation required

Response	AIN (n=120)	EN (n=75)	RN (n=248)	Other (n=28)	Total (N=471)
Yes	96 (80%)	60 (80%)	184 (74%)	19 (68%)	359 (76%)

Question 26 asked whether various key individuals were involved in the respondent's case (more than one response was possible). Notably, an external rehabilitation provider was only involved in about one-third (34%) of all cases (Table 20) and an employer return-to-work coordinator was considered to be involved in 79% of cases. There were significant differences between the nursing roles with respect to involvement of an employer return-to-work coordinator (χ^2_3 = 10.7, p = 0.01), and for that of an external rehabilitation provider (χ^2_3 = 9.4, p = 0.002) (p=0.02). In both instances there was more involvement for enrolled nurse cases. A total of 126 did not report the involvement of any person undertaking these roles.

Table 20: Involvement in management of case

Key individuals	Response	AIN (n=125)	EN (n=76)	RN (n=250)	Other (n=28)	Total (N=479)
Employer return-to-work coordinator	Yes	87 (70%)	66 (87%)	204 (82%)	21 (75%)	378 (79%)
External rehabilitation provider	Yes	42 (34%)	36 (47%)	82 (33%)	5 (18%)	165 (34%)
Insurer case manager	Yes	96 (77%)	54 (71%)	178 (71%)	20 (71%)	348 (73%)

Questions 27 and 28 asked how long after the injury/illness exposure it took for the return-to-work coordinator and insurer case manager to contact the participant, respectively. There was no contact by return-to-work coordinators in 8.6% of cases and by insurance case managers in 9.3% of cases (Table 21). Contact took more than two weeks in 22% of cases by both key individuals. There was a significant difference (χ^2_{12} = 22.5, p = 0.03) between the nursing roles in the time taken for contact by return-to-work coordinators, but not for insurer case managers.

Table 21: Length of time until contact

Key individual	Response	AIN	EN	RN	Other	Total
Return-to-work coordinator	No contact	13 (11%)	5 (6.9%)	19 (7.9%)	2 (7.4%)	39 (8.6%)
	First day	8 (6.8%)	6 (8.3%)	20 (8.4%)	8 (30%)	42 (9.2%)
	2-7 days	51 (43%)	26 (36%)	108 (45%)	7 (26%)	192 (42%)
	8-14 days	23 (19%)	19 (26%)	37 (15%)	3 (11%)	82 (18%)
	Other	23 (19%)	16 (22%)	55 (23%)	7 (26%)	101 (22%)
	Total	118 (100%)	72 (100%)	239 (100%)	27 (100%)	456 (100%)
Insurer case manager	No contact	7 (5.7%)	6 (8.2%)	28 (12%)	2 (7.7%)	43 (9.3%)
	First day	3 (2.4%)	1 (1.4%)	4 (1.7%)	1 (3.8%)	9 (1.9%)
	2-7 days	52 (42%)	20 (27%)	70 (29%)	10 (38%)	152 (33%)
	8-14 days	40 (33%)	30 (41%)	85 (35%)	4 (15%)	159 (34%)
	Other	21 (17%)	16 (22%)	54 (22%)	9 (35%)	100 (22%)
	Total	123 (100%)	73 (100%)	241 (100%)	26 (100%)	463 (100%)

Question 29 required a response as to whether the participant had been referred to a medical specialist for further treatment. Almost two-thirds (64%) of respondents replied in the affirmative (see Table 22) with the average waiting time being 6.9 weeks. There was however a large variation in the waiting time; the range was 1day to 78 weeks.

Table 22: Referral to a medical specialist

Response	AIN (n=122)	EN (n=76)	RN (n=247)	Other (n=28)	Total (N=473)
Yes	82 (67%)	50 (66%)	153 (62%)	20 (71%)	305 (64%)

The final question in this section (question 31) asked the participant to indicate all health services that they had received. Table 23 shows that physiotherapy (78%) was the most frequently accessed service overall, closely followed by radiological imaging services such as X-rays (77%). Functional exercise programs were only utilised by one third of respondents (33%), surgery was provided to 25% and work conditioning was reported by 7.3%.

Table 23: Health services utilised

Health service	AIN (n=125)	EN (n=76)	RN (n=250)	Other (n=28)	Total (N=479)
X-rays/ cat scans / MRI	97 (78%)	63 (83%)	187 (75%)	23 (82%)	370 (77%)
Physiotherapy	97 (78%)	68 (89%)	186 (74%)	22 (79%)	373 (78%)
Occupational therapy	10 (8.0%)	7 (9.2%)	19 (7.6%)	2 (7.1%)	38 (7.9%)
Psychological treatment	17 (14%)	21 (28%)	55 (22%)	7 (25%)	100 (21%)
Chiropractic treatment	6 (4.8%)	7 (9.2%)	18 (7.2%)	2 (7.1%)	33 (6.9%)
Osteopathy	6 (4.8%)	1 (1.3%)	18 (7.2%)	0	25 (5.2%)
Surgery	32 (26%)	23 (30%)	55 (22%)	10 (36%)	120 (25%)
Rehabilitation counselling	15 (12%)	8 (11%)	28 (11%)	4 (14%)	55 (11%)
Work conditioning	8 (6.4%)	7 (9.2%)	19 (7.6%)	1 (3.6%)	35 (7.3%)
Functional exercise programs	43 (34%)	27 (36%)	84 (34%)	6 (21%)	160 (33%)
Blood test or other pathology	15 (12%)	12 (16%)	28 (11%)	3 (11%)	58 (12%)
Vaccination	2 (1.6%)	0	4 (1.6%)	0	6 (1.3%)
Allergy tests	0	0	3 (1.2%)	0	3 (0.6%)

Rehabilitation process

The stakeholder most frequently identified by nurses to be involved in workplace assessments prior to returning to work, was the employer return-to-work coordinator (39%). AINs were significantly less likely (30%) to have this done by the return-to-work coordinator (χ^2_3 = 8.4, p = 0.04). However, 42% of nurses overall did not know if the workplace was assessed by any of these stakeholders prior to their return-to-work and this was statistically significantly higher (58%) for AINs (χ^2_3 = 16.8, p = 0.001).

Table 24: Stakeholders involved in assessing workplace before nurse returned to work*

Response	AIN (n=125)	EN (n=76)	RN (n=250)	Other (n=28)	Total (N=484)
Employer return-to-work coordinator	37 (30%)	36 (47%)	104 (42%)	13 (46%)	191 (39%)
External rehabilitation provider	13 (10%)	13 (17%)	36 (14%)	4 (14%)	67 (14%)
Insurer case manager	11 (8.8%)	6 (7.9%)	16 (6.4%)	3 (11%)	37 (7.6%)
Do not know	72 (58%)	26 (34%)	96 (38%)	9 (32%)	205 (42%)

* participant could select more than one category

There were 448 nurses for whom a graded return-to-work plan was applicable. Of these, 355 (79%) reported that this had been established, ranging from 52% (RN), 26% (AIN) to 17% (EN).

Table 25: Graded return-to-work plan established

Response	AIN (n=121)	EN (n=71)	RN (n=246)	Other (n=28)	Total (N=466)
Yes	93 (77%)	60 (85%)	183 (74%)	19 (68%)	355 (76%)
No	21 (17%)	9 (13%)	55 (22%)	8 (25%)	93 (20%)
NA	7 (5.8%)	2 (2.8%)	8 (3.3%)	1 (3.6%)	18 (3.8%)

In responding to question 33b, only 289 participants reported how long after they reported their injury that their employer provided them with a return-to-work plan. The average number of weeks reported was 7.2 (sd 9.0) however, the median number of weeks was 4 (iqr 2 – 8), ranging from 1-62 weeks. Only 16.4% of participants reported that their return-to-work plan was provided within one week.

For the 93 respondents who did not have a return-to-work plan, 11% resigned or did not return-to-work. Others returned to work on normal duties, or modified duties or reduced hours and a few commenced working for new employers (see Table 26).

Table 26: How nurses returned to work without return-to-work plan

Response	AIN (n=21)	EN (n=9)	RN (n=51)	Other (n=8)	Total (N=89)*
Return-to-work on normal duties	9 (43%)	7 (78%)	22 (43%)	3 (38%)	42 (46%)
Return-to-work SD/ on modified duties, reduced hours	7 (33%)	1 (11%)	23 (45%)	3 (38%)	34 (38%)
No return-to-work / resigned	3 (14%)	1 (11%)	5 (9.8%)	1 (113%)	10 (11%)
Return-to-work with new employer	2 (9.5%)	0	1 (2.0%)	1 (13%)	3 (4.5%)

4 participants did not answer question

The most frequently reported stakeholders involved in the development of return-to-work plans were injured nurses and their nominated treating doctors. Approximately 50% of respondents also reported their employer/supervisor and employer return-to-work coordinators were involved in developing these plans. There were differences in the distribution of stakeholder involvement for developing return-to-work plans by nursing role for employer return-to-work coordinators (χ^2_3 = 7.9, p = 0.05) and the insurer (χ^2_3 = 19.2, p = <0.001) (see Table 27).

Table 27: Stakeholders involved in development of return-to-work plan*

Question	AIN (n=125)	EN (n=76)	RN (n=250)	Other (n=28)	Total (N=479)*
You	72 (58%)	54 (71%)	176 (70%)	20 (71%)	322 (67%)
Nominated treating doctor	83 (66%)	55 (72%)	168 (67%)	22 (79%)	328 (69%)
Employer / supervisor	60 (48%)	41 (54%)	121 (48%)	10 (36%)	234 (48%)
Employer return-to-work coordinator	57 (46%)	47 (62%)	149 (60%)	16 (57%)	269 (56%)
Rehabilitation provider	18 (14%)	14 (18%)	32 (13%)	3 (11%)	67 (14%)
Physiotherapist	40 (32%)	22 (29%)	53 (21%)	6 (21%)	121 (25%)
Chiropractor	2 (1.6%)	0	2 (0.8%)	0	4 (0.8%)
Insurer	39 (31%)	12 (16%)	32 (13%)	6 (21%)	89 (19%)
Other	6 (4.8%)	4 (5.3%)	16 (6.4%)	3 (11%)	29 (6.1%)

*Participants could select any that were involved

One third of respondents reported no change in the hours worked however, there was a difference in the distribution for nursing role of no change in hours worked ($\chi_3^2 = 9.8$, $p = 0.02$).

Half of the respondents reported working reduced hours per day to assist their rehabilitation and a third reported reduced hours per week.

Table 28: Changes in working hours to assist rehabilitation

Question	AIN (n=125)	EN (n=76)	RN (n=250)	Other (n=28)	Total (N=479)*
No change in hours worked	39 (31%)	19 (25%)	106 (42%)	9 (32%)	173 (36%)
Reduced hours per day	59 (47%)	48 (63%)	122 (49%)	15 (54%)	244 (51%)
Reduced days per week	54 (43%)	29 (38%)	77 (31%)	10 (36%)	170 (36%)
Have not returned to work	6 (4.8%)	2 (2.6%)	7 (2.8%)	1 (3.6%)	16 (3.3%)
Other	10 (8%)	7 (9.2%)	11 (4.4%)	1 (3.6%)	29 (6.1%)

Respondents could select more than one category

Provision and type of suitable duties

Of the 355 respondents who reported that a graded return-to-work plan was established 303 (87%) reported they were provided with suitable duties consistent with the restriction recommended. However, overall 343 respondents (75%) reported they were provided with suitable duties consistent with the restriction recommended by their NTD (see Table 29).

Table 29: Were suitable duties provided consistent with restrictions

Response	AIN (n=117)	EN (n=70)	RN (n=243)	Other (n=28)	Total (N=458)
Yes	87 (74%)	60 (86%)	174 (72%)	22 (79%)	343 (75%)
No	30 (24%)	10 (13%)	69 (28%)	6 (21%)	115 (25%)

There were 110 responses to the question about why suitable duties were not provided from 115 "No" respondents in Table 29. The most frequent response was that tasks provided were unsuitable (25%) however, approximately 20% also reported the following reasons: no suitable duties were required and supervisors' or peers were unsupportive (see Table 30).

Table 30: Reasons why suitable duties were not provided

Response	AIN (n=28)	EN (n=10)	RN (n=66)	Other (n=6)	Total (N=110)
No suitable duties required	4 (14%)	0	17 (26%)	2 (33%)	23 (21%)
No suitable duties available	6 (21%)	2 (20%)	9 (14%)	1 (17%)	18 (16%)
Tasks provided unsuitable	8 (7.1%)	3 (30%)	14 (21%)	2 (33%)	27 (25%)
Unsupportive supervisor/peers	2 (7.1%)	4 (40%)	15 (23%)	1 (17%)	22 (20%)
Casual employment, rostered work ceased	2 (7.1%)	0	0	0	2 (1.8%)
Duties provided by different employer	2 (7.1%)	1 (10%)	0	0	4 (3.6%)
Other reasons	4 (14%)	0	10 (15%)	0	14 (13%)

There were 333 responses to question 36c which asked about the type of suitable duties provided from the 343 "Yes" respondents in Table 29. One third of respondents reported restricted or light duties were provided by their employer. There was a significant difference in the distribution of types of duties provided by nursing role (χ^2_{18} = 34.5, p = 0.01). ENs reported higher restricted or light duties. One third reported they were provided with modified nursing duties (22% doing same nursing duties and 13% doing different nursing duties), and 20% were provided with clerical duties (see Table 31).

Table 31: Type of suitable duties provided by nurse role

	AIN (n=84)	EN (n=59)	RN (n=169)	Other (n=21)	Total (N=333)
No restrictions/unchanged nursing duties	1 (1.2%)	0	16 (9.5%)	1 (4.8%)	23 (5.4%)
Changed employers site or employer	0	0	2 (1.2%)	0	3 (0.6%)
Modified, same nursing duties	21 (25%)	12 (20%)	35 (20.7%)	5 (24%)	77 (22%)
Modified, different nursing duties	12 (14%)	3 (5.1%)	21 (12%)	6 (26%)	45 (13%)
Clerical, including medical records	18 (21%)	15 (25%)	31 (18%)	3 (14%)	73 (20%)
Restricted or light	27 (32%)	29 (49%)	54 (32%)	4 (19%)	119 (34%)
Other	5 (6%)	0	10 (5.9%)	2 (9.5%)	28 (5.1%)

Chi Squared (18) 34.5, Pearson p=0.01

Examples of suitable duties reported are:

1. Reduced hours or reduced days of work
2. Restrictions to lifting, pushing and pulling and/or duration of standing
3. Patient observations
4. Clinical administration
5. Clerical work, ward clerk, photocopying, filing and phone duties
6. Triage
7. Showering patients, feeding and activities of daily living
8. Wound dressings
9. Charts and documentation including writing reports
10. Management and scheduling duties
11. Medications including ordering
12. Stock audits
13. Short theatre cases
14. Aged care assessments
15. Pre-admissions, history taking and pre-operation preparation
16. Discharges including discharge planning
17. Patient enquiries
18. Diversional activities
19. Cleaning

20. Community mental health team
21. Clinic work, including outpatients, immunisation, wounds, antenatal
22. Restricted patient contact or home visiting
23. Computer data entry and auditing
24. Education of patients and/or staff and orientation and new staff training
25. Respite care and day care
26. Recovery room nursing
27. Special care nursing
28. Stock inventory including restocking
29. Policy revision and accreditation documentation
30. Assessment and reviewing plans
31. Case management
32. Community health
33. Occupational health and safety including updating material safety data sheets and safety audits
34. Clinical governance including risk management and root cause analysis
35. Research and special projects
36. Selection and modification of equipment
37. Clinical supervision including team leader
38. Nurse buddy to assist with normal duties
39. Supernumerary
40. Promoted to new role

For this analysis the description of suitable duties is collapsed to nursing duties, restricted/light duties and clerical/other duties.

Suitable duties were reported to have been provided to 346 eligible participants in Table 29 however, some participants who responded to question 36A and to the question about type of suitable duties (36C) who should not have responded: some had returned to pre-injury duties, or did not require rehabilitation, or had no graded return-to-work plan. When these respondents were excluded from the data, the actual number of eligible participants who were provided with suitable duties was 270 (63%)

The following tables contain data for 270 respondents who responded appropriately to the question about provision of suitable duties.

There is a statistically significant difference in the distribution of the types of suitable duties provided by nursing role (see Table 32).

Table 32: Type of suitable duties provided by nursing role – clerical vs. other

Q36c (Suitable duties provision) vs. Q6 (Nursing role)					
	AIN (n=72)	EN (n=50)	RN (n=131)	Other (n=14)	Total (N=256)
Nursing	26 (36)	12 (24)	60 (44.6)	8 (57)	106 (40)
Clerical / other	23 (32)	12 (24)	29 (22.3)	3 (21)	67 (25)
Restricted / light	23 (32)	26 (52)	42 (33.0)	3 (21)	94 (35)
Chi Squared (6) 12.9, Fishers Exact p=0.05					

There were no statistically significant differences between types of suitable duties provided by geographic area (see Table 33).

Table 33: Type of suitable duties provided by geographic area

Q36c (Suitable duties provision) vs. ra_cat (Area)				
	Major City (n=103)	Regional (n=63)	Other (n=79)	Total (N=245)
Nursing	36 (35)	33 (52)	34 (43)	103 (42)
Clerical / other	25 (24)	14 (22)	17 (22)	56 (23)
Restricted / light	42 (41)	16 (25)	28 (35)	86 (35)
Chi Squared (4) 5.7 Fishers Exact p=0.2				

There were no statistically significant differences between types of suitable duties provided by type of health facility (see Table 34).

Table 34: Type of suitable duties provided by type of health facility

Q36c (Suitable duties provision) vs. Q3 (Type of health facility)						
	Public Hospital (n = 125)	Private Hospital (n = 24)	Aged Care (n = 74)	Disability (n = 36)	Other (n = 11)	Total (N = 270)
Nursing	56 (45)	9 (38)	28 (38)	10 (28)	5 (45)	108 (40)
Clerical / other	24 (19)	7 (29)	21 (28)	12 (33)	3 (27)	67 (25)
Restricted / light	45 (36)	8 (33)	25 (34)	14 (39)	3 (27)	95 (35)
Chi Squared (8) 5.9 Fishers Exact p=0.6						

There were no statistically significant differences between types of suitable duties provided by principal area of practice (see Table 35).

Table 35: Type of suitable duties provided by principal area of practice

Q36c (Suitable duties provision) vs. Q10 (Principal area of practice)						
	Med Surg (n = 47)	Emergency ICU OT (n = 44)	Aged Care (n = 83)	Mental Health (n = 17)	Other (n = 67)	Total (N = 258)
Nursing	18 (38)	20 (45)	28 (34)	8 (47)	32 (48)	106 (41)
Clerical / other	10 (21)	8 (18)	28 (34)	6 (35)	13 (19)	65 (25)
Restricted / light	19 (40)	16 (36)	27 (33)	3 (18)	22 (33)	87 (34)
Chi Squared (8) 9.5 Fishers Exact p=0.3						

There were 401 respondents who reported the length of time they were on suitable duties. Of these, 40% reported being on suitable duties for 1-5 months and an additional 20% reported 6-12 months. Less than 20% were on suitable duties for less than a month or more than one year (see Table 36).

