MONASH University

Insurance Work and Health Group
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INTERVENTIONS TO SUPPORT THE RETURN TO WORK OR RECOVERY AT WORK OF OLDER HEALTHCARE WORKERS

AGEING WORKFORCE PROJECT FINAL REPORT

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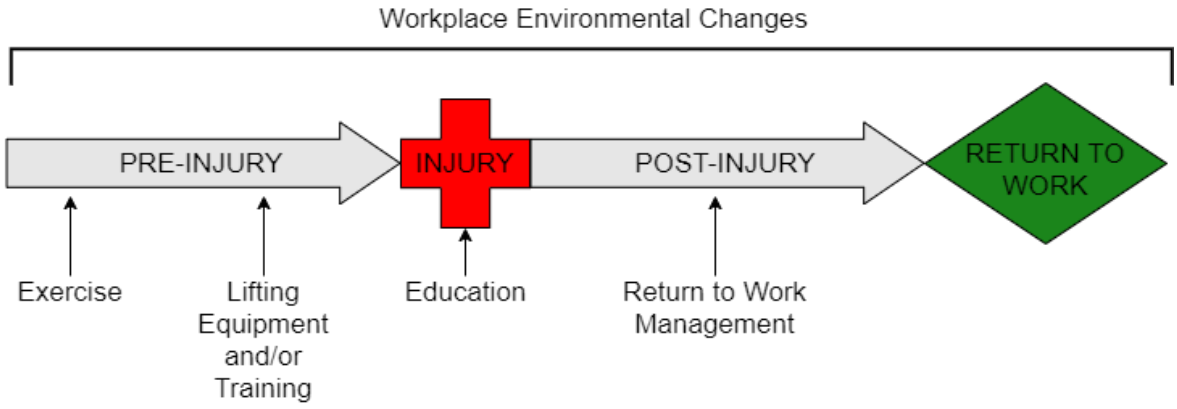
EXECUTIVE SUMMARY

This report culminates a three-phased project combining literature review, data analysis and workshop components to design and recommend interventions that can be implemented to support the stay at work and return to work of older workers. This process, intervention mapping, combines theory and evidence, but critically, requires the participation of relevant stakeholders throughout the intervention development process.

The best approach emerging from evidence and practical experience was to consider multiple interventions implemented at different time points: pre-injury (injury prevention), at time of injury, post-injury and ongoing. Five interventions were identified: exercise, lifting equipment and/or training, education, return to work management and workplace environmental changes. Implementing a single intervention is likely to see benefit, however employing all interventions together is likely to yield the most positive results.



- Exercise: could prevent work-related and non-work-related injury by improving physical condition, but also improve lifestyle and general health which could improve and hasten recovery should an injury occur. Utilising existing resources (e.g. exercise physiology staff) and promotion within the workplace would be important for a program's success.

- Lifting equipment and/or training: Ensuring adequate and uniform access to lifting equipment with associated training that is regularly maintained is an effective injury prevention measure. An audit of current equipment and practices would identify areas of priority need.

- Education: potential to ensure managers know how to best support injured workers and empower workers to play an active rather than passive role in their recovery. EML would be well placed to develop and possibly deliver this intervention in conjunction with health services.

- Return to work management: including undertaking job analysis to create job dictionaries, and shifting focus to retraining/upskilling early in a claim if a worker looks like they may be unable to return to their previous role.

- Workplace environment changes: focussing on ensuring positive workplace culture throughout the organisation. Promoting a culture whereby staff feel comfortable, safe and valued will improve overall morale and contribute to a worker's desire to return to work. This is the longest-term intervention and requires significant buy-in from senior leadership and line managers.

Evaluation of interventions is an essential step in determining the effectiveness of any measures introduced. Intervention-specific evaluation measures include return to work rates/duration of working time lost, retention rates, redeployment outcomes and qualitative measures, among others.

Next steps include developing implementation plans to identify intervention leaders, gather resources and develop the finer details of the program to be piloted.

BACKGROUND

More than half a million Australian workers experience work-related injury and illness every year[1]. The health and social care sector is a large and growing segment of the Australian economy, employing more than 1.5 million workers and accounting for 13% of the national labour force[2]. Unfortunately, the health and social care sector has been identified as a major source of work-related injury and illness, with the number of injuries at work high compared to other industries[3,4]. Up to one in five non-fatal work-related injuries and illnesses occur among workers in the 'health care and social assistance' industry[5]. The Australian Bureau of Statistics (ABS) reported a rate of 53 work-related injuries and illnesses for every 1000 employees in the 2013-14 financial year, which was 50% higher than the 'education and training' industry and nearly 200% higher than 'financial and insurance services'[6].

As a result of sustained low fertility, relatively low immigration and increasing life expectancy, Australia and other developed countries have an ageing population. Consequently, there are a number of economic, work-related and health-related implications, including a rapidly ageing workforce. A higher number of people exiting the workforce than entering the workforce results in a reduction in the labour force, subsequently slowing economic growth. Further, there is going to be rising demand for health services as a large proportion of the population reach ages that commonly require health and aged care.

According to statistics published by the Australian Institute of Health and Welfare for 2015, a quarter of all medical practitioners were aged 55 and older[7], and around 2 in 5 nurses and midwives were aged 50 and over[8]. This pattern is mirrored in other countries including the USA where nearly half of all registered nurses will be of retirement age in 2020, and nearly one quarter of all physicians were over 60 years in 2007[9]. So, while the need for healthcare is increasing due to the ageing population, a considerable proportion of the healthcare workforce is nearing retirement. The ageing workforce also has potential consequences for training future health care professionals as there is loss of experience from the workforce as older workers retire[10]. Nursing and other healthcare professions are renowned for problems with retention and ongoing issues of burnout[11-13]. High workload, low staffing levels, long shifts and low autonomy are job characteristics that are associated with burnout[11].

The consequences of ill health are significant for older workers[14]. The ABS has reported that involuntary retirement is relatively common among older workers and that ill health is the dominant driver of involuntary retirement when considered across all age cohorts[15]. Further the ABS reports that those who retire for health reasons (own sickness, injury or disability), retire on average earlier than those retiring for most other reasons[16]. On average older workers take longer periods of time off work after a health shock[17], and experience longer periods of unemployment[18]. Older workers who are injured at work are also more likely to try and fail to return to work with the same employer than younger workers[19].

The healthcare workforce is one of the most rapidly ageing workforces in Australia. Combined with the unique nature of some healthcare occupations, this presents a challenge for prevention and rehabilitation. Analysis of workers' compensation claims data in the state of Victoria demonstrated that healthcare workers aged 55 to 64 years had a rate of compensable injury 2.3 times that of younger workers, and that nurses had the greatest volume of compensable conditions[20]. Injuries were most commonly due to muscular stress while handling objects, falls on the same level, and muscular stress while lifting, carrying or putting down objects[21]. Occupational injuries can result in economic losses to employers, as well as physical, mental and financial losses to workers[22].

Unfortunately, whilst there is mixed evidence that the likelihood of work-related injury is elevated with increasing age, there is considerable evidence that older workers generally take longer to return to work[23-25]. A report by Lane et al. (2016) of Australian workers' compensation claims from 2009 to 2014 showed that whilst the incidence of making a claim was somewhat higher among older workers (22.9 claims per 1000 workers in 15-24 year age group to 31.1 in 55+ years age group), the difference in duration of compensated absence was considerable (median of 1.2 weeks for 15-24 year age group compared to 3.0 weeks in 55+ years age group)[24].

Therefore, when combining existing issues of retention and burnout with increased risk of work-related injury and illness and an ageing workforce, it is important to act to prevent loss of experienced nursing and healthcare staff. This report seeks to provide possible options, based on results from a literature review, data analysis and focus groups, to support return to work and retention of older healthcare workers.

METHODS AND RESULTS

This was a mixed methods project involving three distinct but related phases: literature review, data analysis, and implementation mapping. Information gathered through the first two phases was provided to workshop participants to guide discussion, and provide evidence for the developed interventions. Figure 1 provides an overview of the process.

