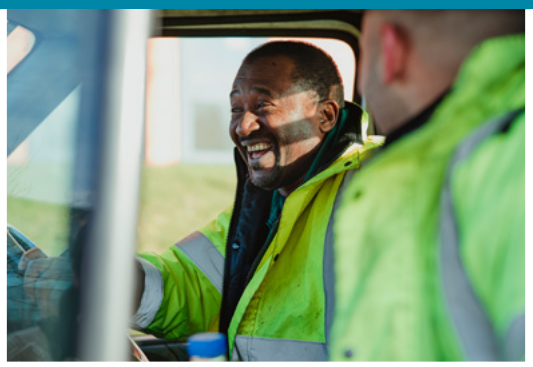
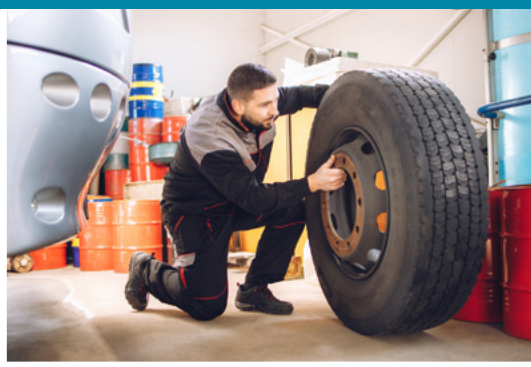
PHYSIOTHERAPY NEW ZEALAND
Kōmiri Aotearoa
Occupational Health

Occupational Health Physiotherapy in Aotearoa New Zealand

PRACTICE GUIDELINES





Acknowledgments and thanks to:

Focus Groups

Physiotherapy New Zealand

Occupational Health Physiotherapy Special Interest Group Committee

Tae Ora Tinana

Physiotherapy Board of New Zealand

The International Federation of Physiotherapists working in Occupational Health and Ergonomics (IFPOHE)

The Occupational Health Community

Working Group/Authors:

Daniel Harvey BHSc (Physiotherapy), MHSc (Hons), MHPrac (Rehabilitation) (Distinction), PGDipHSc (Musculoskeletal), PGCertHSc (Acupuncture), Specialist Musculoskeletal Physiotherapist (NZ Physio Board Registered)

Jason Longworth Dip Physiotherapy, Dip MT, PGCertPhys (Occ Health), PGDipOHS (Distinction) HASANZ Registered

Catherine Mcintosh Dip Physiotherapy, Dip Erg, MHPrac (Rehabilitation)

Shane Meys BPhty, PGDip (Sport and Exercise)

Julie Moffett Dip Physiotherapy, MHSc (Physiotherapy), PGCert (Acupuncture), PGCert (Tertiary Teaching and Learning)

Gemma Newburn BPhty (Distinction), BPhEd, MClinPhysio, PGCertHSc (Rehabilitation) HASANZ Registered

Mathieu Wilson BHSc (Physiotherapy), PGCertHSc (Rehabilitation), MESH (Ergonomics, Safety and Health), HASANZ Registered

Version 1.0 | October 2023

Contents

Introduction:
Why These Guidelines

Occupational Health (OH) aims to optimise health and wellbeing in the workplace.

Occupational Health Physiotherapists working in Aotearoa New Zealand do not have a guidance document or relevant information on what an OH Physiotherapist is, does, or the career pathway to become one.

Physiotherapy New Zealand's OH Special Interest Group committee, acting on behalf of its members, requested expressions of interest from its 700 members to be involved in a working group to define what an OH Physiotherapist is and does, as well as contribute to guidance for career progression. A thorough process involving applications and interviews was undertaken, and a group of seven experienced and diverse OH Physiotherapists were invited to join the project. They then collaborated for 18 months to create this practical guide for clinical, professional and promotional purposes.

Feedback and consultation were sought from other industry experts both nationally and internationally, as well as The Physiotherapy Board of New Zealand and Tae Ora Tinana, the Māori partner of Physiotherapy New Zealand. These guidelines were designed to complement the Physiotherapy Board of New Zealand's Physiotherapy Thresholds which contains the key roles and competencies for a Physiotherapist practising in Aotearoa New Zealand.

This document provides professional development guidance specifically for OH Physiotherapists. The International Federation of Physiotherapists working in Occupational Health and Ergonomics (IFPOHE) were consulted ensuring the document has credibility and consistency to support the profession's growth both nationally and internationally.

This guide aims to:

1. Describe important attributes and skills for an OH Physiotherapist in Aotearoa New Zealand
2. Promote high quality practice of OH Physiotherapy
3. Provide professional career development guidance for Physiotherapy students, new graduates and other physiotherapists interested in pursuing, or currently working in OH
4. Promote the value of OH Physiotherapy in the business, education and health sectors

What is an Occupational Health Physiotherapist

An OH Physiotherapist is a healthcare professional who has expertise in the prevention and management of work-related injuries and illnesses.

OH Physiotherapists work with individuals and organisations to identify and eliminate occupational hazards in the workplace, and to promote and maintain the health and wellbeing of workers. OH Physiotherapists also work with organisations to optimise efficiency and safety in work task and system performance which improves culture, productivity, efficiency and profitability.

The role of the OH Physiotherapist is exciting and diverse, working in a variety of industry settings from the physical labour of forestry, manufacturing, health, agriculture, and construction, to the more sedentary environments such as corporate, laboratory, engineering or automation.

Workers in any job role have a variety of unique movements, tasks, environmental factors, and risks which may impact health. Understanding all of these factors, working actively to minimise risks, and helping the worker and workplace achieve the positive health benefits of work is a core function of an OH Physiotherapist.

What an Occupational Health Physiotherapist Offers

There are many professions working in the field of OH, all with different and overlapping areas of expertise. In New Zealand, OH Physiotherapists are often confused with other health professionals working in the field, however there are significant differences in the roles and capabilities of an OH Physiotherapist who has specific training and expertise in the neuromusculoskeletal system function, dysfunction, injury and rehabilitation.

As well as being able to undertake work task assessments, workplace health and safety training, consulting services, rehabilitation programs, and return-to-work (RTW) planning, OH Physiotherapists can also provide diagnosis, prognosis, treatment, and work capacity certification.

A Physiotherapist has exceptional knowledge and expertise in human movement analysis and biomechanics to understand the tasks and loads that a worker is exposed to. OH Physiotherapists understand the impact that the workplace and the work role have on worker health, wellbeing, and function. An OH Physiotherapist is an advocate for health outcomes including optimising both worker wellbeing and overall system performance.

