

Allied Health Professions' Office of Queensland

Physiotherapy Learner Guide

Assist with physiotherapy treatments and interventions

April 2017

Physiotherapy Learner Guide – Assist with physiotherapy treatments and interventions

Published by the State of Queensland (Queensland Health), April 2017



This document is licensed under a Creative Commons Attribution 3.0 Australia licence. To view a copy of this licence, visit creativecommons.org/licenses/by/3.0/au

© State of Queensland (Queensland Health) 2017

You are free to copy, communicate and adapt the work, as long as you attribute the State of Queensland (Queensland Health).

For more information contact:

Intellectual Property Officer, Department of Health, GPO Box 48, Brisbane QLD 4001, email ip_officer@health.qld.gov.au, phone (07) 3328 9862.

An electronic version of this document is available at <https://www.health.qld.gov.au/ahwac/html/ahassist-modules/>

Disclaimer:

The content presented in this publication is distributed by the Queensland Government as an information source only. The State of Queensland makes no statements, representations or warranties about the accuracy, completeness or reliability of any information contained in this publication. The State of Queensland disclaims all responsibility and all liability (including without limitation for liability in negligence) for all expenses, losses, damages and costs you might incur as a result of the information being inaccurate or incomplete in any way, and for any reason reliance was placed on such information.

Acknowledgement

The Allied Health Professions' Office of Queensland wishes to acknowledge the Queensland Health allied health clinicians who have contributed to the development of the original learning support materials in 2011. In alphabetical order:

Christine Colavitti

Dean Cook

Rita Hwang

Jackie Kraayenbrink

Nicole Lehtonen

Paul Stankunas

Similarly we are grateful for the contributions of Aged Care Queensland Education Institute.

As well as a subgroup of the Queensland Health Physiotherapy Advisory Forum Queensland (PAFQ), including:

Nicole Bellet

Peter Buttrum

Kathy Grudzinskas

Cherie Hearn

Claire Stewart

Elaine Unkles

Judith Wilson

Contents

INTRODUCTION	1
Learner Guide Structure	1
Learning requirements	1
Self-Completion Checklist	2
Recognition for Prior Learning	2
Symbols	3
LEARNING OUTCOMES	4
LEARNING TOPICS	6
CONTENT	7
1. Organisation Practices	7
1.1 Roles and Responsibilities	8
1.2 Policies and Procedures	15
1.3 Record Keeping	23
Key Points	29
2. Body Systems	30
2.1 Anatomy and Physiology	31
2.2 Pain	47
2.3 Psychological Effects	53
Key Points	56
3. Programs and Treatments	57
3.1 Rationale and Processes for Treatment	58
3.2 Equipment and Materials Management	69
3.3 Monitoring Requirements	75
Key Points	87
SELF-COMPLETION CHECKLIST	88
RESOURCES	99
References	100

Figures

Figure 1 - Diaphragm's Role in Breathing (Adapted from Brain; 2006)	34
Figure 3	36
Figure 3	36
Figure 4	37
Figure 5 - The Human Circulatory System (Guze, n.d)	39
Figure 6 - Gas Exchange (Dorling Kindersley; 2010)	40
Figure 7 - The Human Nervous System (Laurien; n.d)	44
Figure 8 - Quality Cycle (Queensland Health, 2017)	85

INTRODUCTION

Welcome to the Learning Guide: Assist with physiotherapy treatments and interventions.

Learner Guide Structure

This Learner Guide has been developed specifically for allied health assistants to provide the necessary knowledge and foster the skills required to assist a physiotherapist in delivering and monitoring a client-specific exercise program.

The Learner Guide covers information concerning:

- respiratory support
- adverse events with electrotherapy treatments
- moving and positioning clients
- levels of supervision
- working as part of a team
- reporting and communication
- working with non-compliant patients
- prioritisation of treatment

Each topic includes sub-topics which cover the essential knowledge from the unit of competency. You will be asked to complete the activities in each topic to support your learning. These activities address the essential skills from the unit of competency and will be part of your assessment.

Throughout the guide, you will be given the opportunity to work through a number of activities, which will reinforce your learning and help you improve your communication and organisation skills, manual handling skills and ability to apply therapeutic exercise practices. Take time to reflect during the module on how you may be able to apply your new knowledge and skills in your role as an allied health assistant.

Learning requirements

It is important that you have an allied health workplace supervisor who has agreed to support in your study. Regular clinical supervision during the course of your study should also assist you to stay “on track”, provide opportunities for your supervisor to monitor your progress, provide encouragement, and to check that you understand the information in the learning materials. This will be particularly important if you are having any specific learning difficulties.

Activities and assessment tasks may require access to the internet. If you do not have internet access please talk with your supervisor about your options.

Self-Completion Checklist

The Self Completion Checklist outlines the underpinning knowledge and skills contained in each of the topics for the unit of competency you will be assessed against. You will be asked to review the list and place a tick in the box if you feel you have covered this information in each section and if you feel ready to undertake further assessment. If you have any questions about this checklist, ask your supervisor.

Recognition for Prior Learning

If you subsequently enrol in the Certificate IV in Allied Health Assistance you may be able to undertake recognition assessment for the study that you have done. To enable you to gain recognition for the learning you have undertaken in this Learner Guide, it will be necessary for you to complete the Assessment Guide associated with this unit of competency. The assessment activities in this Assessment Guide must be signed off by a **physiotherapist**. Copies (Word version) of the Assessment Guide can be obtained by contacting the AHPOQ team via e-mail: AH_CETU@health.qld.gov.au



Please Note

Due to the varied environments in which allied health assistance is carried out, the terms 'patient' and 'client' are used interchangeably throughout this resource. Please use your organisation's preferred term when performing your duties.

Symbols

The following symbols are used throughout this Learner Guide.



Important Points – this will include information that is most relevant to you; statistics, specific information or examples applicable to the workplace.



Activities – these will require you to reflect on information and workplace requirements, talk with other learners, and participate in a role play or other simulated workplace task. You may use the space provided in the Learner Guide to write down a draft response. Record your final answer in the Assessment Guide.



Further Information – this will include information that may help you refer to other topics, complete activities, locate websites and resources or direct you to additional information located in the appendices.



Case Studies – these will include situations or problems for you to work through either on your own or as a group. They may be used as a framework for exploration of a particular topic.



Research – this refers to information that will assist you complete activities or assessment tasks, or additional research you may choose to undertake in your own time.

LEARNING OUTCOMES

As an allied health assistant assisting with physiotherapy treatments and interventions, you will be required to perform the following tasks.

1. Prepare for the delivery of a treatment program by:
 - Obtaining information about the treatment or intervention from the physiotherapist
 - Determining patient availability according to organisation protocols
 - Determining availability of treatment space, if required
 - Gathering the equipment to deliver the treatment program, in line with patient needs and specifications of the physiotherapist, ensuring safe handling of electrical modalities

2. Conduct physiotherapy treatment and interventions by:
 - Confirming the patient's understanding of the program based on the treatment plan prepared by the physiotherapist
 - Obtaining informed consent from the patient before commencing the exercise program
 - Where electrotherapeutic appliances are used, assisting in positioning the patient and equipment for the physiotherapist to verify
 - Timely reporting of patient misunderstanding or confusion to the physiotherapist
 - Guiding the patient to participate in the treatment program as determined by physiotherapist
 - Identifying and noting any difficulties the patient experiences, completing the physiotherapy treatment and interventions and reporting to physiotherapist in a timely manner
 - Identifying and managing patient compliance issues, including subjective and objective reporting of patient response to the program, and reporting to the physiotherapist in a timely manner
 - Providing feedback to the patient to reinforce patient understanding of treatment program and progress
 - Seeking assistance when patient presents with needs or signs outside limits of own authority, skills and/or knowledge
 - Reporting patient difficulties to the supervising physiotherapist for advice before continuing the prescribed exercise program

3. Clean and store equipment by:
 - Cleaning equipment according to manufacturer's recommendations, infection control requirements and organisation protocols under direct supervision of physiotherapist
 - Storing equipment according to manufacturer's recommendations and the organisation's protocols

- Checking and maintaining equipment according to organisation protocols, manufacturer's guidelines and physiotherapist's guidelines
 - Reporting equipment faults to the appropriate person(s)
 - Labelling or tagging equipment faults, where possible remove from use if unsafe or not working and inform staff in line with organisation procedures
 - Ensuring safety protocols established when cleaning or testing electrotherapy equipment
4. Report and document information by:
- Providing patient progress feedback to the treating physiotherapist
 - Reporting patient difficulties and concerns to the treating physiotherapist in a timely manner
 - Implementing variations to the treatment program according to the instructions of the physiotherapist.
 - Documenting information about the treatment program according to the organisation's protocols
 - Using appropriate terminology to document patient response, outcomes and identified problems related to the treatment program
5. Comply with supervisory requirements by:
- Assisting with the exercise program according to the instructions of the treating physiotherapist
 - Providing patient progress feedback to the treating physiotherapist
 - Reporting patient difficulties and concerns to the treating physiotherapist in a timely manner
 - Implementing variations to the exercise program according to the advice of the treating physiotherapist
 - Assisting with patient and equipment positioning in preparation for treatment under direction of the treating physiotherapist

LEARNING TOPICS

The table below outlines the relationship between the topics presented in this Learner Guide and the Essential Knowledge required for completion of the unit of competency.