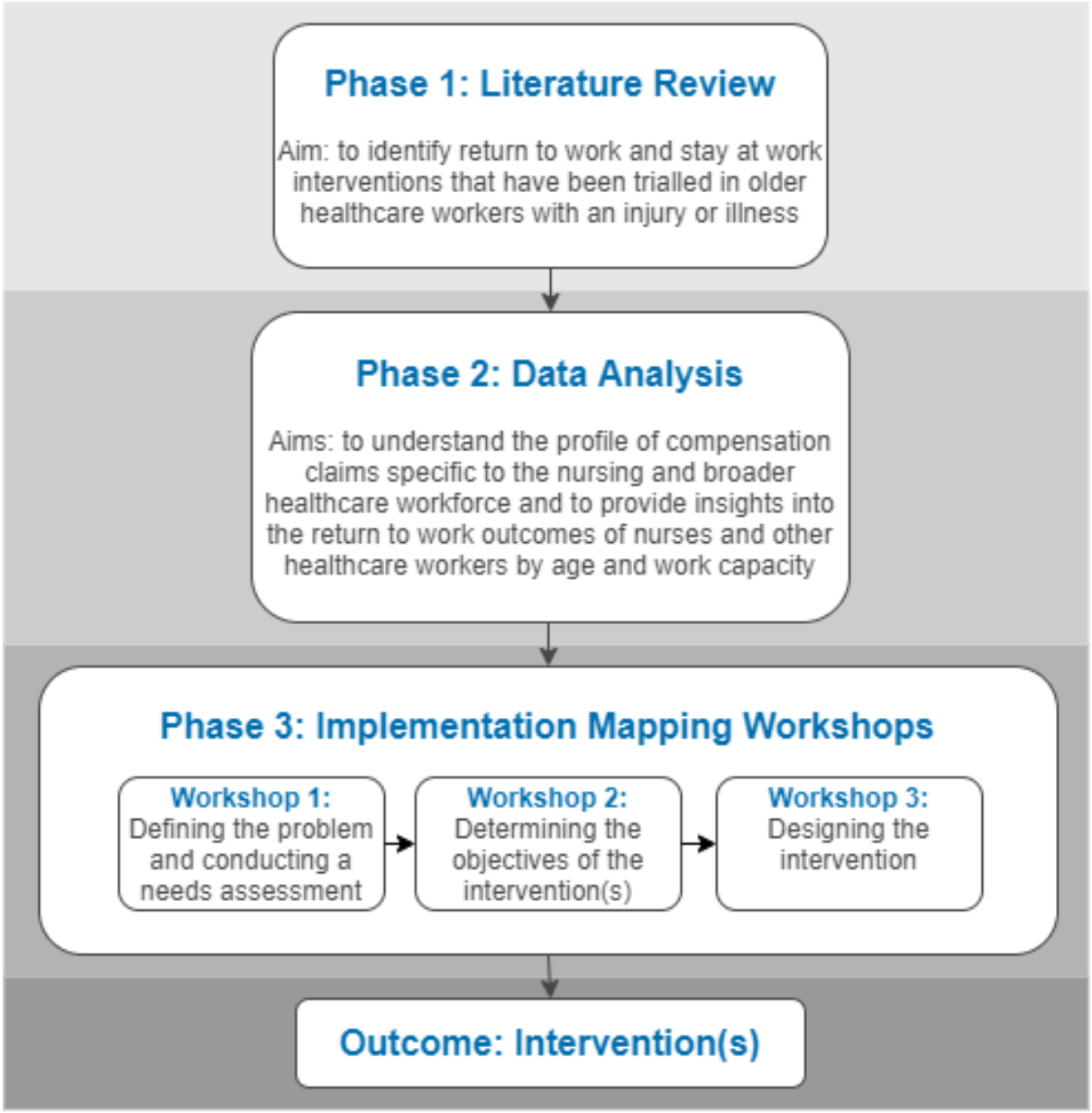


Figure 1 - Mixed methods process

LITERATURE REVIEW

We conducted a rapid systematic review of academic literature of interventions designed to encourage older healthcare workers to return to or stay at work[26]. The aim of the review was to identify return to work and stay at work interventions that have been trialled in older healthcare workers with an injury or illness. No studies specifically focused on older healthcare workers, and populations of the included studies consisted mainly of nurses. As a result, the review focused on return to work and stay at work interventions predominantly in nurses, with the intention to apply the findings to older healthcare workers where possible. Data was extracted from 26 studies.

The strength of evidence was determined using a best evidence synthesis methodology that assessed the quantity and consistency of evidence in included studies, based on the study authors' conclusions. There is strong evidence (8 studies) that lifting equipment and training interventions improve return to work, and moderate evidence (4 studies) that it improves physical health. There is moderate evidence (4 studies) that work reorganisation improves stay at work. There is moderate evidence (4 studies) that education interventions improve stay at work. There is moderate evidence (4 studies) that exercise plus education interventions have a positive effect on physical health outcomes.

It is not clear whether the evidence gathered in this review may be generalised to older workers, and it is not clear how the characteristics of an older healthcare workforce (such as an increased prevalence of chronic health conditions and co-morbidities, longer work tenure and workplace experience) would influence findings. As a result, it is not possible to draw conclusions about older workers. This review highlights a significant gap in the research literature.

Based on the findings of this review, lifting equipment and associated training should be introduced to improve return to work outcomes. This type of intervention should also be considered in practice to improve physical health outcomes of healthcare workers. In order to improve stay at work outcomes, work reorganization and education interventions should be considered where they are suitable for the specific work context. In a similar manner, exercise interventions should be considered in order to improve physical health outcomes for healthcare workers.

These results (summarised in Appendix) helped to inform the data analysis plan and the pre-workshop survey, as well as promote discussion in workshops through pre-reading.

DATA ANALYSIS

We analysed two sources of workers' compensation claims data to determine the incidence of injury among older healthcare workers and factors associated with their return to work[27]. The first, the National DataSet for Compensation-based Statistics (NDS) is a claim-level dataset of all accepted Australian workers' compensation claims from the major state- and territory-based jurisdictions, and Australia's commonwealth system, from 1/7/12 – 30/6/17. The second, EML claims and work status data from 1/7/12 – 30/6/17.

The NDS and EML claims and work status datasets showed similar claim profiles in nurses and other healthcare workers: a higher proportion were females, and musculoskeletal conditions and body stressing injuries were most common. There was a higher incidence of time loss claims (claims per million hours worked), and a higher burden of injury (weeks compensated per million hours workers) among both nurses and other healthcare workers than non-healthcare workers, with nurses having the highest incidence and burden for all age groups. This pattern was replicated among musculoskeletal conditions. For mental health conditions the incidence in other healthcare workers was higher than nurses up to 54 years of age, beyond 54 years the incidence is similar to nurses. For major injury types there was a decline in incidence and burden after 64 years with the exception of fractures, which increased.

Recurrent claims were relatively uncommon among nurses (1.9%) and other healthcare workers (2.1%). Not working but having capacity to work was more common among non-Government non-healthcare workers (10.5%) compared to nurses (5.2%) and other healthcare workers (6.2%). Nurses who had capacity but had no return to work were more likely to be aged 50-59 years, have a mental health condition, and be in the lower socioeconomic quintile. Other healthcare workers who had capacity but no return to work were more likely aged 50-59-years and with a mental health condition. Being identified as having no return to work with no capacity was most likely in those aged 50-59 years, in the Government non-healthcare worker group, and among those with mental health conditions, fractures and other diseases. For those not working and without eligibility for benefits, the proportion of all claims increased with age, particularly among nurses. Up to 59 years, the likelihood of relapse (returning to work then later recommencing income support) was greater with increasing age.

Understanding the incidence and burden by age across the occupational groups, and the factors associated with certain return to work outcomes, as determined in this report, helped recognise why these groups exhibited these results. Consistently, there was a higher incidence of claiming and burden of injury among nurses and healthcare workers from 45 to 64 years. Those with musculoskeletal conditions, mental health conditions, and fractures commonly had higher odds of not working (with or without capacity) and return to work relapse. Similarly, the 50-59-year age group consistently had higher odds of poorer work outcomes.

These findings were provided to workshop participants as pre-reading to promote discussion and inform the pre-workshop survey, and helped to inform intervention development.

WORKSHOPS

AIM

The purpose of the workshops was to co-design interventions with health sector employers and employees, insurers and other stakeholders using theoretical, empirical and practical evidence and experience.

PARTICIPANTS

A list of participants was provided to the research team by EML and the ACT Government. These participants represented EML, Canberra Health Services, ACT Government (Health Directorate, Injury Management and Health Safety and Wellbeing teams), and NSW Health. They were selected based on their ability to provide valuable insight into the Ageing Workforce Project and the development of potential interventions most likely to be effective. See workshop summaries for the list of participants in each workshop.

INTERVENTION MAPPING METHODOLOGY

Intervention mapping is an approach to developing evidence-based health promotion programs by combining theory, evidence and real-world knowledge[28]. The approach requires use of theory and evidence, but critically, requires the participation of relevant stakeholders throughout the intervention development process. The workshops addressed the first four of six intervention mapping steps, with the remaining two steps to be taken by EML and health organisations. Table 2 shows the intervention mapping stages and the relevant workshop that addressed the stage(s).

Table 1 - Intervention mapping stages with corresponding workshop

Component	Actions	Workshop
A. Needs Assessment or Problem Identification	• Establish and work with a planning group • Develop a logic model of the problem • State program goals	1
B. Program Outcomes and Objectives	• State expected outcomes • Create a logic model of change • Prioritise areas for intervention	2
C. Select intervention methods and strategies	• Generate program themes • Define program components, scope and sequence • Design practical applications to deliver change methods	3
D. Design and Organise the Program	• Refine program structure and organisation • Draft messages, materials and protocols • Pre-test, refine and produce materials	3
E. Specify Implementation Plan	• Identify potential program users • State outcomes for program use • Design implementation interventions	-
F. Generate Evaluation Plan	• Write outcome and process evaluation questions • Develop indicators and measures for assessment • Specify the evaluation design	-

KEY FINDINGS

The aim of the first workshop was to define the problem/issue in order to determine the needs of the intervention, with key findings summarised in Table 2.

Table 2 - Summary of the what/where/who/when/why of the problem

WHAT?	With increasing age there is a noticeable difference (reduction) in return to work rates of injured healthcare workers.
WHERE?	Whilst the problem of no or delayed return to work is most prevalent in hospitals, there are other healthcare settings in which this problem is also quite prevalent.
WHO?	It seems that no or delayed return to work is most prevalent among nurses yet the pattern seems to occur across all workers in the healthcare industry (both medical and non-medical staff).
WHEN?	There is no exact age where no or delayed return to work occurs, yet it begins to become more noticeable from late 40s onwards.
WHY?	There are a number of workplace, healthcare and personal factors that likely affect a worker's return to work, either on their own or in conjunction with others.