Furthermore, Physiotherapists are trained to help prevent and treat injuries. An OH Physiotherapist can support both the injured worker and the workplace throughout the rehabilitation process. OH Physiotherapists work both in and out of the clinic so they are involved with a workplace at multiple levels. OH Physiotherapists have the ability to impact organisational change and improvement, with the goal of injury and illness prevention from the top down, rather than the bottom of the cliff approach of treating injuries in the clinic.

The Occupational Health Physiotherapy Practitioner

CASE EXAMPLE 1

An OH Physiotherapist worked with an apple orchard and packhouse to address the high rate of turnover and injury claims with lost time during the short three-month season.

Staff leaving reported that the role was too physically demanding to tolerate the full season. There was a lack of understanding from management on how to manage discomfort and assist staff to better tolerate the work demands.

The OH Physiotherapist provided an intervention over three weeks that involved a worksite visit to observe the roles, assessing injury data and undertake planning with management. The second visit was for a half-day session in the packhouse observing and interviewing employees and supervisors. Identification of high-risk tasks, making adjustments, improving techniques, and managing some clear mismatch of body types to roles/stations was undertaken.

The OH Physiotherapist also created posters with postural reminders and technique cues to place at each station. A work specific five minute warm up and stretching routine was developed, taught, and implemented in the workplace three times per day as microbreaks while the production line was stopped.

Supervisors were trained to notice technique deficits and correct workers early. They were empowered to communicate and manage pain or discomfort in a structured way with new skills and understanding to change roles, reduce the loading and to refer for physiotherapy treatment early if the symptoms were not settling.

The feedback from this intervention showed an improvement in workplace culture, increased worker self-management and awareness, plus improvement in communication and management support of the workers.

Outcome: The workers felt more care shown by the supervisors, staff turnover reduced, and injury rates were 70% lower than previous years.

The Occupational Health Physiotherapy Practitioner

CASE EXAMPLE 2

A large construction company desired to be regional leaders in Health and Safety (H&S), wellbeing and culture.

They contracted an experienced OH Physiotherapist to undertake a review of their current systems and offer solutions to improve them.

The review of data identified that the company did not have a pre-employment or induction process. They also lacked an injury prevention and injury management policy and procedure which are essential to achieve H&S compliance.

A collaborative approach, between a H&S consultant, Occupational Physician and OH Physiotherapist was used to develop a proposal to prioritise and address these areas. The team worked with management over the next six months to create and improve necessary policies, procedures and initiatives, including:

- Pre-employment and induction process: A recruitment process was designed to select workers with the best fit for specific roles based on functional job descriptions along with a suitable drug and alcohol policy; work was done with the Human Resources department to ensure that there was consistency in their hiring processes; an induction programme that included physical conditioning periods for heavy roles was introduced ensuring that there was a gradual increase in workload and demands over the initial 6-8 weeks of employment.
- An Injury Management and Return to Work policy and procedure was collaboratively written and a workshop for managers was undertaken to train the importance of understanding the ACC processes, the workplace's responsibilities, and how to proactively manage pain and discomfort.
- An early identification and referral process was introduced for physical, medical, and mental health issues, whether work or non-work related, as they all affect performance and injury risk.
- A structured approach to RTW management was implemented for any workplace or non-workplace injury prioritising showing care with communication, early RTW with alternative duties, and ongoing support to ensure workers were coping with work demands.

The Occupational Health Physiotherapy Practitioner

CASE EXAMPLE 3

A hospital administrator strained their low back lifting a box from the back of a low shelf, they were uncomfortable sitting and were certified unfit for work for one week.

Their manager requested support from their OH Physiotherapist. The assessment of the worker highlighted a high level of concern about their injury, due to a history of recurrent back pain for years, as well as their dissatisfaction with the set up.

The OH Physiotherapist observed the demands of the role and provided advice and workstation set up to the worker. The OH Physiotherapist contacted the worker's treating physiotherapist to discuss the interventions at work, and to ensure they worked together to support the worker with consistent messaging.

Their manager requested "manual handling training" for the worker and wider team. Isolated manual handling training is known from extensive research to be ineffective in isolation. The OH Physiotherapist delivered this training, but advised the manager of its lack of effectiveness, compared to an evidenced-based risk management approach.

The manager was appreciative of the approach, and was involved throughout the process supporting the OH Physiotherapist and their team. The manager liaised with the leadership team to help them understand benefits of a risk management approach to worker pain and discomfort throughout the hospital, and support the changes/investment recommended by the OH Physiotherapist.

Further assessment of the workspace was conducted. Using the information from this assessment they were able to remove some higher-risk unnecessary manual tasks, improve work flow, and office set up. Minimising awkward postures and making changes to storage systems ensured heavy boxes were easily accessed, without bending or twisting.

Approval was gained for consultation sessions with the wider administration teams in other hospital departments to understand their experience and challenges with their work space. Improved worker engagement, encouragement of self awareness, and early reporting, combined with team commitment to regular movement and exercises, were part of this initiative. Work space, flow and task assessments were carried out for all admin teams, with appropriate modifications and improvements implemented.

Over time, and with the OH Physiotherapist's continued efforts, the hospital began to understand the benefits of and use an evidence-based risk management approach to manual tasks and work-related musculoskeletal disorders.

The Occupational Health Physiotherapy Practitioner

CASE EXAMPLE 4

An OH Physiotherapist worked with a local tilt slab manufacturing company to assess the work task process and the relationship of a specific task to low back injuries.

They assisted by educating the company managers on the ergonomic challenges of sustained reaching and bending involved in this specific task.

By observing and consulting the workers and management, a solution was reached to change the process and purchase a new tool to reduce the bending and reaching required. The expert skills of the OH Physiotherapist assisted to identify the high-risk task and facilitated finding a solution to improve safety.

The OH Physiotherapist also demonstrated a high level of knowledge identifying other health risks in this workplace and recommended appropriate management of these:

a. Silica exposures: The OH Physiotherapist discussed the risks and how they should be managed. They then referred for mask fit testing and an Occupational Hygiene assessment for risk management.

b. Multiple workers demonstrating presenteeism with high levels of fatigue reported due to the shift work requirements. This observation was discussed with management, and they agreed to review the shift schedule and access advice from the Occupational Physician in regard to the current evidence and best night shift patterns.