Topics	Essential Knowledge
1. Organisation Practices	<ul style="list-style-type: none"> • A working knowledge of factors that facilitate effective and collaborative working relationships • Roles, responsibilities and limitations of self and other allied health team members, nursing, medical and other personnel • OHS policies and procedures that relate to the AHA's role in implementing mobility and movement programs prescribed by the physiotherapist • Infection control policies and procedures that relate to the allied health assistant's role in implementing mobility and movement programs prescribed by the physiotherapist • Relevant national and state/territory legislation and guidelines, including Australian Physiotherapy Association (APA) Guidelines • A working knowledge of record keeping practices and procedures in relation to diagnostic and therapeutic programs and treatments • Supervisory and reporting protocols of the organisation
2. Body Systems	<ul style="list-style-type: none"> • A working understanding of the basic anatomy and physiology of the lungs • A working understanding of the basic reaction to pain within the body • A working understanding of the psychological effects of disability due to injury or disease and strategies used to cope with this
3. Programs and Treatments	<ul style="list-style-type: none"> • A working knowledge of the rationale and processes for different programs and treatments • A working understanding of the signs of adverse reaction to different programs and treatment • A working knowledge of the equipment and materials used in different programs and treatments • A working understanding of the dangers of electrotherapeutic modalities and the risks involved to patient and staff in the vicinity of such apparatus • A working knowledge of the monitoring requirements for different programs and treatments

CONTENT

1. Organisation Practices

This topic covers information about:

- Roles and Responsibilities
- Policies and Procedures
- Record keeping

Activities in this topic address the following essential skills:

- Use procedures to move and position clients in a safe manner
- Work under direct and indirect supervision
- Work independently and as part of a (multidisciplinary) team
- Report back changes in patient performance
- Communicate effectively with patients in a therapeutic/treatment relationship
- Communicate effectively with supervisors and co-workers
- Use skills in time management, personal organisation and establishing priorities

1.1 Roles and Responsibilities

As some allied health assistants using this resource may work across a number of professions, not exclusively with physiotherapists, the term allied health assistant or AHA will be used throughout.

The role of the allied health assistant is to support and assist the physiotherapist in providing client care. The Australian Physiotherapy Association (APA) defines a physiotherapy assistant as 'a health care worker who works under the supervision of a registered physiotherapist and holds a Certificate IV in Allied Health Assistance (Physiotherapy) or equivalent. These workers have a range of skills which allow a physiotherapist to confidently delegate a higher level of tasks than other support workers' (Wellness & Lifestyles Australia, 2009).



The physiotherapist is always directly accountable for a client's treatment but will delegate tasks to the allied health assistant as appropriate. It is the responsibility of the assistant to complete the tasks and liaise with the physiotherapist regarding the client's progress.

Roles and responsibilities of the allied health assistant include, but are not limited to:

- having an understanding of the role of physiotherapists, allied health assistants and aides
- understanding the limits of your scope of practice
- being aware of and following all relevant safety precautions
- only undertaking the tasks for which you have appropriate competence
- being aware of and complying with relevant aspects of the ethical principles and code of conduct of the physiotherapy profession (Australian Physiotherapy Association, 2008) and the employer

Working relationships



It is recommended that you research further information regarding the role and responsibilities of the physiotherapy assistant. The following websites are a good place to start.

Australian Physiotherapy Association (APA)

<http://www.physiotherapy.asn.au>

Australian Physiotherapy Council (APC)

<https://physiocouncil.com.au/>

Physiotherapy Board of Australia

From 1 July 2010 new registration requirements were approved by the Physiotherapy Board for accreditation for physiotherapists and are regulated by the Australian Health Practitioner Regulation Agency (AHPRA). You should undertake research and become familiar with all the required codes and guidelines you are required to follow in any role you undertake.

<http://www.physiotherapyboard.gov.au/Codes-and-Guidelines.aspx>

Allied Health Assistant Framework

The Allied Health Assistant Framework details the effective employment and use of AHAs in the Queensland health workforce. The Framework supports delegation of tasks to AHAs and has been developed for Hospital and Health Services to assist the integration of AHA roles into service delivery practices.

<http://qheps.health.qld.gov.au/alliedhealth/html/strategies/allied-health-assistants.htm>

Roles and responsibilities of physiotherapists working with assistants include:

- remain at all times responsible for the delivery of the prescribed treatment that is provided by the allied health assistant
- take responsibility to instruct and educate assistants, delegate to assistants, and evaluate the implementation of delegated tasks, supervising as necessary
- have an understanding of the role of the allied health assistant and ensure delegated tasks are within the allied health assistant's scope of practice and level of competence
- recognise and promote appropriate professional development and learning opportunities for the assistant

Working Relationships

As an allied health assistant, you may be working with a range of people, including physiotherapists, clients and their families, doctors, nurses, client support staff, maintenance and administrative staff. It is important to form an effective and joint working relationship with other members of the team. Ways to facilitate this include:

- Participating in helpful and regular communication
- demonstrating reliability—following through on tasks and being consistent
- actively listening to other team members' ideas and points of view
- being an active participant, showing initiative and contributing to the workplace
- being flexible and adapting to changing circumstances
- treating others in a respectful and supportive manner

Code of Conduct

The Code of Conduct for the Queensland Public Service reflects the principles of integrity and impartiality, promoting the public good, commitment to the system of government, accountability and transparency. As an allied health assistant, you need to be aware of this code and abide by it when working in a Queensland Health facility.

The Code of Conduct for the Queensland Public Service was developed in line with the government's commitment and in consultation with agencies, employees and industrial representatives. The Code was designed to be relevant for all public sector agencies and their employees and reflects the amended ethics principles and values contained in the Public Sector Ethics Act 1994.

(Public Service Commission, 2010)



Further information regarding the Code of Conduct can be found at:

<https://www.qld.gov.au/gov/code-conduct-queensland-public-service>

Personal Organisation

Often you will be working with more than one patient at a time. You may also be working across different areas. You will need to be able to manage your workload to ensure you meet all your role obligations.

The skills that will assist you to manage your workload include:

- The ability to prioritise tasks
- The ability to manage the way you use your available time
- How you personally organise the requirements of your role e.g. reporting, making patient notes, entering information into electronic databases etc


To set your priorities, you should think of tasks as falling within three groups:

- Things that must be done and you cannot put off until another time
- Things that are important that you can put off for a short time but should be completed before you leave for the day
- Things that are not important and can be done when you have time and have completed the tasks from the two groups above. These are also tasks that you would like to do if you have the time, such as re-organise your desk

If you cannot decide, look at the possible impact upon the patient or the situation if you do not complete this task. If the impact will cause harm to the patient, then it needs a higher priority. You also have to be realistic about the amount of work you can complete in any given time or task. The more steps involved in a task, the more time it will take to complete. You also need to include the time it takes you to:

- fill out required paper work
- travel (if required) or time to get to your next patient
- gathering needed resources or equipment
- setting up environments and rooms
- assisting patients to fill out paper work
- answer any questions a patient will have (extra time for new patients)
- clean any equipment and aids used including other infection control requirements
- time for meal breaks

Time management involves how you choose to use your time, which includes how long you spend talking to patients or other staff members; how long you take to do notes and reports; how long it takes you to set up a room for an activity and so on. Some workers find that when they analyse how they spend their work time, they may be



spending more time with patients than necessary, or may be spending time talking to a work colleague about personal matters and so on. Planning your time assists you to allocate more time to priority tasks to assist you to complete your workload for the day.

You can set goals, or create a task list based on appointments you have or meetings you must attend. You may also need to find other ways to do tasks to ensure you can accomplish more in the time that you have available. You also must be realistic about how many patients you can assist in the time you have available. It is up to you to organise your workload to achieve the expected outcomes of your role.



Activity 1: Roles and responsibilities of an allied health assistant

Please answer the following questions. You may use the space provided below to write down a draft response. Record your final answer in the Assessment Guide. Reflect on some of the working relationships within your workplace, during the time you have been working in Queensland Health. In particular, think back to a strong working relationship which you have developed in your work area.

1. What are the factors which made this a strong working relationship?

2. What are the benefits to you and your clients because of this strong working relationship?

Activity continues on following page



Activity 1: Roles and responsibilities of an allied health assistant (continued)

Now reflect on your experience with time management, personal organisation and establishing priorities. Answer the following question.

3. You have looked at your workload for the day and realise that you will not have enough time to complete all your scheduled appointments. Explain how you would prioritise your workload.

1.2 Policies and Procedures

Policies and procedures are formal documents developed for the workplace to ensure work practices are performed to a required standard.

A policy is a statement of intent to achieve a particular outcome, and how that outcome will be achieved. Health service directives are formal documents that contain mandatory outcomes to be achieved by a HHS and may also contain required actions to be completed. For example, there is a Health Service Directive for Patient Safety (November 2014), the objective of which is to monitor the quality of health services delivered by Hospital and Health Services.

<https://www.health.qld.gov.au/directives/docs/hsd/qh-hsd-032.pdf>

Queensland Health policies should always be aligned with Queensland Health's 'strategic direction'. They should be in line with the state and federal legislation on the same matter and be easily accessible for those required to implement the policies (Queensland Health, 2015). On an employee level, we must apply Queensland Health policies and guidelines to our work to ensure we are providing client care that is of a high standard, safe, and accessible to all.