The aim of the second workshop was to determine current practice following a work-related injury or illness, brainstorm the behavioural and environmental changes that the intervention will target, and define the measurable outcomes of the intervention. Current practices outlined included the response to an injury, early management of an injury/progression to a claim, and management throughout a claim. Desired changes were outlined for each stakeholder (e.g. employer, worker, healthcare provider etc.). The most important measurement outcome was considered return to work rates/duration of time loss.

The aim of the third workshop was to discuss the finer details of possible interventions. Having defined the problem in workshop one, and the objectives of the intervention in workshop two, the focus of this workshop was to talk through the practical components of an intervention. Discussion revolved around the important considerations for type of intervention, its setting, the target, the deliverer of the intervention, the timing and the format. Barriers (e.g. budget, location) and facilitators (e.g. organisational shift, policy change) were discussed.

INTERVENTION DEVELOPMENT

Proposed interventions were included if they arose in at least two of the three stages (e.g. literature review and data analysis or literature review and workshops), or were considered vitally important by workshop participants despite not appearing in multiple stages. The benefit of each proposed intervention is outlined, alongside the target population, the key stakeholders (those required for successful implementation of the intervention), expected timeframes and difficulty, and any necessary considerations (barriers and facilitators). Finally, an overview and/or example of how the implementation may look is provided, utilising evidence from the literature review, data analysis and workshop discussions. Note that some practices suggested within these interventions may already be current practice, however this does not appear to be uniform and is therefore suggested.

Whilst each intervention does not target older workers specifically, these interventions have been selected based on literature review and data analysis results, and focussed discussions from workshops around the ageing

workforce. In intervention selection it was important to address the reasons why older workers may take longer to RTW, as well as key elements of current practice that workshop participants identified as needing change. The areas deemed by workshop participants to be necessary for change have been worked into one or more of the five proposed interventions. Anything that was worth noting that did not warrant its own intervention or "fit" into the ones proposed were added to 'Additional Suggestions'.

INTERVENTION OUTCOMES AND EVALUATING SUCCESS

Implementation of an intervention should be followed by a rigorous evaluation of its effectiveness to determine the true impact of the initiatives put in place. The outcomes to be evaluated should be defined in advance of the implementation and cover multiple aspects of health and wellbeing. The key outcome identified in workshops and surveys was return to work rates and/or duration of time off work. The exact measure may depend on the timing of the intervention, for example a preventative intervention may look at claim volume whereas a post-injury intervention may look at return to work rate at a specific time. Ultimately, a reduction in claim and disability burden in the target cohort will be a key goal of any intervention. Other suggested outcomes include injury recurrence rates, retention rates, and redeployment measures. Defined quantitative outcomes could be combined with qualitative analysis that incorporates feedback from the worker and key stakeholders involved in the intervention. An understanding of the impact the invention has had on workers and the workplace will be important in determining whether the intervention is sustainable or can be applied to a broader work group, as well as understanding why the intervention may or may not have been successful, including how it could be improved.

PROPOSED INTERVENTIONS

From the literature review and workshops, it become clear that one intervention to "fix" the issue was unrealistic, rather multiple inter-related interventions to target different time points would be more suitable. A systematic review by Cullen et al (2018) found that multi-domain workplace interventions were effective at reducing working time lost for workers with musculoskeletal and pain-related conditions[29]. Figure 2 shows a timeline of a workers' compensation claim, developed within the workshops, and the possible interventions that could be implemented at each point. Each of these have been discussed further below.

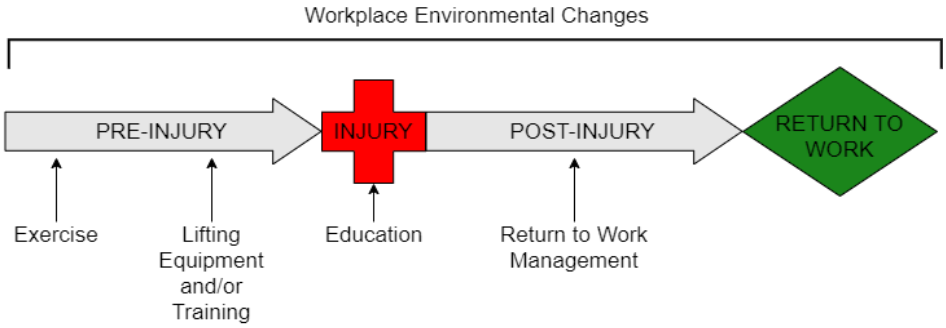
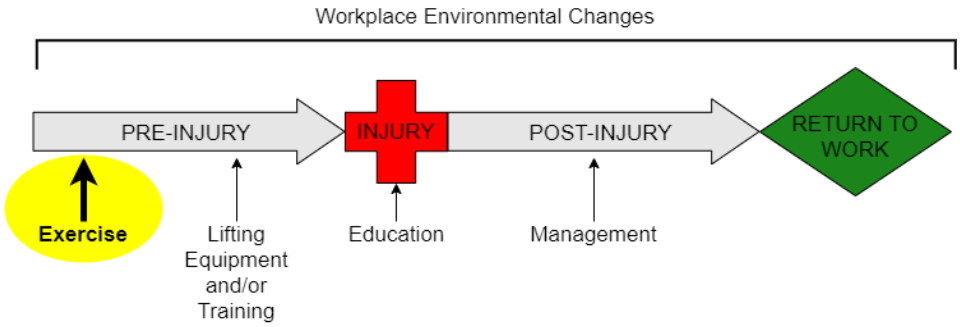


Figure 2 - Timeline of proposed interventions

EXERCISE (INJURY PREVENTION)



Exercise as injury prevention was discussed as being a potentially valuable intervention and was identified in the literature review and workshops. Not only could an exercise intervention prevent work-related and non-work-related injury, but also improve lifestyle and general health which could improve and hasten recovery should an injury occur.

TARGET POPULATION

Exercise interventions are able to benefit all workers, regardless of age, however are expected to be most useful for older workers and those who follow a relatively sedentary lifestyle. Additionally, those with a higher risk of injury (e.g. those with more physically demanding role) would be ideal as targets as exercise intervention will improve their physical condition, reducing the likelihood of injury.

BENEFIT

It is widely known that physical activity can contribute to improved mental and physical wellbeing, particularly in older adults. Physical activity also plays a key role in falls prevention, which is important for older cohorts due to an ageing body. Exercise can help prevent disease, alleviate symptoms associated with co-morbidities, improve mental health, reduce risk of falls and other injury, and improve cognitive function[30].

For nurses in particular, musculoskeletal injuries are the predominant type of injury (70.8%)[27]. Utilising a range of techniques including education, equipment, occupational health and safety policy and multi-disciplinary collaboration is recognised as helpful to preventing musculoskeletal injury in nurses[31]. However, barriers to executing this coordinated approach exist including knowledge and availability of equipment, personal and contextual factors, and staffing and time pressures.

The literature review highlighted that exercise interventions had limited or mixed evidence of benefit for stay at or return to work, yet moderate evidence of benefit for physical health, which may consequently reduce injury risk and improve recovery among those who happen to get injured[26].

KEY STAKEHOLDERS

There were discussions that organisations could utilise their existing resources, such as exercise physiologists, to save on costs. However, it was acknowledged that workers in the healthcare industry already are often operating at capacity. Outsourcing fitness professionals to develop programs that workers could complete either during breaks or at home/in their own time could be an option. They could also deliver occasional or regular on-site workouts.

In order to set this type of intervention in motion, support from the organisation is required. Depending on the type of exercise intervention, it may be necessary to allocate funds to source providers and allocate time to complete the exercise program, both of which would require organisational support. A necessary component to getting this intervention operational is to have one or more leaders to disseminate information and advocate for changing physical activity habits. Furthermore, fostering a culture that recognises the importance of exercise and leading a healthy lifestyle is important (see Workplace Environmental Changes).

NECESSARY CONSIDERATIONS

It was discussed in workshops that an exercise intervention may be outsourced and due to the necessary time commitment of the person delivering the exercise, be comparatively cost-effective. Furthermore, this type of intervention would have benefits to the individual and the organisation beyond what would be evaluated/measured.

Motivation to exercise is an important factor that must be considered. There are facilitators and barriers that affect an older person's motivation to exercise, including cost, physical barriers, fear of injury, low motivation, dislike of exercise, service locality, perceived time, and others[32]. Whilst any exercise is likely to be beneficial, an exercise intervention would likely be most effective when tailored to the individual, including ensuring the exercise is a type they enjoy that can be scheduled easily into their lifestyle. Exercise physiologists are experts in developing exercise programs that will benefit the mental and physical health of their patient based on their capabilities and limitations, however it is not practical for an exercise physiologist to develop exercise programs for every employee within a healthcare setting. A "one size fits all" approach may be beneficial, however there may be limited adherence if the previously mentioned factors were not considered.

An exercise intervention will have far-reaching benefits beyond the workplace. However, for those with inherent motivation to exercise, they are unlikely to require an intervention. It is likely that an exercise intervention paired with education (on the benefits of exercise) and ongoing support will be more beneficial[32].