The Occupational Health Physiotherapy Practitioner

Stage 1

A Physiotherapist working in Occupational Health can:

- Undertake assessment in a workplace context (worker, work, workplace)
- Provide diagnosis, prognosis, treatment and work capacity certification
- Work impartially to gather information from the key stakeholders and all parties involved
- Consider the dynamics of the specific workplace context and relationships
- Draw on the principles of the Te Tiriti o Waitangi to deliver culturally responsive care for Tangata Whenua and other cultures within Aotearoa New Zealand
- Plan and implement safe and effective OH Physiotherapy services utilising evidence-based practice to inform decision making in the context of the worker, work and workplace
- Reflect and review the effectiveness of the OH Physiotherapy service provided to ensure it facilitates the workers optimal participation in their work
- Advocate impartially for optimal health and wellbeing in the workplace that is culturally safe for workers
- Demonstrate an advanced knowledge of organisational systems and relevant legislation regarding health and wellbeing in the workplace
- Provide a second opinion where appropriate, as well as identify when external referral or interdisciplinary team's (IDT) input is indicated

Stage 2

As an OH Physiotherapist progresses in their experience and knowledge, they can:

- Plan and implement an OH Physiotherapy assessment and evaluation that identifies and prioritises issues addressed in consultation with worker(s), employer(s) and key stakeholders
- Apply an evidence based, risk management approach, with in-depth knowledge and skills to the assessment
- Recognise the implications and complex interactions between worker(s), work and workplace
- Demonstrate advanced clinical reasoning to analyse and interpret complex situations and systems
- Demonstrate understanding of the worker(s), work and workplace context, and barriers that impacting health and wellbeing
- Demonstrate skill in efficient identification of worker and workplace needs, effective prioritisation of identified issues, and response to changing needs over time
- Develop and implement tailored action plans that consider the issues identified in the workplace in collaboration and co-ordination with workers, employers and other key stakeholders
- Demonstrate advanced clinical reasoning considering the context of the worker(s), work, workplace and key stakeholders, to reflect and respond appropriately
- Impartially advocate for optimal health outcomes in relation to the needs and rights of worker(s), workplace and key stakeholders

Stage 3

An experienced OH Physiotherapist can:

- Adapt and contextualise all available information to plan and implement an appropriate OH Physiotherapy assessment and evaluation in challenging and unresolved situations or environments
- Support and guide OH practitioners and other IDT members in their assessment and management of complex and challenging workplace scenarios
- Demonstrate expert clinical reasoning to evaluate and modify where necessary the management of complex and challenging situations and systems
- Teach and mentor other OH practitioners how to manage complex and challenging situations in the workplace
- Assist other OH practitioners to make the best use of available evidence to support clinical reasoning and decision making
- Demonstrate expert management of complex situations involving worker(s), work, workplace and key stakeholders
- Critically appraise previous management and outcomes to inform future interactions and ensure continued progress

Bill Glass Triangle

The Bill Glass Triangle is a framework commonly used in Occupational Health to systematically assess and manage the interactions between the worker, work and workplace *(see glossary for more details)*.

Core Areas of Practice: Within the Defined Field of Occupational Health Physiotherapy

This list of core Occupational Health Physiotherapy skills aims to help physiotherapists identify areas of competency, areas of interest and knowledge gaps to guide professional development. A Physiotherapist beginning a career in Occupational Health will not have competency in all the core skills.

All Occupational Health Physiotherapists need to be clear what areas are inside their scope and expertise and what isn't. Knowing when to refer to other Occupational Health practitioners who may have more knowledge, skills, and experience is essential for safe practice.

Injury/Illness Prevention

1. Pre-employment functional assessments
2. Computer workstation set up
3. Pain and discomfort management
4. Aging workforce management
5. Job demands and work task analysis
6. Risk Management for hazardous work e.g.
   - a. Repetitive tasks
   - b. Sedentary work
   - c. Manual work
   - d. Operating machinery
   - e. Confined spaces
- f. Workplace Training
   - a. Managers & Supervisors
   - b. Workers

Physical Health in the Workplace

1. Safety culture
2. Fatigue/chronic fatigue
3. Hydration
4. Presenteeism
5. Absenteeism
6. Pregnancy
7. Physical disabilities or impairments

Mental Health in the Workplace

1. Psychosocial Safety culture
2. Wellbeing and Worker Performance
   - a. Mental overload and stress
   - b. Mental health diagnoses/disorders

Injury Management

1. Gradual onset pain and discomfort
2. Diagnosis and prognosis
3. Return to work
4. Fitness for work tasks/duties assessment and communication
5. Functional capacity review and certification

Health & Safety

1. Compliance and Legislation
   - a. Physical hazard risk assessment and management
   - b. Psychosocial hazard risk assessment and management
   - c. Relevant policy and procedure review/audit, development and implementation
   - d. Worker engagement, participation and representation
2. Moving and Handling:
   - a. Manual task risk assessment and management (including training)
   - b. Workplace system and equipment design
   - c. Selection and use of lifting equipment for material handling
   - d. Selection and use of equipment for moving and handling people and animals

Treatment & Rehabilitation

1. Neuromusculoskeletal Injuries/ Conditions:
   - a. Acute and chronic
   - b. Work related musculoskeletal disorders
   - c. Non work related musculoskeletal disorders
   - d. Hand-arm/whole-body vibration syndrome
   - e. Bruises, contusions, crush injuries
   - f. Cuts and lacerations
   - g. Sprains and strains
2. Non Injury Conditions/Disorders:
   - a. Medical
   - b. Neurological
   - c. Cardiovascular
   - d. Respiratory
   - e. Chronic pain disorders
   - f. Cancer
   - g. Long covid/covid vaccine related
   - h. Autoimmune
   - i. Age related
   - j. Drug and alcohol related

Application of Key Roles within Occupational Health Physiotherapy Practice

Assessment

- Individuals
- Workplace
- Work tasks
- Systems

Treatment

- Injuries/conditions
- Pain & discomfort
- Work conditioning

Advise & Educate

- Employers
- Workers
- Key stakeholders

Plan and Implement

- Rehabilitation
- Return to work
- Injury prevention

Consulting

- Risk assessment
- Risk management
- Policy & procedures

Training

- Moving & handling
- Wellbeing
- Mental health
- Injury management
- Injury prevention

Professional and Ethical Practice in Occupational Health Physiotherapy

CASE EXAMPLE

Background

Sione is a 20-year-old male who works as an outwards goods worker in a medium and repetitive role, moving and loading packages daily. He has a four-week history of lower back pain (his first episode of lower back pain ever experienced) after a weekend sporting accident and Sione is currently medically certified as fully unfit for work.

Current barriers

Sione reports that his employer is blocking him from returning to work "until he is 100%" and that he feels his employer is not supportive of him because his injury "occurred outside the workplace and isn't work-related". The worker felt there was a lack of trust between him and the employer.