You do not need to be aware of all of Queensland Health's policies. However, you should have an awareness and understanding of specific Queensland Health policies that apply to your role as an AHA.

To find out more about the Department of Health's policy framework:

<https://www.health.qld.gov.au/system-governance/policies-standards/types/default.asp>

The following policies include some that you should review and be familiar with when assisting with physiotherapy treatments and interventions. Please note: this is not a full list. There will be additional policies relevant to your particular workplace.

- Anti-discrimination and vilification Policy (November 2016)
- Orientation, Induction and Mandatory Training Policy (November 2016)
- Workplace Equity and Harassment Officers Policy (May 2010)



You should discuss with your supervisor or line manager which additional Queensland Health Policies (not listed above) are relevant to your particular workplace and your particular role.

A guideline provides advice on best practice and is intended to be a supporting document to a policy or standard. They cannot be 'stand-alone documents within the framework'. (Queensland Health, 2015).

A procedure might be applicable to multiple Queensland Health settings, or may be service and location specific. For example, Princess Alexandra Hospital has its own Home Visiting Safety-Community Based Services procedure document specific to its site, which is designed to maintain the safety and security of staff, student health professionals and patients/clients/carers when conducting home visits.

<http://qheps.health.qld.gov.au/metrosouth/policy/docs/procedure/PR2015-57.pdf>

Accreditation

At an organisational level, all Queensland Health services must participate in a periodic accreditation process. The National Safety and Quality Health Service (NSQHS) Standards were developed by the Australian Commission on Safety and Quality in Health Care to drive the implementation of safety and quality systems and improve the quality of health care in Australia. The 10 NSQHS Standards provide a nationally consistent statement about the level of care consumers can expect from health service organisations.

In September 2011, Health Ministers endorsed the NSQHS Standards and a national accreditation scheme. This has created a national safety and quality accreditation scheme for health service organisations. <https://www.safetyandquality.gov.au/our-work/accreditation-and-the-nsqhs-standards/>

The primary aim of the National Safety and Quality Health Service (NSQHS) Standards are to protect the public from harm and to improve the quality of health service provision.



The National Safety and Quality Health Service Standards are clearly outlined on the following website.

<http://qheps.health.qld.gov.au/psu/safetyandquality/standards/default.htm>

Review the standards and highlight those standards that you believe will apply to you in your workplace setting.

Occupational Health and Safety (OHS)

At the start of employment it is common practice that your employer will provide an orientation to the work area. This will include a broad introduction to local policies and procedures, and topics related to Occupational Health and Safety (OHS) including infection control and manual handling. As an AHA you need to be aware of these local policies and procedures and how they relate to your role in assisting the physiotherapist to deliver patient care.

You will be expected to comply with the Queensland Health OHS Policy (2010) to ensure a safe and healthy work environment and reduce the risk of work related injury and illness.



You can find the Queensland Health OH&S policy (2010) on the following link.

<https://www.health.qld.gov.au/system-governance/policies-standards/doh-policy/policy/gh-pol-401.pdf>

It is also essential that you understand your workplace's guidelines for manual handling and how this relates to your role in delivering an exercise program, as well as undergoing appropriate manual handling training and competency.

Manual Handling

The manual handling of patients includes any workplace activity where a person is physically moved or supported. It includes the moving, handling and repositioning of patients. Patient handling tasks have been identified as a priority hazard exposure for healthcare workers.



It is important to develop good client handling techniques to keep both you and the client safe. Tasks need to be individually assessed. Avoid movements that involve excessive force, sustained or awkward posture, and high repetition. These risks are not restricted to client handling, but also apply to the movement and transportation of equipment.



You can find more information about manual handling by following this link:

http://qheps.health.qld.gov.au/safety/ergo/resources_patient.htm

As an AHA, it is essential that you understand the local guidelines for manual handling and how this relates to your role in assisting the physiotherapist to deliver and monitor an exercise program for mobility. You will need to speak with your supervisor to receive the appropriate skills training and competency assessment required for the area you work in.

Infection Control

'Infection control practices aim to prevent infection transmission by limiting the exposure of susceptible people (hosts) to microorganisms (agents) that may cause infection.' (Queensland Health, 2008).



The Centre for Healthcare Related Infection Surveillance and Prevention (CHRISP) is the state wide service for Queensland Health to assist with healthcare related infection. Further information is available at:

<http://www.health.qld.gov.au/chrisp/>

Infection control policies and procedures provide the foundation for a safe healthcare environment for staff and clients. You will need to identify and apply the policies and procedures that relate to your role including:

- standard and additional precautions
- employee health issues e.g. immunisation
- infection surveillance
- environmental issues
- reprocessing of reusable medical and surgical equipment
- equipment and product purchases
- waste management
- building and refurbishment
- food safety
- laundry management

Within healthcare facilities, infection control programs promote the use of strategies and procedures to prevent or minimise the spread of infection. Standard precautions form the basis of infection control strategies and include:

- appropriate hand washing - before and after patient contact, hygiene care, handling patient belongings
- immunisation – responsibility to be up-to-date
- asepsis - sterile or free from contamination
- use of personal protective equipment - gloves, masks, protective eye wear etc
- maintenance of a clean, safe environment - cleaning equipment and work space

- cough etiquette – cover mouth when coughing
- sharps management - careful and safe disposal of needles

While delivering an exercise program in your role as an AHA you may meet patients who are infective or suspected of being infective. It is important you are aware of and follow infection control procedures at all times.



Further information regarding Queensland Health Infection Control Guidelines can be found at: <https://www.health.qld.gov.au/chrisp/>

Performance Appraisal and Development (PAD)

This is a process to be completed by all Queensland Health staff, which involves setting goals for improving work performance and progressing career paths. This is intended to benefit both staff and the organisation. Your Performance Appraisal and Development (PAD) is usually completed once a year and if required, a six monthly review of the goals that you set.

There is a clear process and structure for employees participating in a PAD including the use of standardised forms. Participating in PAD ensures:

- clear performance expectations for employees
- ensuring feedback and guidance on performance – both positive and negative
- jointly identifying learning and developmental needs and activities

In addition, your PAD can be used to identify areas of work you would like to improve or develop. You and your manager can develop a plan about how to achieve your goal. For example, you may wish to improve your knowledge of wheelchair maintenance. In your PAD, you can record this as a goal and work out with your manager how you can learn more e.g. work-shadow with another staff member or attend a workshop on the topic.

This plan is designed to be used for longer term career planning as well as short-term needs. For example, perhaps you wish to work in an acute ward setting. Your manager may then plan with you how you can work towards that goal while still working in your current setting.

Goals need to be relevant to your employer and their business of healthcare. Your manager may use your PAD to identify and discuss areas they require you to work on, including if parts of any of your work performance that may be a concern (Queensland Health Human Resources Policy G9, June 2014 viewed 1 December 2016).



Please refer to the Performance Appraisal and Development Policy (July 2014): <https://www.health.qld.gov.au/system-governance/policies-standards/doh-policy/policy/gh-pol-189.pdf>



Activity 2: Policies and Procedures

Please answer the following questions. You may use the space provided below to write down a draft response. Record your final answer in the Assessment Guide.

1. Outline why it is important to be aware of relevant policies and procedures within your work area and within Queensland Health.

2. Describe how you would access relevant policies and procedures such as infection control, occupational health and safety and incident management policies. Consider access in terms of resources within the department, people and relevant technology.

Activity continues on following page



Activity 2: Policies and Procedures (continued)

3. You have come into contact with a client who has methicillin resistant Staphylococcus aureus (MRSA) colonised in the leg wound and has been using a wheelie walker. What infection control procedure should you use before another client can use the walker? You may find it useful to refer to the Queensland Health internet site on: <https://www.health.qld.gov.au/chrisp/>

1.3 Record Keeping

Parts of this section on documentation have been taken with permission from Guidelines for allied health assistants documenting in health records (Queensland Health, 2016):

<https://www.health.qld.gov.au/ahwac/docs/aha/ahadocguide.pdf>

Documentation

Documentation of patient care and interventions by all medical and health professionals is important for a number of reasons:

- as a communication tool to facilitate the continuum of patient care
- to allow evaluation of care provided
- for research or epidemiological needs
- to allow clinical unit management
- to meet statutory requirements
- in case the information is required for medico-legal defence

As an AHA you may be required to document certain aspects of patient care you are involved in but this will vary according to your workplace. This may include:

- telephone calls
- meetings with other health professionals
- meetings with carers or other relevant individuals (e.g. teachers)
- missed or cancelled appointments and follow-up of this
- education or information provided to the patient
- progress notes following treatments

Criteria for documentation are as follows:

- write in chronological order i.e. in order of time and date
- Keep it to the point, accurate and relevant
- ensure there is a patient label or identification on each page – always check that it is the correct patient before documenting in their record
- use black pen only
- ensure your writing is readable
- avoid spare lines and gaps within and between the entries
- always time and date entries:
 - try to write the entry as soon as possible after the intervention
 - the time documented is the time that you write the entry

- use a 24 hour clock. For example, 9 am = 0900
- do not time or date entries looking back into the past
- clearly label your entries
 - show that you are an allied health assistant
 - outline the nature of your intervention; e.g. 'as per the allied health professional' or 'as per written guidelines and protocol'
- sign entries and clearly print name and designation (title)
- avoid use of non-standard abbreviations and terminology
- record facts only – your own emotional statements or moral judgements should not be recorded
- avoid general terms – try to be specific
- if errors are made:
 - draw a neat single line through writing, and sign and date this change. If the whole entry is an error, write 'Written in error' or 'Written in wrong chart' etc.
 - do not use white out correction fluid (liquid paper)
 - do not retrospectively amend

Incident Reporting

You will also be required to document any risks, hazards or incidents within the workplace. You need to be familiar with the policy and procedure for reporting incidents involving staff, patients and visitors. It is essential you know how to use your workplace Clinical Incident Reporting System and know where to find OHS information on the Queensland Health intranet site, QHEPS. For example, if you are involved with an incident such as you are hurt or observed a near miss incident, you are required to fill out a Queensland Health workplace incident report form and give the form to your supervisor or manager to complete. Once the form has been completed, it will be forwarded to the local OHS unit. The OHS unit will then enter your form data into the Incident Management System, commence investigations and any required corrective actions.