Table 36: Length of time on suitable duties

Length of Time	AIN (n=109)	EN (n=67)	RN (n=202)	Other (n=23)	Total (N=401)
1 week or less	2 (1.8%)	4 (6.0%)	11 (5.5%)	2 (8.7%)	19 (4.7%)
2-3 weeks	16 (15%)	10 (15%)	26 (13%)	4 (17%)	56 (14%)
1 month - 5 months	38 (35%)	29 (43%)	83 (41%)	9 (39%)	159 (39%)
6 months -12 months	23 (21%)	9 (13%)	44 (22%)	4 (17%)	80 (20%)
More than one year	17 (16%)	8 (12%)	16 (7.9%)	3 (13%)	44 (11%)
Other	13 (12%)	7 (10%)	22 (11%)	1 (4.3%)	43 (11%)

There were 428 responses to a question asking participants whether they were able to undertake the suitable duties recommended in their return-to-work plan. Of these, 336 (79%) reported they were able to undertake these duties (see Table 37).

Table 37: Were you able to undertake the suitable duties recommended

	AIN (n=114)	EN (n=68)	RN (n=221)	Other (n=25)	Total (N=428)
Yes	85 (75%)	56 (82%)	173 (78%)	22 (88%)	336 (79%)
No	29 (25%)	12 (18%)	48 (22%)	3 (12%)	92 (21%)

There were 89 responses describing reasons why participants were unable to undertake suitable duties. These responses were categorised as follows:

1. Unrelieved pain/exacerbation of injury or unable to work (28 responses)

2. No suitable duties/no work plan provided or staff shortages that prevented compliance with suitable duties (28 responses)

3. Negative attitudes and expectations from management or staff (includes bullying) (17 responses)

4. Termination of employment or no work offered (6 responses)

5. Other responses (10 responses)

Of the 336 respondents who were able to undertake the suitable duties recommended, 255 respondents that reported that they performed their suitable duties in the department/area/ward they were working in prior to their injury. This suggests that more than 75% of nurses, who are provided with suitable duties, continue to work in the same area following their injury.

Table 38: Suitable duties performed in the pre-injury department/area/ward

	AIN (n=125)	EN (n=54)	RN (n=171)	Other (n=22)	Total (N=328)
Yes	57 (70%)	42 (78%)	134 (78%)	22 (100%)	255 (78%)
No	24 (30%)	12 (22%)	37 (22%)	0 (0%)	93 (22%)

There were 411 responses to the question about whether duties were supplied on a supernumerary basis. Of these, 39% reported that they were provided with supernumerary duties.

Table 39: Were the duties supplied on a supernumerary basis

Response	AIN (n=125)	EN (n=76)	RN (n=218)	Other (n=25)	Total (N=411)
Yes	47 (47%)	30 (45%)	78 (36%)	6 (24%)	161 (39%)
No	54 (55%)	37 (55%)	140 (64%)	76 (76%)	250 (61%)
Chi Squared (3) 6.6 Fishers Exact p=0.086					

There were 450 responses to the question about whether nurses were still participating in their return-to-work program. Of these, 16% of respondents were still participating in their return-to-work program. There is a difference in the distribution of participants still participating in the return-to-work program by nursing role (see Table 40). Registered nurses most frequently responded that they were not still participating in a return-to-work program.

Table 40: Still participating in the return-to-work program

	AIN (n=116)	EN (n=71)	RN (n=237)	Other (n=26)	Total (N=450)
Yes	22 (19%)	18 (25%)	27 (11%)	6 (23%)	73 (16%)
No	94 (81%)	53 (75%)	210 (89%)	20 (77%)	377 (84%)
Chi Squared (3) 10.0 Fishers Exact p=0.015					

Of the 73 respondents who responded they were still participating in a return-to-work program 69 provided an estimation of when they expect to return to pre injury duties. Eighty percent were either uncertain or reported they would not be able to return to their pre-injury duties (see Table 41).

Table 41: Do you expect to return to pre injury duties?

	AIN (n=22)	EN (n=17)	RN (n=25)	Other (n=5)	Total (N=69)
Yes, within 1 week	0	1 (6.0%)	1 (4.0%)	0	2 (2.9%)
Yes, within 1 month	2 (9.0%)	0	2 (8.0%)	0	4 (5.8%)
Yes, within 3 months	3 (14%)	0	1 (4.0%)	0	4 (5.8%)
Yes, within 6 months	1 (5.0%)	1 (6.0%)	0	0	2 (2.9%)
Yes, within 1 year	1 (5.0%)	0	0	0	1 (1.5%)
Uncertain	7 (32%)	6 (35%)	7 (28%)	1 (20%)	21 (30%)
No	8 (36%)	9 (53%)	14 (56%)	4 (80%)	35 (51%)

Participants (n=377) not still participating in a return-to-work program reported their current status in Table 40. Of these, 61% had returned to same duties with the same employer and 8.6% returned to modified or different duties with the same employer. Others found employment with a different employer either doing the same duties (2.8%) or modified or different duties (10%). Unfortunately, 10% reported being unable to work and 6.9% were unable to find suitable employment consistent with recommended restrictions (see Table 42).

Table 42: Current status of participants NOT still participating in a return-to-work program

	AIN (n=79)	EN (n=50)	RN (n=199)	Other (n=20)	Total (N=348)
Completed return-to-work program and returned to same duties / same employer	42 (53%)	32 (64%)	126 (64%)	12 (60%)	214 (61%)
Completed return-to-work program and returned to modified duties / same employer	3 (3.8%)	2 (4.0%)	5 (2.5%)	3 (15%)	13 (3.7%)
Completed return-to-work program and returned to different duties / same employer	3 (3.8%)	2 (4.0%)	12 (6.0%)	0	17 (4.9%)
Completed return-to-work program and returned to same duties / different employer	3 (3.8%)	1 (2.0%)	5 (2.5%)	1 (5.0%)	10 (2.8%)
Completed return-to-work program and returned to modified duties / different employer	1 (1.8%)	1 (2.0%)	4 (2.0%)	1 (5.0%)	7 (2.0%)
Completed return-to-work program and returned to different duties / different employer	8 (10%)	2 (4.0%)	17 (8.5%)	2 (10%)	29 (8.3%)
Unable to find suitable employment consistent with restrictions as recommended by NTD	8 (10%)	6 (12%)	10 (5.0%)	0	24 (6.9%)
Unable to work	11 (14%)	4 (8.0%)	18 (9.0%)	1 (5.0%)	34 (9.8%)

Nurses who reported doing different duties (n=46) were doing nursing-related duties in most instances (76%). Here was a significant difference in the distribution of doing different duties related to nursing by nursing role (see Table 43). Registered and other nurses responded more frequently that they were doing nursing-related different duties.

Table 43: Nurses doing different duties related to nursing

	AIN (n=11)	EN (n=4)	RN (n=29)	Other (n=2)	Total (N=46)
Yes	5 (45%)	3 (75%)	26 (90%)	1 (50%)	35 (76%)
No	6 (55%)	1 (25%)	3 (10%)	1 (50%)	11 (24%)
Chi Squared (3) 9.3 Fishers Exact p=0.01					

Participants who were doing different duties and reported that they were given assistance to find these duties reported this occurred in 16 of 37 responses (43%).

Logistic regression models were used to determine respondents' ability to return-to-work associated with the following factors: type of health facility, gender, age, nursing role, workload, geographic area, principal area of practice and type of injury (see Table 44). Whilst differences are noted in the full model for type of health facility, age and area of practice, in the parsimonious model only area of practice remains a significant factor in ability to return-to-work; compared to medical and surgical nurses emergency/intensive care/operating theatre nurses are 10.8 the odds of being able to return-to-work. The result for emergency/intensive care/operating theatre nurses is

statistically significant (p=0.03) and has occurred because all bar one of these nurses who sustained an injury were able to return to work (see Table 44).

Table 44: Logistic regression model for ability to return-to-work

Outcome: Q38c Returned to Work (Able (1) vs. Unable (0))					
Predictor		**Crude**		**Adjusted**	
Variable	**Category**	**Odds Ratio (95% CI)**	**P-Value**	**Odds Ratio (95% CI)**	**P-Value**
Q3 (Type of health facility)	Public hospital	1			
	Private hospital	0.7 (0.26, 2.03)	0.5		
	Aged care	0.6 (0.32, 1.12)	0.1		
	Disability / community	0.5 (0.24, 1.1)	0.0850		
	Other	0.3 (0.12, 0.92)	0.0340		
Q4 (Gender)	Female	1			
	Male	0.9 (0.36, 1.99)	0.7		
Q5 (Age)		1 (0.95, 1)	0.05	0.98 (0.95, 1)	0.09
Q6 (Nursing role)	Registered nurses	1			
	Assistants in nursing	0.7 (0.38, 1.24)	0.2		
	Enrolled nurses	0.8 (0.38, 1.61)	0.5		
	Other nurses	1.9 (0.43, 8.43)	0.4		
Q8 (Workload)	Normal (30-39 hrs)	1			
	< 30 hrs	0.6 (0.33, 1.1)	0.10		
	> 40 hrs	1.2 (0.6, 2.2)	0.7		
Area (Geographical)	Major city	1			
	Regional	1.1 (0.57, 2.27)	0.7		
	All other	1.4 (0.73, 2.77)	0.3		
Q10 (Area of practice)	Med, surg	1		1	
	Emergency/ICU/OT	11.8 (1.48, 93.78)	0.02	10.8 (1.36, 86.24)	0.03
	Aged	0.7 (0.31, 1.4)	0.3	0.7 (0.32, 1.47)	0.3
	Mental health	0.7 (0.28, 2.04)	0.60	0.8 (0.3, 2.34)	0.8
	Other	0.8 (0.36, 1.8)	0.60	0.8 (0.35, 1.78)	0.6
Injury type	Physical	1			
	Psychological	0.4 (0.2, 0.93)	0.03		
	Other	1.4 (0.42, 4.86)	0.5		

Logistic regression models were used to determine respondents' ability to return-to-work on pre-injury duties associated with the following factors: type of health facility, gender, age, nursing role, workload, geographic area, principal area of practice and

type of injury. Nurses who work more than 40 hours have significantly less odds of going back to work on the same duties (see Table 45).

Table 45: Logistic regression model for able to return-to-work on pre-injury duties

Outcome: Q38c Returned to Work (Same duties (1) vs. modified duties (0))					
Predictor		Crude		Adjusted	
Variable	Category	Odds Ratio (95% CI)	P-Value	Odds Ratio (95% CI)	P-Value
Q3 (Type of health facility)	Public hospital	1			
	Private hospital	2.1 (0.71, 6.66)	0.17		
	Aged care	0.9 (0.52, 1.77)	0.9		
	Disability / community	0.9 (0.43, 1.79)	0.7		
	Other	0.4 (0.13, 1.19)	0.10		
Q4 (Gender)	Female	1		1	
	Male	1.7 (0.7, 4.43)	0.2	1.8 (0.72, 4.8)	0.18
Q5 (Age)		1.0(0.99, 1.03)	0.33		
Q6 (Nursing role)	Registered nurses	1			
	Enrolled nurses	0.8(0.43, 1.44)	0.4		
	Assistants in nursing	0.8(0.41, 1.62)	0.5		
	Other nurses	0.7 (0.27, 1.68)	0.4		
Q8 (Workload)	Normal (30-39 hrs)	1		1	
	< 30 hrs	0.6 (0.31, 1.07)	0.08	0.6 (0.32, 1.11)	0.10
	> 40 hrs	0.6 (0.32, 1)	0.05	0.54 (0.3, 0.96)	0.04
Area (Geographical)	Major city	1			
	Regional	0.9 (0.5, 1.82)	0.88		
	All other	0.7 (0.43, 1.35)	0.3		
Q10 (Area of practice)	Med, surg	1			
	Emergency/ICU/OT	1.8 (0.76, 4.08)	0.2		
	Aged	1.3 (0.61, 2.81)	0.5		
	Mental health	1.4 (0.52, 4.03)	0.5		
	Other	0.9 (0.42, 1.8)	0.7		
Injury type	Physical	1			
	Psychological	0.6 (0.24, 1.39)	0.2		
	Other	1.7 (0.55, 5.17)	0.3		

Logistic regression models were used to determine respondents' ability to return-to-work with the same employer associated with the following factors: type of health facility, gender, age, nursing role, workload, geographic area, principal area of practice

and type of injury (see Table 46). Nurses working in aged care facilities have significantly reduced odds of returning to work with the same employer.

Table 46: Logistic regression model for able to return-to-work with same employer

Outcome: Q38c Returned to Work (Same employer (1) vs. Different employer (0))					
Predictor		Crude		Adjusted	
Variable	Category	Odds Ratio (95% CI)	P-Value	Odds Ratio (95% CI)	P-Value
Q3 (Type of health facility)	Public hospital	1			
	Private hospital	1 (0.27, 3.54)	0.9		
	Aged care	0.52 (0.25, 1.12)	0.09		
	Disability / community	0.5 (0.21, 1.21)	0.13		
	Other	0.2 (0.07, 0.75)	0.02		
Q4 (Gender)	Female	1			
	Male	0.9 (0.35, 2.61)	0.9		
Q5 (Age)		1.0 (1, 1.06)	0.06	1.0 (1, 1.06)	0.09
Q6 (Nursing role)	Registered nurses	1			
	Enrolled nurses	0.7 (0.34, 1.46)	0.3		
	Assistants in nursing	1.5 (0.54, 4.11)	0.4		
	Other nurses	0.6 (0.21, 1.78)	0.4		
Q8 (Workload)	Normal (30-39 hrs)	1		1	
	< 30 hrs	0.6 (0.3, 1.46)	0.3	0.6 (0.27, 1.42)	0.2
	> 40 hrs	0.6 (0.31, 1.27)	0.2	0.5 (0.23, 1.04)	0.06
Area (Geographical)	Major city	1			
	Regional	0.9 (0.43, 1.92)	0.8		
	All other	1.7 (0.81, 3.88)	0.1		
Q10 (Area of practice)	Med, surg	1		1	
	Emergency/ICU/OT	0.5 (0.12, 1.92)	0.3	0.4 (0.11, 1.91)	0.3
	Aged	0.3 (0.08, 1.14)	0.08	0.2 (0.07, 1)	0.05
	Mental health	0.3 (0.06, 1.28)	0.10	0.2 (0.05, 1.03)	0.06
	Other	0.2 (0.06, 0.7)	0.01	0.2 (0.05, 0.64)	0.01
Injury type	Physical	1			
	Psychological	0.5 (0.18, 1.28)	0.1		
	Other	1.7 (0.38, 7.51)	0.5		

Nurses who had completed their rehabilitation reported hours of work following rehabilitation (n=325). Of these, 80% reported they returned to pre-injury hours (see Table 47)

Table 47: Hours of work after rehabilitation

	AIN (n=71)	EN (n=49)	RN (n=183)	Other (n=22)	Total (N=325)
Pre-injury hours	54 (76%)	37 (76%)	150 (82%)	19 (86%)	260 (80%)
Reduced hours per day	1 (1.4%)	1 (2.0%)	4 (2.2%)	0	6 (1.9%)
Reduced days per week	5 (7.0%)	5 (10%)	17 (9.3%)	3 (14%)	30 (9.2%)
Reduced days and hours per week	11 (15%)	6 (12%)	12 (6.7%)	0	29 (8.9%)

For nurses doing different duties and who were satisfied with these duties, 106 of 148 were satisfied (72%) (see Table 48).

Table 48: Nurses satisfaction with different duties

	AIN (n=43)	EN (n=30)	RN (n=68)	Other (n=7)	Total (N=148)
Yes	32 (74%)	17 (57%)	53 (78%)	4 (57%)	106 (72%)
No	11 (26%)	13 (43%)	15 (22%)	3 (43%)	42 (28%)

Participants were asked if they had received vocational, functional or workplace assessments. Fifty percent of respondents reported that they had none of these assessments. The most frequently reported assessment was workplace assessment (30%). There were differences in the distribution of assessments received by nursing role. ENs had more vocational assessments than other nurses (see Table 49).

Table 49: Assessments received

Question	Response	AIN (n=125)	EN (n=76)	RN (n=250)	Other (n=28)	Total (N=479)	P-value
Vocational assessment	Yes	10 (8.0%)	13 (17%)	13 (5.2%)	0	36 (7.5%)	0.0052
Functional assessment	Yes	19 (15%)	21 (28%)	42 (17%)	2 (7.1%)	84 (18%)	0.0570
Workplace assessment	Yes	28 (22%)	31 (41%)	75 (30%)	8 (29%)	142 (30%)	0.0540
None of the above	Yes	70 (56%)	27 (36%)	124 (50%)	16 (57%)	237 (50%)	0.0326

Participants were asked whether they were offered retraining. There were 434 responses to this question and 396 (91%) reported that they were not offered retraining. There was a statistically significant difference by types of nurse and being offered retraining as shown in Table 50.

Table 50: Offered retraining

	AIN (n=125)	EN (n=76)	RN (n=250)	Other (n=28)	Total (N=484)
Yes	14 (13%)	11 (15%)	13 (5.7%)	0	38 (8.8%)
No	95 (87%)	60 (85%)	215 (94%)	26 (100%)	401 (91%)
Chi Squared (3) 11.47 Fishers Exact p=0.009					

Of the 38 participants who were offered retraining participants reported which stakeholders offered retraining. The employer was the most frequently identified stakeholder to offer retraining (see Table 51).

Table 51: Stakeholders who offered retraining

Question	AIN (n=14)	EN (n=11)	RN (n=13)	Other (n=0)	Total (N=38)
Employer	7 (50%)	6 (55%)	9 (69%)	0	22 (58%)
Return-to-work coordinator	5 (36%)	3 (27%)	4 (31%)	0	12 (32%)
Rehabilitation provider	3 (21%)	6 (55%)	2 (15%)	0	11 (29%)
Insurance case manager	2 (14%)	2 (18%)	3 (23%)	0	7 (18%)

Experiences and perceptions of injured nurses with rehabilitation process

Section G of the questionnaire asked participants to rate 59 questions relating to their experiences and perceptions of the rehabilitation process using a five item likert scale. As an exploratory analysis, this section is reported by nursing role and area to explore differences in responses across these two variables of interest. A factor analysis was conducted, as a method of data reduction, to reduce the amount of information and identify common themes. Differences in the main factors across nursing roles and area were tested using linear regression. The association between the two predictor variables (nursing role and area) and the factors, and subsequently type of health facility, gender, age, nursing role and average hours worked and the factors was also completed.

To interpret the factor analysis item loadings on each factor greater than 0.3 were considered satisfactory for inclusion in that factor and is viewed as an indication of some relationship. Items within each identified factor were subsequently analysed and each factor characterised.

Five factors emerged from the questionnaire:

1. Nurses' perceptions of support and their value;

2. Nurses' perceptions of the return-to-work process/ plan;
3. Nurses' perception of long term future;
4. Nurses perceptions of compensation and financial aspects of their injury; and
5. Nurses' perceptions of a negative experience.

Factor 1: Nurses' perceptions of support and their value

Of the 59 items in the questionnaire, 29 reflected nurses' perceptions of support and their value (see Table 52). The factor loadings indicate support from the employer, supervisor and co-workers in the injury process. Injured nurses felt valued as a nurse with steps being taken to keep them in the nursing profession. This factor accounted for 15.1% of the variation within this section of the questionnaire.