Client centred, solution-based approach:

- The OH Physiotherapist gained full informed consent from the worker to engage in a return-to-work management programme with the worker, employer and treating health care professionals
- The OH Physiotherapist met with the worker and carefully listened to their concerns and identified their barriers
- The OH Physiotherapist met with the employer and discussed with them in a professional manner the legal requirements (ACC Act, Health & Safety at Work Act) for the employer to support the employee, irrespective if the injury occurred at work or outside of work
- The OH Physiotherapist facilitated a meeting at the workplace with the manager, health and safety representative, union delegate and worker to discuss the proposed graduated RTW plan. The meeting also allowed for the discussion of the employer's understanding and interpretation of the legislative requirements and the need for health and safety in the workplace to be a priority
- The meeting allowed for the identified barriers and issues to be discussed in a professional and collaborative manner and for trust to be formed by all parties
- Research is clear on the importance of trust in the workplace; it may be beneficial to recognise the importance of trust in providing a positive environment for return-to-work. In particular, trusting that the injured worker is genuine in their needs. Employers should be encouraged to be aware that actively providing support to an injured worker can increase their confidence in returning to work after an injury. Such actions delivered from the management level may also provide a model for how co-workers and supervisors will treat the injured worker (Christophersen, Fadyl & Lewis, 2022).

Outcome

Sione was able to start a graduated return to work programme building his hours over four weeks. He felt supported and empowered in his return with trust gained between the worker and employer. The manager was appreciative to have a better understanding their ethical, legal and professional requirements as an employer and this led to developing a better RTW process that will inform their future interactions.

Professional and Ethical Practice

Stage 1: Best practice OH Physiotherapy

- Complies with the key legal, professional, ethical and cultural standards relevant to occupational health physiotherapy practice
- Prioritises the health, safety, and wellbeing/ Mauri ora in the workplace
- Recognises and respects professional boundaries and therapeutic relationships
- Identifies and manages conflicts of interest
- Makes and acts on informed decisions about acceptable professional and ethical behaviours in relation to the worker(s), work, and workplace
- Recognises and implements appropriate strategies to manage personal health and wellbeing

Stage 2: As an OH Physiotherapist progresses in their experience and knowledge, they can

- Be critically aware and contribute to the development of key legal, professional and ethical and cultural standards that improves the health, wellbeing/Mauri ora and performance of worker(s), workplace and key stakeholders
- Contribute to reviews of key legal, professional and ethical standards relevant to occupational health physiotherapy practice
- Role model self-awareness and actively manage personal wellbeing and professional performance

Stage 3: An experienced OH Physiotherapist can

- Lead the development of key legal, professional and ethical and cultural standards that improves the health, wellbeing/Mauri ora and performance of worker(s), workplace and key stakeholders
- Mentor OH Physiotherapists, IDT members and key stakeholders to promote the health, safety and wellbeing of the worker(s), work and workplace
- Review and provide expert opinion on the competency or conduct within the OH Physiotherapy practice

Communication in Occupational Health Physiotherapy

CASE EXAMPLE

Background

A combined work task and functional assessment for an aquaculture research technician was requested by a local seafood research company. The aim was to assess the suitability of the role for an employee, with a two-year history of carpal tunnel symptoms, for a full-time role. The workplace wanted to offer this worker a permanent position (moving from casual) but was unsure if they would be safe in this role.

The assessment

Initial communication to the worker and employer (both manager and H&S Adviser) outlined the process, clarified goals and gained consent.

The initial interactions with the worker required consideration of their concern about having someone assess whether they could do their job or not. Respect was shown and an explanation that the purpose was to ensure the company wasn't exposing them to a role that may harm their health, plus it aimed to assist with any modifications and management advice.

The assessment involved a group meeting with the worker and manager and also a private meeting with both of them to ensure the opportunity for them both to speak openly and understand any dynamics that may be relevant. In this case the relationship was open, and the workplace was very supportive so there was no conflict or differing agendas which can often be present.

The work task assessment involved the worker demonstrating their daily tasks and routines including loads, force required, repetitions, postures, techniques and the environment. The focus was on understanding potentially aggravating tasks for carpal tunnel and identifying any potential modifications or aspects of the role that created a higher risk of symptom aggravation.

The functional assessment involved a full clinical assessment to:

- **Clarify the severity and source of symptoms**
- **Understand current and past management and/or treatment**
- **Be able to advise on specific areas of caution and techniques in the role that will help reduce the symptom aggravation**

In this case there were no other obvious sources of the symptoms, the client had initiated physiotherapy and exercises. The main consideration was the right index finger and thumb had reduced sensation and low grip strength. The need for caution and two hands when handling fragile or breakable items was communicated. Overall, the worker's symptoms were stable and well managed, with both work and non-work tasks causing short term pain with low irritability, they also felt confident in their role and tasks within the team.

Outcome

The role was considered sustainable and safe within a supportive team, in a role with high variability and flexibility of tasks. A report and recommendations were provided to the workplace to share and discuss with the employee. The worker was advised on techniques to limit aggravation, and to see their GP for a referral to a specialist management if symptoms didn't settle with physiotherapy input.

A follow up phone call was made to the H&S manager to discuss any questions or provide clarification. They advised that the manager and worker were very appreciative of the input, and despite their initial suspicion and defensiveness about the process everyone was more confident with their new knowledge.

Communication in Practice

Stage 1: Best practice OH Physiotherapy

- Uses professional communication to support the development of trust in professional relationships with the worker(s), workplace and key stakeholders
- Exhibits a range of culturally responsive communication skills using a person and whānau-centred approach that encourages whakawhanaungatanga, trust and autonomy and is characterised by aroha, empathy, respect, and compassion
- Documents relevant OH assessment and evaluation findings and management plan
- Uses professional written communication to the worker(s), workplace and key stakeholders
- Identifies, mitigates and manages conflict in a proactive and constructive manner among the worker(s), workplace and key stakeholders

Stage 2: As an OH Physiotherapist progresses in their experience and knowledge, they can

- Use professional communication with awareness of workplace cultures and interpersonal dynamics to facilitate consistent understanding between all stakeholders
- Identify and differentiate conflicting agendas of worker(s), workplace and key stakeholders and tailor communication accordingly
- Use informative reporting following specific assessment to add objective credibility, value and clarity to complex cases in OH settings
- Demonstrate and communicate advanced knowledge and understanding in complex situations with reference to relevant legislation
- Recognise complexities including psychosocial factors, interpersonal and human resources issues in the workplace setting and act early to optimise health outcomes
- Practise with self-awareness to navigate the complexities and conflicts and facilitate positive relationships in the workplace

Stage 3: An experienced OH Physiotherapist can

- Use professional communication to achieve optimal health outcomes in complex and challenging situations
- Use timely communication to impart knowledge to the worker(s), workplace and key stakeholders to seek independent expertise when appropriate
- Demonstrate leadership in communication to empower positive change and mitigate confrontation risk
- Develop and present professional current best practice knowledge to worker(s), workplaces and key stakeholders
- Teach and mentor other OH practitioners to produce expert documentation
- Collate, analyse and synthesise information and data to inform proposals, policy and procedure development at multiple levels
- Mentor, teach and assist OH practitioners to manage complex workplace situations with participation at multiple levels
- Improve workplace processes and communication to facilitate health, safety and wellbeing in the workplace

The Self Directed and Reflective Occupational Health Physiotherapist

CASE EXAMPLE

Background

Sarah is a physiotherapist who has been practicing for three years in both the hospital and private practice setting. She has had a few patients who have had an OH Physiotherapist assisting with their RTW and is interested in becoming an OH Physiotherapist.