This information can be found at:

<http://qheps.health.qld.gov.au/safety/ims/home.htm>



Activity 3: Documentation

You have been asked by the physiotherapist on the orthopaedic ward to complete an exercise program with a patient who has recently undergone a total knee replacement (TKR). As you walk into this patient's room, you find them sitting on the floor in front of their chair. When you ask them what has happened, why they are sitting on the floor, they report that they have fallen out of the chair, but they report being unhurt.

Please answer the following questions. You may use the space provided below to write down a draft response. Record your final answer in the Assessment Guide.

1. What steps would you take to ensure that the patient can be safely returned to the chair?

2. Once the patient has been cleared medically and is safely in the bed or chair, who would you report to? What would you report to them?

Activity continues on the next page.



Activity 3: Documentation (continued)

3. What documentation would you need to complete following what you have witnessed? Write an example below of what you would record in the patient's record. Attach a copy of any Queensland Health forms that you may complete.

Confidentiality

Queensland Health has a commitment to ensuring the privacy and confidentiality of all personal information collected. Patient information is confidential and care should be taken to ensure that all documented information remains confidential.

Listed below are some general guidelines for maintaining patient confidentiality:

- do not allow anyone to touch or look at a patient record unless they are a healthcare provider taking care of that patient
- carry medical records in a way so as not to expose identifying information such as patient details
- keep all patient records in a safe and secure place
- do not take any patient files or identifiable patient information out of the workplace
- do not tell anyone about what is in a patient record unless they are taking care of the person
- only access information about a patient or employee when it is part of your job, it is lawful, or when specific consent is given
- do not e-mail patient information via public networks (i.e. non Queensland Health e-mail providers)



All health professionals employed by Queensland Health are required to comply with the standards of confidentiality as specified by the Code of Conduct. Further information regarding confidentiality can be found at:

<https://www.qld.gov.au/gov/code-conduct-queensland-public-service>

Informed consent

Every patient has the right to make a decision about any treatment they receive that involves their body, including who can touch them. Medical staff such as a doctor or a physiotherapist is responsible for informing the client about any aspect of treatment.

Informed consent can only be given by a client when they understand:

- the reason for the treatment
- what will be done
- how it will be done
- who will do it
- the expected outcomes
- other treatment options
- the consequences or expected outcomes of not having the treatment

There are also legal requirements about informed consent that you need to be aware of:

- A person under 18 years of age cannot give consent, so must have a parent or guardian give the consent
- A person who has been assessed as not having the capacity to make choices cannot give legal consent, so must have a guardian or substitute decision maker give consent (e.g. clients with particular mental health disorders or disorders such as Alzheimer's disease)
- A client who has been sedated, is in a coma or is confused

Clients have the right to informed choice so they can:

- Leave their condition untreated
- Seek alternative healthcare
- Seek an independent second opinion
- Request a healthcare provider of a particular gender, where possible
- Refuse admission or choose to leave a health facility, regardless of their condition, after explanation of the likely effect on their health

Informed consent is the responsibility of the person diagnosing or treating the client. Your role may include ensuring the client has signed consent on their records and to assist the client with any questions they may have about what program or activity you are going to work with them on. At every stage of a new or unfamiliar program, activity or treatment, you should inform the client so they understand what is happening. If they ask you to stop, you must stop as this is considered to be withdrawal of consent. Please ensure you document any refusal of care in the appropriate manner.

Key Points

This section of the Learner Guide has covered information related to the topic of Organisation Practices. On completion of this section you should:

Roles and Responsibilities:

- Explain the roles and responsibilities of allied health assistant and other personnel.
- Demonstrate effective and collaborative working relationship.
- Relate relevant National and State/Territory legislation and guidelines, including the Australian Physiotherapy Association guidelines and the Code of Conduct.

Policy and Procedures:

- Summarise local policy and procedures including OHS, infection control and manual handling

Record Keeping:

- Describe record keeping practices and procedures in relation to diagnostic and therapeutic treatments. Explain why documentation is important, and how entries related to patient care should be documented
- Be familiar with and comply with the standards of confidentiality as specified by the Code of Conduct
- Explain incident reporting and documentation

2. Body Systems

This topic covers information about:

- Anatomy and Physiology
- Pain
- Psychological Effects

Activities in this topic cover the following essential skills:

- Complete electrotherapy support and respiratory support
- Apply understanding of the danger of adverse events occurring with electrotherapy treatments
- Use procedures to move and position patients in a safe manner
- Work under direct and indirect supervision
- Work independently and as part of a (multidisciplinary) team
- Report back changes in client performance
- Communicate effectively with patients in a therapeutic or treatment relationship
- Communicate effectively with supervisors and co-workers
- Work effectively with non-compliant patients
- Use skills in time management, personal organisation and establishing priorities

2.1 Anatomy and Physiology

Anatomy is the scientific study of the structure of the body. Physiology is the scientific study of how the body functions. Having a basic knowledge of normal anatomy and physiology gives you an understanding of how the body works and allows you to recognise abnormalities when it is affected by injury or disease.

In this section we will focus on the basic structure and function of the respiratory system. We will also briefly review the circulatory and nervous systems. For information on basic anatomy and physiology please see the Learner Guide for unit *HLTAH401B Deliver and monitor a client-specific exercise program*.

The Respiratory System

The main function of the respiratory system is to allow gas exchange to the body via respiration (breathing). That is, it provides oxygen and removes carbon dioxide from the cells.

The respiratory system is made up of:

- the upper respiratory tract
- the lower respiratory tract



How effective your patient's respiratory system functions will impact on their ability to move, exercise, recover from illness or surgery, or just feel comfortable during treatment sessions. As an AHA you need to understand this, in order to gain your patient's confidence and co-operation, and assist the physiotherapist with your preparation for treatment.

The upper respiratory tract is made up of:

- the nose and nasal cavities
- the pharynx (throat)
- the larynx (voice box)

The lower respiratory tract is made up of:

- the trachea (wind pipe) and the epiglottis which closes over and protects the wind pipe during swallowing
- the bronchi and bronchioles (breathing tubes)
- alveoli (air sacs)

Our lungs are divided up into lobes, and as we breathe in, air is distributed around the lobes. Bronchi are the larger airways which transport air quickly to all lobes of the lung. They are kept open by rings of cartilage, a bit like the hose of a vacuum cleaner. No gas exchange occurs in the bronchi. As we follow the bronchi, they branch into smaller and smaller breathing tubes, called bronchioles, which open into small air sacs called alveoli.

If we think of the alveoli as balloons, it helps to understand what can happen if bronchi or bronchioles become blocked, with mucous or other matter like food particles or vomit; air cannot reach the alveoli and they remain deflated, like a balloon which has gone flat.

The inner lining of our airways produces mucus which helps in cleaning the airways and keeps the lungs moist. Sometimes, for example, when we have a chest infection, the airway and alveolar linings may become inflamed and start making more mucous, which can in turn become infected. Normal mucous is quite clear, but infected mucous can become yellow, green or even brown.

We clear mucous from our airways all the time, by clearing our throat or coughing. Mucus we cough up is usually called sputum, and physiotherapists can tell a lot about what is going on in the lungs by changes they see in the sputum, both in terms of volume and appearance.

The basic functions of the respiratory system are to:

- take oxygen from the air and transport it into both lungs
- transfer oxygen into the blood stream for delivery to all organs and muscles within the body
- filter the air and protect against irritants and foreign particles entering the body (by coughing or sneezing)
- transfer and expel carbon dioxide out into the air

Normal 'breathing in' may also be called inhalation or inspiration, and 'breathing out' may be referred to as exhalation or expiration. Aspiration is breathing substances into the lungs which are not supposed to be there e.g. water, vomit, food and etc.

There are a large number of conditions which may affect a person's respiratory system including:

Condition	Definition
Asthma	Reversible or reactive airway disease, where exposure to allergens, exercise, cold air or medication may result in broncho-constriction (narrowing of the airway) and wheeze
Chronic Obstructive Airway or Pulmonary Disease (COAD or COPD)	Progressive disorder characterised by hyperinflation (air trapping), e.g. emphysema and chronic bronchitis.
Pneumonia	An infection in the lung tissue which results in inflammation of the tissue and may result in fluid or pus in the air sacs. The inflammation is usually associated with fever, chills, tiredness and chest pain.
Aspiration Pneumonia	This term refers specifically to pneumonia which has occurred after foreign substances have been inhaled. It's common in people with swallowing disorders e.g. after stroke, anaesthesia, alcohol and drug overdose.