Table 52: Nurses' perceptions of support and their value

Question	Question	Loadings
g20	I believe I am valued by my employer as a nurse	0.77
g15	My supervisor was supportive during my return-to-work	0.76
g22	I was valued as a long standing employee	0.75
g14	My employer was supportive during my return-to-work	0.73
g21	Steps were taken to keep me in the nursing profession	0.65
g13	My co-workers were supportive during my return-to-work	0.61
g35	At no time have I felt discriminated against by any party because of my injury/illness	0.54
g25	My supervisor cooperated with my return-to-work coordinator in return-to-work program	0.52
g12	The genuineness of my injury/illness has never been questioned	0.48
g54	After my injury, my employer provided me with all the relevant information I needed	0.47
g31	I believe I was provided with acceptable suitable duties	0.40
g16	I received support from the return-to-work coordinator when my claim was lodged	0.37
g56	Other injured co-workers can be supportive to nurses attempting to return-to-work	0.337
g18	My supervisor was kept informed of my progress	0.327
g48	I was provided with information about my rights and responsibilities	0.307
g24	I feel alienated from my co-workers as a consequence of my injury/illness	-0.317
g4	I feared losing my job because of my injury/illness	-0.317
g6	I have considered leaving nursing because of my injury/illness	-0.337
g32	I was subject to undue pressure to return-to-work	-0.407
g33	I was subject to undue pressure to change my restrictions	-0.497
g34	I was subject to pressure to resign	-0.55

There was no difference in perception of support and value as a nurse between the different nursing roles or geographical area (see Table 53).

Table 53: Simple Linear Regression models Outcome: Factor 1 vs. Area and nursing role

Predictor		Coefficient	
Variable	**Category**	**Estimate (95% CI)**	**P-value**
Area (Geographical)	Major city	0	
	Regional	0.05 (-0.17, 0.27)	0.6
	All other	-0.05 (-0.26, 0.15)	0.6
Q6 (Nursing role)	Registered nurses	0	
	Enrolled nurses	-0.03 (-0.24, 0.17)	0.8
	Assistants in nursing	0.12 (-0.12, 0.36)	0.3
	Other nurses	0.22 (-0.15, 0.58)	0.3

Table 54 shows the results of a multiple linear regression with factor 1 (nurses' perceptions of support and value). Those working more than 40 hours per week, suggesting those working overtime, gave lower overall responses to factor 1, to feeling supported and valued, when compared to nurses working a normal week of 30-39 hours.

Those nurses who indicated they had a psychological injury gave lower overall responses to feeling supported or valued (factor 1) when compared to those with physical injuries. Nurses' age is significantly associated with feeling less supported and valued (see Table 54).

Table 54: Multiple Linear Regression model Outcome: Factor 1

Predictor		Adjusted	
Variable	**Category**	**Estimate (95% CI)**	**P-Value**
Q5 (Age)		0.01 (0.01, 0.02)	<0.01
Q6 (Nursing role)	Registered nurses	0	
	Enrolled nurses	0.17 (-0.14, 0.47)	0.3
	Assistants in nursing	0.19 (-0.09, 0.46)	0.2
	Other nurses	0.25 (-0.16, 0.65)	0.2
Q8 (Workload)	Normal (30-39 hrs)	0	
	< 30 hrs	-0.06 (-0.29, 0.16)	0.6
	> 40 hrs	-0.23 (-0.44, -0.01)	0.04
Area (Geographical)	Major city	0	
	Regional	-0.06 (-0.28, 0.17)	0.6
	All other	-0.08 (-0.29, 0.14)	0.5
Q10 (Area of practice)	Med, surg	0	
	Emergency/ICU/OT	0.25 (-0.07, 0.58)	0.13
	Aged	0.14 (-0.28, 0.56)	0.5
	Mental health	-0.1 (-0.48, 0.28)	0.6
	Other	0.11 (-0.2, 0.41)	0.5
Injury type	Physical	0	
	Psychological	-0.58 (-0.93, -0.22)	<0.01
	Other	0.13 (-0.27, 0.52)	0.5
Q3 (Type of health facility)	Public hospital	0	
	Private hospital	0 (-0.38, 0.38)	1.0
	Aged care	-0.38 (-0.79, 0.04)	0.07
	Disability / community	0.08 (-0.24, 0.39)	0.6
	other	-0.16 (-0.62, 0.3)	0.5

Factor 2: Nurses' perceptions of the return-to-work process/plan

Of the 59 items in the questionnaire, 14 reflected the nurses' perceptions of the return-to-work process/ plan. Nurses' reported being involved in the development of the return-to-work plan, felt they were assigned realistic duties, were informed and supported in the process and had supervisors who were involved, informed and cooperative (see Table 55). This factor accounted for 12.3% of the variation within this section of the questionnaire.

Table 55: Nurses' perceptions of the return-to-work process/plan

Question	Question	Loadings
g26	I was involved in the development of my return-to-work plan	0.72
g17	My rehabilitation and return-to-work plan was realistic	0.71
g28	The rehabilitation process was explained and I understood the process	0.71
g16	I received support from the return-to-work coordinator when my claim was lodged	0.69
g19	I was kept informed about all aspects of my case	0.68
g18	My supervisor was kept informed of my progress	0.62
g25	My supervisor cooperated with my return-to-work coordinator in return-to-work program	0.56
g54	After my injury, my employer provided me with all the relevant information I needed	0.54
g31	I believe I was provided with acceptable suitable duties	0.48
g48	I was provided with information about my rights and responsibilities	0.46
g14	My employer was supportive during my return-to-work	0.40
g21	Steps were taken to keep me in the nursing profession	0.34
g15	My supervisor was supportive during my return-to-work	0.34
g33	I was subject to undue pressure to change my restrictions	-0.34

There was no difference in nurses' perception of the return-to-work process between the different nursing roles or geographical area (see Table 56).

Table 56: Simple Linear Regression models Outcome: Factor 2 vs. Area and Q6

Predictor		Coefficient	
Variable	**Category**	**Estimate (95% CI)**	**P-value**
Area (Geographical)	Major city	0	
	Regional	0 (-0.22, 0.23)	1.0
	All other	-0.01 (-0.22, 0.2)	1.0
Q6 (Nursing role)	Registered nurses	0	
	Enrolled nurses	-0.01 (-0.22, 0.2)	1.0
	Assistants in nursing	0.12 (-0.12, 0.37)	0.3
	Other nurses	0.18 (-0.19, 0.56)	0.3

Table 57 shows the results of a multiple linear regression with factor 2 (nurses' perceptions of the return-to-work plan/process).

Statistically significant differences in responses were found for those nurses working more than 40 hours per week, when compared to nurses working a normal week of 30-39 hours, and to those nurses who indicated they had a psychological injury when compared to those with physical injuries. This indicates that those working more than

40 hours and those with psychological injury reported a less satisfying experience of the return-to-work process.

Table 57: Multiple Linear Regression model Outcome: Factor 2

Predictor		Adjusted	
Variable	**Category**	**Estimate (95% CI)**	**P-Value**
Q5 (Age)		0.01 (0, 0.02)	0.02
Q6 (Nursing role)	Registered nurses	0	
	Enrolled nurses	0.11 (-0.19, 0.41)	0.5
	Assistants in nursing	0.17 (-0.11, 0.45)	0.2
	Other nurses	0.16 (-0.25, 0.58)	0.5
Q8 (Workload)	Normal (30-39 hrs)	0	
	< 30 hrs	-0.07 (-0.3, 0.16)	0.5
	> 40 hrs	-0.21 (-0.43, 0.02)	0.07
Area (Geographical)	Major city	0	
	Regional	-0.09 (-0.32, 0.15)	0.5
	All other	-0.01 (-0.23, 0.22)	0.9
Q10 (Area of practice)	Med, surg	0	
	Emergency/ICU/OT	0.22 (-0.11, 0.55)	0.2
	Aged	-0.11 (-0.44, 0.23)	0.5
	Mental health	-0.14 (-0.53, 0.25)	0.5
	Other	0.15 (-0.15, 0.45)	0.3
Injury type	Physical	0	
	Psychological	-0.47 (-0.84, -0.1)	0.01
	Other	0.13 (-0.28, 0.53)	0.5

Factor 3: Nurses perception of long term future

Eleven items of the 59 in the questionnaire reflected the nurses' perceptions of the long term future. Nurses' felt that injury permanently affected their ability to work in the future. This included affecting the length of their working life; need to change career, fear of losing their job and feeling alienated from their co-workers (see Table 58). This factor accounted for 12.2% of the variation within this section of the questionnaire.

Table 58: Nurses perception of long term future

Question	Question	Loadings
g9	I believe my ability to work will be permanently affected	0.87
g7	I believe that my working life has been reduced due to my injury/illness	0.80
g10	I believe I will have to change my career/profession as a result of my injury/illness	0.76
g11	I believe I will not be able to work in the future because of this injury/ illness	0.68
g6	I have considered leaving nursing because of my injury/illness	0.61
g4	I feared losing my job because of my injury/illness	0.46
g24	I feel alienated from my co-workers as a consequence of my injury/illness	0.40
g59	Injured nurses live in fear of re-injury	0.31
g32	I was subject to undue pressure to return-to-work	0.31
g1	My medical treatment has been successful	-0.65
g8	I believe my physical condition will return to what it was before I was injured	-0.74

AINs and ENs were more concerned regarding the long term future when compared to registered nurses (see Table 59). However, there was no difference between geographical areas.

Table 59: Simple Linear Regression models Outcome: Factor 3 vs. Area and Q6

Predictor		Coefficient	
Variable	**Category**	**Estimate (95% CI)**	**P-value**
Area (Geographical)	Major city	0	
	Regional	-0.11 (-0.35, 0.13)	0.4
	All other	0.05 (-0.17, 0.27)	0.7
Q6 (Nursing role)	Registered nurses	0	
	Enrolled nurses	0.25 (0.03, 0.47)	0.03
	Assistants in nursing	0.27 (0.01, 0.53)	0.04
	Other nurses	-0.17 (-0.57, 0.23)	0.4

Table 60 shows the results of a multiple linear regression with factor 3 (nurses' perceptions of the long term future).

Enrolled nurses gave lower overall responses to the long term future (factor 3) when compared to registered nurses. Nurses working in Emergency/ICU/OT (very specialised nurses) and those working in other areas not covered by emergency, aged or mental health also gave lower overall responses to the long term future when compared to nurses working in medical or surgical wards.

Statistically significant differences in responses were found for those nurses who indicated they had a psychological injury when compared to those with physical injuries indicating those with psychological injury were more concerned regarding their long term future.

Table 60: Multiple Linear Regression model Outcome: Factor 3

Predictor		Adjusted	
Variable	**Category**	**Estimate (95% CI)**	**P-Value**
Q6 (Nursing role)	Registered nurses	0	
	Enrolled nurses	0.3 (0, 0.61)	0.05
	Assistants in nursing	0.17 (-0.11, 0.45)	0.2
	Other nurses	-0.17 (-0.57, 0.23)	0.4
Q10 (Area of practice)	Med, surg	0	
	Emergency/ICU/OT	-0.36 (-0.69, -0.03)	0.03
	Aged	-0.26 (-0.6, 0.07)	0.1
	Mental health	-0.17 (-0.56, 0.21)	0.4
	Other	-0.34 (-0.64, -0.04)	0.02
Injury Type	Physical	0	
	Psychological	0.23 (-0.13, 0.59)	0.2
	Other	-0.43 (-0.83, -0.04)	0.03

Factor 4: Nurses' perceptions of compensation and financial aspects of their injury

Table 61 shows Factor 4 – the nurses' perceptions of the compensation and financial aspects of their injury. Nurses reported positively to being paid on time, being reimbursed for expenses and having timely treatment approved. Five items of the 59 in the questionnaire were included in this factor.

Table 61: Nurses' perceptions of compensation and financial aspects of their injury

Question	Question	Loadings
g30	The insurer paid my weekly payments on time	0.74
g29	The insurer approved all of my medical treatment in a timely manner	0.70
g52	I was reimbursed for all of my out of pocket expenses	0.70
g12	The genuineness of my injury/illness has never been questioned	0.40
g19	I was kept informed about all aspects of my case	0.32

There was no difference in nurses' perception of compensation and financial aspects of their injury between the different nursing roles or geographical area (see Table 62).

Table 62: Simple Linear Regression models Outcome: Factor 4 vs. Area and Q6

Predictor		Coefficient	
Variable	**Category**	**Estimate (95% CI)**	**P-value**
Area (Geographical)	Major city	0	
	Regional	0.1 (-0.13, 0.34)	0.4
	All other	0.06 (-0.15, 0.28)	0.6
Q6 (Nursing role)	Registered nurses	0	
	Enrolled nurses	0.06 (-0.15, 0.28)	0.6
	Assistants in nursing	0.16 (-0.09, 0.42)	0.2
	Other nurses	0.25 (-0.13, 0.63)	0.2

Table 63 shows the results of a multiple linear regression with factor 4 (nurses' perceptions of compensation and financial aspects of their injury).

Enrolled nurses gave lower overall responses to compensation and financial aspects of their injury (factor 4) when compared to registered nurses. Nurses working in Emergency/ ICU/ OT (very specialised nurses) and those working in other areas not covered by emergency, aged, medical, surgery or mental health also gave lower overall responses to compensation and financial aspects of their injury when compared to nurses working in medical or surgical wards.

Statistically significant differences in responses were found for those nurses who indicated they had a psychological injury when compared to those with physical injuries and for nurses working in aged care facilities when compared to those working in a public hospital.

Table 63: Multiple Linear Regression model Outcome: Factor 4

Predictor		Adjusted	
Variable	**Category**	**Estimate (95% CI)**	**P-Value**
Q5 (Age)		0.02 (0.01, 0.03)	< 0.001
Q6 (Nursing role)	Registered nurses	0	
	Enrolled nurses	0.29 (-0.03, 0.61)	0.07
	Assistants in nursing	0.13 (-0.16, 0.41)	0.4
	Other nurses	0.32 (-0.1, 0.75)	0.1
Area (Geographical)	Major city	0	
	Regional	0 (-0.24, 0.24)	1.0
	All other	0.04 (-0.18, 0.27)	0.7
Q10 (Area of practice)	Med, surg	0	
	Emergency/ICU/OT	0.36 (0.02, 0.7)	0.04
	Aged	0.16 (-0.28, 0.59)	0.5
	Mental health	-0.24 (-0.63, 0.16)	0.2
	Other	0.29 (-0.03, 0.61)	0.08
Injury type	Physical	0	
	Psychological	-0.4 (-0.77, -0.02)	0.04
	Other	0.17 (-0.24, 0.59)	0.4
Q3 (Type of health facility)	Public hospital	0	
	Private hospital	0.07 (-0.32, 0.47)	0.7
	Aged care	-0.38 (-0.81, 0.06)	0.09
	Disability / community	-0.13 (-0.45, 0.2)	0.4
	Other	-0.39 (-0.87, 0.09)	0.1
Q8 (Workload)	Normal (30-39 hrs)	0	
	< 30 hrs	-0.01 (-0.24, 0.23)	1.0
	> 40 hrs	-0.19 (-0.42, 0.03)	0.1

Factor 5: Nurses' perceptions of a negative experience

Table 64 shows the items included in factor 5 – nurses' perceptions of a negative experience. Five items of the 59 in the questionnaire were included in this factor. Nurses reported being unfamiliar with terminology, pressured to attend an employer nominated doctor; to change restrictions and to resign.

Table 64: Nurses' perceptions of a negative experience

Question	Question	Loadings
g27	Terminology was often used that was unfamiliar to me	0.71
g49	I was subject to undue pressure to attend a treating doctor nominated by my employer	0.66
g24	I feel alienated from my co-workers as a consequence of my injury/illness	0.40
g33	I was subject to undue pressure to change my restrictions	0.33
g34	I was subject to pressure to resign	0.31

Enrolled nurses perceived a more negative experience to the rehabilitation process when compared to registered nurses (Table 65), however, there was no difference between geographical areas.

Table 65: Simple Linear Regression models Outcome: Factor 5 vs. Area and Q6

Predictor		Coefficient	
Variable	**Category**	**Estimate (95% CI)**	**P-value**
Area (Geographical)	Major city	0	
	Regional	-0.11 (-0.34, 0.13)	0.4
	All other	0.02 (-0.19, 0.24)	0.8
Q6 (Nursing role)	Registered nurses	0	
	Enrolled nurses	0.43 (0.22, 0.65)	< 0.001
	Assistants in nursing	0.21 (-0.04, 0.46)	0.1
	Other nurses	-0.2 (-0.58, 0.18)	0.3

Table 66 shows the results of a multiple linear regression with factor 5 (nurses' perceptions of a negative experience).

Enrolled nurses gave lower overall responses to negative experiences (factor 5) when compared to registered nurses. Nurses working more than 40 hours per week had a more negative experience than those working a normal, 30-39 hour week. Nurses working in 'Other' areas not covered by emergency, aged, medical, surgery or mental health also gave lower overall responses of negative experiences when compared to nurses working in medical or surgical wards.

Those nurses with psychological injury also reported a more negative experience when compared to those with physical injury and male nurses reported lower overall responses of negative experiences when compared to female nurses.

Table 66: Multiple Linear Regression model Outcome: Factor 5

Predictor		Adjusted	
Variable	**Category**	**Estimate (95% CI)**	**P-Value**
Q6 (Nursing role)	Registered nurses	0	
	Enrolled nurses	0.55 (0.25, 0.86)	< 0.001
	Assistants in nursing	0.15 (-0.12, 0.41)	0.3
	Other nurses	-0.26 (-0.64, 0.13)	0.2
Q8 (Workload)	Normal (30-39 hrs)	0	
	< 30 hrs	-0.09 (-0.31, 0.14)	0.4
	> 40 hrs	0.19 (-0.03, 0.4)	0.08
Q10 (Area of practice)	Med, Surg	0	
	Emergency/ICU/OT	-0.13 (-0.45, 0.18)	0.4
	Aged	-0.24 (-0.66, 0.18)	0.3
	Mental health	0.02 (-0.35, 0.39)	0.9
	Other	-0.3 (-0.61, 0)	0.0470
Injury type	Physical	0	
	Psychological	0.68 (0.35, 1.02)	< 0.001
	Other	-0.2 (-0.57, 0.18)	0.3
Q3 (Type of health facility)	Public hospital	0	
	Private hospital	0.02 (-0.34, 0.38)	0.9
	Aged care	0.08 (-0.34, 0.49)	0.7
	Disability / community	-0.2 (-0.51, 0.1)	0.1950
	Other	0.25 (-0.2, 0.69)	0.3
Q4 (Gender)	Female	0	
	Male	-0.3 (-0.62, 0.01)	0.06

Delays in process

Thirty five percent of respondents indicated there was a delay in the medical management of their injury; however this was not significantly different between the different nursing roles (see Table 67).

Table 67: Were there any delays in the medical management of your injury?

Question	Response	AIN (n=119)	EN (n=75)	RN (n=243)	Other (n=28)	Total (N=465)
G85	Yes	46 (39%)	22 (29%)	85 (35%)	8 (29%)	161 (35%)
	No	73 (61%)	53 (71%)	158 (65%)	20 (71%)	304 (65%)

Delays in the development and implementation of the return-to-work program was reported by 23% of respondents, however this did not vary between the different nursing roles (see Table 68).