An exercise intervention also may be difficult to implement in a healthcare setting where a high proportion of staff members work rotating shifts. Any available exercise classes (e.g. yoga, walking groups) may not be possible due to inconsistent break times. For example, in a cohort of nurses, breaks are generally not all taken at the same time to ensure adequate staffing levels remain on the ward. Therefore, a lunchtime walking group that may

be possible for administrative roles, is unlikely to be possible for clinical staff. Further, workers already in physically demanding roles may appreciate resting during their breaks rather than exercising.

Older workers were identified as being most important to target with this particular intervention type, however it must be noted that it is not clear at what age someone should be considered an "older worker" and therefore a target for this type of intervention. Discussions in workshops varied from 40 up to 55 years of age, however the general consensus was from late 40s onwards. Regardless, some workers may not appreciate being branded as an "older worker".

EXPECTED TIMEFRAME AND DIFFICULTY OF IMPLEMENTATION

As mentioned above, there are necessary considerations such as budget, resourcing and motivation that may affect implementation. Allocating funds may be difficult in the healthcare industry, and can therefore make resourcing difficult. Utilising existing trained personnel within an organisation can reduce costs, however they need to have capacity to develop and oversee the intervention. Further, changing culture within a workplace to encourage greater physical activity can see benefits without associated costs. For example, encouraging staff to take the stairs rather than elevators, or start lunchtime walking groups, can increase physical activity.

EXPECTED TIMEFRAME TO SEE IMPACT

Development of fitness and strength occurs over time, meaning it is more likely that impacts would be seen after a longer period of time. However, once a positive impact is seen, it is envisaged that positive changes will be seen beyond reduced injury incidence including shorter recovery times and improved general wellbeing of staff.

WHAT IT MIGHT LOOK LIKE

Intervention aim: To promote and offer exercise to improve general health and prevent injury among workers.

Expected outcomes: Improved worker health (both physical and mental) and reduced injury rates.

There are a number of publicly available toolkits aimed at workplaces that encourage and support physical activity. One example is the guide prepared by the Northern Territory Government[33]. This extensive resource provides information on the benefits of ensuring a healthy workforce and provides tips on how to achieve it. Some examples include options to encourage employees to increase their physical activity, including active transport (e.g. walk to work), active meetings and events, and a physical activity and sedentary behaviour policy. Practical examples include encouraging workers to get off bus stops earlier or parking the car further away, provide secure bike storage to encourage commuting by bike, encourage the use of stairs, include a stretch break in meetings, or organise (and pay for) an on-site fitness class, among many others.

Other workplace initiatives could be competitions and/or monitored health programs where workers could set goals and "check-in" at regular intervals to see how they're tracking. These programs could include pre-screening on health indicators (e.g. blood pressure, resting heart rate, weight) and even fitness tests, then have

checkpoints at which these are regularly checked and compared. Incentives to participate such as prizes for greatest adherence or greatest improvements in health indicators and/or fitness tests could encourage workers to participate.

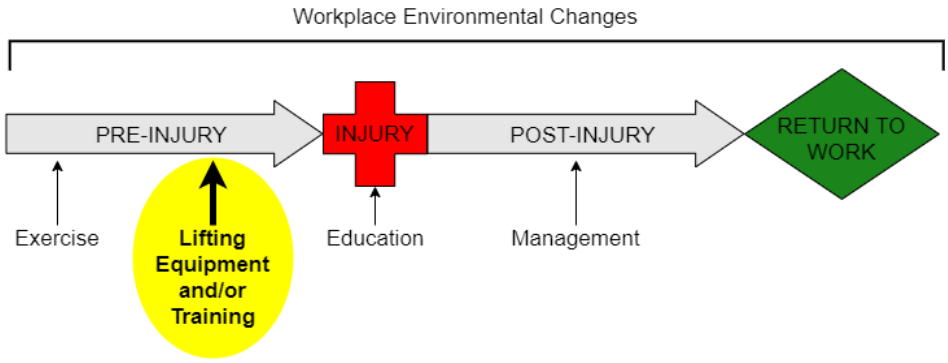
Such initiatives should be connected with workplace culture. A workplace culture that encourages physical activity and certain behaviours (such as taking the stairs instead of the elevator) are considered the "norm" can only help the cause. Further, signage dotted around the workplace to educate workers on the importance of exercise may also help, e.g. "physically active people have a lower risk of premature death due to cardiovascular disease and stroke"[33].

Organisations could implement the below options:

Location of exercise	Possible exercise interventions	Description
Workplace	Walking group	To promote physical activity and social cohesion, lunchtime walking groups could be a valid way to increase physical activity of some workers. The added benefit is that workers may have the opportunity to meet workers across departments. For some workers in the healthcare industry, however, in particular shift workers, breaks are at alternate times to one another and joining a group may be difficult. Further, safety must be considered for those who work night shifts.
	Fitness classes	Organisations may choose to pay for regular fitness classes, developed by a qualified fitness professional. Aside from increased physical activity, there is an added benefit to meeting workers outside of their immediate working area. Space considerations are necessary.
At-home	General program	Multiple options must be provided to account for varying fitness levels (e.g. low, medium and high intensity). Multiple exercise types (e.g. walking, resistance training) would also be beneficial as different people prefer different types of exercise. This option may be preferable to some workers who are self-conscious about exercising with others, particularly if they perceive their fitness level to be low. This could be developed by organisational staff such as Exercise Physiologists, to save on costs.

Evaluation method(s): Claim volumes/injury rates, recurrence rates, sick leave, qualitative outcomes

LIFTING EQUIPMENT AND/OR TRAINING



Lifting equipment and associated lifting training has long been touted as fundamental for reducing manual handling injuries. However, its uptake is not always uniform. Whilst emphasis on correct lifting or no-lift techniques has been around for many years, data analysis showed there are still significant numbers of manual-handling-related injuries and conditions. The literature review highlighted that lifting equipment and/or training had a strong benefit to return to work outcomes, with positive but limited evidence of benefit for stay at work. This was also deemed important by workshop participants and has therefore been included as a potential intervention.

TARGET POPULATION

Any worker that regularly lifts and/or moves patients or other heavy items as part of their job description, for example, nurses, physiotherapists, cleaners, orderlies, and others. Whilst the overarching project is focused on older workers, improvements to lifting technique and use of lifting equipment will benefit all.

BENEFIT

The data analysis report showed that healthcare workers, in particular nurses, have a high proportion of musculoskeletal injuries due to body stressing, in particular to the upper body (including back and shoulders)[27]. There was also a general increase in musculoskeletal condition/injury incidence with age within both nursing and other healthcare worker groups (up to 60 years old). This pattern was also true for fractures and other traumatic injuries. It is expected that older workers would benefit most from a lifting intervention.

In order to move, carry, lift, push or pull something you are using bodily force, which can result in an acute injury. Furthermore, effects can be felt over time causing chronic conditions and pain. The benefits of proper manual handling are widely known. Understanding how manual handling can be altered to ensure reduced stress and strain on muscle and joints can reduce injury.

KEY STAKEHOLDERS

With this type of intervention, it is necessary to allocate funds. Lifting equipment can be expensive initially, but may save costs in the long-term. In saying that, in the healthcare industry it can be difficult to source large

amounts of funds necessary to purchase and maintain the equipment. Management of healthcare organisations are a key player to allow adequate budget for new lifting equipment.

Should equipment already be sourced, preservation of lifting knowledge is required and may involve an external trainer to conduct training sessions. This could also necessitate involvement by senior management to allocate appropriate funds, as well as facilitate time for appropriate staff to undertake training.

NECESSARY CONSIDERATIONS

There were differing opinions in the workshops around lifting equipment and/or training. Some believed that lifting training was already wide-spread and adequate[34], whereas others thought there was much that could still be done. Further, it was noted that availability of lifting equipment differed depending on the location of the healthcare organisation and different funding models. Therefore, it is likely that opinion on lifting equipment and/or training varies based on personal experience.

In order for lifting equipment and/or training to be most effective, there is a need to foster a safety culture so that workers are comfortable and not ostracised when using correct techniques (see 'Workplace Environmental Changes'). Junior staff may feel judged or awkward insisting on a second set of hands or when spending time to source lifting equipment, and possibly more experienced staff may not see the need to do so as they've done things their way up to that point and not been injured.

Education on the importance of correct lifting techniques is important, especially if paired with a safety culture that promotes it. Knowledge of why proper procedures should be followed rather than understanding of only the procedure is important. It may be beneficial to introduce case studies into training sessions to provide real examples of the implications for not following correct lifting techniques.

It was mentioned in the workshops that looking long-term about lifting equipment is necessary. One region had a model of renting lifting equipment rather than purchasing it, which meant lower short-term costs, but equipment types and brands differed. This had the consequence of not all staff having full understanding and training for using that particular piece of equipment and hence chose not to use it or used it incorrectly, increasing injury risk.

EXPECTED TIMEFRAME AND DIFFICULTY OF IMPLEMENTATION

It is expected that many healthcare settings will already be employing lifting training as an injury prevention/staff safety measure. It would take time to review current practices or audit lifting equipment and training levels to determine whether and where it is required. In instances where change is necessary or recommended, there would be time required for delivery of training. Additionally, changes to workplace culture to alter views on using lifting equipment and/or safe techniques can take time and requires strong leadership.

EXPECTED TIMEFRAME TO SEE IMPACT

It is expected that once lifting equipment is installed and training has occurred, impacts would be relatively quick, shown through reduced injury incidence.

WHAT IT MIGHT LOOK LIKE

Intervention aim: To ensure all staff within workplaces have adequate access to lifting equipment should it be required and appropriate lifting training (including correct use of equipment).