Reflection and self direction

Gap between current and required knowledge and skills.

Next steps

Sarah looks up what an OH Physiotherapist is on the PNZ website and notices that there are guidelines on what is expected for someone working in this area. She reviews these requirements, the case study examples, and the different competencies listed. Sarah found a local OH Physiotherapist and asked to shadow them for a few days, they kindly offered to be her mentor. Sarah then assesses her personal practice against the competencies. She uses a combination of self-reflection, feedback from colleagues, and review of relevant literature to identify strengths and areas for improvement. She found that she was particularly strong in her communication skills, but needed to improve her understanding of the relevant legislation, non-injury factors affecting work, task analysis and the development and implementation of RTW plans.

Following this assessment, she puts together a list of continuing professional development (CPD) activities that she needs to complete to develop her knowledge in the area. Sarah's mentor helped support her professional development and carry out peer reviews with her, she also continued to observe her mentors work monthly to grow her experience and exposure to OH Physiotherapy practice.

For the peer review Sarah arranges an assessment with an injured worker at their worksite. Sarah calls the employer to check if there any hazards on site of which she needs to be aware and for any PPE she will need to bring. Sarah has researched the role and injury and has some ideas and options to discuss with the manager regarding alternative safe duties and they agree on a suitable RTW plan. While on site, the employer asks if she can provide onsite manual handling training to prevent injuries from occurring. Sarah realises that 1. She doesn't have experience in this area, and 2. She remembers reading that there isn't a lot of evidence for manual handling training. She advises the employer to seek someone more experienced on the HASANZ list under manual handling training, noting that there are potentially better strategies that could be put in place to reduce future injury risk.

Outcome

As a part of her CPD activities, Sarah reviews the recent evidence on factors that affect RTW outcomes, and together with her mentor, gradually implements changes to develop her practice. Sarah works to grow her knowledge and skills for the next few years and once both she and her mentor feel that they have met all the competencies, they submit these with a HASANZ application as an OH Physiotherapist.

Self Directed & Reflective Practitioner

Stage 1: Best practice OH Physiotherapy

- Assess personal OH Physiotherapy practice against relevant competencies
- Develop and implement an action plan to continually improve practice
- Evaluate OH Physiotherapy learning needs, engage in relevant CPD, peer review and recognise when to seek professional support, clinical and professional supervision
- Identify and apply OH research to achieve current evidence-based practice
- Identify and engage in cultural safety CPD consistent with He kawawhakaruruhau ā matatau Māori
- Continuously and proactively apply principles of quality improvement and risk management to practice
- Recognise situations that are outside their own scope of practice or competency and take appropriate and timely action to address this

Stage 2: As an OH Physiotherapist progresses in their experience and knowledge, they can

- Role model learning and development by regularly assessing personal OH Physiotherapy practice with respect to evidence-based literature, peer review and best practice guidelines
- Role model personal professional development to support other OH Physiotherapists to identify and address their learning needs
- Critically appraise literature to identify gaps in the current knowledge base and be aware of how these impact practice
- Apply quality improvement processes for health promotion and contribution to systems improving worker(s) and workplace health and wellbeing
- Recognise when others are working outside their scope of practice or competency and support them to take appropriate and timely action to address this

Stage 3: An experienced OH Physiotherapist can

- Mentor and lead learning in OH Physiotherapy practice to continuously improve the application of current knowledge in personal practice
- Mentor and support advanced OH Physiotherapists and other OH practitioners to identify and support their learning needs
- Critically appraise, design and carry out OH Physiotherapy research or projects to inform practice
- Lead the development and implementation of quality improvement processes to improve standards of OH Physiotherapy practice
- Able to provide expert opinion regarding OH Physiotherapy scope of practice and competencies

Occupational Health Physiotherapists are Collaborative Practitioners

CASE EXAMPLE

Background

A referral is received to complete a one-off work site assessment. The client is an office assistant experiencing a gradual onset of low back pain.

The assessment

During the assessment it became apparent that other workers were experiencing similar concerns, the workplace had high absenteeism (sick leave) and both factors were negatively impacting the work output.

The OH Physiotherapist collaborated with the employer to negotiate additional private OH services to benefit the work, workers, and the workplace. The collaboration included on site line managers, and the Chief Executive Officer (CEO) to facilitate interactive training sessions.

One training session was based on workstation ergonomics focusing on the application of the principles of manual task risks, providing moving and handling training, plus a program of stretching suited to the workplace. Another training session focused on empowering line managers to support these initiatives with their teams with buy-in from the CEO.

The collaboration extended to liaison with the administration team leader responsible for ordering stationery and supplies. The OH Physiotherapist collaborated with the employer's preferred office furniture suppliers to identify options better suited to the workplace and workers, including seating with increased adaptability and weight capacity, and introducing sit/stand options within budget constraints.

An Occupational Hygienist was consulted to assess noise and lighting which was identified as an issue by all staff. The recommended intervention was implemented to improve soundproofing and lighting to minimise adaptive postures and set ups observed in the workplace.

Outcome

The OH Physiotherapist followed up with the employer six months after the interventions were implemented. Feedback confirmed improvement in employee engagement demonstrated by increased work attendance, less complaining and higher levels of productivity.