Table 68: Were there any delays in development and implementation of your return-to-work program?

Question	Response	AIN (n=116)	EN (n=74)	RN (n=238)	Other (n=28)	Total (N=456)
G87	Yes	28 (24%)	20 (27%)	55 (23%)	3 (11%)	106 (23%)
	No	88 (76%)	54 (73%)	183 (77%)	25 (89%)	350 (77%)

Forty percent of nurses reported having sustained an injury since the initial injury. Almost half of the AINs and ENs reported having sustained an injury since the original injury, a third of registered nurses and a quarter of 'other' nurses reported this (see Table 69).

Table 69: Have you sustained an injury/illness since your initial injury?

Question	Response	AIN (n=117)	EN (n=76)	RN (n=243)	Other (n=28)	Total (N=464)
G90A	Yes	55 (47%)	38 (50%)	87 (36%)	7 (25%)	187 (40%)
	No	62 (53%)	38 (50%)	156 (64%)	21 (75%)	277 (60%)

1.12 Discussion

This study aimed to provide evidence of the current practices relating to the rehabilitation of injured nurses in NSW. The research focused on the return-to-work practices for injured nurses, identification of practices being used, the experiences and perceptions of these practices by nurses, as well as differences between geographical locations, type of facilities and type of nurse.

Key results from this research include: nurses feeling valued, supported and involved in their return-to-work; the effect of injury on their future work life; positive and negative experiences of the process; and the differences in relation to age, type of injury (psychological), number of hours worked per week and nurse specialisation. Specialist nurses (emergency, intensive care and operating theatre) are more likely to be returned to work.

The sample was representative of the nursing workforce as follows (see Table 4): most were working in major cities or regional locations (64%) and in public hospitals (48%), a quarter (26%) worked in aged care facilities, half were registered nurses (52%) and most were female (91%). The type of injury recorded was also representative. Physical

injuries accounted for 86% of injuries in our sample with manual handling injury being the most common injury recorded. Notably, nurses reported lifting and positioning of patients as the most common cause of these injuries (see Table 8). This is consistent with the current literature for nurses in which it is reported that the health and community industry has the second highest rate of workplace injury in NSW, with manual handling injuries contributing to >43% of these injuries (3). It is of particular interest that 33% of those reporting physical injuries in this study were working in aged care facilities (n=128). This may be related to the amount of manual handling involved in such work with heavier manual handling tasks potentially being more prevalent in these facilities.

Workplace injury management practices

Most nurses in this study notified their employer of the injury on the day it occurred (68%) (see Table 5) and indicated that their employers contacted them promptly afterwards (62%) (see Table 6). However, it is of concern that 15.2% of injured nurses in this study experienced a delay of more than a week before being contacted by their employer after they sustained a workplace injury. This is clearly not consistent with the research evidence which suggests the employer should work closely with the injured worker as soon as possible after the injury and emphasises the importance of early return-to-work for injured workers (89, 90).

The present study found that 51% of injured nurses were contacted by a return-to-work coordinator within the first week of the injury occurring and 35% of insurance case managers were also reported to have contacted the injured party within the first week (see Table 21). This indicates that employers are generally notifying insurers about injuries within the required time. There was however a significant difference in the time taken for involvement with the return-to-work coordinator between nursing roles, which was not identified with contact from the insurance case manger. No contact with a return-to-work coordinator was reported by 8.6% of participants (most frequently for AINs), and 12% of RNs had no contact from the insurance case manager. Delays in contact between the injured worker and the various stakeholders has been identified in other studies as detrimental to the rehabilitation process, whereas proactive communication has been linked with better rehabilitation outcomes (87, 90, 91).

Approximately two-thirds of injured nurses in this study consulted a general practitioner for care, with about a quarter of injured nurses presenting at emergency departments (see Table 12). The process of workplace injury management requires the injured worker to see a medical practitioner for a certificate if they cannot work. When managing a worker's injury the nominated treating doctor may need to obtain further

diagnostic assistance or therapies such as X-rays or physiotherapy. This is consistent with regulatory obligations under the Workplace Injury Management and Workers' Compensation Act 1998 (69). For those injured nurses who required such interventions half of those in this study received this within three days however 18% waited more than 21 days (see Table 15). Indeed, substantial waiting periods were identified by some respondents in this study, with the range of time to see a medical specialist varying from 1 day to 78 weeks in duration (see Table 22). Delayed periods of time in receiving treatment may impact upon return-to-work and rehabilitation outcomes. Other studies have shown that the longer an injured worker is away from work the less likely they are to return (90, 92, 93).

Rehabilitation

Many nurses in this study reported being able to return-to-work within two weeks after injury (37%), although another nine percent reported being unable to return-to-work at all (see Table 16). Over three-quarters (76%) of the nurses who returned to work required rehabilitation and returned on suitable duties, with no difference found between the various nursing roles (see Table 17).

The present study found that the return-to-work coordinator was a key individual involved in the respondent's case and a rehabilitation external provider was only involved in about one third of cases (34%) (see Table 20). Interestingly, Kenny (13) found return-to-work coordinators were the most frequently reported source of perceived inadequacy by injured workers, however this was not identified in this study. Recent research concludes that one key element in the successful return-to-work process is the active involvement of the return-to-work coordinator (94).

In this study AINs indicated that they were less likely to have involvement with the return-to-work coordinator in workplace assessments (see Table 24). Enrolled nurses were significantly more likely than other nurses to have involvement from the return-to-work coordinator and from an external rehabilitation provider in workplace assessments. In this study 20% of participants reported that they did not have a graded return-to-work plan established (see Table 25). Of these, almost half (46%) returned to work on normal duties and 38% reported returning to work on suitable/modified duties (which suggests plans were actually adopted for these participants) (see Table 26). Sixteen percent of participants reported that their return-to-work plan was provided after one week. This is consistent with the data reported in Table 16 indicating that 19.6% of respondents returned to work within one week.

Suitable duties were rated both positively and negatively by the respondents in this questionnaire. Eighty-seven percent of injured nurses in this study reported being

provided with suitable duties to return-to-work, with 75% reporting these were consistent with restrictions recommended by their medical practitioner (see Table 29). According to regulatory requirements (95), when an injured nurse requires a return-to-work plan, the nominated treating doctor and the injured worker are the key stakeholders involved in the development of the return-to-work plan. This is consistent with the findings in this study, where nurses reported being involved in the development of the return-to-work plan (67%) with the nominated treating doctor (69%), the employer/supervisor (48%), and return-to-work coordinator (56%) (see Table 27). Suitable duties were provided in the pre-injury area of practice and ward for 75% of respondents in this study (see Table 38). Successful outcomes have been linked to return-to-work with the pre-injury employer and location (33).

Suitable duties identified in this study were essentially modified nursing duties (35%) or different duties such as clerical duties (20%) (see Table 31). A significant difference in the types of suitable duties provided between the various nursing roles was identified, with more ENs reporting returning to work on restricted or light duties (49%) than AINs or RNs (see Table 32). Even though injured nurses reported that the suitable duties provided were nursing related, RNs were significantly more likely to perform nursing related clinical duties than other nurses. These differences may be related to the type of duties normally undertaken by AINs and ENs, who may have more duties that involve manual handling and a more limited range of duties, when compared to RNs. However, further investigation is needed to determine the reasons for these differences in rehabilitation associated with nursing role. More ENs had involvement with external workplace rehabilitation providers who are engaged to provide specialised expertise in case management (see Table 20) (in addition to that generally available to the employer and insurer (96)) and assist in returning an injured worker to work in the pre-injury area or in a new area. The reason for this cannot be determined from the data collected.

There were no differences between type of health facility, geographical area or principal area of practice in relation to the type or availability of suitable duties in this study (see Table 33, Table 34 and Table 35). In contrast, the literature suggests that employers from hospitals find the task of providing suitable duties particularly difficult (13).

The present study found that some nurses believed that suitable duties were often actually unsuitable (25%) and 20% reported that the supervisor/peers were noted as being unsupportive (see Table 30). However, 62 % nurses in this study reported they were assigned realistic duties and were supported during the process by their

supervisor (see Table 55). Unsupportive supervisors and co-workers, and inflexibility of employers has been identified in other literature as an impediment in the provision of suitable duties for injured workers (13, 19).

In this study, the most frequently reported assessment as part of the rehabilitation process was a workplace assessment (30%) (see Table 49). However, 42% of injured nurses in this study were not aware if a workplace assessment had been completed by key stakeholders prior to their return to work (see Table 24) and AINs were significantly less aware than other nurses. Workplace assessments are conducted by qualified assessors to ensure that a return-to-work plan is precisely matched to the worker's current work capacity, thus providing for safe upgrading of duties with the intention of improving the worker's capacity (14)(97). Under the NSW WorkCover guidelines, workers referred to an external rehabilitation provider must undergo a workplace assessment. In relation to the AINs in this study, their response may be linked to an increased involvement from the insurance case manager and less involvement from a rehabilitation provider prior to returning to work.

Of the respondents in this study, 39% were provided with supernumerary duties, but this occurred less frequently for RNs (see Table 39). Supernumerary duties are those where nurses work as an 'extra' on a shift. However, there is limited literature regarding the use of duties in a supernumerary capacity and further research into the value and benefits of these duties is required.

Most injured nurses in this study (58%) reported spending between one week and five months on suitable duties, and 30% reported spending between 6-12 months on suitable duties (see Table 36). Provision of suitable duties is documented as commonly being provided as part of the rehabilitation process, however the length of time injured workers spend on suitable duties is not clearly articulated(33, 98).

Return-to-work with the same employer and in the pre-injury area of practice was reported by the majority (61%) of the injured nurses in this study (see Table 42), which is in contrast to the literature (19). Ten percent of nurses in this study were unable to return-to-work. This is a little less than in other environments in Australia and New Zealand where 15% and 13% of injured workers were reported as being unable to return-to-work respectively.

Nurse experiences and perceptions

Most injured nurses in this study reported feeling valued (56%) and supported (57%) by their employers (see Table 52). Most nurses also reported receiving a positive and/or appropriate initial response from their employer when notifying them of the injury

and felt valued as an individual and professional. However about one-third (32%) reported a negative response from their employer (see Table 9). This may be reflective of longer term outcomes for these injured nurses. Although the majority of nurses reported a positive initial response from their employers in this study, the data about difficulties undertaking suitable duties suggest that some nurses subsequently experienced negative attitudes and expectations from management or staff.

In addition, nurses who reported a psychological injury were less likely to experience a positive response from their employer than a nurse reporting a physical injury. Those nurses who indicated they suffered a psychological injury also gave significantly more negative responses in their perceptions of compensation and financial aspects of their injury when compared to those suffering physical injury, and also reported more negative experiences of the rehabilitation process (see Table 63 and Table 66). Workplace stress in nurses has been identified in previous research(31), with psychological injuries among nurses and working women generally increasing(73) . The characteristics of the workload and working environment are reported to be the primary causes(31). In the present study, nurses working more than 40 hours per week or those who worked overtime were less likely to feel supported than nurses working less hours (see Table 54). There were no significant differences in perceived support between nursing roles or geographical areas.

The factor analysis identified that age was a significant factor for nurses feeling supported and valued, in relation to perceptions of the return-to-work process and regarding perceptions of compensation and financial aspects of injury. Older nurses were more likely to feel less valued and have more negative perceptions of the return-to-work process and of the compensation aspects. This is consistent with literature that indicates older workers, and older workers with a disability have been identified as experiencing stereotyping and discrimination on the part of employers, with the suggestion that they experience more sickness and injury and therefore are not as productive as younger workers (99, 100).

When reflecting on the nurse's perception of their future post injury, 52% of nurses in this study indicated that the injury may permanently affect their ability to work in the future (see Table 58). Nurses suggested their injury may potentially affect the length of their working life and alienate them from their co-workers. It also created a fear of losing their employment. AINs, ENs and very specialised nurses (such as those working in Emergency, Intensive Care and Operating Theatres) and nurses suffering psychological injury were more concerned regarding their longer term future than RNs.

Concerns regarding the longer term future have also been identified in other research involving injured workers in NSW (18).

Although the responses from this study are encouraging regarding the provision of suitable duties, it is important to note that 42% of the respondents believed that their recovery continued to improve while on suitable duties, and another 42% suggest that it potentially delayed their recovery (see Table 18). Suitable duties or modified work has been reported to facilitate return-to-work, increase the likelihood of return-to-work for injured workers and improve outcomes(71), however these benefits are often simply considered in economic terms such as a reduced numbers of days lost from work and reduced costs. Further study to investigate delays in recovery associated with suitable duties is required.

Nurses working more than 40 hours per week were significantly less likely to return-to-work on the same duties (see Table 45) compared with those working less than 40 hours, and they reported more negative experiences of the rehabilitation process. Overtime is unlikely to be part of the post injury return-to-work plan, however in the study by the Heads of Workers' Compensation Authorities, 55% of injured Australians reported returning to work on their pre-injury hours (93).

Aged care nurses in this study had reduced odds of returning to work with the same employer (see Table 46). Almost all injuries to nurses in the aged care sector were manual handling injuries (92%). Further study investigating the nature of the work and the type of, and ratio of nurses in this sector is required to determine reasons why this occurs. Characteristics of the work environment, the dependency levels of aged care patients, and the amount and nature of manual handling involved in this sector requires further study.

Nurses' perceptions reported in this study may provide some insight into the process and outcomes of occupational rehabilitation.

Study Limitations

The response rate to the cross-sectional study was modest (14.2%) and consequently the results may not be representative of the target nursing population. Nonetheless, the return-to-work rates reported in this study and several other related factors, such as a lack of support and negative attitudes of key stakeholders, are similar to those reported in studies of injured workers in other occupations (13). Secondly, the retrospective nature of this study involved respondents reporting data for a period of two years prior to completing the questionnaire. The results therefore may have been affected by

recall bias and associated under-reporting. However, the more memorable, serious or significant cases are likely to have been well represented in the sample.

The sample approached to participate in the cross-sectional study was nurses identified by WorkCover NSW using their Workers' Compensations claims database. Injured workers submit claims via employers or directly to agents or insurers. The agent/insurer processes this information and enters it into a system, which at the end of each month, is reported to WorkCover. This system includes descriptive fields which describe the occupation of the injured worker and involves the allocation of the most appropriate Australian Standard Classification of Occupation code, which assigns the injured worker to an occupation category. A poor description or a data entry error can therefore give rise to a coding error such that the occupation of the injured worker is recorded incorrectly. From the substantial number of workers initially approached to participate in the study who reported they were not nurses, it is evident that coding errors for occupation affected recruitment to this study. As such, these coding/data entry errors may have impacted on the determination of the sample and its appropriateness.

The determination of the sample may also have been affected by the difference between the injury date and the claim date. Typically, there is a lag between when a claim is lodged with an insurer, known as the 'claim date', and when the injury occurred, the 'date of injury'. Given the sample data provided by WorkCover was based on the claim date, there may therefore have been a slight mismatch between the intended sample (nurses who experienced injuries in the last two years) and the actual sample. This is unlikely to have affected the representativeness of the sample but may have impacted the response rate. Similarly, the data provided by WorkCover (claim dates between 1 July 2005 and 30 June 2007) did not exactly match with questions in the survey instrument which asked respondents to report on injuries sustained in the last two years, depending on when they completed the questionnaire and considering it was posted in November 2008.

Finally, respondents were asked to report on injuries requiring rehabilitation. It is possible that some injured nurses may not have reported injuries for which they perceived they did not undergo rehabilitation although they actually did, despite a definition of 'occupational rehabilitation' being provided at the outset of the questionnaire.

6. Achievement of study aims and objectives

This study was conducted in two parts and was designed to achieve the research aims and objectives outlined below.

Part 1 of the study was a series of qualitative focus groups (one in each of the three geographical areas) with workplace return-to-work coordinators will be conducted, to identify current practices, as well as the experiences and perceptions of the rehabilitation process from the employer perspective.

Part 2 of the study was a cross sectional study of injured nurses utilising a posted questionnaire to determine their experiences and perceptions of the rehabilitation process.

The study aimed to determine:

1. What are the institutional practices and processes that are utilised following injury to nurses in NSW?
2. What are the perceptions and experiences of injured nurses involved in the occupational rehabilitation process in health facilities in NSW?
3. What are the perceptions and experiences of workplace return-to-work coordinators involved in the occupational rehabilitation process for injured nurses in health facilities in NSW?

To achieve these aims the study objectives were:

4. To identify the practices and processes used in the return-to-work of injured nurses.
5. To evaluate the perceptions and experiences of injured nurses and workplace return-to-work coordinators with respect to these practices.
6. To identify if any differences in practices between rural, regional and metropolitan geographical areas exist.
7. To identify if any differences in practices between aged care, public and private sectors exist.
8. To identify types of nursing activities employed as suitable duties in a return-to-work program for injured nurses.
9. To recommend desirable practices to facilitate the return-to-work of injured nurses.

1.13 Practices and processes used; and perceptions and experiences of return-to-work coordinators in the return-to-work of injured nurses

The practices involved in returning injured nurses to work from return-to-work coordinators' perspective are reported by return-to-work coordinators in Part 1 of the study included:

There is wide variation in the organisational context in which return-to-work coordinators operate including: the way the return-to-work process is valued and resourced, models for injury prevention and management, leadership and supervisory commitment to the process; and financial support for return-to-work coordinators roles, training and supernumerary staffing. In rural areas the injury management process is also affected by limited resources and services, and distances involved in travelling to access services. Return-to-work coordinators were sincerely committed to assisting and supporting nurses to return-to-work and were motivated to do this by nursing shortages.

There is often a lack of clarity about case management which may be viewed by both return-to-work coordinators and insurers as 'their' role, resulting in confusion and anxiety for injured nurses because they are uncertain about who is managing their case. There is a perception that doctors often contribute to barriers that delay the return-to-work process. This process is viewed as complex and may be compounded by confusion and fear of injured workers, also resulting in delays in successful return-to-work. These same issues have been reported in the literature previously, (12, 18, 41) yet they continue to interfere with the return-to-work process. Return-to-work coordinators recognised that timely return-to-work may be affected by carer responsibilities for some injured nurses.

1.14 Practices and processes used; and perceptions and experiences of injured nurses in the process of returning to work following an injury

Overall, most nurses in Part 2 of this study reported being able to return-to-work successfully. Seventy per cent of nurses sought medical assistance within 24 hours of being injured and most of them presented to a general practitioner or emergency department. Fifty per cent of injured nurses were contacted by a return-to-work coordinator within the first week of the injury occurring and 35% of insurance case managers were also reported to have contacted the injured party within the first week. This indicates that employers are generally notifying insurers about injuries within the required time.

The return-to-work coordinator was a key individual involved in the respondent's case and a rehabilitation external provider was only involved in about one third of cases. Most participants returned to work on a graded return-to-work plan and nurses reported being involved in the development of the return-to-work plan with the nominated treating doctor, the employer/supervisor and return-to-work coordinator. More than one third of nurses reported being able to return-to-work two weeks after their injury; although approximately ten percent reported being unable to return-to-work at all. Most nurses reported returning to work with the same employer and in the pre-injury area of practice. Workplace assessments were reported by one third of participants however, almost half of them were not aware if a workplace assessment had been completed by key stakeholders prior to their return-to-work.