It is important to note that these patients may suffer from shortness of breath, increased coughing and sputum production, and decreased exercise tolerance; therefore they will require careful monitoring of symptoms.

Some patients may be prescribed bronchodilators (e.g. Ventolin), and it may be advisable for them to take these prior to or during exercise to keep their airways open. All of these symptoms can affect the treatment session, and it is important to have a plan of chair locations etc so that these patients can rest if required during the treatment.

The lungs however are not muscles so they require assistance to expand. They are also soft and require protection.

The role of the diaphragm is essential in the expansion of the lungs; it contracts and moves down when you breathe in; and relaxes and moves up when you breathe out; drawing the air into your lung and then pushing it out. This works in conjunction with

movement of the ribs which provide protection for the lungs but also move to help the diaphragm in lung expansion.

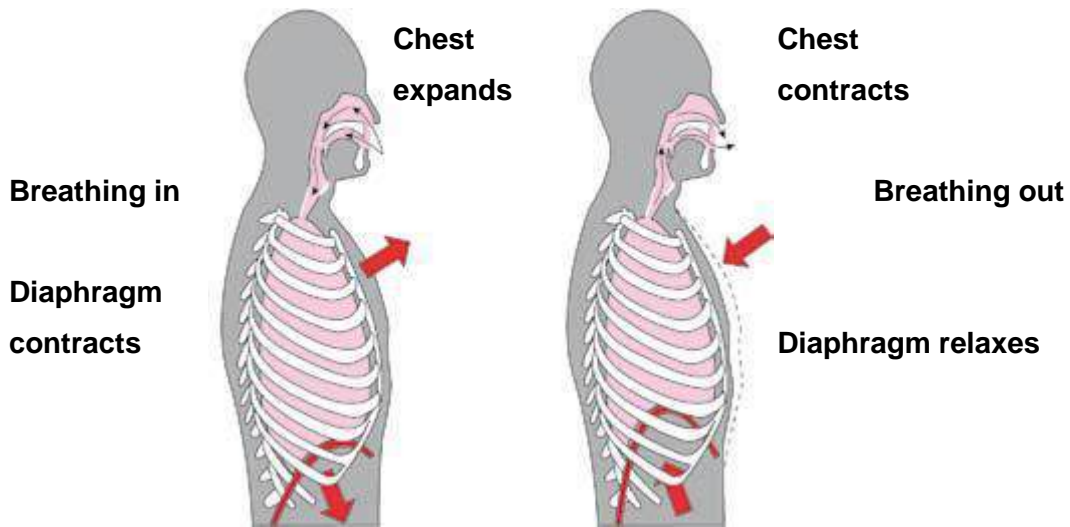


Figure 1 - Diaphragm's Role in Breathing (Adapted from Brain; 2006) 1: Diaphragm's Role in Breathing. (Adapted from Brain, 2006)

Poor positioning of patients can affect the function of the diaphragm and increase their shortness of breath. It is important to discuss the best position for each patient with your physiotherapist.

Any injury to the rib cage can also affect the ease with which a patient can breathe. It will be important to ensure that patients have adequate pain relief before activities in these circumstances.



Activity 4: Major Structures of the Upper and Lower Respiratory Tracts

Label the three diagrams with the following terms and write a brief outline of their main function:

- nasal cavities
- pharynx
- larynx
- trachea
- heart
- left lung
- right lung
- bronchi
- bronchioles
- alveoli

You may use the space provided below to write down a draft response. Record your final answer in the Assessment Guide.

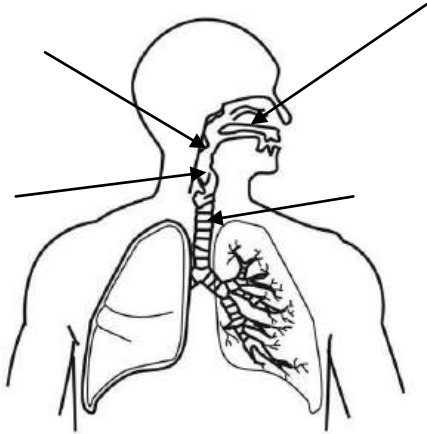


Figure 1

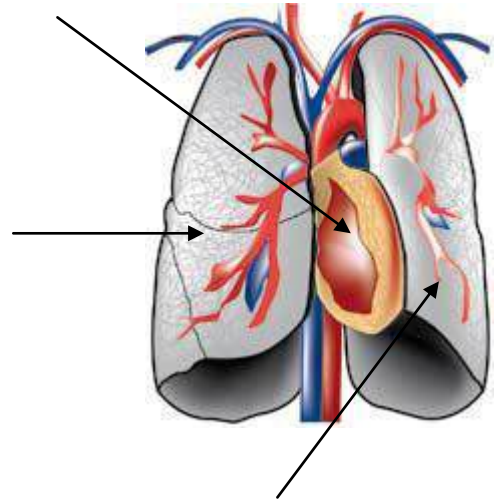


Figure 2

Figure 3 is on the following page.



Activity 4 (continued)

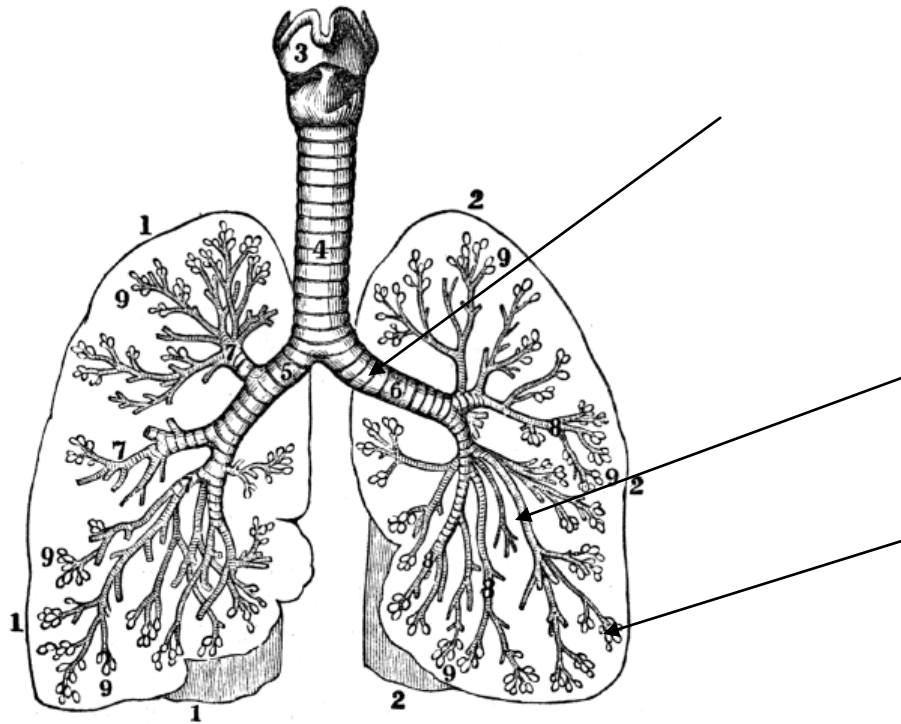


Figure 3

The Circulatory System

The main function of the circulatory system is to transport and pass nutrients, gases, hormones and etc. to and from the body's cells via the cardiovascular and lymph systems and to help fight disease and maintain body homeostasis (equilibrium).

The circulatory system is made up of:

- the cardiovascular system
- the lymphatic system

The cardiovascular system is made up of:

- the heart
- the blood
- the blood vessels

The lymphatic system is made up of:

- the lymphatic fluid
- the lymph nodes
- the lymph vessels

The lymphatic system is a network of tubes throughout the body that drains lymphatic fluid from tissues and empties it back into the bloodstream. The main roles of the lymphatic system include managing the body fluid levels, filtering out bacteria, and housing types of white blood cells. Lymphatic fluid is filtered through the spleen, thymus and lymph nodes before being emptied into the blood (Better Health Channel, 2011).



The health of your patient's circulatory system will impact on their ability to fight disease, move, exercise, recover from illness or surgery, and influence how they participate during treatment sessions. As an AHA, you need to consider these factors in order to gain the patient's confidence, and to allow you to work effectively with patients with circulatory system diseases and conditions.