Collaborative Practitioner

Stage 1: Best practice OH Physiotherapy

- Engages in collaborative and culturally responsive models of practice to manage the complex range of biopsychosocial factors impacting on the worker(s), work and workplace
- Engages in safe, effective and collaborative interdisciplinary OH practice with worker(s), workplace and key stakeholders

Stage 2: As an OH Physiotherapist progresses in their experience and knowledge, they can

- Role model collaborative and culturally responsive models of practice to manage the complex range of biopsychosocial factors impacting on the worker(s), work and workplace
- Facilitate safe, effective and collaborative interdisciplinary OH practice with worker(s), work and key stakeholders for optimal health outcomes

Stage 3: An experienced OH Physiotherapist can

- Mentor and lead collaborative and culturally responsive models of practice for the management of complex biopsychosocial factors to optimise the worker(s), work and workplace outcomes
- Mentor and lead safe, effective and collaborative interdisciplinary OH practice with worker(s), work and key stakeholders for optimal health outcomes

Occupational Health Physiotherapist Educator

CASE EXAMPLE

Background

Ngaire identified an interest in OH Physiotherapy and undertook further study to obtain a post graduate qualification in ergonomics while working as a new graduate rotational physiotherapist for a local health board.

On completion of this post graduate study, Ngaire worked as a physiotherapist providing a variety of injury management, injury prevention and workplace education and advice alongside other physiotherapists and ergonomists in NZ and in the UK while on her overseas experience.

This experience and further OH focused CPD reinforced her interest in the field of OH Physiotherapy. Subsequently, Ngaire has worked in roles to enhance the OH education of fellow physiotherapists as a professional advisor and more recently as a learning and development manager, leading learning and development for a range of allied health professionals in the OH field.

While in her current role, Ngaire has completed a Master of Health Practice and participated in Physiotherapy New Zealand projects to enhance education for fellow OH Physiotherapists.

Purpose of the role

Leading learning and development for OH professionals. Beyond ensuring staff training needs are met to enhance individual OH performance, this role identifies and addresses organisational needs for growth and development to improve performance, efficiency, and outcomes.

Ngaire supports the identification and delivery of learning programmes to meet individual needs as well as policy, process, and practice innovation to meet organisational needs. Ngaire is involved in monitoring, review and improvement of service quality and efficiency.

Ngaire aims to affect organisational development and continuous improvement to achieve strategic goals via policy, process, and practice innovation. By demonstrating the expectation of a continual learning philosophy and role modelling the learning culture and critical thinking skillset, Ngaire sets a high standard for those in her organisation and those they work with.

Physiotherapist Educator

Stage 1: Best practice OH Physiotherapy

- Engages in education to empower oneself and others in OH Physiotherapy practice
- Engages in the education of students and other physiotherapy colleagues in OH Physiotherapy practice

Stage 2: As an OH Physiotherapist progresses in their experience and knowledge, they can

- Facilitate education amongst an IDT, worker(s), the workplace and other key stakeholders
- Act in a supervisory role to facilitate, enhance and support professional development for OH Physiotherapists and the wider IDT, at clinical, professional and personal levels

Stage 3: An experienced OH Physiotherapist can

Mentor and lead education amongst an IDT, worker(s), workplaces and key stakeholders

- Support OH Physiotherapists and the wider IDT to engage in OH research
- Mentor and lead education for advanced OH Physiotherapists and the IDT, to develop their clinical, academic, and leadership capacity
- Demonstrate best practice using links with relevant academic and professional institutions to remain current with research in OH
- Participate in research and disseminate new knowledge to the OH Physiotherapy profession through published peer-reviewed journal articles and presentations to local, national and/or international audiences

Leadership and Management as an Occupational Health Physiotherapist

CASE EXAMPLE

Background

Barry, a 45-year-old male storeman, was referred for Vocational Rehabilitation and RTW planning following an assault within his workplace causing physical and mental trauma.

Barry had worked for his company for 20 years. It was a sensitive case and he had been off work for an extended period of over 12 months, initially fully unfit then slow progression to two half days per week. Ongoing incapacity was related to his post-traumatic stress disorder (PTSD) mental Injury.

The direct manager was stalling progress by advocating for and allowing Barry to control the RTW pace. Barry was dissatisfied with the process to date, reported anxiety and fatigue limiting his ability to progress. Barry also had difficulty finding work/life balance and needed days off to rest.

There had been four previous failed RTW programmes and interpersonal issues with previous case managers. Barry was making good progress with his psychologist. The GP was completing medical certificates primarily based on Barry's self-reported capabilities. The case manager had booked psychiatric and medical case reviews to determine work capacity but there was a three month wait.

Vocational Rehabilitation process

- Immediate engagement with case manager to discuss injury history, interventions to date, Barry's profile and personality including preferences as well as any barriers/issues.
- Meeting with case manager and senior manager responsible for health and safety as well as security. This allowed further discussion and exploration of relevant issues and details.
- Barry was contacted for introduction and discussion of progress and plans, including his preferences and intentions. He was informed of prior contact with case manager and senior manager. Consent was obtained for communication with treatment providers, specifically the psychologist.
- The psychologist was contacted to gain accurate clinical opinion on recovery, issues and optimal RTW approach, plans and timeframes.
- A workplace assessment meeting was completed with Barry and his direct manager to discuss progress to date, what had and had not worked, as well as collective discussion and agreement to plans moving forwards. It was discussed whether to move Barry to another store to optimise his safety and security. However, Barry's preference was to remain where he felt more comfortable, secure, familiar, and supported.
- Follow up discussions were had with the psychologist, Barry, his direct manager, senior manager, and case manager, with an eventual agreement to support Barry in the current store where he was more familiar and comfortable in alignment with his preference. The psychologist supported this and in her clinical opinion considered this as the most suitable plan. An appropriate RTW plan was generated with a collaborative approach with some agreed flexibility to account for adaptation as expected. There was also closely planned security and safety control systems implemented within the organisation.
- A detailed progress letter was sent to Barry's GP clearly documenting assessment findings, discussions, accommodations, and controls in place to support him to transition back into the workplace safely and sustainably, with request for medical certification of the collectively agreed graduated RTW plan
- The OH Physiotherapist remained in the leadership and coordination role as a key contact person. The closely connected OH Physiotherapist supported and communicated with all stakeholders throughout RTW progression. They were able to adapt as needed throughout the process and keep all parties updated and informed

OH Physiotherapists utilise a strong skillset and experience to lead and manage an OH issue such as a complex RTW scenario. This includes the confidence and competence to take the lead, to challenge others to reflect and potentially reconsider their position. OH Physiotherapists also understand the importance of considering and including the client, as well as all stakeholders. This requires appropriate communication strategies and collaboration with others. With experience, OH Physiotherapists understand the role each stakeholder has, coordinating with them and facilitating collaboration towards a positive, successful, and sustainable final outcome.