Expected outcomes: Reduced incidence of injury, higher staff retention and a potentially improved return to work rate.

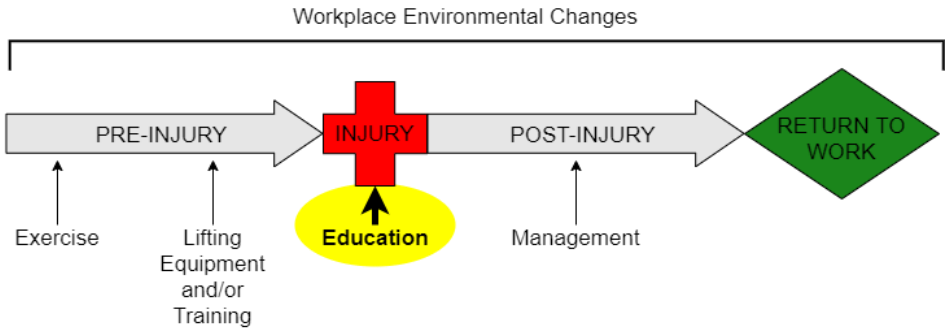
Prior to any intervention being implemented, it would be valuable undertaking an exploratory study or audit to determine where this type of intervention is most needed and will have the greatest impact. Feedback from workshops were that access to lifting equipment and extensiveness of lifting training varied across health districts and hospitals/clinics. It would also be worthwhile to identify one or multiple 'champions' to lead/manage the intervention, including sourcing any required funds or resources, including staff.

Combining a lifting intervention with a positive culture change toward improved safety as standard practice (where necessary) will likely see the most positive outcomes. Further, maintenance of knowledge should be mandated to ensure skill preservation. There is considerable literature to inform lifting equipment and/or training interventions[26], with the major components of this listed below as a guide. In order for this intervention to be implemented, however, support (monetary and organisational) is necessary.

One included literature review study trialled a multi-factor lifting intervention aimed at reducing injury incidence among health care workers[35]. The stages involved 1) an education program focused on anatomy, injuries, body mechanics, personal health, lifting and patient handling procedures; 2) a hands-on patient-handling skills development for skills-based learning in equipment usage; 3) an eight-hour training session with a one-hour refresher course mandated on a yearly basis. It is expected that this approach would be beneficial.

Evaluation method(s): Availability and use of equipment, claim volumes/injury rates, retention rates, recurrence rates, return to work rates/duration of working time lost, sick leave, qualitative outcomes

EDUCATION (CLAIM-SPECIFIC)



Education interventions were considered important by workshop participants, and there were two key receivers of this type of intervention: direct managers/supervisors of an injured worker, and the worker themselves. Educating direct managers on how to best oversee a worker's claim and support the worker throughout their recovery and return to work has potential to make a big difference in claim duration, as it has been shown that employer support can greatly reduce the duration of work absence[36]. Educating the injured worker about the compensation process can improve their navigation through the system, thereby reducing stress. Further, providing information about the "journey" and the expectations of the workers' compensation system would be beneficial (e.g. the goal is to return the worker to work).

Another target group for an educational intervention was healthcare providers, however many mentioned that this has been ongoing and many still certify based on what the worker wants rather than their capabilities. Instead, an intervention focused on educating the worker may help to empower them to lead the conversation with the healthcare provider and encourage certification in some capacity rather than a commonly identified problem of the healthcare provider certifying based on the worker's request.

TARGET POPULATION

It was deemed that education interventions would be most useful when aimed at a worker's direct manager (pre-claim), with knowledge then being passed down to the worker from the manager (post-injury/claim).

In workshop one, it was highlighted that support from management was key, and a lack of support from direct managers was a reason why workers were not getting back to work. This was both due to not feeling valued or missed by the workplace, and a decreased frequency of shifts can make a worker feel left out. Further, it was acknowledged that many managers may be unaware of the necessity to support return to work as well as how to best support the worker to do so.

Workshop one also recognised that many workers struggle to navigate the workers' compensation system, and whilst it is their injury or illness, can have a passive rather than active approach to recovery. An educational intervention that targets managers to best inform their workers of their rights and responsibilities and support their workers throughout recovery is required so it does not become a barrier to recovery and return to work.

BENEFIT

Safe Work Australia's National Return to Work Strategy 2020-2030 outlines five action areas that represent opportunities for change, three of which are relevant here[37]. The first of these, "Supporting workers", aims to help workers be actively involved in their recovery and return to work. Action Areas two ("Building positive workplace culture and leadership") and three ("Supporting employers"") aim to support workplaces to reduce stigma and promote positive relationships and behaviours, and help employers effectively support workers in their recovery and return to work. The outcomes of these are to see increases in the number of workers staying in or returning to good work following an injury, positive return to work experiences, and employers preparing for, effectively responding to and managing work-related injury.

Workers need greater knowledge of their rights and obligations, information and communication. To ensure the most positive outcomes for injured/ill workers, it is important to empower workers and provide them with the information that can benefit their recovery. Workers face a number of challenges associated with work-related injury/illness including loss of control, alienation, financial loss, adjustment to rehabilitation, and having to navigate compensation systems, among others[38].

The worker-employer relationship is a vital element that can promote or delay return to work. A study by Sheehan et al (2019) found a number of factors associated with greater or poorer employer support[36]. Greater support was shown to those with fractures, traumatic injury, occupational disease, and those with very good or excellent self-rated health. Those with mental health conditions and longer claim durations reported lower employer support. Contrary to expectations, older workers (>51 years) had the greatest perceived support. Further, receiving pre-claim support (e.g. being treated the same by people at work, supervisor believing the injury) and post-claim support (e.g. providing suitable duties, treating the worker fairly) greatly improves return to work outcomes[39].

Poor interactions between workers and insurers can also lead to development of secondary injury, such as psychological conditions, when there is perceived lack of respect, understanding and communication[40]. A number of other studies recommended macro- and micro-level changes to workers' compensation systems to improve the claim process, as its complexities are a disincentive to making a claim and subsequently can affect return to work outcomes[41].

A 2019 study of workers with an accepted workers' compensation claim by Collie et al. found that 23% of workers reported a negative or neutral experience within the workers' compensation system[42]. Experience ratings were generated based on the extent of agreement to whether the worker found the process open and honest, there was good communication between relevant parties, the system was acting in their best interest, treated them fairly, and helped with their recovery. Those with a negative/neutral claim experience had 60% lower odds of having returned to work at the time of interview (6-24 months post-claim acceptance). Greater

understanding of the system for workers could alleviate some of these issues and improve return to work outcomes.

KEY STAKEHOLDERS

Large organisations are likely to already have trained occupational health and safety professionals and return to work coordinators with the skillsets necessary to deliver such education sessions, in particular to direct managers. This may or may not already be standard practice within some organisations, or due to the availability of an in-house return to work coordinator, this may be overlooked. Alternatively, workers' compensation insurers may choose to conduct sessions from their perspective to educate these managers and/or ensure that key stakeholders within organisations are informed (e.g. return to work coordinators) and presents an opportunity for EML to be actively involved. Otherwise, external trainers may provide an educational package for managers across organisations.

EXPECTED TIMEFRAME AND DIFFICULTY OF IMPLEMENTATION

Should EML be interested in running their own education sessions for managers within the healthcare industry, sessions can occur as soon as material is ready and time has been allocated to deliver these sessions to managers. Similarly, within organisation training can commence once material and time is allocated for managers to attend. Workshops suggested that in-person delivery would more likely to be effective, followed up with hard-copy or online resources that can be used as a reference. Compared with the other proposed interventions, this would have the shortest timeframe to be operational.

EXPECTED TIMEFRAME TO SEE IMPACT

Qualitative outcomes (e.g. understanding of the system, knowledge of rights and responsibilities) would likely see an immediate impact. Quantitative outcomes would be expected to improve not long later, as even current claims can benefit through improved employer support.

NECESSARY CONSIDERATIONS

Throughout the workshops it was repeatedly acknowledged that an injured worker may have difficulties navigating the workers' compensation system. Further, expectations of the goals of workers' compensation are important to ensure all parties are "on the same page" (worker, employer, healthcare provider, insurer). In terms of educational resources, an in-person training session was considered most effective by workshop attendees, with a physical or digital manual for later reference. This approach would be best suited for training managers. For workers, however, a one-on-one or case-conferencing session at time of injury or claiming with relevant parties would be more beneficial. A physical or digital resource pack in lay terms for later reference would also be important for workers. Some organisations already stated they have early case-conferencing to discuss expectations.

An education intervention may not be as effective as others if there is high turnover of staff, in particular managers, unless regular training sessions were available. Furthermore, resourcing for an education intervention could possibly be expensive, particularly if there was an external organisation or dedicated trainer (full-time employee wage with possibly travel). Utilising existing resources would be preferable, however due to current resourcing constraints this could be difficult.

WHAT IT MIGHT LOOK LIKE

Intervention aim: To ensure managers, and subsequently injured workers, are provided with adequate information to make appropriate decisions throughout the claim and recovery/return to work processes.

Expected outcomes: Improved understanding by managers of the workers' compensation process and how to best support injured workers. Improved understanding and empowerment of workers to guide their workers' compensation journey.