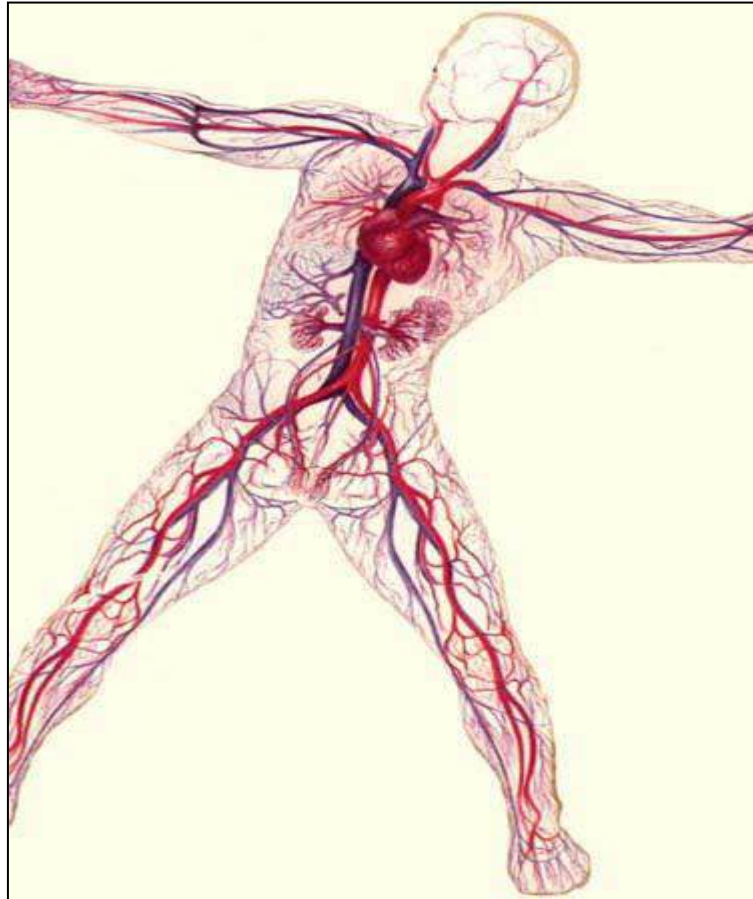


Figure 2 - The Human Circulatory System (Guze, n.d)

There are many conditions which may affect (primarily or secondarily) a person's circulatory system including:

- peripheral vascular disease – reduced arterial blood flow to the peripheries – usually lower limbs
- cardiac conditions affect the pump action of the heart leading to reduced blood flow to vital organs such as in heart failure, heart attack and angina
- lymphoedema - swelling in the limbs due to damage to the lymphatic system e.g., arm swelling after treatment for breast cancer
- Deep vein thrombosis (DVT) - blood clots in the large veins
- Pulmonary embolus (PE) - a blockage of the blood vessels in the lungs by a substance (usually a blood clot) which has come from somewhere else in the body via the bloodstream
- stroke - blockage or bleed in the blood vessels supplying the brain - also called a cerebrovascular accident, or CVA
-

These patients may benefit significantly from a physiotherapy program, by improving their exercise tolerance, and improving their quality of life.

Sometimes the circulatory and respiratory systems are referred to as one system, the cardio-respiratory system.

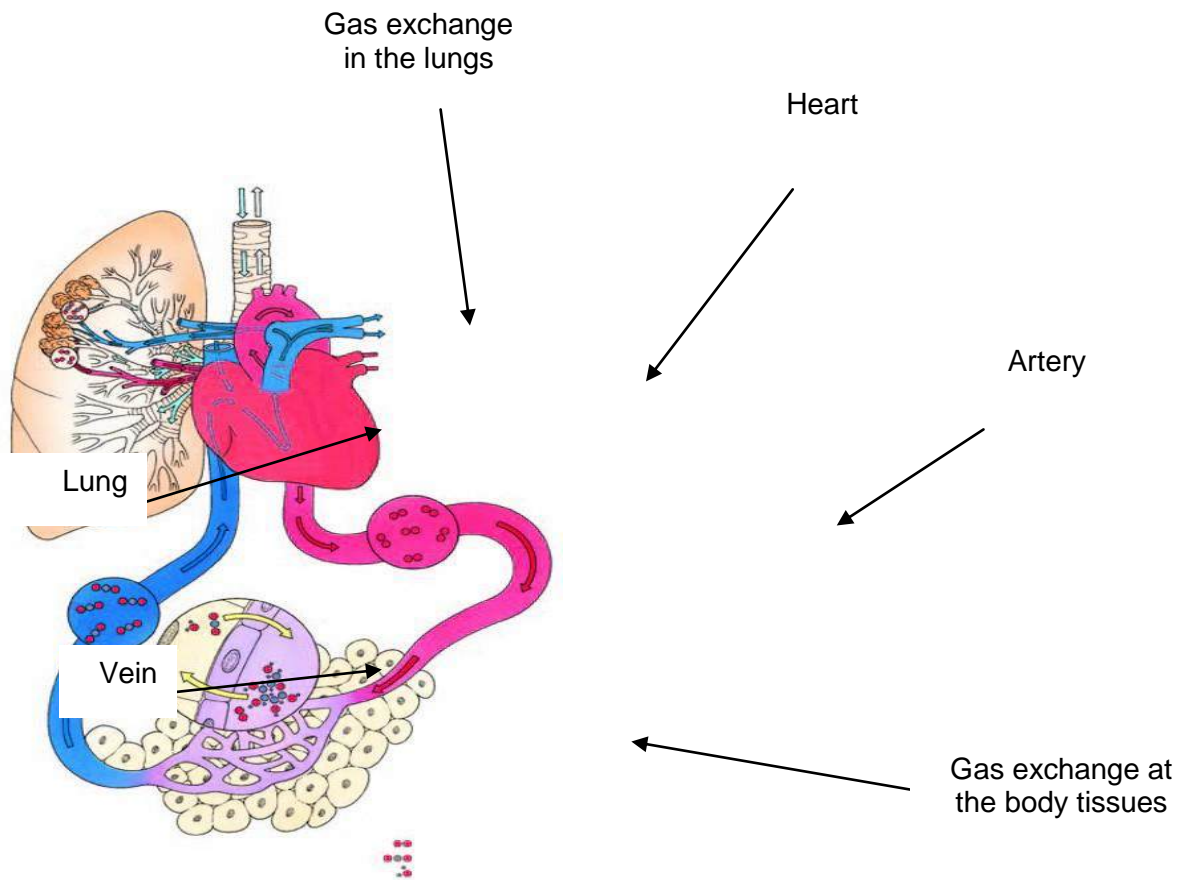


Figure 3 - Gas Exchange (Dorling Kindersley; 2010)

Gas exchange also occurs at the body tissues, where oxygen passes from the blood into the cells, and carbon dioxide and other waste products pass from the cells into the blood for transportation back to the lungs for gas exchange and expulsion from the body.

A very important consideration of patients with circulatory system conditions is determining when you should cease your therapy session. These patients may experience swelling, pain (in chest or limbs), and general fatigue. You should seek out your supervising physiotherapist to discuss some of the many scenarios when treatment should be ceased.

As a general guide you should cease treatment when:

- your patient experiences chest pain
- your patient experiences new or unusual pain, light-headedness, dizziness, shortness of breath or fatigue
- your patient reports the desire to cease treatment
- you are, for any reason, unsure whether or not to continue treatment

This is not an exhaustive list and discussion with your physiotherapist is strongly advised.



It is very important to understand the circulatory system, because as an AHA you may be asked by the physiotherapist to participate in a treatment session with a patient with heart disease, or a patient with another circulatory system condition (e.g. peripheral vascular disease and etc). You will need to have an understanding of some of the possible limitations that these patients may have in order to safely mobilise these patients, and also know when to cease treatment.



Activity 5: Circulatory System

Respond to the case study below. You may use the space provided below to write down a draft response. Record your final answer in the Assessment Guide.



Case Study: Circulatory System

You have been given a copy of a written exercise program that the physiotherapist has prescribed for a patient with heart failure. The physiotherapist has asked you to assist the patient to mobilise and supervise the patient's exercise program within the hospital.

The patient has been walking 20 metres each day with the physiotherapist with supervision and no walking aids (such as a walking stick or a frame). The patient reports feeling very tired, and can only walk 20 metres before they need to sit and rest. They also report having very heavy and swollen legs, and they intermittently experience chest pain.

You are confident about the exercises, and you have previously worked with and received training from this physiotherapist, but you have had limited contact with patients with heart failure.

What steps will you take in order to deliver this treatment safely? Who would you talk to and what information may you need to gather?

The Nervous System

The nervous system may also be called the neurological system.

The main functions of the nervous system are to co-ordinate actions and send messages between different parts of the body.

The nervous system is made up of:

- the central nervous system
- the peripheral nervous system

The central nervous system (CNS) is made up of:

- the brain
- the spinal cord

The peripheral nervous system is made up of:

- the sensory nerves (allowing us to feel)
- the motor nerves (allowing us to move)
- the autonomic nervous system (controls our internal organs and functions e.g. heart rate, digestion and sweating)



Your patient does not have control over the nervous system. However if the nervous system is disrupted in any way, either through disease processes or injury, it will impact on their ability to feel, move, exercise, recover from illness or surgery, and influence how they participate during treatment sessions. As an AHA, you need to consider these factors in order to gain the patient's confidence, and to allow you to work effectively with patients with neurological conditions.