Over three-quarters of the nurses who returned to work, returned on suitable duties. More than half the participants reported spending between one week and five months on suitable duties, and one third reported spending between 6-12 months on suitable duties. For those who returned to work successfully, most reported being supported and valued by management and co-workers.

Various factors were identified by nurses that delayed their return-to-work or that contributed to negative rehabilitation experiences. Some injured nurses experienced a delay of more than a week before being contacted by their employer after they sustained a workplace injury. Initial management responses were positive however, some nurses reported negative attitudes that contributed to the negative rehabilitation experiences, in particular for those who suffered a psychological injury. Nurses who worked longer hours and who were older also reported that they felt less supported. Aged care nurses in this study were less likely to return-to-work with the same employer and most likely to sustain manual handling injuries. Half of the nurses in this study indicated that the injury may permanently affect their ability to work and may potentially affect the length of their working life.

This study provides two perspectives of the practices and processes used in the return-to-work of injured nurses. Both perspectives suggest that the return-to-work coordinator is the key role that facilitates the successful return-to-work of injured nurses. The process is conducted in a complex organisational context and while many nurses were successfully rehabilitated, numerous factors may contribute to delayed return-to-work and a negative rehabilitation experience for injured nurses. Nurses who are valued by their employer and provided with adequate support are more likely to have a positive rehabilitation experience. Nurses' who sustained psychological injury, worked longer

hours, were older or who worked in aged care, received less support and had more negative rehabilitation experiences.

Large scale multi-site comparative studies into health care organisational practices are required in order to provide a robust evidence base for the development of best practice guidelines for the return-to-work process. The focus of this type of study would be on organisational processes and outcomes of return-to-work. While this study has touched on the issue of geographical isolation and return-to-work, further study of this issue is required. Case management practices within the Workers Compensation system need exploration in order to clarify roles and to determine which stakeholders are best positioned to undertake case management and to establish best practice. Nurses who are at risk for negative rehabilitation experiences may require additional support systems to assist their successful return-to-work.

1.15 Differences in practices between rural/ regional and metropolitan geographical areas

This study aimed to identify if there were any differences in practice between rural, regional and metropolitan areas in relation to the occupational rehabilitation of injured nurses. Our survey included injured nurses from major cities (41%), inner and outer regional areas (23%) and remote (29%) geographical areas. The focus groups included return-to-work coordinators from metropolitan/regional (n=15) and rural geographical areas (n=10).

Differences in practice between rural and metropolitan/ regional geographical areas were identified in relation to workforce issues for nurses, travel, GP's and in relation to the organisation.

Workforce issues

Issues associated with the nursing workforce impacted upon return-to-work in all areas. This included the general shortage of qualified nurses which is globally documented (25-27). Return-to-work coordinators outlined a real commitment to achieving a successful return-to-work for injured nurses because of the workforce shortages. However, in rural areas the return-to-work coordinators indicated they needed to do everything possible to retain their injured nursing staff due to the nurse shortage and as most did not have the option of calling in agency nurses to fill the gap. Some return-to-work coordinators felt that because their organisations were located in rural and remote areas, that they adopted a different attitude towards return-to-work and that this was intimately linked to the issue of staff retention.

Return-to-work coordinators in all geographical areas felt they needed to be creative to accommodate specialised nurses on suitable duties, due to the expertise they hold, however in rural settings this was identified as being particularly important due to the limited number of specialist nurses available. Innovation to assist such nurses to remain at work was identified as being essential in rural settings.

The use of agency staff varied between the geographical areas. Rural return-to-work coordinators discussed the limited availability of agency staff and their urban counterparts discussed the special challenges that agency staff presented. Internationally, there is concern that the reliance on agency staff may result in organisations shifting more hazardous jobs and tasks to members of this alternative workforce and that casual staff are more likely to be at increased risk of stress because of their more precarious employment position(40).

Although differences between rural and metropolitan areas were discussed in the focus groups, there was no statistically significant difference between type and availability of suitable duties, return-to-work or return to pre-injury duties of injured nurses between geographical areas identified in the survey.

Travel

Travel arrangements were discussed as impacting upon return-to-work in all geographical areas. Personal travel such as the distance and time travelled, the type of travel surface or mode of transport, and individual travel arrangements needed consideration in order to determine shifts and suitable duties. This was particularly true for injured nurses living in rural and remote areas who travel longer distances over a variety of terrain to get to work and who often needed to be accommodated on shifts that allowed them to car pool to work.

Availability of resources, and the distances to access services in rural areas both for treatment and rehabilitation impact upon the timely injury management process, with travel being identified as an issue, as the long journeys required often exacerbate the injury.

General Practitioners

General Practitioners (GPs) have been identified as one of the barriers to return-to-work for injured workers (12),and this was also identified in the present study. Those in rural settings identified that in some instances working in smaller, more isolated communities created better relationships with GPs and this supported a timely return-to-work ethos, however not all return-to-work coordinators working in rural settings

agreed with this indicating they did not think that rural GPs were any more accessible or supportive than their urban counterparts.

Organisational issues

A wide variation of organisational contexts in which the return-to-work coordinators operate was identified in the present study. This includes wide variation in the way return-to-work is valued and resourced; the model for injury prevention and management; the leadership and supervisory commitment to the process; the commitment to education of return-to-work process within the organisation and professional development for the return-to-work coordinators. In particular there were large differences in the financial commitment the organisation made, and budgetary arrangements for funding both the return-to-work coordinators role and supernumerary staffing positions. Organisational approaches to return-to-work are influenced by local conditions and the geographic location can have a profound effect on a range of factors linked to successful return-to-work. Factors such as the distances travelled from rural areas to services for diagnosis and treatment is one example.

The organisational attitude towards return-to-work was also discussed as varying between geographical areas. Return-to-work coordinators in rural areas recognised that the reputation of their organisation rested upon fair management of injured workers. The community focus of employers was identified as important with consideration of the impact of injured workers upon the local community and the subsequent feedback from the community about the employer needing to be considered.

Another difference between geographical locations highlighted the isolation of some rural return-to-work coordinators. Some return-to-work coordinators were not in contact with other return-to-work coordinators either within their own organisation or from other organisations. A lack of peer support was considered detrimental to ongoing professional development, affecting knowledge and skill acquisition and the ability to innovate.

1.16 Differences in practices between aged care facilities, public hospitals and private hospitals

This study aimed to identify if there were any differences in practice between aged care facilities, public and private hospitals in relation to the occupational rehabilitation of injured nurses. Our survey included injured nurses from public hospitals (48%), private hospitals (7.4%), aged care facilities (26%) and also those working in disability or

community (13%). The focus groups included return-to-work coordinators from public hospitals (n=8), private hospitals (n=8) and Aged care/disability sectors (n=5).

There were few differences identified between aged care facilities, private and public hospitals, however some of the differences identified in relation to organisational approaches maybe the result of differences within these sectors. Aged care nurses were the exception with some differences being identified.

The model for return-to-work within organisations; managerial and supervisory attitudes; and resourcing varied between facilities. Some studies have attempted to understand how organisational culture impacts upon return-to-work (54, 63, 65-67). The structural characteristics of companies (size and sector) have been identified as impacting upon early return-to-work (64). In the present study organisational approaches varied from well-resourced and highly supported return-to-work systems to poorly resourced return-to-work coordinators who were simply unable to do the job effectively due to their part-time status or because the return-to-work position was just one of many “hats” or roles they assume in the workplace.

Aged care nurses in the present study have reduced odds of returning to work with the same employer and when compared to other nurses those working in aged care had more manual handling injuries. Thirty three percent of those reporting physical injuries in the present study were working in aged care facilities. This may be related to the amount of manual handling involved with potentially heavier work being more prevalent in these facilities. Further study investigating the nature of the work and the type of and ratio of nurse in this area is required to determine reasons why this maybe the case. Differences in the nature of the work environment, the dependency levels of these patients, the amount of manual handling involved with potentially heavier work may be more prevalent in these establishments requires further study.

There was no statistical difference between ability to return-to-work, to return-to-work on pre-injury duties or type of suitable duties provided between facility, in our survey results, however it was noted in the focus groups that return-to-work can be impeded where nurses normally work alone, such as in residential facilities with limited staffing numbers and with the physical arrangement of these facilities. Literature however, suggests that employers from hospitals find the task of providing suitable duties particularly difficult (13).

1.17Types of nursing activities deemed as suitable duties in a return-to-work program for injured nurses

Return-to-work coordinators in Part 1 of the study reported that:

For nurses who had a high manual workload, it was often more difficult to find appropriate suitable duties (ENs and AINs). This was also true for nurses in highly specialised areas (ICU and OT). One of the most novel results relates to community nurses who have significant issues due to difficulties driving following physical injuries and carrying out solitary nursing activities following a psychological injury. Nurses in residential facilities have both a heavy manual workload and often work alone.

For nurses who had supervisory or management roles prior to injury, return-to-work coordinators were more often able to find them suitable duties. These roles were viewed as more likely to constitute suitable duties following injury.

Most return-to-work coordinators supported the view that it was important to maintain regular teams, however in the case of psychological injuries due to workplace bullying it was often difficult to maintain the worker in the original work team.

The range of suitable duties offered included administrative, light clinical duties. Some examples of suitable duties were:

1. Admissions
2. Discharges and follow-up discharge phone calls
3. Patient education
4. Patient observations
5. Medications
6. Feeding patients
7. Spending time with patients
8. Supervision/mentoring of clinical staff
9. Documentation (including patient care plans, medical records, organisational policies and procedures, electronic documentation including data entry)
10. Administration and coordination activities (continuity of care)

Nurses in Part 2 of the study reported that:

Three quarters of the injured nurses reported they were provided with suitable duties that were consistent with restrictions recommended by their nominated treating doctor. They also reported being involved in the return-to-work plan and most continued to work in their pre-injury area of practice. Suitable duties were modified nursing duties or different duties such as clerical. AINs and ENs were more likely to have duties which involved manual handling prior to sustaining an injury. ENs returned to work more often on restricted or light duties. RNs were more likely to perform nursing duties than other

nurses. There were no differences between health facility, geographical areas or principal area of practice in relation to the type of availability of suitable duties in this part of the study.

Examples of suitable duties reported are:

1. Reduced hours or reduced days of work
2. Restrictions to lifting, pushing and pulling and/or duration of standing
3. Patient observations
4. Clinical administration
5. Clerical work, ward clerk, photocopying, filing and phone duties
6. Triage
7. Showering patients, feeding and activities of daily living
8. Wound dressings
9. Charts and documentation including writing reports
10. Management and scheduling duties
11. Medications including ordering
12. Stock audits
13. Short theatre cases
14. Aged care assessments
15. Pre-admissions, history taking and pre-operation preparation
16. Discharges including discharge planning
17. Patient enquiries
18. Diversional activities
19. Cleaning
20. Community mental health team
21. Clinic work, including outpatients, immunisation, wounds, antenatal
22. Restricted patient contact or home visiting
23. Computer data entry and auditing
24. Education of patients and/or staff and orientation and new staff training
25. Respite care and day care

26. Recovery room nursing
27. Special care nursing
28. Stock inventory including restocking
29. Policy revision and accreditation documentation
30. Assessment and reviewing plans
31. Case management
32. Community health
33. Occupational health and safety including updating material safety data sheets and safety audits
34. Clinical governance including risk management and root cause analysis
35. Research and special projects
36. Selection and modification of equipment
37. Clinical supervision including team leader
38. Nurse buddy to assist with normal duties
39. Supernumerary
40. Promoted to new role

Overall nurses in this study reported that they were assigned realistic duties and were supported during the process by their supervisors. However, one quarter of nurses reported that their suitable duties were not suitable, and some were not supported by their supervisors and co-workers and these factors may have negatively impacted their return-to-work experience.

Similarities

The data from the return-to-work coordinator's focus groups is consistent with the data from the nurses' questionnaire as follows:

ENs and AINs had more difficulties with the provision of suitable duties due to their high manual handling workload.

For nurses who had supervisory or management roles prior to injury, return-to-work coordinators were more often able to find them suitable duties. These roles were viewed as more likely to constitute suitable duties following injury. The questionnaire data tends to support these findings.

The range of suitable duties offered included administrative, light clinical duties. Some examples of suitable duties provided in parts 1 and 2 of the study were:

1. Admissions
2. Discharges and follow-up discharge phone calls
3. Patient education
4. Patient observations
5. Medications
6. Feeding patients
7. Spending time with patients
8. Supervision/mentoring of clinical staff
9. Documentation (including patient care plans, medical records, organisational policies and procedures, electronic documentation including data entry)
10. Administration and coordination activities (continuity of care)

Differences

Nurses in highly specialised areas (ICU and OT) were thought to have more difficulties with the provision of suitable duties by return-to-work coordinators, however the responses of injured nurses in the questionnaire showed that emergency, intensive care and operating theatre nurses were highly likely to be able the return to their normal duties.

In part 1 of the study, the novel results relates to community nurses who have significant issues due to difficulties driving following physical injuries and carrying out solitary nursing activities following a psychological injury was not supported by the questionnaire data.

In part 1 of the study the results relating to nurses in residential facilities having both a heavy manual workload and often working alone, is not supported by the questionnaire data.

Part 1 of the study found that return-to-work coordinators supported the view that it was important to maintain regular teams, however in the case of psychological injuries due to workplace bullying it was often difficult to maintain the worker in the original work team. This is supported in part 2 of the study where nurses reported being unable to undertake suitable duties for reasons including negative attitudes and expectations of management and staff including bullying and termination of employment.

There were ten types of suitable duties identified in parts 1 and 2 of the study which were consistent; however there were an additional 30 types of suitable duties identified by nurses in the part 2 questionnaire responses. Importantly, a quarter of nurses also reported that the suitable duties provided were not consistent with the restrictions recommended by their nominated treating doctor.

1.18 Recommended practices to facilitate the return-to-work of injured nurses

In synthesising the results from the two arms of the study a number of recommendations for facilitating the return-to-work of injured nurses emerge. These can be considered in two main groups; possible changes to the current process and suggestions for further research.

Changes to the current process

1. There is clearly and commonly confusion on the part of the injured nurse regarding the rehabilitation process. There is a need for plain English and user friendly information. This should include clear guidelines on the roles and responsibilities of the key players in the process, particularly those related to case management.
2. Casual employees, and nurses with several employers, are not adequately considered in the current rehabilitation processes. Suitable duties are not necessarily always made available to such individuals, and responsibility for their occupational rehabilitation is often not defined across multiple employers.
3. There needs to be greater emphasis given to the positive influence senior management may bring to the rehabilitation process. Their role with respect to supernumerary positions and organisational culture related to occupational rehabilitation of injured nurses appears critical and underutilised.
4. General Practitioners need to be more actively involved in the rehabilitation process and play a greater role in supporting the injured nurse. Education of GPs should be reviewed and adapted to their needs, and rehabilitation processes that involve GPs simplified as much as possible.
5. Suitable duties should be appropriate to the level of training and experience of the injured nurse. Similarly, further consideration is needed regarding mechanisms for successfully retraining injured nurses into other nursing roles rather than effectively forcing them to leave the profession.

6. Delays in implementing treatment related to issues with payment need to be overcome. Early intervention is highly desirable to reduce the likelihood of psychosocial issues developing.
7. Education aimed at reducing age discrimination in the workplace should be provided, particularly with ageing of the workforce and the increasing need to retain nurses.
8. There is an urgent need for nationally recognised training for return-to-work coordinators as the present levels of training and skill vary substantially across some jurisdictions, with an extension of the harmonisation achieved between NSW, Queensland and Victoria required. Injured nurses are entitled to similar levels of service and care wherever they may work and live in Australia.
9. The relative invisibility of psychological injuries is associated with the risk of accusations of malingering and non-validation of injury, as well as workplace bullying. It is important that workplaces are accountable in their organisational processes in relation to rehabilitating nurses with occupational mental health issues. In many cases, significant cultural change is required.

Directions for future research

1. Elucidating differences in experiences in the occupational rehabilitation process between the various nursing roles and the factors that lead to these differences may help inform the development of more successful occupational rehabilitation processes.
2. There is an urgent need to further explore the reasons why some injured nurses are not being offered suitable duties.
3. The relationship between nursing role satisfaction and the success of occupational rehabilitation merits investigation.
4. Manual handling injuries continue to be over-represented in nurses and require further workplace-based study.
5. Further research investigating what GPs perceive as the barriers to successful occupational rehabilitation may be useful in promoting their engagement.

7. References

1. Retsas A, Pinikahana J. Manual handling activities and injuries among nurses: an Australian hospital study. J Adv Nurs. 2000;31(4):875-83.

2. Inness E. Workplace-based occupational rehabilitation in New South Wales, Australia. Work. 1995;5:147-52.

3. WorkCover NSW. New South Wales Statistical Bulletin 2008/09. Produced by the Knowledge Management Branch, WorkCover New South Wales; 2010.

4. Safe Work Australia. National Online Statistics Interactive. [cited 2010]; Available from: http://nosi.ascc.gov.au.

5. Manual Handling Guide for Nurses, 2nd Edition [database on the Internet]. WorkCover NSW 2006. Available from: http://www.workcover.nsw.gov.au/formspublications/publications/Documents/manual_handling_guide_for_nurses_4799.pdf.

6. Nelson A, Fragala G, Menzel N. Myths and facts about back injuries in nursing. Am J Nurs. 2003 Feb;103(2):32-40.

7. WorkCover NSW. Statistical Bulletin 2007/08 WorkCover, NSW; 2009.

8. Australian Nursing Federation (Victorian Branch). Literature Review of the Barriers and Factors for a Successful Return to Work2007.

9. Institute for Work & Health. Seven 'principals' for successful return to work2007: Available from: http://www.iwh.on.ca/seven-principles-for-rtw.

10. MacEachen E, Clarke J, Franche RL, Irvin E. Systematic review of the qualitative literature on return to work after injury. Scand J Work Environ Health. 2006;32(4):257-69.

11. Franche R, Krausse N. Readiness for Return to work Following Injury or Illness: Conceptualizing the Interpersonal Impact of Health Care, Workplace and Insurance Factors. J Occup Rehabil. 2002;12(4):233-56.

12. Foreman P, Murphy G, Swerissen H. Barriers and Facilitators to Return to Work: A Literature Review. Melbourne: Australian Institute for Primary Care, La Trobe University; 2006 [cited 31/03/2009]; Available from: www.workcover.com/documents.aspx?fno=1353.

13. Kenny DT. Common themes, different perspectives: a systemic analysis of employer-employee experiences of occupational rehabilitation. Rehabilitation Counseling Bulletin. 1995;39(1):54-83.

14. Kenny DT. Barriers to occupational rehabilitation: an exploratory study of long-term injured workers. Journal of Occupational Health and Safety, Australia and New Zealand. 1995;11(3):249-56.

15. Unions NSW. Report on a quantitative study of 1000 seriously injured workers and their Return to Work2005: Available from: http://www.workcover.nsw.gov.au/formspublications/publications/Documents/barriers_return_work_research_report_2793.pdf.

16. Australian Institute of Health and Welfare. Health and community services labour force 20062009: Available from: http://www.aihw.gov.au/publications/hwl/hwl-43-10677/hwl-43-10677.pdf.