It is important to address the following key learning objectives for an intervention targeted at managers:

- A worker's rights and responsibilities
- The workers' compensation process and its goals
- The key stakeholders in a workers' compensation system and how to best engage with each
- Importance of early reporting (internally and to the insurer)
- That by doing X-Y-Z now there will be long-term benefits (e.g. early treatment/intervention, discussion on suitable duties for a gradual return to work)
- Importance of ongoing support (e.g. regular "check-ins" to see how worker is going, update them on any workplace changes)
- Importance of work for health
- How to best provide support (e.g. regular phone calls, discussions with healthcare provider, identification of suitable duties)
- Identification of possible transferrable skills of a worker
- Skill development to assist with redeployment where appropriate
- Importance of transparency
- Consider the worker as a whole person (who has a life outside of work)

Once managers are educated, they are best placed to educate a worker. Key learning objectives for a worker include:

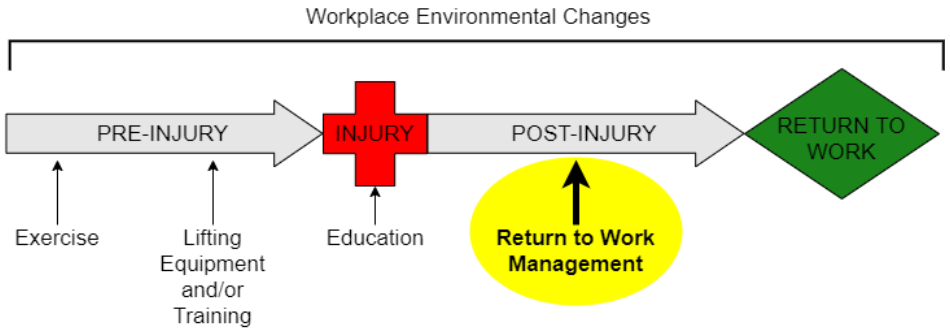
- Their rights and responsibilities
- The main goal of workers' compensation
- The key stakeholders within a workers' compensation system

- How to navigate the system
- How to support their recovery

This education seeks to empower the worker to lead their recovery, thereby directing conversation with their healthcare provider with support from their manager and the insurer. During education, providing scenarios and case studies would be beneficial as they can help make it “real”.

Evaluation method(s): Return to work rates/duration of working time lost, recurrence rates, qualitative outcomes

RETURN TO WORK MANAGEMENT



Good management within workplaces, in particular in relation to managing return to work and recovery of an injured worker, has potential to ensure all relevant parties will reach their goals. All levels of management have a role to play.

TARGET POPULATION

This type of intervention is somewhat intertwined with the education intervention aimed at managers, however is more targeted to resourcing and planning for a worker's return, and can also involve an organisation's return to work coordinator. Therefore, improved management during a worker's recovery should target anyone actively involved and may include the direct supervisor through to the head of the organization, particularly if culture changes or policies are required to occur.

BENEFIT

Results from the 2018 National RTW Survey found that two of five workers overall reported that they needed support to navigate the workers' compensation claim process (40.2% in NSW)[43]. Half indicated that when requiring support, they most often called on their employer or colleague. In NSW, a quarter sought support from the insurer.

Supporting a worker through recovery and the return to work process is known to have more positive outcomes[36,39]. Having an employer doing what they can to support a worker, including making every effort to find appropriate alternate duties, can increased the likelihood of a rapid return to work (less than 30 days) sixfold and more than four times for any return to work beyond 30 days[39]. Furthermore, introduction of a return to work plan was found to significantly increase the likelihood of return to work, regardless of whether it was written or unwritten.

KEY STAKEHOLDERS

Like the education intervention, this is an intervention where EML can be actively involved. Uniting both statistical and anecdotal evidence has shown the importance of employer involvement in recovery, and claims managers within EML will have a wealth of knowledge that would be beneficial to be shared with employers to support

return to work. Creation of educational materials for presentation to employers by EML would assist in the employer's management of a claim.

Key workers within organisations need to be open to change in some components of their role if previous methods were not as effective. Furthermore, senior management has a role to play in terms of facilitating return to work in alternate duties, retraining/upskilling (and potentially allocating funds to do so) and returning in a permanent part-time capacity.

EXPECTED TIMEFRAME AND DIFFICULTY OF IMPLEMENTATION

Similar to the education intervention, EML may be interested in running their own information sessions for managers and/or return to work coordinators within the healthcare industry due to vast knowledge from claims managers to inform on possible management practice changes.

Time will be required to develop job dictionaries (with possible alternate duties) for the vast number of roles within the healthcare industry, and then for these to filter through all levels of management. Further, major management changes are likely to take time, particularly if there are necessary culture, budget and/or resourcing considerations. Compared with the other proposed interventions, this would have a moderate timeframe to be operational.

EXPECTED TIMEFRAME TO SEE IMPACT

An immediate impact would likely be seen with qualitative outcomes (e.g. competence and confidence of managers to manage an injured worker). Quantitative outcomes would be expected a short time later as new and current claims can benefit from improved management.

NECESSARY CONSIDERATIONS

Clear understanding of each role within healthcare is necessary, including the fundamental tasks that define the job. These may include detail on the postures required, the general physical demands, equipment used, time spent on various tasks, and daily workflow. Therefore, it would be worthwhile for organisations to develop detailed job dictionaries based on analysis of the tasks required within each role, particularly common roles such as nurses and administrative staff.

It should be considered that location can play a major role in ability to manage an injured worker and provide suitable duties. In regional areas there may be limited opportunities for alternative roles, or greater travel may be required to work in a different setting.

It should be noted that workshop participants were complimentary about some programs employed by EML, in particular the WISE and ARC programs. Consideration of making these or similar programs standard practice within organisations (as not all injuries result in a claim that may access these) would be worthwhile.

Workshop discussions suggest that this type of intervention will be most useful for older workers, in particular changes affecting retraining, redeployment or a shift to permanent part-time hours. It was recognised that responsibilities generally change with age (e.g. caring responsibilities may increase and/or decrease over time) and this needs to be considered when managing workers. Further, depending on a worker's experience with their time off work during recovery, it may be difficult to motivate them to return to work as they have become accustomed to a new lifestyle (e.g. no shift work), and hence motivators to working need to be addressed and potentially accounted for (for example, allowing a return in part-time capacity).

WHAT IT MIGHT LOOK LIKE

Intervention aim: To be proactive rather than reactive with respect to managing return to work and therefore have policies and practices already in place to facilitate improved support.

Expected outcomes: Streamlined processes for direct managers and return to work coordinators would reduce barriers to findings suitable duties to enable stay at work and return to work.

The main focus of this intervention is to be "ahead of the game" and anticipate how to best support return to work for an injured worker. A key outcome of the workshops was that suitable/alternate duties were often vital in the return to work process, yet supervisors were unaware of possible appropriate tasks, or there were none available. The aim of this intervention is to therefore analyse the various roles within the healthcare industry, provide detailed job dictionaries for each, and subsequently identify modified duties that will still contribute to the workplace. Alternatively, those workers who may be unable to return to their pre-injury duties should be identified as early as possible and upskilling and/or redeployment should be promoted or at least considered. Further detail is provided below under subheadings.

Job Dictionaries / Job Task Analysis

A recommendation for intervention is the creation of job dictionaries for common roles in the healthcare and/or hospital setting, where these do not already exist. Job dictionaries provide a detailed breakdown of tasks performed in each job role, and the frequency with which these tasks are performed. Job dictionaries are able to be used to easily identify which tasks an injured worker is able to perform. Having job dictionaries for multiple roles within the organisation can also assist a supervisor and/or return to work coordinator in identifying an alternative role for an injured worker that they may not otherwise have been aware of. A template of a job dictionary with a return to work checklist and possible alternate duties has been provided below, adapted from Worksafe Queensland and RTWSA's examples[44,45]. These may be used in conjunction with existing certificate of capacity templates, but the main focus is determining the specific tasks within a role, and possible alternate duties should a worker be unable to perform particular aspects of that role.

Return to Work Checklist

Job dictionaries can be combined with a return to work checklist and plan, which can be provided to an injured worker's treatment provider to identify which of their regular work tasks they are able to complete. A checklist may also include duties which are not part of a worker's regular duties but may represent pre-defined possible suitable duties, which can be signed off by the treating practitioner at the same time.

Support for Partial Return to Work / Alternate Roles

A common theme from workshops was that for nurses in particular, the rostered nature of work does not support a graduated return to work and alternative roles were not always available. This restricts what a supervisor or return to work coordinator is able to offer an injured worker. Delaying return to work in a worker who has capacity increases the risk that they will not return to work in the longer term.

The ability to offer part-time or alternate roles is likely to require significant planning / restructuring that may not be feasible for all workplaces (particularly smaller workplaces). If part-time duties are not feasible then investigation into whether other roles that may utilise a worker's skills are available. In particular for older workers, is there a role in training and/or mentoring that still involves them in the workplace at a reduced capacity? Alternatively, is there a non-physical role available that utilises their skills (e.g. clinics, telehealth)? Larger workplaces should be anticipating that there will be workers requiring this support and work to provide this flexibility.

Upskilling / Role Change

The early opportunity or option for a worker to access professional development or training for a new role could be beneficial in preventing long-term claims where a role change is often a last resort when a worker is unable to return to their previous role. Raising these options earlier in the claim may be beneficial, particularly for older workers. Opportunities and pathways should be pre-defined, including clearly articulating how (for example) a nurse's skills would be transferrable to this different role. Having case studies/success stories of people who have been through a similar transition may make the option more 'real' and less confronting for a worker who may have a strong identity tied to their job role. A balance between a worker feeling 'pushed-out' and supported and valued as an employee would be essential.