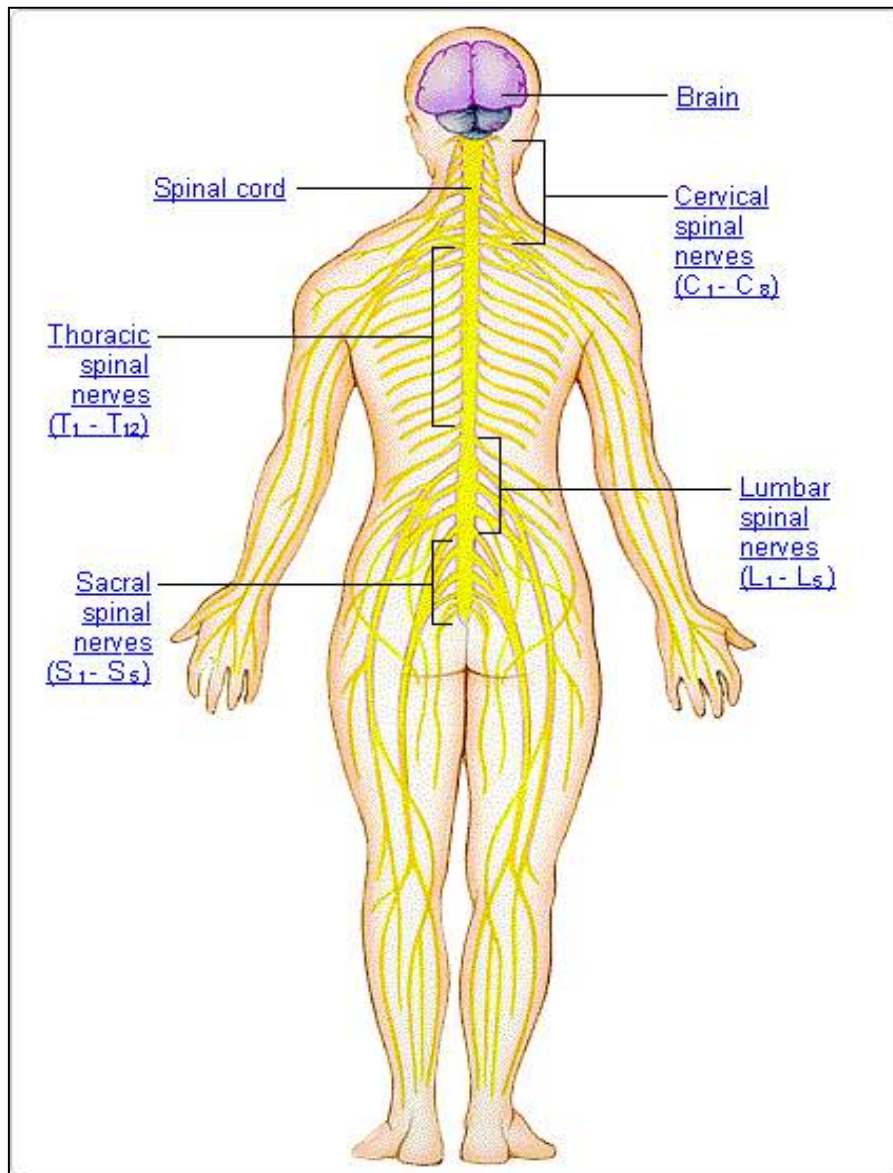


Figure 4 - The Human Nervous System (Laurien; n.d)

There are a large number of neurological conditions which may affect patients you see while working as an AHA.

Neurological Conditions

Condition	Definition
CVA (Cerebral Vascular Accident) or Stroke	Sudden neurological deficit with duration greater than 24 hours, due to a disruption of oxygenated blood supply to the brain or bleeding – symptoms may include weakness down one side of the body, slurred speech, confusion or loss of consciousness.
Multiple Sclerosis	A slowly progressive disease involving destruction of coating surrounding nerves in the CNS - symptoms may include vision problems, muscular weakness, depression, speech difficulties, severe fatigue and pain.
Spinal Cord Injury	Impairment or loss of motor and sensory function after damage to the spinal cord through injury, infection or illness. Symptoms may include paralysis and loss of sensation in legs (paraplegia) or all four limbs (quadriplegia), loss of bladder and bowel function, loss of sexual function.
Parkinson's Disease	Degenerative condition affecting the CNS. Symptoms include tremor, stiffness, slow movements, and disorders of gait (walking pattern).
Traumatic Brain Injury	Damage to the brain as a result of an injury – may be localised due to area of impact, or widespread damage throughout the brain due to the impact forces. The injury may also occur secondary to bleeding or blood clots in the brain.

Many studies have shown the benefits of exercise in neurological conditions. In stroke patients for example, therapeutic exercise has been shown to improve function, quality of life, strength, endurance, balance, and mobility, as well as depressive symptoms.

Exercise may also play an important role in treating and reducing risk factors for further strokes or cardiac events (Myers & Nieman, 2010). Studies have also shown endurance and resistance training can reduce fatigue in patients with multiple sclerosis and therapeutic exercise can increase function and quality of life in people with Parkinson's Disease (Leiberman & Bockenek, 2009).



Activity 6: The Nervous System

Please answer the following questions. You may use the space provided below to write down a draft response. Record your final answer in the Assessment Guide.

What are some of the changes which might occur in a patient who has had a stroke? Consider the areas of physical function, speech, vision and sensation. With reference to these areas, what changes might you need to make in your approach to this patient compared with somebody who has not had a stroke?

Areas of Change	List potential changes in a patient who has had a stroke	List your approach to this patient
Physical function		
Speech		
Vision		
Sensation		
Others		

2.2 Pain

According to the International Association for the Study of Pain (2010), pain is ‘an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.’ It is a vital, protective mechanism that allows us to live safely in an environment filled with potential dangers.

Pain is detected by pain receptors (called nociceptors), which are found throughout the body, but are especially common in the skin, joint capsules, outside layer of bones, and around walls of blood vessels. There are no pain receptors in the brain, making it insensitive to any potentially painful stimuli inflicted on it; and few in the internal organs, which can make it difficult to localise pain in these areas.

Pain may also be referred, meaning it originates in one area, but is felt in another area. For example, pain from a heart attack may be felt in the chest, jaw, or down the left arm, or a pinched nerve in the back may be felt as pain in the leg.

Pain may be divided into acute and chronic pain.

Acute pain is generally the result of tissue injury, the cause is clear, and local treatment of the injury is usually effective in relieving the pain. Treatment of acute pain may involve a combination of analgesia (pain relieving medication), local anaesthetics, steroids, anti-inflammatory medications and ointments, ice, exercise, electrotherapy or physiotherapy, depending on the type and site of pain.

Chronic pain however is more difficult to treat. It may be defined as pain which continues beyond the ordinary duration of time that to the body needs to heal or recover from injury, which has been described as anywhere from four to twelve weeks. Chronic pain may be the result of a chronic disease process i.e. arthritis (inflammation of the joints) or cancer; or due to a factor related to the acute disease process that continues after the disease has resolved, such as damaged sensory nerves causing pain that has no apparent cause (e.g. ‘phantom pain’ which may feel to the patient like a sore toe, even though the leg has been amputated).

Chronic pain may also cause a problem called allodynia, in which people are ‘extra - or hyper- sensitive’ and experience pain in response to stimuli that are not normally painful.

For example, this group of people may experience pain with a breeze on their skin, the pressure of water from a shower hitting their body, or sheets touching the legs.

There are often complex psychological and physiological components involved in chronic pain. It has been suggested that changes occur in the nervous system in chronic pain patients, which may increase the body's reaction to pain signals, or make conventional treatments ineffective, causing ongoing pain perception (Mann & Carr, 2007).

Continuous severe pain may also take its toll on a patient's emotional wellbeing. When pain relief medication doesn't work and pain doesn't respond to the usual therapies, the psychosocial impact can be significant. For example, a patient may develop a tolerance to a particular pain medication, requiring increased doses or the addition of other medications, which may have side effects like sleep disturbances, weight gain and depression.

It is therefore vital that chronic pain management involves not only treatment of pain symptoms, but also counselling or anti-depressants, to assist in decreasing the **perceived** level of pain. There is a lot of evidence that quality of life for patients with chronic pain is linked more to beliefs about pain than to the intensity of the pain they are experiencing.

With pain, it is important to always consider that:

- Pain is subjective and personal.
- Pain perception can be influenced by our personality, emotional state, cultural background, age, gender and coping mechanisms.
- Previous experiences with pain can affect future experiences.
- Pain is a protective mechanism which helps to guard against injury. Pain can however inhibit muscle activity and limit a person's participation in an exercise program. Pain inhibition may be quite involuntary- the patient may be really trying to contract a muscle but the body won't allow this to happen. You will see this quite often after knee surgery, where, even with good pain relief and genuine effort from the patient, their quadriceps muscle will not contract

Patients therefore can report pain very differently. As an AHA you need to be aware of the physical signs and symptoms which may show that a patient is in pain. This becomes very important with patients who are unable to communicate, (e.g. have had a stroke affecting their speech), who do not speak English, who may be confused or who have dementia.

Observe your patient. Some of the signs of pain include:

- grimacing facial expression
- withdrawing from touch
- reluctance to move
- protective body posture, (e.g. hunching over after abdominal surgery, or limping on a painful leg).

Question and communicate with your patient.

Ask your patient to describe any pain before you start. You can then monitor any changes as you go. A useful scale is the McGill Pain Questionnaire, developed by Melzack (1975). Simply ask what and where their pain is and then ask the patient to grade it between 0 and 10. Zero means no pain and 10 is maximum pain.

Pain can be a very important determinant of a physiotherapy exercise program. As an AHA, you need to report any new or different pain to your supervising physiotherapist.



You may find that patients will report pain to you while performing an exercise program. It is natural to get some aching in muscles or joints with new or more intense exercises than people are used to, or to have pain related to their condition. However, if a patient reports sudden onset of chest, jaw or left arm pain, or a new, severe pain, it is important to cease the exercise and report this to medical staff immediately for review.

It is important to be able to recognise that signs of physical distress that can be common to pain may also be relevant to other medical situations.