17. Nursing and Health Services Consortium. New South Wales Workforce Research Project. 2000 [04/07/2008]; Available from: http://www.dest.gov.au/archive/highered/eippubs/eip01_12/3.htm.

18. Sager L, James C. Injured workers' perspectives of their rehabilitation process under the New South Wales Workers Compensation System. Aust Occup Ther J. 2005;52(2):127-35.

19. Langford E. Buried But Not Dead: A survey of occupational illness and injury incurred by nurses in the Victorian health service industry1997: Available from: http://www.anfvic.asn.au/about/infopages/2993.html.

20. Department of Human Services Victoria. Nurse Recruitment and Retention Committee: Final Report. Appendix 3 Quantitative Survey of Registered Nurses, Non-Working Nurses. Melbourne2000 [cited 02/02/2008]; Available from: http://www.dhs.vic.gov.au/pdpd/pdfs/govresp.pdf.

21. Australian Nursing Federation (Victorian Branch). Experience of Injured and/or Ill Nurses - Return to Work Project Focus Groups2007; Report 1: Available from: http://www.anfvic.asn.au/multiversions/8869/FileName/Report_4.pdf.

22. Krause N, Frank JW, Dasinger LK, Sullivan TJ, Sinclair SJ. Determinants of duration of disability and return-to-work after work-related injury and illness: challenges for future research. Am J Ind Med. 2001 Oct;40(4):464-84.

23. Beardwood B, Kirsh B, Clark N. Victims twice over: Perceptions and experiences of injured workers. Qual Health Res. 2005;15(1):30-48.

24. Australian Bureau of Statistics. Selected Health Occupations: Australia, 2006 - 4819.0. 2006 [updated 17/06/2008; cited 2009 July]; Available from: http://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/4819.0.

25. Duckett D. Health workforce design for the 21st century. Aust Health Rev. 2005;29(2):201-10.

26. Senate Community Affairs References Committee. The patient profession: time for action: report on the inquiry into nursing. Canberra: Commonwealth of Australia; 2002 [cited 29/04/2009]; Available from: http://www.aph.gov.au/Senate/Committee/clac_ctte/completed_inquiries/2002-04/nursing/report/index.htm.

27. Pryjmachuk S, Easton K, Littlewood A. Nurse education: factors associated with attrition. J Adv Nurs. 2009 Jan;65(1):149-60.

28. The Australian Health Workforce Institute. Australian Nursing Workforce Summary. Australia/New Zealand: Kronos 2008 [2009]; Available from: http://www.renalsociety.org/announcements/ANWR_Executive_Summary.doc.

29. Australian Government. WorkForce Tomorrow - Adapting to a more Diverse Australian Labour Market,. In: Employment and Workplace Relations Services, editor.2005.

30. Shaw W, Hong QN, Pransky G, Loisel P. A literature review describing the role of return-to-work coordinators in trial programs and interventions designed to prevent workplace disability. J Occup Rehabil. 2008;18(1):2-15.

31. McVicar A. Workplace stress in nursing: a literature review. J Adv Nurs. 2003;44(6):633-42.

32. WorkCover NSW. Guidelines for Employers, Return to Work Programs2003: Available from: http://www.workcover.nsw.gov.au/NR/rdonlyres/8B77273D-6E45-4246-AE25-353BC2D5F1DA/0/guidelines_for_employers_return_to_work_programs_506.pdf.

33. Franche RL, Cullen K, Clarke J, Irvin E, Sinclair S, Frank J. Workplace-based return-to-work interventions: a systematic review of the quantitative literature. J Occup Rehabil. 2005 Dec;15(4):607-31.

34. Martikainen P, Bartley M, Lahelma E. Psychosocial determinants of health in social epidemiology. Int J Epidemiol. 2002 Dec;31(6):1091-3.

35. Kapiriri L, Norheim OF, Martin DK. Priority setting at the micro-, meso- and macro-levels in Canada, Norway and Uganda. Health Policy. 2007 Jun;82(1):78-94.

36. Bensimon CM, Tracy CS, Bernstein M, Shaul RZ, Upshur RE. A qualitative study of the duty to care in communicable disease outbreaks. Soc Sci Med. 2007 Dec;65(12):2566-75.

37. Hage J, Jordan G, Mote J. A theory-based innovation systems framework for evaluating diverse portfolios of research, part two: macro indicators and policy interventions. Science and Public Policy. 2007;34(10):731-41.

38. Kompier MA. New systems of work organization and workers' health. Scand J Work Environ Health. 2006 Dec;32(6):421-30.

39. Landsbergis PA. The changing organization of work and the safety and health of working people: a commentary. J Occup Environ Med. 2003 Jan;45(1):61-72.

40. National Institute of Occupational Health and Safety. The changing organization of work and the safety and health or working people2002: Available from: http://www.cdc.gov/niosh/02-116pd.html.

41. Friesen MN, Yassi A, Cooper J. Return-to-work: The importance of human interactions and organizational structures. Work (Reading, Mass. 2001;17(1):11-22.

42. Willis E. The sociological quest: An introduction to the study of social life. Sydney: Allen and Unwin; 2004.

43. Nord W, Lawrence T, Hardy C, Clegg S, editors. The Sage Handbook of organization studies second ed. London: Sage Publications; 2006.

44. Young AE, Wasiak R, Roessler RT, McPherson KM, Anema JR, van Poppel MN. Return-to-work outcomes following work disability: stakeholder motivations, interests and concerns. J Occup Rehabil. 2005 Dec;15(4):543-56.

45. Powell RA, Single HM. Focus groups. Int J Qual Health Care. 1996 Oct;8(5):499-504.

46. Morgan D. Focus groups as qualitative research. 2nd ed. London: Sage; 1997.

47. Kitzinger J. The methodology of focus groups: the importance of interaction between research participants. Sociology of Health. 1994;16(1):103-21.

48. Merriam SB. Qualitative research: A guide to design and implementation. San Francisco: Wiley Press; 2009.

49. Australian Bureau of Statistics. Census geography paper 03/01 ASGC remoteness classification - purpose and use. Commonwealth of Australia; 2001 [July 2008]; Available from: www.abs.gov.au/.../f9c96fb635cce780ca256d420005dc02!OpenDocument -.

50. Fern E. Advanced focus group research. London: sage; 2001.

51. Kvale S. Interviews: An introduction to qualitative research interviewing. London: Sage; 1996.

52. Erickson F, editor. Qualitative methods in research on teaching. New York: Macmillan; 1986.

53. Freeman M, deMarrais K, Preissle J, Roulston K, St pierre E. Standards of evidence in qualitative research: An incitement to discourse. Educational Researcher. 2007;36(1):25-32.

54. Baril R, Clarke J, Friesen M, Stock S, Cole D. Management of the return to work programs for workers with musculoskeletal disorders: a qualitative study in three Canadian provinces. Soc Sci Med. 2003;57(11):2101-14.

55. Messing K. One-eyed science: Occupational health and women workers. Philadelphia: Temple University Press; 1998.

56. Calvey J, Jansz J. Women's experience of the workers compensation system. Australian Journal of Social Issues. 2005;40(2):285-311.

57. El-Bassel N. Correlates of return to work after an onset of short-term disability among female union members. Journal of Employee Assistance. 1996;12(1):47-72.

58. Case Management Society of America. What is a case manager and how do I find one? 2009 [cited 2009 18 August]; Available from: http:www.cmsa.org/Consumer/tabid/61/Default.aspx.

59. Parrish M, Schofield T. Injured workers experiences of the workers compensation claims process: institutional disrespect and the noeliberal state. Health Sociology Review. 2005 18 March 2005;14(1):33-46.

60. Kirsh B, McKee P. The needs and experiences of injured worker': a participatory research study. Work (Reading, Mass. 2003;21(3):221-31.

61. Roberts-Yates C. Examining the role of rehabilitation in the South Australian workers compensation system. Australian Journal of Rehabilitation Counselling. 2003;9(2):82-101.

62. Hochschild A. The managed heart: Commercialization of human feeling. Berkeley: University of California Press; 1983.

63. Andersen LP, Kines P, Hasle P. Owner attitudes and self reported behavior towards modified work after occupational injury absence in small enterprises: a qualitative study. J Occup Rehabil. 2007 Mar;17(1):107-21.

64. Baril R, Bethelette D, Massicotte P. Early return to work of injured workers: multidimensional patterns of individual and organizational factors. Safety Science. 2003;41(4):277-300.

65. Roberts-Yates C. Employers' perceptions of claims/injury management and rehabilitation in South Australia. Asia Pacific Journal of Human Resources. 2006;44(1):102-22.

66. Seland K, Cherry N, Beach J. A study of factors influencing return to work after wrist or ankle fractures. Am J Ind Med. 2006 Mar;49(3):197-203.

67. Shaw WS, Robertson MM, Pransky G, McLellan RK. Employee perspectives on the role of supervisors to prevent workplace disability after injuries. J Occup Rehabil. 2003 Sep;13(3):129-42.

68. Williams RM, Westmorland M. Perspectives on workplace disability management: a review of the literature. Work. 2002;19(1):87-93.

69. New South Wales Government. Workplace Injury Management and Workers Compensation Act 19981998: Available from: http://www.austlii.edu.au/au/legis/nsw/consol_act/wimawca1998540/.

70. Kenny DT. The Role of the Rehabilitation Provider in Occupational Rehabilitation: Providing for Whom? Part 1: Self-perceptions. Aust J Rehab Counsel. 1998;4(2):97-110.

71. Krause N, Dasinger L, Neuhauser F. Modified Work and Return to Work: a review of the literature. J Occup Rehabil. 1998;8(2):113-39.

72. Sullivan M, Feuerstein M, Gatchel R, Linton SJ, Pransky G. Integrating psychosocial and behavioural interventions to achieve optimal rehabilitation outcomes. J Occup Rehabil. 2005;15(4):475-89.

73. WorkCover WA. Stress, Compensation and the General Practitioner2001; 2404/2008: Available from: http://www.workcover.wa.gov.au/NR/rdonlyres/2565A9BF-F39D-4C1F-B034-16AB94046BC3/0/Stress_Compensation_and_the_GP_0307.pdf.

74. Rassmussen K, Andersen JH. Individual factors and GP approach as predictors for the outcome of rehabilitation among long-term sick listed cases. J Occup Rehabil. 2005;15(2):227-37.

75. Kenny DT. The Role of the Rehabilitation Provider in Occupational Rehabilitation: Providing for Who? Part 2: Perceptions of Key Stakeholders. Australian Journal of Rehabilitation Counselling. 1998;4(2):110-22.

76. Muenchberger H, Kendall E. Creating successful rehabilitation partnerships between health professionals and employers. International Journal of Disability Management Research. 2006;1(1):10-20.

77. Rawson D. Models of inter-professional work: Likely theories and possibilities . London and New York: Routledge; 1994.

78. Edlund C, Dahlgren L. The physician's role in the vocational rehabilitation process. Disabil Rehabil. 2002;24(14):727-33.

79. Australian Bureau of Statistics. 6324.0 - Work-Related Injuries, Australia, 2005-06 2006: Available from: http://abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6324.02005-06?OpenDocument.

80. Williams RM, Westmorland MG, Shannon HS, Amick III BC. Disability management practices in Ontario health care workplaces. Journal of occupational rehabilitation. 2007;17:153-65.

81. Amick III BC, Habeck RV, Hunt A, Fossel AH, Chapin A, Keller RB, et al. Measuring the Impact of Oganizational Behaviors on Work Disability Prevention and Management. J Occup Rehabil. 2000;10(1):21-38.

82. Nelson A, Fragala G, Menzel N. Myths and facts about back injuries in nursing. The American journal of nursing. 2003;103(2):32-40; 1 quiz.

83. Trinkoff AM, Le R, Geiger-Brown J, Lipscomb J. Work schedule, needle use, and needlestick injuries among registered nurses. Infection control and hospital epidemiology : the official journal of the Society of Hospital Epidemiologists of America. 2007;28(2):156-64.

84. Yassi A, Gilbert M, Cvitkovich Y. Trends in injuries, illnesses, and policies in Canadian healthcare workplaces. Canadian journal of public health 2005;96(5):333-9.

85. O'Brien-Pallas L, Shamian J, Thomson D, Alksnis C, Koehoorn M, Kerr M, et al. Work-Related Disability in Canadian Nurses. Journal of Nursing Scholarship. 2004;36(4):352-7.

86. WorkCover NSW. Statistical Bulletin 2006/07 2008: Available from: http://www.workcover.nsw.gov.au.

87. Kenny DT. Returning to Work After Workplace Injury: Impact of Worker and Workplace Factors. Journal of applied rehabilitation counseling. 1998;29(1):13-9.

88. Standards Australia. AS 1885.1-1990 Measurement of Occupational health and safety performance Part1; Describing and reporting occupational injuries and disease known as the Workplace injury and disease recording standard 1990.

89. Loisel P, Buchbinder R, Hazard R, Keller R, Scheel I, van Tulder M, et al. Prevention of work disability due to musculoskeletal disorders: the challenge of implementing evidence. J Occup Rehabil. 2005;15(4):507-24.

90. Pransky G, Gatchel R, Linton SJ, Loisel P. Improving return to work research. J Occup Rehabil. 2005;15(4):453-7.

91. Kosny A, Franche RL, Pole J, Krause N, Cote P, Mustard C. Early healthcare provider communication with patients and their workplace following a lost-time claim for an occupational musculoskeletal injury. J Occup Rehabil. 2006 Mar;16(1):27-39.

92. Australasian Faculty of Occupational and Environmental Medicine. Helping people return to work: using evidence for better outcomes (a position statement)2009: Available from: http://www.afoem.racp.edu.au/page/media-and-news/policy-and-advocacy.

93. Heads of Workers' Compensation Authorities. 2007/08 Australia and New Zealand return to work monitor2008 [cited 22/08/2008: Available from: http://www.hwca.org.au/documents/2007-08%20Australia%20and%20New%20Zealand%20RTW%20Monitor%20Final%20Report.pdf.

94. Pransky G, Shaw WS, Loisel P, Hong QN, Desorcy B. Development and validation of competencies for return to work coordinators. J Occup Rehabil. 2010 Mar;20(1):41-8.

95. WorkCover NSW. Injury Management and Return to Work Programs2009; 23/09/2009: Available from: www.workcover.nsw.gov.au.

96. Heads of Workers Compensation Authorities. Nationally consistent approval framework for workplace rehabilitation providers. n.d.; Available from: http://www.workcover.nsw.gov.au/formspublications/publications/Documents/nationally_consistent_approval_framework_workplace_rehabilitation_providers_HWCA_guide_2222.pdf.

97. WorkCover NSW. Approval of workplace rehabilitation providers within the NSW workers compensation system. Gosford: WorkCover NSW; undated [cited October, 2010]; Available from: http://www.workcover.nsw.gov.au/formspublications/publications/Documents/approval_workplace_rehabilitation_providers_within_new_workers_compensation_system_5317.pdf.

98. The Australian Health Workforce Institute. Australian Nursing Workforce Research2008: Available from: http://www.renalsociety.org/announcements/ANWR_Executive_Summary.doc.

99. Cant R, O'Loughlin K, Legge V. Sick leave -- Cushion or entitlement? A study of age cohorts' attitudes and practices in two Australian workplaces. Work (Reading, Mass. 2001;17(1):39-48.

100. Remenyi A. Older Workers and Rehabilitation Counselling. The Australian Journal of Rehabilitation Counselling. 1995;1(1):46-60.

8. Attachments

Attachment 1: Focus Group Manager Recruitment Letter

1st August, 2008

Dear Sir/Madam

The University of Newcastle is conducting a study funded by WorkCover NSW to evaluate the rehabilitation process in relation to NSW nurses who have experienced an injury or illness in the workplace.

One of the aims of the study is to document the experiences and perceptions of Rehabilitation Coordinators. We are seeking to gather information from Rehabilitation Coordinators on factors that aid or impede the successful rehabilitation of injured nurses.

We are writing to invite your co-operation in allowing your Rehabilitation Coordinator who has dealt with the rehabilitation of an injured nurse in the last 12 months to attend a 1.5 hour focus group to be conducted in your area. Participation is entirely voluntary and confidentiality and anonymity of the information provided is assured. A letter has also been sent to your Rehabilitation Coordinator informing them of the study and inviting them to participate.

The evidence obtained will be of particular use to the employers of nurses, Rehabilitation coordinators and WorkCover NSW. In addition, it is envisaged that this research will benefit the wider community including administrators, regulators and professional organisations by providing current supporting evidence of various aspects of occupational rehabilitation for injured nurses in NSW. Upon completion of the study a summary of the study results may be provided to your organisation at your request.

An information sheet has been enclosed with further details regarding the study and participation details.

Should you require further information or if you would like your organisation to participate in our study, please contact:
Joanna Bohatko-Naismith
Research Officer
Email: Joanna.Bohatko-Naismith@newcastle.edu.au
Ph: (02) 49217038

Thank you for considering our invitation to participate in this study.

Sincerely

Maya Guest
Lecturer, School of Health Sciences
T +61 2 4921 7735
F +61 2 4921 7479
Maya.guest@newcastle.edu.au

Attachment 2: Focus Group Return-to-work Coordinator Recruitment Letter

1st October, 2008

Dear Sir/madam

The University of Newcastle is conducting a study aimed at exploring the workplace rehabilitation process for injured nurses. Nursing has a high rate of injury and evidence for successful strategies for rehabilitation is very limited. WorkCover NSW has funded the study to collect evidence that can assist in improving rehabilitation strategies. The evidence obtained will be of particular use to employers of nurses, rehabilitation coordinators and WorkCover NSW.

One of the aims of the study is to document the experiences and perceptions of Rehabilitation Coordinators. We are seeking to gather information from Rehabilitation Coordinators on factors that aid or impede the successful rehabilitation of injured nurses. We are interested in talking to Rehabilitation Coordinators who have dealt with an injured nurse within the last 12 months.

We are writing to invite you to attend a 1.5 hour focus group to be conducted in your area. Participation is entirely voluntary and confidentiality and anonymity of the information provided is assured. A letter has been sent to your employer informing them of the study and your invitation to participate.

All Rehabilitation Coordinators who attend will receive a certificate of participation. Nurse Rehabilitation Coordinators can use the certificate as evidence of contributing to nursing and health care research as required in Standard 3.4 in the ANMC National Competency Standards for Registered Nurses in their professional portfolio. Upon completion of the study a copy of the study results may be provided to your organisation upon request.

We have enclosed an information sheet with further details regarding the research and participation details. Should you require further information or wish to participate in our study, please contact:

Joanna Bohatko-Naismith
Research Officer
Email: Joanna.Bohatko-Naismith@newcastle.edu.au
Ph: (02) 49217038

Thank you for considering our invitation to participate in this study.

Sincerely,

Maya Guest
Lecturer, School of Health Science
T +61 2 4921 7735
F +61 2 4921 7479
Maya.guest@newcastle.edu.au

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Attachment 3: Focus Group Information Statement

Information Statement for the Research Project:

The Outcome of Occupational Rehabilitation of NSW Nurses

Version 2– Focus Group 01/08/08

Why is the research being done?
The NSW Nurses' Association is interested in the issue of occupational rehabilitation for NSW Nurses among its members and is currently involved in a research study on this topic in collaboration with the University of Newcastle. The purpose of the research is to evaluate the perceptions and experiences of injured nurses and the experiences of workplace Rehabilitation Coordinators with regard to occupational rehabilitation. Nursing has a high rate of injury; however details of rehabilitation processes for nurses are limited. This study will provide valuable information about NSW nurses' perceptions and experiences with the occupational rehabilitation process.