Evaluation method(s): Return to work rates/duration of working time lost, redeployment measures, qualitative outcomes

Job Dictionary: *ROLE*

Task:	Role:	Site:
Description:		Overall Physical Demand Rating:
		OH&S:
Shift Times:		PPE:
Physical Environment:		Client Base:
Education:		

Critical physical demands (can be developed for each major task within each role)

Physical Demand	N	O	F	C	Description
Sitting					
Standing					
Walking					
Climbing					
Stooping					
Bending					
Kneeling					
Squatting					
Crawling					
Gripping					
Forward Reach					
Overhead Reach					
Lift					
Carry					
Push / Pull					

N = Never, O = Occasional (1–33%), F = Frequent (34–66%), C = Constant (67–100%)

Critical range of motion	
Lift capacity	
Push / Pull force	
Shift duration / Roster	
Environmental factors	
Task rotation	
Breaks	
PPE	

Repetitive action / sustained posture

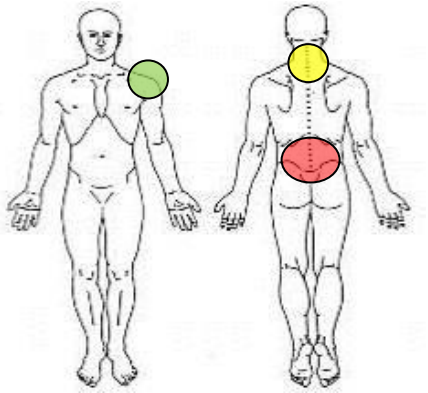
- Repetitive means the movement or force is performed more than twice a minute
- Sustained means the posture of force is held for more than 30 seconds at a time

Neck:	
Lumbar spine:	
Repetition:	
Shoulders:	

Lift/Push/Pull demands

Very Light Work	Lifting and carrying < 5kg. Variable posture sitting, standing and walking. Pushing up to 2kg Force and pulling up to 2kg Force occasionally at waist level.
Light Work	Lifting and carrying up to 10kg maximum. Frequent lifting and / or carrying of objects weighing up to 5kg. Pushing up to 5kg Force and pulling up to 5kg Force occasionally at waist level.
Medium Work	Lifting and carrying up to 22kg maximum. Frequent lifting and / or carrying of objects weighing up to 10kg. Pushing up to 12kg Force and pulling up to 12kg Force occasionally at waist level.
Heavy Work	Lifting up to 45kg maximum. Frequent lifting and / or carrying of objects weighing up to 22kg. Pushing up to 24kg Force and pulling up to 24kg Force occasionally at waist level.
Very Heavy Work	Lifting above 45kg maximum. Frequent lifting and / or carrying of objects weighing above 22kg. Pushing up to 35kg Force and pulling up to 35kg Force occasionally at waist level.

Risk of developing a musculoskeletal injury



Red = **High** (e.g. repetitive movement, sustained awkward positioning, high force / very heavy lift)

Yellow = **Medium** (e.g. repetitive movement, high force/heavy lift, awkward position)

Green= **Low** (e.g. repetitive movement, awkward position e.g. bending)

Return to Work Checklist and Plan: *ROLE*

To be completed with patient/injured worker.

Worker name: _____

Claim number: _____

Injury: _____

Worker will be able to participate in the duties as below from: / / to / /

Full time ☐ Part time ☐ (if part time, please specify: ____ hours per day/shift ____ days/week

Tick if suitable	**Job tasks**	**Limitations/comments**
	e.g. assisting patient with dressing/undressing. Light to heavy depending on patient needs. Rotate between walking, lifting and standing.	
	e.g. feed patients or assist patients to eat or drink. Under 2kg. Rotate between sitting and standing positions.	
Tick if suitable	**Alternate duties**	**Limitations/comments**
	e.g. administration – data entry, filing, general administration. Under 2kg. Rotate between sitting and standing positions.	
	e.g. restocking – restocking supply cupboards. Under 5kg. Rotate between standing and walking positions.	

If none of the above tasks or alternate duties are appropriate at this time, please advise a review date or timeframe to revisit: _____

Other comments:

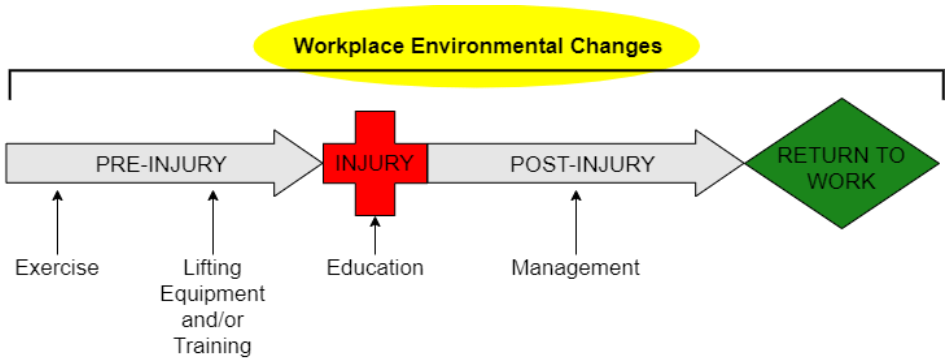
_____

_____

_____

_____

WORKPLACE ENVIRONMENTAL CHANGE



Whilst there was limited to moderate evidence in the literature review that work re-organisation (in terms of changing the way work is done and the processes followed within the workplace), and a grouped 'workplace environment change/work re-organisation' intervention was ranked highly by workshop participants. The workshops emphasised the importance of workplace culture and there was some evidence from the review to support it. Therefore, the focus of this proposed intervention is on workplace environmental change only.

TARGET POPULATION

The key to driving cultural change is leadership provided by senior managers through to line managers. While workplace environmental change aims to target whole workplaces, managers and leaders are the initial focus.

BENEFIT

Workplace culture is the shared behaviours and norms within an organisation such as values, routines and traditions[46]. Positive workplace culture is one of the key factors in recruiting and retaining nurses and has been found to improve not only the wellbeing of midwifery staff but also the quality and safety of care they provide to their patients[47].

Some characteristics of positive workplace culture includes frequent and appropriate communication between management and staff, encouragement of teamwork, known organisational goals and values, anti-social behaviour (e.g. bullying, unsafe behaviours, unethical behaviour) is not tolerated, consideration is given to work/life balance and employee morale is high, among others. Transparent processes and development of trusted relationships between staff and management, and between staff members is vital. Furthermore, significant focus on safety culture and ensuring correct procedures are followed, even if the time taken for the task is longer, is important for worker safety[48].

An example of how creating a transparent environment whereby workers feel comfortable to approach their supervisors to discuss any concerns is discussed. For nurses with burnout, an intervention involving a "convergence dialogue meeting" was found to improve return to work rates[49]. This meeting involved a dialogue between worker and supervisor on the reasons for burnout/sick leave, and discussion on solutions and

suggesting changes. A follow-up seminar attending by both parties invited reflection on how to prevent a similar occurrence of burnout, and how to prevent stress-related sick leave.

KEY STAKEHOLDERS

To drive cultural change as stated above, strong management and leadership is vital. Therefore, whilst all managers within an organisation should be targeted and have an important role to play, it is likely to be most effective if there is someone in senior management who champions the change.

EXPECTED TIMEFRAME AND DIFFICULTY OF IMPLEMENTATION

Any type of large-scale change across significant organisations such as NSW Health or Canberra Health Services will take time. Further, key stakeholders need to be on board for success to occur.

EXPECTED TIMEFRAME TO SEE IMPACT

Once cultural changes begin to occur it is likely that impact will be seen shortly afterwards. It is likely that impacts beyond the goal (stay at work or return to work) will be seen such as improved employee morale and greater work efficiency.

NECESSARY CONSIDERATIONS

It is envisaged that not all sections within an organisation will require a culture shift or will be resistant to any change due to already having a strong and positive culture. Further, any change to the workplace could be met with resistance and/or criticism if workers have previously been exposed to workplace changes that were perceived as negative. A worker needs to trust their manager and the manager needs to respect the worker, in some cases this trust may have to be earned if there has been a previous negative incident or there are personality clashes. Fostering a psychologically healthy workplace will have far-reaching benefits.

Whilst part of the goal of improved workplace culture is better patient care for clinical staff, it is necessary to ensure patient quality is not compromised in any way.

WHAT IT MIGHT LOOK LIKE

Intervention aim: To promote, foster and develop and positive workplace culture within individual units and across the organisation.

Expected outcomes: Improved staff wellbeing and satisfaction with their job, with subsequent flow on benefits to patients for clinical staff.

The following scorecard (adapted from the Australian Midwifery Workplace Culture instrument[47]) may be used to determine how employees feel about their workplace culture, which in turn can be used to identify opportunities for improvement. Not only does it provide opportunity to flag status of relationships between workers and

managers, but also other domains that can contribute to a workplace's culture such as values, co-workers and empowerment.

Results from these scorecards can also act as an aid for those in senior management to recognise those areas within the organisation where culture change is most necessary (e.g. by calculating the mean score across organisational units/wards/departments). Furthermore, this process can be repeated to compare before and after any changes.