Outcome

- Positive environment and experience for worker, workplace and key stakeholders
- Optimised communication and collaboration between worker, workplace and key stakeholders
- Improved guidance and direction clinically from treatment providers
- Client more involved and empowered within their recovery and RTW
- Positive change in momentum with RTW progress

Leadership & Management

Stage 1: Best practice OH Physiotherapy

- Physiotherapy practice whilst considering the worker(s), work and workplace
- Works efficiently and effectively under leadership within relevant professional, ethical and legal frameworks whilst considering the worker, work and workplace settings

Stage 2: As an OH Physiotherapist progresses in their experience and knowledge, they can

- Contribute to the improvement of OH Physiotherapy practice amongst an IDT, workplace and key stakeholders
- Demonstrate leadership in OH Physiotherapy practice amongst an IDT, workplace and key stakeholders to optimise health outcomes

Stage 3: An experienced OH Physiotherapist can

- Mentor and lead system improvements to optimise workplace health and wellbeing utilising latest evidence and best practise
- Lead and promote the development of OH Physiotherapy in Aotearoa New Zealand
- Provide expert leadership in OH Physiotherapy practice amongst IDT and key stakeholders
- Have an active involvement in OH Physiotherapy locally, nationally, and internationally, advocating for workplace health and wellbeing
- Influence and contribute to relevant policy and strategy processes that impact upon OH Physiotherapy practice

Complementary Areas of Occupational Health Practice

The below lists outline further professional development opportunities in the field of Occupational Health.

Appropriate training will range from self-directed learning, short courses to formal post graduate qualifications depending on individual skills, experience and the specifics of the area. Relevant Professional groups can assist with training or help to recommend suitable training to achieve competency in some of these areas (e.g. NZOHS, HFESNZ, NZISM). Many of the H&S areas have a AS/NZ Standard or NZQA training which should be achieved to undertake work in the specific area. Physiotherapists may have training and experience in some complimentary areas which can be applicable in certain Occupational Health roles.

Note: this list is not exhaustive, an OH Physiotherapist may identify and pursue other complimentary skills relevant to their interests and/or job role.

Mental Health & Wellbeing

1. Harassment/bullying/conflict
2. Violence in the workplace
3. Conflict resolution
4. Psychological interventions (e.g. CBT, ACT, mindfulness, health behaviour change)
5. Negotiation
6. Mediation and relationship facilitation
7. Breathing Rehabilitation

Human Factors/Ergonomics

1. Workplace assessments using a systems approach
2. Job task analysis using a systems approach
3. Anthropometry
4. Systems thinking
   a. Socio-technical systems
   b. Incident investigation
5. Human-centred design
   a. Workplaces - good work design
   b. Workplaces - health & safety by design
   c. Systems and technology
   d. Products
6. Human behaviours
   a. Psychology
   b. Psychosocial factors
   c. Cognitive loads
   d. Fatigue

Occupational Health & Safety

1. Workplace Health Monitoring
2. Occupational Hygiene
   a. Exposure monitoring of dust, noise, light, vibration, chemicals
3. Respiratory protective equipment – fit testing
4. Accident or incident investigation
5. Driving assessment
6. Drug and alcohol testing & processing
7. Hazardous substances
8. Working in and around vehicles
9. Working at heights
10. Noise and hearing conservation
11. Thermal environment

Systems

1. Formal Research
2. Human Resources
3. Project management
4. Change management
5. Organisational development

Medical

1. Immunisation services
2. Nutrition
3. Lymphoedema
4. Skin Checks
5. Burns

Key Working Relationships and Professional Groups

INCLUDING BUT NOT RESTRICTED TO

Key Working Relationships/Networks	Professional Groups	Organisations
• Allied Health Professionals e.g. Physiotherapist, Speech Language Therapist, Social Worker, Podiatrist, Psychologist, Occupational Therapist, Orthotists, and Counsellors • Ergonomist/Human Factors Professional • Health and Safety Advisors/ Consultants • Kaiawhina • Kiritaki and whanau • Māori & Pacific Health Providers • Medical Professionals e.g. General Practitioners, Orthopaedics, Occupational Physician, Neurologists, Neuropsychologist and Nurses • Occupational Hygienist • Peer Support and Supervision Networks • Rongoā Māori • Specific Industry/Sector Groups • Vocational Consultants/Career Counsellors	• Australian and New Zealand Society of Occupational Medicine (ANZSOM) • Career Development Association of New Zealand (CDANZ) • Health and Safety Association New Zealand (HASANZ) • Human Factors and Ergonomics Society of New Zealand (HFESNZ) • Human Resources Institute of New Zealand (HRNZ) • International Federation of Physiotherapy working in Occupational Health and Ergonomics (IFPOHE) • New Zealand Institute of Safety Management (NZISM) • New Zealand Occupational Health Nurses Association (NZOHNA) • New Zealand Occupational Hygiene Society (NZOHS) • New Zealand Psychological Society • Occupational Health Physiotherapy Group • Occupational Therapy New Zealand – Whakaora Ngangahau Aotearoa (OTNZ-WNA) • Pasifika Physiotherapy Association (PPA) • Physiotherapy Board of New Zealand • Physiotherapy New Zealand (PNZ) • Tae Ora Tinana	• ACC agents e.g. Third Party Administrators • Accident Compensation Corporation (ACC) Tertiary/ Academic Institutions • Employers and Manufacturers Association (EMA) • Ministry of Business, Innovation and Employment (MBIE) • Relevant worker unions • Worksafe New Zealand