The expected benefit of this research to the nursing profession is to provide evidence of current practices relating to the rehabilitation of injured nurses; from both the perspective of the nurses and regarding what helped or hindered their successful rehabilitation and also from the Rehabilitation Coordinators' perspective regarding what aids or impedes the successful rehabilitation of nurses.

Who can participate in the research?
Participants will consist of Rehabilitation Coordinators within area health services, the private hospital sector, aged care, and DADHC from rural, regional and metropolitan regions of NSW, that have worked with injured nurses in the last 12 months. The Rehabilitation Coordinators will be invited to attend and participate in focus groups being conducted in their local geographical area.

What choice do you have?
Participation in this research is entirely your choice. Only those people who give their informed consent will be included in the project. A follow up telephone call will be made to confirm your participation. Whether or not you decide to participate, your decision will not disadvantage you.

How much time will it take?
The focus group discussion should take approximately 1.5 hours.

What are the risks and benefits of participating?
There will be no direct benefit or risk to you in participating in this research.

What would you be asked to do?
Participants are required to attend a focus group which will last between one and 1.5 hours. Informed consent will be sought in written form and by tape recorded affirmation at the beginning of the focus group. It will be explained to participants that the focus group will be tape recorded and the discussion transcribed, however all identifying place, organisation and personal names will be replaced by pseudonyms in the final 'cleansed' transcript and in publications. Participants will have the right to withdraw from the study at any time including during and after the focus group.

There is an expectation that participants will share their professional experiences of workplace rehabilitation as it relates to injured nurses. Participants will be asked to discuss any commonalities and differences in their perceptions, experiences and work practices.

How will your privacy be protected?
The Information Statement forwarded to potential participants will explain the voluntary nature of participation, confidentiality and anonymity. Prior to commencement of each focus group, the consent form will be issued and discussed by the researcher, and then the Participants will be invited to sign the consent form. All of the data collected during focus group recording will be kept in a locked cabinet and transcriptions will be filed in password protected electronic data files. All data will be stored in a secure location within the office of the School of Health Sciences and disposed of, 5 years after the conclusion of the project. Participants have the right to withdraw at any time during the focus group discussions or have their comments erased from the final transcript. All Researchers working on the focus groups have signed a confidentiality agreement.

How will the information collected be used?
This project has been funded by WorkCover NSW Assist 2007 Applied Research Projects. The results of this project will be reported to WorkCover NSW in a formal report, and presented at an annual workshop session convened by WorkCover NSW. A copy of the report will be provided to NSW Nurses' Association. (Individual participants will not be identified in any reports arising from the project). A summary of the results of the study will also be provided to the NSW Nurses' Association for the purpose of providing feedback to their members about the results of this study and to any participants that request a summary. The results will also be published in a peer reviewed journal and presented at professional conferences.

What do you need to do to participate?
Please read this Information Statement and be sure you understand its contents before you consent to participate. If there is anything you do not understand, or if you have questions, contact the researcher.

Further Information
If you would like further information please contact:
Ms Maya Guest
School of Health Sciences
Faculty of Health, University of Newcastle, Callaghan NSW 2308
Phone: 02 49217730 Email: Maya.Guest@newcastle.edu.au

Thank you for considering this invitation.

Ms Maya Guest
Ms Carole James
Associate Professor Darren Rivett
Dr Ashley Kable
Dr Erica Southgate
Joanna Bohatko-Naismith

Complaints about this research
This project has been approved by the University's Human Research Ethics Committee, Approval No. H- 2008-0192. Should you have concerns about your rights as a participant in this research, or you have a complaint about the manner in which the research is conducted, it may be given to the researcher, or, if an independent person is preferred, to the Human Research Ethics Officer, Research Office, The Chancellery, The University of Newcastle, University Drive, Callaghan NSW 2308, Australia, telephone (02) 49216333, email Human.Ethics@newcastle.edu.au.

Attachment 4: Focus Group Contact and Screening Procedure

Nurse Rehabilitation Study
Contact and Screening Protocol for Participation in Focus Groups

Contact:

Two letters with attached information sheets will be sent to each organisation. The first will be to the employer (CEO/site or unit manager); the second to the Rehabilitation Coordinator. Each package will contain the following:

1. Letter of invitation (see Attachment 1 and 2)
2. Focus Group Information Statement (see Attachment 3)

One week after the initial letter has been sent, a member of the research team will contact the Rehabilitation Coordinator by telephone to invite participation in the study and answer questions. It is envisaged that the telephone call will reiterate the:

1. Study aims and focus group method including time commitment and dissemination of findings;
2. Ethical considerations such as voluntary nature of participation, anonymity and confidentiality, and right of refusal to participate;
3. De-identification of data for publication and option of more time for consideration.

Screening:

During the telephone call the researcher will ask the following screening question:

- In your position as Rehabilitation Coordinator have you worked with injured nurses in the last 12 months?
- What sector are you currently employed in? (public, private, aged, DADHC, Justice Health)

If the response is yes and the rehabilitation coordinator has indicated a willingness to participate in the study, details of the focus group venue, date and time will be provided. Signed informed consent will be obtained at the commencement of the Focus Group.

If the response is no, inform them that the survey is specifically about injured nurses and thank them for their interest.

Attachment 5: Focus Group Consent Form

Consent Form for the Research Project:

The Outcome of Occupational Rehabilitation of NSW Nurses

Ms. Maya Guest
School of Health Sciences
The University of Newcastle
University Drive
CALLAGHAN NSW 2308
49217735
Maya.Guest@newcastle.edu.au

Document Version 1; dated 19/05/08

Researchers: Dr Erica Southgate, Ms Carole James, Ms Maya Guest, Associate Prof. Darren Rivett, Dr Ashley Kable, Mrs Joanna Bohatko-Naismith

I agree to participate in the above research project and give my consent freely.

I understand that the project will be conducted as described in the Information Statement, a copy of which I have retained.

I understand I can withdraw from the project and have my comments erased from the final transcript at any time and do not have to give any reason for withdrawing.

I consent to participating in a focus group.

I understand that my personal information will remain confidential to the researchers, all of whom have signed a confidentiality agreement.

I have had the opportunity to have questions answered to my satisfaction.

Print Name: _____

Signature: _____ **Date:** _____

Attachment 6: Focus Group Schedule

Focus Group Schedule

1. **Facilitator-led preliminary activities -** Introduction of facilitator/scribe; description of research project and focus group activities; confidentiality within the group; confidentiality and anonymity of data; dissemination of findings; and informed consent process.

2. **Group introduction exercise** – Tell the group who you are, a bit about your professional background, how you came to your role as a Rehabilitation Coordinator (RC), and what your role involves?

3. **Visual mapping exercise -** A nurse in your workplace presents with an injury. Draw a map or a diagram of what happens to them thinking about different pathways they might follow.

4. **Group discussion** – Sharing the maps within the group, what similarities and differences are there in the process?

5. **Group discussion** – Referring to the map if you like, can you tell me about planning for return to work when dealing with injured nurses? What are some of the issues that arise? *Prompt* – Does the issue of suitable duties arise? What does this involve? How do you manage this issue?

6. **Hot spot mapping and group discussion -** You have 3 red sticky dots to place on your maps. Place them on the stages in the rehabilitation process that you consider to be the most difficult and jot a note beside them as to why you consider them to be difficult? As a group, let's discuss, which stages have been highlighted and what you have written.

7. **Group discussion** – In your workplace what do you see as some of the major barriers to performing your role as a RC? Can you identify any factors that assist you to perform your role?

8. **Group discussion-** Do you have any 'good news stories' about workplace rehabilitation of injured nurses that you would like to share with the group? Why do you think this case/s turned out so well?

9. **Group discussion -** Do you think there is anything unique to your workplace that help or hinders the return to work process? Prompt – Does your specific health sector (DADHC, aged care, public or private hospital) or geographic location have an impact?

10. **Finishing off with individual contribution -** You are given the power to fix any problem in the return to work process. As the key 'fix-it' person what would be your top two recommendations?

Or

You are asked to help train workplace Rehabilitation Coordinators who will work with injured nurses. You have to give these new coordinators one piece of advice. What would it be?

Any final comments are sought or can be emailed to the research team.

Attachment 7: Cross-Sectional Study Information Statement

Information Statement for the Research Project:

The Outcome of Occupational Rehabilitation of NSW Nurses

Why is the research being done?
The purpose of the research is to evaluate the perceptions and experiences of injured nurses and the experiences of workplace Rehabilitation Coordinators with regard to occupational rehabilitation. Nursing has a high rate of injury; however details of rehabilitation processes for nurses are limited. This study will provide valuable information about NSW nurses' perceptions and experiences in all areas of the occupational rehabilitation process. The NSW Nurses' Association is interested in the issue of occupational rehabilitation for NSW Nurses among its members and is currently involved in this research study on this topic in collaboration with the University of Newcastle.

The expected benefit of this research to the nursing profession is to provide evidence of current practices relating to the rehabilitation of injured nurses. The study will be looking at the perspective of injured nurses and the factors that promote or prevent their successful rehabilitation; and from the Rehabilitation Coordinators' perspective regarding the factors that contribute to the successful rehabilitation of nurses.

How were you selected?
Your contact details were retrieved by WorkCover NSW because you are a nurse who has sustained a workplace injury or illness that required rehabilitation in the last 24 months. Your personal information has not been supplied to any person. The study packages will be addressed and posted from WorkCover NSW.

What choice do you have?
Participation in this research is entirely your choice. Only those people who give their informed consent will be included in this research project. If you choose to complete the accompanying questionnaire, this will be considered as informed consent. Whether or not you decide to be part of this study, your decision will not disadvantage you.

What would you be asked to do?
If you agree to be part of this study, you are asked to complete and return the attached questionnaire about your perceptions and experiences regarding your return to work program. No information collected in this questionnaire can be used to identify you. The questionnaire is to be returned to the researchers in the accompanying reply paid envelope provided with the study package documents. We ask that you do this within the next 2 weeks, but definitely within 2 months of receiving the questionnaire.

How much time will it take?
The questionnaire should take about 30 minutes to complete.

What are the risks and benefits of participating?
There will be no direct benefit or risk to you in participating in this research; however the results may inform nursing workforce policy and provide information about management of occupational rehabilitation for nurses in the future.

A collaborative research project between the University of Newcastle and the NSW Nurses Association.

How will your privacy be protected?
The questionnaire is anonymous and it will not be possible to identify you from your answers. Even though a study number is printed on the survey it is not linked to any of your identifying details held by WorkCover NSW. Your study number will only be used for the purposes of checking data entry. Completed questionnaires will be used to create data files and stored in a secure location within the offices of the School of Health Sciences and disposed of, 5 years after the conclusion of the project. Data files will only be accessible by the research team and will be password protected.

How will the information collected be used?
This project has been funded by WorkCover NSW Assist 2007 Applied Research Projects. The results of this project will be reported to WorkCover NSW in a formal report, and presented at an annual workshop session convened by WorkCover NSW. A copy of the report will be provided to NSW Nurses' Association and those that are part of this study can be assured that they will not be identified in any reports arising from the project. A summary of the results of the study will also be provided to the NSW Nurses' Association for the purpose of providing feedback to their members about the results of this study and any participants' who request a summary. The results will also be published in peer reviewed journal**s** and presented at professional conferences.

What do you need to do to participate?
Please read this Information Statement and be sure you understand its contents before you complete and return the questionnaire. If there is anything you do not understand, or if you have questions, contact the Researcher. If you would like to be part of this study, please complete and return the attached anonymous questionnaire in the reply paid envelope provided.

Further information
If you would like further information please contact:
Ms Maya Guest
School of Health Sciences
Faculty of Health, The University of Newcastle, Callaghan NSW 2308
Phone: 02 49217735 Email: Maya.Guest@newcastle.edu.au

Thank you for considering this invitation.

Ms Maya Guest
Ms Carole James
Associate Professor Darren Rivett
Dr Ashley Kable
Dr Erica Southgate
Joanna Bohatko-Naismith

Complaints about this research
This project has been approved by the University's Human Research Ethics Committee, Approval No. **H-2008-0192**. Should you have concerns about your rights as a participant in this research, or you have a complaint about the manner in which the research is conducted, it may be given to the researcher, or, if an independent person is preferred, to the Human Research Ethics Officer, Research Office, The Chancellery, The University of Newcastle, University Drive, Callaghan NSW 2308, Australia, telephone (02) 49216333, email Human-Ethics@newcastle.edu.au.

A collaborative research project between the University of Newcastle and the NSW Nurses Association.

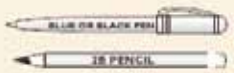
Attachment 8: Cross-Sectional Study Questionnaire

The Outcome of Occupational Rehabilitation of NSW Nurses

THE UNIVERSITY OF NEWCASTLE AUSTRALIA

INSTRUCTIONS:

- Use a blue/black ballpoint pen or 2B pencil
- Do not use a red or felt tip pen
- If you make a mistake, either erase or place a cross through the incorrect oval and fill in the correct oval



Please MARK LIKE THIS:
NOT LIKE THIS:
Please CORRECT LIKE THIS:

Occupational Rehabilitation: is a process which will help injured workers' return to work following a workplace injury.

Return-to-Work Coordinator: is someone employed or engaged by the employer who assists the injured worker in returning to work in a safe and timely manner.

Occupational Rehabilitation Service Providers: are accredited by WorkCover NSW to provide a range of services focusing on return to work, case management and specialised rehabilitation services.

Treatment Provider: is a health professional that provides treatment and advice about an injured worker's capacity for work.

SECTION A Study Eligibility

1. **Have you had an injury in the workplace that required rehabilitation as a result of working as a nurse in NSW between July 2005 and June 2007?**

   ○ Yes
   ○ No

   If you answered No, you do not have to answer any more questions. Please return the questionnaire in the envelope provided. Thank you.

SECTION B Pre-Injury/Illness Workplace Information

2. **What was the Postcode of your principal place of employment at the time of your injury/ illness?**

   ☐☐☐☐

3. **What type of health facility were you employed by, where your injury/illness occurred?** *(Please select ONE option)*

   ○ Public Hospital
   ○ Private Hospital/Health Facility Employer
   ○ Public Aged Care Facility
   ○ Non-government Aged Care Facility
   ○ Disability Services
   ○ Community Nursing/Community Health Services
   ○ General/Private Practice
   ○ Nursing Agency
   ○ Other, *please specify*

SECTION B Pre-Injury/Illness Workplace Information *(continued)*

4. **Please provide your gender:**

   ○ Male
   ○ Female

5. **What is your age?**

   ☐☐ Years

6. **What was your nursing role at the time of your injury/illness?** *(Please select ONE option)*

   ○ Personal Care Assistant
   ○ Assistant in Nursing
   ○ Enrolled Nurse
   ○ Endorsed Enrolled Nurse
   ○ Registered Nurse
   ○ Registered Midwife
   ○ Clinical Nurse Specialist
   ○ Clinical Nurse Consultant
   ○ Clinical Nurse Educator
   ○ Nurse Educator
   ○ Nurse Manager
   ○ Accredited Nurse Practitioner
   ○ General Practice Nurse
   ○ Nurse Executive (Director of Nursing, DDON)
   ○ Other, *please specify*

Barcode Area

SECTION B Pre-Injury/Illness Workplace Information *(continued)*

7. For how many years have you worked as a nurse?

☐☐

8. What was the average number of hours per week that you worked as a nurse prior to the injury/illness?

- ○ Less than 9 hours per week
- ○ 10 – 19 hours
- ○ 20 – 29 hours
- ○ 30 – 39 hours
- ○ 40 – 49 hours
- ○ Greater than 49 hours per week

9. Was your principal mode of employment?
(Please select ONE option)

- ○ Full time (Permanent)
- ○ Part time (Permanent)
- ○ Casual

10. What was your principal area of practice at the time of your injury/illness?
(Please select ONE option)

- ○ Aged Care/Older person nursing
- ○ Community services
- ○ Day Surgery/Endoscopy Unit
- ○ Disability services
- ○ Drug and Alcohol services
- ○ Education
- ○ Emergency nursing
- ○ Equipment processing and sterilization (CSU)
- ○ Indigenous health
- ○ Infectious illness/public health/infection control
- ○ Intensive Care/HDU/CCU/NICU
- ○ Management
- ○ Medical wards/services
- ○ Mental Health
- ○ Midwifery
- ○ Nephrology/Renal/Transplant
- ○ Occupational health and safety
- ○ Operating theatres/Recovery/Anaesthetics
- ○ Paediatrics
- ○ Primary Care/General practice
- ○ Red Cross Blood/Pathology services
- ○ Rehabilitation
- ○ Research
- ○ Sexual Health/Family Planning
- ○ Surgical wards/services
- ○ Other, *please specify*

SECTION C Details of the Injury/Illness

For the following questions please respond for your INITIAL injury/illness and NOT for any subsequent injuries/illness.

11. Did you have more than one employer at the time of your injury/illness?

- ○ Yes
- ○ No

12a. On what date did the initial injury/illness exposure occur?

D D M M Y Y Y Y

12b. At what time did your injury/illness occur?

☐☐☐☐ (24 hr clock format)

- ○ Not Applicable

12c. On the day of the injury/illness how many hours did you work?

☐☐ hours

12d. When did you notify your employer of your injury/illness?

- ○ The same day the injury/illness occurred
- ○ Next day
- ○ Within a week
- ○ More than a week
- ○ More than a month

13a. How long after your injury/illness did your employer contact you?

- ○ The same day the injury/illness occurred
- ○ Next day
- ○ Within a week
- ○ More than a week
- ○ More than a month

SECTION C Details of the Injury/Illness *(continued)*

13b. **When advised of your injury/illness, how did your employer respond?**

14. **Which of the following describes your major injury/illness?** *(Please select ONE option)*

- ○ Disc prolapse or bulge
- ○ Long term back pain (muscular)
- ○ Temporary sprains/strains of joints/muscles/tendons/ ligaments (excluding long term back pain)
- ○ Inflammation of joints, muscle, tendons or ligaments
- ○ Fractures/Dislocations
- ○ Injuries to nerves including spinal cord
- ○ Dermatitis and other eczema
- ○ Temporary psychological distress
- ○ Long term psychological illness*
- ○ Multiple injuries (only to be used where no principal injury can be identified)*
- ○ Other and unspecified injuries/illness*

*Please describe

15. **Please select the bodily location of your major injury/illness** *(Please select ONE option)*

- ○ Eye
- ○ Ear
- ○ Face
- ○ Head (other that eye, ear and face)
- ○ Neck
- ○ Back (upper / lower)
- ○ Trunk (other than back excluding internal organs)
- ○ Shoulders and arms
- ○ Hands and fingers
- ○ Hips and legs
- ○ Feet and toes
- ○ Internal organs (located in the trunk)
- ○ Non-physical locations (eg psychological systems)
- ○ Other, *please specify*

SECTION C Details of the Injury/Illness *(continued)*

16a. **Did the injury/illness occur in your pre-injury principal area of practice?**

- ○ Yes ☞ *Please go to Question 17*
- ○ No

16b. **If No, did it occur as a result of the following?**

- ○ Travel to or from work
- ○ Travel during working hours
- ○ During transfer/transport of patients
- ○ Other, *please specify*

17. **How was the injury/illness sustained?** *(Please select ALL that apply)*

- ○ Breaking a fall
- ○ Taking a patient's weight
- ○ Lifting/positioning patients
- ○ Lifting/assembling equipment
- ○ Falls on the same level (including trips and slips)
- ○ Falls from height
- ○ Contact with objects to a part of the body
- ○ Contact with chemical or substance
- ○ Contact with, or exposure to, biological factors
- ○ Patient resistance to care/aggression
- ○ Staff bullying/aggression
- ○ Exposure to other mental stress factors (not including bullying or aggression)
- ○ Vehicle accidents/ Travelling
- ○ Other, *please specify*

SECTION D Initial Management of Injury/ Illness

The following questions relate to your recovery and rehabilitation after your injury.