Response	Score
Strong disagree	1
Disagree	2
Neutral	3
Agree	4
Strongly agree	5

Table 3 – Example scorecard to measure perceptions of workplace culture

Domain	Statement	Response
Resources	I have sufficient resources that I need to perform my job (e.g. space, adequate rooms, equipment, supplies)	
	When we are short staff, we are given adequate support	
	I have sufficient time to perform all aspects of my job	
Values	Our workplace celebrates when I/a worker achieves success (e.g. completes a course, uses innovation to improve practice)	
	I feel respected by my co-workers	
	I feel good about working in my unit	
	My manager treats me with respect	
	I feel I work in a unit with a positive culture (e.g. collaborative peers, innovative, high morale, supportive management)	
	My work philosophy is shared by my co-workers	
	My work unit values the work that I do	
	I would recommend this work unit as a good place to work	
Management/ Leadership	My manager gives me constructive feedback	
	I feel comfortable approaching my manager about my physical or mental wellbeing	
	I would like to have access to resources, training or leadership	
	There are positive role models where I work	
	I do not feel supported by my manager*	
	We are a well-managed team	
	I know who my manager and senior manager is	
	Unacceptable behaviour is appropriately addressed	
	There is strong leadership at the highest level in my unit	
	My manager is approachable	
	My manager takes near-misses and/or incidents seriously	
Engagement	I do not feel well informed about what is going on in my work unit*	
	My managers understand how things really are	
Team	When things get difficult, I can rely on my colleagues	

	I feel able to ask for help when I need it (e.g. lifting a patient, knowledge)	
	The people I work with are friendly	
Role	I know exactly what is expected of me in my job	
	I get the training and development I need	
	I do not feel supported to develop my potential*	
Empowerment	I am able to influence the way things are done in my workplace	
	I cannot change my working hours/shifts easily*	
	My concerns are taken seriously by my manager	
	My work unit acts on my/my co-workers' concerns	
	I am supported to make my own decisions where applicable	

* indicates reverse scoring.

Evaluation method(s): Retention rates, qualitative outcomes

ADDITIONAL SUGGESTIONS

A number of issues were described in the workshops that sat outside the interventions described above. These are summarised here and where possible should be part of approaches to improve stay at work and return to work of older workers.

- Discussions into strategic organisation-wide approaches to managing ageing workers would be worthwhile. It is important to retain these workers for the knowledge and experience they bring to their role and the organisation, and because good work is known to be good for health. Therefore, developing a strategy to approach issues associated with ageing would be beneficial.
- Early discussions with healthcare providers to ensure all parties' goals are aligned, concerns are voiced and actioned, and any required additional services are identified that may benefit recovery (e.g. psychology, physiotherapy) are important. This also provides opportunity for relationships between all relevant parties to be developed, and the manager and/or insurer to educate the healthcare provider on the goals of workers' compensation.
- An introduced policy or standard practice for managers to be proactive and regularly "check-in" with their staff would be beneficial. This could allow some staff to divulge any personal information (e.g. home life, niggling injuries) that may be hindering their ability to do their job so that changes can be made prior to an injury/claim occurring. For this to be effective, there needs to be a strong level of trust and respect between manager and worker, otherwise workers may fear the ramifications of providing such information.
    - There is a need for strong links between patient safety teams and staff/workplace safety teams. Attention is often focused on patient safety, however the general consensus from workshops was that if you look after the staff then by default patients will be better looked after. This can be summarised in a quote from the workshops, "If you don't have the staff you can't keep the patients safe."
- A focus on return to work from the beginning from a claims management (EML) perspective rather than liability is needed. For contested claims they are often overturned and accepted in the end, but the window of opportunity for early intervention is missed, likely resulting in a longer claim.

NEXT STEPS

EML and health organisations may choose to move forward with implementation of one or all of these interventions. Whilst some are most likely specific to the health organisation, there are opportunities for collaboration with EML. We suggest that going forward the following steps for implementing an intervention be used as a guide. The first, exploration, involves gathering information to determine who or which areas within an organisation should be targeted (both for piloting and in general), assign a leader to oversee and coordinate the intervention, and gather any necessary preliminary data. The second, installation, works through the finer details of the intervention including sourcing the materials and funds, attaining staff and training necessary personnel to deliver the intervention. The third stage is piloting the intervention. From the first two steps, one or more targets will have been selected as appropriate to target. Once implemented, the intervention should be monitored during the pilot phase and evaluated to determine if any changes need to be made. When piloting has been completed and the intervention is satisfactory, it can be expanded. It is then necessary to evaluate the intervention over time to determine its success.

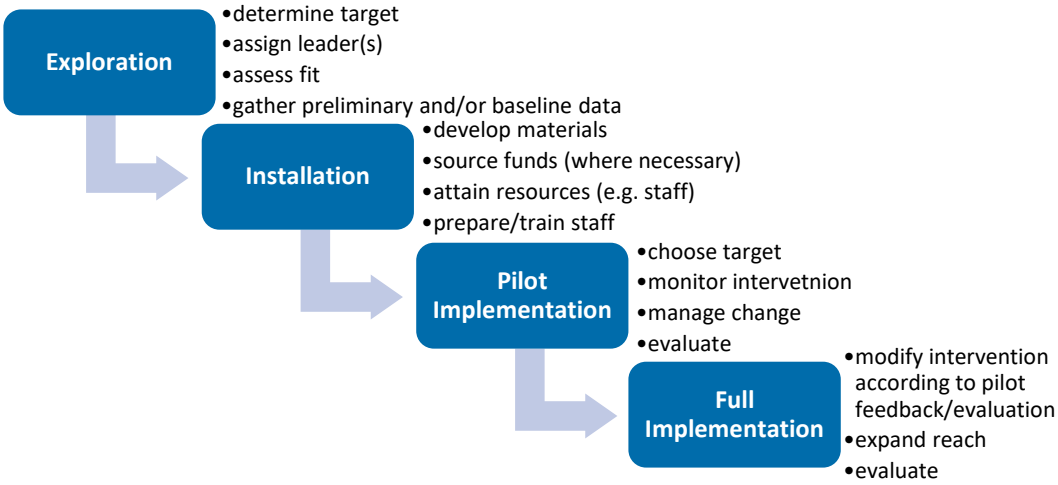


Figure 3 - Next steps for implementation[50]

CONCLUSIONS

This report is the culmination of a three-staged project that combined theoretical, empirical and practical evidence to prioritise, based on findings within the stages, and design five interventions that can be implemented within healthcare settings to help prevent work-related injury, better support injured workers, promote return to work and improve the wellbeing and health of all staff. These were developed with older workers in mind, however have the potential to benefit all workers, regardless of age.

The proposed interventions address in the life of a claim (pre-injury, at the time of injury, post-injury and throughout) and implementation of any of these will lead to improvements in work injury management. However, the combination of multiple interventions will likely see the greatest benefit. The interventions described in this report can provide the basis for health organisations and EML to make positive changes to improve the health and wellbeing of workers, in particular older workers.

APPENDIX

Table 4 - Summary of literature review results

Intervention	Description	Example	Outcome	Studies measured (% positive effect)	Evidence indicator *
Change to work environment	Changes to the work environment such as refurbishment (with no introduction of previously unavailable equipment or devices).	Moved to a refurbished location. Differences included: 1) Increase in number of beds; 2) Change to a single day room; 3) Improvement in level of appointment to dormitories and toileting facilities; 4) Addition of staff disciplines such as physiotherapy and clinical psychology; 5) Introduction of employees to provide diversional actives such as conversation and grooming[51].	Return to work	0	0
			Stay at work	2 (100%)	+
			Physical health	0	0
			Mental health	2 (100%)	+
Work reorganisation	Changes to the model of care provided.	Change from two-ward system where patients joined an admission ward for the acute stage of their illness and were subsequently transferred to a continuing care ward in preparation for discharge. In the new continuous care system, patients joined a single ward and remained on it for the duration of their stay[52].	Return to work	2 (100%)	+
			Stay at work	4 (75%)	++
			Physical health	0	0
			Mental health	2 (100%)	+
Education	Educational approach to introduce new skills or management techniques (but excluding training on the specifics of using lifting equipment)	Participants were offered a tailored choice of online interventions and personalized advice based on education and screening for impaired work functioning, distress, work related fatigue, risky drinking behaviour, depression, anxiety and posttraumatic stress[53].	Return to work	6 (33%)	-
			Stay at work	4 (75%)	++
			Physical health	2 (50%)	-
			Mental health	5 (40%)	-
Lifting equipment and training	Introduction of lifting equipment (such as a ceiling hoist) and training on how to apply the new equipment in practice.	A Transfer, Lifting and Repositioning (TLR) intervention with multiple components: 1) An injury prevention program consisting of education on anatomy, injuries, body mechanics, personal health, lifting and patient handling procedures; 2) a hands on patient-handling skills development for skills based learning in equipment usage; 3) An eight hour training session with a one hour refresher course mandated on a yearly basis[35].	Return to work	8 (100%)	+++
			Stay at work	2 (100%)	+
			Physical health	4 (75%)	++
			Mental health	3 (33%)	-
Exercise	Advice on heath management alongside the introduction of an exercise program.	Integrated Health Programme twice weekly during working hours. The programme consisted of physical exercise, stress management training, health information and an examination of the participants' workplace[54].	Return to work	4 (50%)	+
			Stay at work	1 (100%)	+
			Physical health	5 (80%)	++
			Mental health	1 (0%)	-

* +++ means strong evidence of benefit; ++ means moderate evidence of benefit; + means limited evidence of benefit; 0 means no evidence found; - means mixed evidence found.

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