Glossary

Term	Meaning in the context of Occupational Health Physiotherapy Guidelines document
Aroha	Care, empathy, and compassion. Aroha is actioned when health professionals can think, feel, and act with empathy and compassion towards those they care for.
Interdisciplinary Team (IDT)	A group of health care professionals from different backgrounds that work collaboratively to share expertise, knowledge, and skills to positively impact on patient care and highest quality health outcomes.
Kiritaki	Client
Manaakitanga	Expressing kindness and respect for others, emphasising responsibility and reciprocity. It creates accountability for those who care for others, relationally or systemically.
Mauri Ora	Wellbeing and holistic good health. A concept in Te Ao Māori reflecting a state of flourishing wellbeing, where the spirit is enlightened, the mind is alert, curious and ready to grow, the body is well, pain free and fit for purpose. Relationships are mutually nurturing and beneficial to everyone.
Occupational Health	Refers to the relationship between work and health, including physical, mental, cultural, spiritual, and social wellbeing.
Occupational Health Physiotherapy	Aims to protect, restore and enhance the health and wellbeing of workers, the productivity of work and systems performance of the workplace using clinical knowledge, skills and interventions.
Risk Management Approach	Systematic process of identifying all real and potential hazards and risks, assessing the likelihood and severity of risks. This approach includes holistic models of care such as the Meihana and biopsychosocial models (cultural, mental, physical, environmental, spiritual, emotional, and financial). Applying the hierarchy of controls to mitigate the risks with planned timely review and assessment of the effectiveness and continual improvement process. The hierarchy of control is a step-by-step approach to eliminating or reducing risks and it ranks risk controls from the highest level of protection and reliability through to the lowest and least reliable protection.
Role Model	People we can identify with, who have qualities we would like to have and are in positions we would like to reach. A behaviour exhibited or demonstrated by a person to be looked at by others as an example.
Stakeholders	A person, group or entity with an interest or concern within Occupational Health including but not limited to: • Client (worker) • Employer (workplace) • ACC, other insurer or funder • Family/whanau and community • Support person/ advocate • Union representative and/or delegate • Health care professionals
Standards	Includes all legislation, codes, guidelines, frameworks and competencies, relevant to Occupational Health Physiotherapy.
Whakawhanaungatanga	The process of relating well to others and establishing relationships.
Whānau	Family. A concept in Te Ao Māori that includes physical, emotional and spiritual dimensions and is based on whakapapa. Whānau can be multi-layered, flexible and dynamic.
Work	The specific functions required to carry out the requirements of a role including the physical, social, cognitive demands of all tasks a person/ worker engages in while undertaking the role duties
Worker	A person that undertakes the specified work including their individual characteristics and context such as health, recreational and social factors
Workplace	The environment in which the work is undertaken, including the physical, organisational, social and cultural context of the workplace.

Legislation, Standards, Acts and other Relevant Documents

1. **Accident Compensation Act 2001** https://www.legislation.govt.nz/act/public/2001/0049/latest/DLM99494.html
2. **Employment Relations act 2000** Employment Relations Act 2000 No 24 (as at 30 December 2022), Public Act Contents – New Zealand Legislation: https://www.legislation.govt.nz/act/public/2000/0024/latest/DLM58317.html
3. **Harassment Act 1997** https://www.legislation.govt.nz/act/public/1997/0092/latest/DLM417078.html
4. **Health Information Privacy Code 2020** https://www.privacy.org.nz/assets/New-order/Privacy-Act-2020/Codes-of-practice/Health-information-privacy-code-2020/Health-Information-Privacy-Code-2020-website-version.pdf
5. **Health Practitioners Competency Assurance Act 2003** Health Practitioners Competence Assurance Act 2003 No 48 (as at 01 July 2022), Public Act Contents – New Zealand Legislation: https://www.legislation.govt.nz/act/public/2003/0048/latest/DLM203312.html
6. **Health and Safety at Work Act 2015** No 70 (as at 28 October 2021), Public Act 152 Order for payment of regulator's costs in bringing prosecution – New Zealand Legislation: https://www.legislation.govt.nz/act/public/2015/0070/latest/DLM5977128.html
7. **Health and Safety at Work Regulations 2016** https://www.legislation.govt.nz/regulation/public/2016/0013/latest/DLM6727530.html
8. **Human Rights Act 1993** https://www.legislation.govt.nz/act/public/1993/0082/latest/DLM304212.html
9. **Medical Certification Statement** https://www.workandincome.govt.nz/providers/health-and-disability-practitioners/guides/work-capacity-med-cert-health-practitioners.html
10. **New Zealand Physiotherapy Standardsn** The Physiotherapy Practice thresholds, Aotearoa NZ Physiotherapy Code of Ethics and Professional conduct, Māori Safety and Competence Standard, Physiotherapy Standards Framework – Physiotherapy Board: https://www.physioboard.org.nz/standards
11. **New Zealand Public Health and Disability Act 2000** https://www.legislation.govt.nz/act/public/2000/0091/latest/DLM80051.html
12. **Pae Ora (Healthy Futures) Act 2022** https://www.legislation.govt.nz/act/public/2022/0030/latest/LMS575405.html?search=qs_act%40bill%40regulation%40deemedreg_occupational+health_resel_25_h&p=1&sr=1
13. **Physiotherapists Practising in a Defined Field Standard** https://www.physioboard.org.nz/standards/physiotherapy-standards/physiotherapists-practising-in-a-defined-field-standard
14. **Privacy Act 2020** https://www.legislation.govt.nz/act/public/2020/0031/latest/LMS23223.html
15. **Scopes of Practice and Qualifications prescribed by the Physiotherapy Board** https://gazette.govt.nz/notice/id/2022-gs4926
16. **Te Reo Maori** https://maoridictionary.co.nz
17. **Te Tiriti o Waitangi** Whakamaua: Māori Health Action Plan 2020-2025 | Ministry of Health NZ: https://www.health.govt.nz/our-work/populations/maori-health/whakamaua-maori-health-action-plan-2020-2025
18. **Tribunal releases report on stage one of health services and outcomes** | Waitangi Tribunal: https://waitangitribunal.govt.nz/news/report-on-stage-one-of-health-services-and-outcomes-released

References

1. Chetty, L. (2020). **Experiences of occupational health doctors and nurses about the role of physiotherapists in occupational health rehabilitation:** A qualitative study. Hong Kong Physiotherapy Journal, 40:01, 1-9. https://doi.org/10.1142/S1013702520500018
2. Christopherson, R. M., Fadyl, J. K., & Lewis, G. N. (2022). **Return-to-work expectations and workplace supports in New Zealand: Injured workers' perspectives.** Disability Rehabilitation, 44(5), 702–709. https://doi.org/10.1080/09638288.2020.1776775 & https://pubmed.ncbi.nlm.nih.gov/35235764/
3. Nancarrow, S.A., Booth, A., Ariss, S., Smith, T., Enderby, P., Roots, A. (2013). **Ten principles of good interdisciplinary teamwork.** Human Resources Health, 10;11:19. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3662612
4. New Zealand Government (2016). **Health and Safety at Work Regulations.** https://www.legislation.govt.nz/regulation/public/2016/0013/latest/DLM6727530.html
5. Paice, E., Heard, S., Moss, F. (2002) **How important are role models in making good doctors,** BMJ, 325(7366):707-10. https://doi.org/10.1136/bmj.325.7366.707
6. Physiotherapy Board of New Zealand. (2023). **Physiotherapy thresholds** https://www.physioboard.org.nz/standards/physiotherapy-thresholds
7. Physiotherapy Board of New Zealand. (2023). **He kawa whakaruruhau ā matatau Māori.** https://www.physioboard.org.nz/standards/physiotherapy-standards/he-kawa-whakaruruhau-a- matatau-maori-maori-cultural-safety-and-competence-standard

PHYSIOTHERAPY NEW ZEALAND
Kōmiri Aotearoa

Occupational Health

pnz.org.nz