18. How long after your injury/illness exposure did you first seek medical assistance?

- ○ Less than 3 hours
- ○ 3 – 6 hours
- ○ 7 – 24 hours
- ○ Greater than 24 hours, *please specify the reason for the delay*

19. What was the first service you attended for medical assistance?

- ○ First aid
- ○ Staff health
- ○ Emergency department
- ○ General practitioner
- ○ Occupational physician
- ○ Other, *please specify*

20a. Did you require further medical assistance to manage your injury/illness?

- ○ Yes
- ○ No ☞ *Please go to Question 23a*

20b. If Yes, which type of Nominated Treating Doctor managed your injury/illness?

- ○ General practitioner
- ○ Occupational physician
- ○ Specialist
- ○ Other, *please specify*

SECTION D Initial Management of Injury/ Illness *(continued)*

21. How long after your injury/illness did you see this treatment provider?

- ○ On the day of the injury
- ○ 1-3 days
- ○ 3-7 days
- ○ 8-14 days
- ○ 14-21 days
- ○ More than 21 days, *please specify the reason for the delay*

22. After your injury/illness exposure when were you able to return to work in any capacity?

- ○ Immediately
- ○ For the next rostered shift
- ○ Less than one week
- ○ 1-2 weeks
- ○ More than 2 weeks
- ○ Unable to return to work, *please specify the reason*

23a. If you returned to work following management by your nominated treating doctor, did you return on:

- ○ Suitable duties
- ○ Pre-injury duties

23b. If you returned to work, what was the effect on your recovery?

- ○ No change
- ○ Continued recovery
- ○ Delayed recovery

SECTION E Continuing Management of your Injury/Illness

24a. Following your injury/illness did you require rehabilitation?

- ○ Yes ☞ *Please go to Question 25a*
- ○ No

24b. If No, did you return to your pre-injury duties?

- ○ Yes
- ○ No

SECTION E Continuing Management of your Injury/Illness *(continued)*

25a. Was liability accepted?

- ○ Yes ☞ *Please go to Question 26*
- ○ No

25b. If No, are you disputing it?

- ○ Yes
- ○ No

25c. How did this affect your return to work program?

26. After your injury/illness, were any of the following involved in your case?
(Please select ALL that apply)

- ○ Employer Return-to-Work Coordinator
- ○ External Rehabilitation Provider
- ○ Insurance Company Case Manager

27. How long after the injury/illness did your Return-to-Work Coordinator contact you?

- ○ No contact
- ○ First day
- ○ 2-7 days
- ○ 8-14 days
- ○ Other, *please specify*

28. How long after the injury/illness did your Insurance Company Case Manager contact you?

- ○ No contact
- ○ First day
- ○ 2 – 7 days
- ○ 8 – 14 days
- ○ Other, *please specify*

SECTION E Continuing Management of your Injury/Illness *(continued)*

29. Were you referred to a medical specialist for further treatment?

- ○ Yes
- ○ No ☞ *Please go to Question 31*

30. If Yes, how long did it take until you saw the medical specialist?

☐☐ Days **OR** ☐☐ Weeks

31. Did you receive any of the following health services? *(Please select ALL that apply)*

- ○ X-rays/Cat Scans/MRI
- ○ Physiotherapy
- ○ Occupational therapy
- ○ Psychological Treatment
- ○ Chiropractic Treatment
- ○ Osteopathy
- ○ Surgery
- ○ Rehabilitation counselling
- ○ Work Conditioning
- ○ Functional Exercise Programs
- ○ Blood test or other pathology
- ○ Vaccination
- ○ Allergy tests
- ○ Other, *please specify*

SECTION F Rehabilitation Process (practices and processes used in the return to work of injured nurses)

32. Prior to returning to work was your workplace assessed by one or more of the following?
(Please select ALL that apply)

- ○ Employer Return-to-Work coordinator
- ○ External Rehabilitation provider
- ○ Insurance Company Case Manager
- ○ Do not know

SECTION F Rehabilitation Process (practices and processes used in the return to work of injured nurses) *(continued)*

33a. Was a return to work plan established for your graded return to work?

- ○ Yes
- ○ No ☞ *Please go to Question 33c*
- ○ Not applicable ☞ *Please go to Question 34*

33b. If Yes, how long after reporting your injury did your employer provide you with a return to work plan?

☐☐ Weeks

33c. If No, please describe how you returned to work:

34. Who was involved in developing your return to work plan? *(Please select any that were involved)*

- ○ You
- ○ Nominated treating doctor
- ○ Employer/Supervisor
- ○ Employer Return-to-Work Coordinator
- ○ Rehabilitation Provider
- ○ Physiotherapist
- ○ Chiropractor
- ○ Insurance Company
- ○ Other, *please specify*

35. Were your working hours changed to assist your rehabilitation? *(Please select all appropriate)*

- ○ No change in hours worked
- ○ Reduced hours per day
- ○ Reduced days per week
- ○ Have not returned to work
- ○ Other, *please specify*

SECTION F Rehabilitation Process (practices and processes used in the return to work of injured nurses) *(continued)*

36a. Did your employer provide suitable duties consistent with the restrictions recommended by your Nominated Treating Doctor (NTD)?

- ○ Yes ☞ *Please go to Question 36c*
- ○ No

36b. If No, why were they not provided?

36c. If Yes, please describe the suitable duties provided by your employer (eg. Clerical duties, Medical Records, restricted duties):

37a. For how long were you on suitable duties?

37b. Have you been able to undertake the suitable duties recommended in your return to work plan?

- ○ Yes ☞ *Please go to Question 37d*
- ○ No

SECTION F Rehabilitation Process (practices and processes used in the return to work of injured nurses) *(continued)*

37c. If No, please explain why?

37d. If Yes, did you perform these duties in your pre-injury department/area/ward?

- ○ Yes ☞ *Please go to Question 37f*
- ○ No

37e. If No, please specify the department/area/ward where you were moved to, for suitable duties:

37f. Were the suitable duties supplied on a supernumerary basis (as an extra)?

- ○ Yes
- ○ No

38a. Are you still participating in your return to work program?

- ○ Yes
- ○ No ☞ *Please go to Question 38c*

SECTION F Rehabilitation Process (practices and processes used in the return to work of injured nurses) *(continued)*

38b. If Yes, do you expect to return to pre-injury duties?

- ○ Yes, within 1 week
- ○ Yes, within 1 month
- ○ Yes, within 3 months
- ○ Yes, within 6 months ☞ *Please go to Question 41*
- ○ Yes, within 1 year
- ○ Uncertain
- ○ No

38c. If No, what is your current status?
(Please select the appropriate response)

- ○ Completed return to work program and returned to same duties / same employer
- ○ Completed return to work program and returned to modified duties / same employer
- ○ Completed return to work program and returned to different duties / same employer
- ○ Completed return to work program and returned to same duties / different employer
- ○ Completed return to work program and returned to modified duties / different employer
- ○ Completed return to work program and returned to different duties / different employer
- ○ Unable to find suitable employment consistent with restrictions as recommended by NTD
- ○ Unable to work

39. If you are doing different duties, are these duties still nursing related?

- ○ Yes
- ○ No
- ○ Not applicable

40. If you are doing different duties, were you given assistance finding these duties?

- ○ Yes
- ○ No
- ○ Not applicable

SECTION F Rehabilitation Process (practices and processes used in the return to work of injured nurses) *(continued)*

41. If you have completed your rehabilitation and you are working, are you working:
(Please select ONE option)

- ○ Pre-injury hours
- ○ Reduced hours per day
- ○ Reduced days per week
- ○ Reduced days and hours per week
- ○ Not applicable

42a. If you are doing different duties, are you satisfied with these duties?

- ○ Yes
- ○ No
- ○ Not Applicable

42b. If No, what are these duties?

42c. If No, please describe duties you think would have been more suitable:

SECTION F Rehabilitation Process (practices and processes used in the return to work of injured nurses) *(continued)*

42d. How many weeks have you been off work due to your injury/illness?

☐☐ Weeks

43. Have you received any of the following assessments?

- ○ Vocational Assessment
- ○ Functional Assessment
- ○ Workplace Assessment
- ○ None of the above
- ○ Other, *please specify*

44. Were you offered retraining?

- ○ Yes
- ○ No ☞ *Please go to Section G*

45. If Yes, who offered you the retraining?

- ○ Employer
- ○ Return-to-Work coordinator
- ○ Rehabilitation provider
- ○ Insurance case manager
- ○ Other, *please specify*

SECTION G Experiences and Perceptions of Injured Nurses

Please rate the following items to score your rehabilitation experiences.

		Not Applicable	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1.	My medical treatment has been successful	○	○	○	○	○	○
2.	I have taken sick leave because of my injury/illness	○	○	○	○	○	○
3.	I have taken annual leave because of my injury/illness	○	○	○	○	○	○
4.	I feared losing my job because of my injury/illness	○	○	○	○	○	○
5.	I have been on unpaid leave during my injury/illness	○	○	○	○	○	○
6.	I have considered leaving nursing because of my injury/illness	○	○	○	○	○	○
7.	I believe that my working life has been reduced due to my injury/illness	○	○	○	○	○	○
8.	I believe my physical condition will return to what it was before I was injured/ became ill	○	○	○	○	○	○
9.	I believe my ability to work will be permanently affected	○	○	○	○	○	○
10.	I believe I will have to change my career/profession as a result of my injury/ illness	○	○	○	○	○	○
11.	I believe I will not be able to work in the future because of this injury/ illness	○	○	○	○	○	○
12.	The genuineness of my injury/illness has never been questioned	○	○	○	○	○	○
13.	My co-workers were supportive during my return to work	○	○	○	○	○	○
14.	My employer was supportive during my return to work	○	○	○	○	○	○
15.	My supervisor was supportive during my return to work	○	○	○	○	○	○
16.	I received support from the Return-to-Work coordinator when my claim was lodged	○	○	○	○	○	○
17.	My rehabilitation and return to work plan was realistic	○	○	○	○	○	○
18.	My supervisor was kept informed of my progress	○	○	○	○	○	○
19.	I was kept informed about all aspects of my case	○	○	○	○	○	○
20.	I believe I am valued by my employer as a nurse	○	○	○	○	○	○
21.	Steps were taken to keep me in the nursing profession	○	○	○	○	○	○
22.	I was valued as a long standing employee	○	○	○	○	○	○
23.	My co-workers were not over-loaded during my rehabilitation	○	○	○	○	○	○
24.	I feel alienated from my co-workers as a consequence of my injury/illness	○	○	○	○	○	○
25.	My supervisor cooperated with my Return-to-Work coordinator in the return to work process	○	○	○	○	○	○
26.	I was involved in the development of my return to work plan	○	○	○	○	○	○
27.	Terminology was often used that was unfamiliar to me	○	○	○	○	○	○
28.	The rehabilitation process was explained and I understood the process	○	○	○	○	○	○
29.	The insurance company approved all of my medical treatment in a timely manner	○	○	○	○	○	○
30.	The insurance company paid my weekly payments on time	○	○	○	○	○	○
31.	I believe I was provided with acceptable suitable duties	○	○	○	○	○	○
32.	I was subject to undue pressure to return to work	○	○	○	○	○	○
33.	I was subject to undue pressure to change my restrictions	○	○	○	○	○	○
34.	I was subject to pressure to resign	○	○	○	○	○	○
35.	At no time have I felt discriminated against by any party because of my injury/ illness	○	○	○	○	○	○
36.	I believe my employment was terminated prematurely	○	○	○	○	○	○
37.	My financial situation was unaffected by my injury/illness	○	○	○	○	○	○
38.	I now receive less pay than before my injury/illness	○	○	○	○	○	○
39.	I am taking industrial/legal/common law action	○	○	○	○	○	○
40.	I am applying for a lump sum payment	○	○	○	○	○	○
41.	I am/have applied for permanent disability payments	○	○	○	○	○	○
42.	I am receiving disability support payments through Centrelink	○	○	○	○	○	○
43.	I am not currently working and not receiving benefits	○	○	○	○	○	○
44.	My relationship with my partner has been affected by my injury/illness	○	○	○	○	○	○

SECTION G Experiences and Perceptions of Injured Nurses *(continued)*

Please rate the following items to score your rehabilitation experiences.

		Not Applicable	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
45.	I am unable to care for my children as a result of my injury/illness						
46.	I am unable to perform my pre-injury home duties as a result of my injury/illness						
47.	My mental health has been affected as a result of my injury/illness						
48.	I was provided with information about my rights and responsibilities						
49.	I was subject to undue pressure to attend a Treating Doctor Nominated by my employer						
50.	I was able to select my own rehabilitation provider						
51.	I received information from an external source (eg. Union, Solicitor, WorkCover NSW)						
52.	I was reimbursed for all of my out of pocket expenses						
53.	After my injury I was offered fewer shifts than prior to my injury						
54.	After my injury, my employer provided me with all the relevant information I needed						
55.	When other nurses have also been injured in a unit, it can make it more difficult to return to work						
56.	Other injured co-workers can be supportive to nurses attempting to return to work						
57.	The ability to access an exercise physiologist or functional exercise program is beneficial to the rehabilitation process						
58.	Rostering and changes in shift patterns can have a negative impact on nurses attempting to return to work						
59.	Injured nurses live in fear of re-injury						
	My return to work plan:						
60.	Was modified in consultation with my treating doctor						
61.	Was modified in consultation with me						
62.	Was modified in consultation with my supervisor						
63.	Was modified in consultation with my Return-to-Work coordinator						
64.	Was monitored on a regular basis						
65.	Was adjusted according to my progress						
	My Return-to-Work coordinator:						
66.	Was supportive during my return to work						
67.	Was competent						
68.	Understood the rehabilitation process						
69.	Was responsive to my needs during my return to work						
70.	Maintained regular contact with me						
71.	Responded in a timely manner						
72.	Was a strong advocate						
73.	Was knowledgeable about their role						
74.	Was experienced in their role						
75.	Was well informed and able to answer all of my questions						
76.	Was supported by management and did not have competing demands on their time						
	My Insurers' case manager:						
77.	Was knowledgeable about their role						
78.	Was experienced in their role						
79.	Was supported by management and did not have competing demands on their time						
80.	Understood the rehabilitation process						
81.	Was responsive to my needs during my return to work						
82.	Responded in a timely manner						
83.	Was a strong advocate						
84.	Maintained regular contact with me						

SECTION G Experiences and Perceptions of Injured Nurses *(continued)*

85. Were there any delays in the medical management of your injury?

- ○ Yes
- ○ No ☞ *Please go to Question 87*

86. If Yes, please describe:

87. Were there any delays in development and implementation of your return to work program?

- ○ Yes
- ○ No ☞ *Please go to Question 89*

88. If Yes, please describe:

89. Please comment on the communication process involved in your rehabilitation:

SECTION G Experiences and Perceptions of Injured Nurses *(continued)*

90a. Have you sustained an injury/illness since your initial injury?

- ○ Yes
- ○ No ☞ *Please go to Question 91*

90b. If Yes, how many subsequent injuries/illnesses?

- ○ 1
- ○ 2
- ○ 3
- ○ More

90c. Please specify the types of injury/illness.

91. Do you have any comments (positive or negative) relating to your rehabilitation process that you would like to share with us? *(Please attach an additional sheet for your response if necessary)*

Attachment 9: Thank you / Reminder Card

Thank you for participating:
Nurses Rehabilitation Study

Recently you would have received a study package for the Outcome of Occupational Rehabilitation of NSW Nurses study. The purpose of the study is to evaluate the experiences and perceptions of injured nurses and the rehabilitation process in health care facilities.

If you have already returned your completed survey form to the University of Newcastle, **Thank you!**
If you have not yet returned the survey it is not too late – you can send it now.
If you need another package sent to you please contact: Mary MCLeod at NSWNA on 1300367962

Further Information:
If you would like further information about the study please contact:
Maya Guest
Faculty of Health, The University of Newcastle, Callaghan NSW 2308
Telephone 02 4917735, Email: Maya.Guest@newcastle.edu.au

Thank you for considering this invitation.

If you have any concerns about the study, you are welcome to contact the Human Research Ethics Officer, Research Office, The Chancellery, The University of Newcastle. University Drive, Callaghan NSW 2308, Australia Telephone 02 49216333, Email human-ethics@newcastle.edu.au

Attachment 10: The Lamp: Media Release

Helping injured nurses' return to work

Occupational Rehabilitation project aims to improve the occupational rehabilitation process for injured nurses.

The NSWNA is undertaking a project called The Outcome of Occupational Rehabilitation of NSW Nurses that aims to improve the occupational rehabilitation process for injured nurses in NSW.

A collaborative project between the NSWNA and the University of Newcastle – funded by a WorkCover Partnerships Grant awarded in 2007, this research study sets out to explore the experiences and perceptions of injured nurses and workplace return-to-work coordinators of the rehabilitation process and identify the barriers to the successful occupational rehabilitation of injured nurses employed in health care settings in metropolitan and rural NSW.

The research is being conducted by the Faculty of Health at the University of Newcastle.

An important source of information will be a questionnaire sent to a sample of injured nurses in November. Nurses will be asked to complete and return the questionnaire.

Focus groups have been also held with a number of rehabilitation co-ordinators from a range of employers.

NSWNA General Secretary Brett Holmes said the project derives from the Association's concern about the occupational rehabilitation process and how it is being managed for injured nurses in NSW.

'Nursing is a profession with a high rate of injury and currently the rehabilitation processes for nurses are limited,' he said.

'If you have been injured recently you may be invited to participate in this research project. I encourage members to share their experiences and perceptions of the rehabilitation process so we can improve the process for injured nurses.'

All nurses who have sustained an injury and have required rehabilitation between July 2005 and June 2007 are eligible to participate. Potential participants will be identified by WorkCover NSW and receive a study package inviting participation. Participation in this research is entirely voluntary, anonymous and confidential. No information will be

collected that will identify the participants. The questionnaire should take about 30 minutes to complete.

'The NSWNA will provide members with information about the research findings in future editions of *The Lamp*, or you will be able to obtain a copy of the research findings from the research team at the University of Newcastle,' said Brett.

If you would like further information about this study, please email Maya Guest at maya.guest@newcastle.edu.au or phone 02 49217735.

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