Some of the following physical symptoms are observed in patients in pain, but could also occur if someone is about to faint or lose consciousness:

- clammy and sweaty on touch
- change in facial colour or pale
- nausea
- fast, deep breathing
- confusion
- blurry vision or spots before eyes
- ringing in the ears

There are additional physical signs of emergency that you should be aware of as they can all be signs of heart attack:

- fullness or squeezing pain in chest
- jaw pain, toothache, headache
- heartburn or indigestion
- upper or middle abdomen discomfort
- arm pain
- upper back pain



Further information on “how will you recognise a heart attack” can be found on the Heart Foundation website at: <http://www.heartattackfacts.org.au/Home.aspx>.

The following physical symptoms can all be symptoms of a stroke:

- sudden numbness or weakness of face, arm or leg
- altered sensation or loss of voluntary movement control
- confusion or trouble speaking
- trouble seeing out of one or both eyes
- loss of balance or co-ordination
- sudden severe headache



Further information on “what is a stroke” can be found on the Stroke Foundation website at: <https://strokefoundation.org.au/About-Stroke>

All members of staff need to be familiar with emergency procedures and area alert tones as well as the location of the following:

- emergency buzzers and trolleys
- fire exits
- fire extinguishers and fire break glass and alarms

Activity 7: Pain

You have been asked to assist with the mobilisation of a patient who had abdominal surgery three days ago.

Please answer the following questions. You may use the space provided below to write down a draft response. Record your final answer in the Assessment Guide. You may find it useful to discuss these questions with your supervising physiotherapist and refer to the patient information guide on “Physiotherapy advice after abdominal surgery-Information for patients”

(Churchill Surgical Physiotherapy Team, Oxford University Hospitals NHS Trust, March 2015, <http://www.ouh.nhs.uk/patient-guide/leaflets/files/11733Pabdominal.pdf> sited 25 January 2017.

1. What are the reasons for mobilising a patient with post abdominal surgery even though they may be in pain?

2. What would be normal for a patient post abdominal surgery with regards to their pain?

Activity continues on the next page



Activity 7: Pain (continued)

3. What strategies would the physiotherapist recommend to minimise the patient's pain during treatment? Consider strategies for chest care, helping the patient to move from lying to sitting, mobilising or sitting out in a chair.

4. When would it be necessary to cease mobilising the patient with respect to their pain level? Describe the signs and symptoms that the patient may be showing.

2.3 Psychological Effects

Injury or disease causing pain and disability can have both a physical and psychological impact on a patient. A physical disability may be more obvious, for example a stroke patient cannot move their arm and leg, while a psychological reaction to a disability may be less obvious and present in various ways:

- altered mood
- feelings of frustration
- decreased self esteem and self worth
- decreased confidence
- anger
- depression and mourning
- anxiety
- feelings of isolation
- grief
- denial

Any illness or injury, whether short or long term, has the potential to have a psychological impact on:

- the patient
- their family
- friends and colleagues

As an AHA your main role is to complete a program prescribed by a physiotherapist with your patients, but you also need to have an appreciation of the psychological effects on the patient. Getting patients to consent to participating in an exercise program while they are in significant psychological distress can be a difficult task. Often these people have very poor motivation and are very reluctant or fearful of exercise.

Ongoing or severe pain may also take its toll on a patient's emotional wellbeing. When pain relief medication doesn't work and pain doesn't respond to the usual therapies, the psychosocial impact can be significant. For example, a patient may develop a tolerance for their pain medication, requiring increased doses and multiple medications, which can lead to sleep disturbances, weight gain and depression.

There are many approaches and techniques to help patients cope with these emotional and psychological reactions to pain and disability. The following general strategies are often used by clinicians to motivate patients and reduce the psychological impact of their disability:

- gather information about the patient
- listen to the patient
- participate in regular exercise
- build rapport
- involve family and friends with the treatment
- create a relaxed and supportive environment
- remind the patient about goals they may have set with the physiotherapist (e.g. goals around exercise session times, or the goal of going home from hospital)
- be confident in your role
- be prepared to work flexibly in order to reduce barriers to participation
- discuss the patient with your physiotherapist regularly and inform them about any psychological or emotional issues impacting on treatment
- request your supervising physiotherapist review the patient if you have any concerns

Maintaining effective reporting with your physiotherapy supervisor is essential so that these patients may be referred to other disciplines for review, including:

- the treating medical team
- a social worker
- a psychologist or psychiatrist
- other allied health professionals etc

Other strategies the physiotherapist might use to improve participation in therapy include:

- setting short and long term goals
- changing the environment where exercise occurs
- setting up a reward system for when goals are achieved
- keeping activities functional and fun



Activity 8: Psychological Effects of Disability

You have been asked to assist with the mobilisation of a patient who has been an inpatient in hospital for over one month. This patient's mood has deteriorated progressively over time. He is becoming more reluctant to participate in therapy sessions, and he has now been diagnosed with depression.

Please answer the following questions. You may use the space provided below to write down a draft response. Record your final answer in the Assessment Guide.

1. What are some of the signs and symptoms you might expect to see in a patient with depression? You may wish to look this up in a textbook or on the internet.

2. What are some strategies you could use, (in conjunction with your physiotherapist), to improve this patient's participation in the treatment sessions?

Key Points

This section of the Learner Guide has covered information related to the topic of Body Systems. On completion of this section you should be able to:

The Respiratory System:

- List the main functions
- Identify the basic anatomy and physiology of the lungs.
- Identify some of the signs and symptoms of respiratory distress

The Circulatory System:

- List the main functions
- Identify the major structures
- Identify some of the signs to cease treatment

The Nervous System:

- List the main functions
- Identify the major structures
- List some of the common neurological conditions which you may come across

Pain:

- Describe different types of pain
- Predict basic reaction to pain within the body.
- Be familiar with different disease processes and the benefits of and considerations for exercise

Psychological effects:

- Name psychological effects of disability due to injury and disease and strategies used to cope with this.

3. Programs and Treatments

This topic covers information about:

- Rationale and Processes for Treatment
- Equipment and Materials
- Monitoring Requirements

Activities in this topic cover the following essential skills:

- Complete electrotherapy support and respiratory support
- Apply understanding of the danger of adverse events occurring with electrotherapy treatments
- Use procedures to move and position patients in a safe manner
- Work under direct and indirect supervision
- Work as part of a (multidisciplinary) team
- Report back changes in client performance
- Communicate effectively with clients in a therapeutic/treatment relationship
- Communicate effectively with supervisors and co-workers
- Work effectively with non-compliant clients
- Use time management, personal organisation and establishing priorities

3.1 Rationale and Processes for Treatment

Rationale means the reasoning behind the choice of treatment type to be provided. Physiotherapists and allied health assistants can have a positive effect on many conditions which lead to hospital admission and also can have a positive effect on people within the community and so prevent hospital admission.

Some of these conditions include:

- respiratory conditions
- neurological conditions
- poor mobility especially in frail older people
- pain
- circulatory conditions
- mental health conditions
- musculo-skeletal conditions

Physiotherapy treatment can also have a positive effect on reducing medical complications including:

- pulmonary embolism
- deep vein thrombosis
- lung collapse
- sputum retention (mucous or phlegm in the lungs)
- pressure ulcers



Physiotherapy aims to assist patients to return to optimal functional ability, even in the presence of ongoing injury, illness or disease. As an example, when a patient has had a stroke, the goal may be either to help them learn to walk again, or to gain as much independence as possible through use of equipment such as a wheelchair. The aim is always to utilise skill and knowledge to help the patient to regain as much function as possible.

As an AHA you help support that process.

It is the responsibility of the physiotherapist to determine the rationale for physiotherapy treatment.

The physiotherapist's decision is based on information gathered from:

- medical chart and supporting tests and investigations
- initial referral
- specific medical instructions, limitations and standardised treatment plans, often called clinical pathways (see next section)
- examination of patient
- interpretation of relevant history and diagnostic or assessment findings
- patient's goals (immediate and discharge)
- re-assessment of patient

Other considerations may include:

- staff skill and technique
- available resources
- willingness and ability of patient to participate
- education needed for patient and family to promote recovery
- access to other health services



While a treatment may appear simple, treatment decisions are based on extensive knowledge and education, and well developed clinical reasoning skills. The decision to modify treatment is made by the physiotherapist, in order to ensure patient safety at all times.

While as an AHA you are unable to change a patient's treatment yourself, you are able to have input into treatment decisions by discussing your work with your physiotherapist. The information you record and your observations are very important in helping to determine appropriate treatment for your patients.

Clinical Pathways

Many clinical areas are now using clinical pathways. Clinical pathways are well-established forms of clinical communication, which outline specific instructions and checklists relating to what a patient should be doing on each day during their recovery. They provide a standard process and rationale for treatment.

Examples of conditions where you may see clinical pathways include:

- pressure injury management
- orthopaedic surgery
- cardiac surgery
- general surgery procedures
- falls and mobility management

For example, an orthopaedic surgeon may have a clinical pathway outlining specific instructions on positioning and weight bearing for a patient who has had a total hip replacement (THR). This will guide your physiotherapist about what this patient should be doing each day in terms of mobility, nursing care, medical management and etc. Clinical pathways are based on what would normally be expected for a patient with a particular condition during an uncomplicated hospital admission.

Patients may take longer than expected to progress along their clinical pathway due to unexpected complications such as infection, or a cardiac event, so they are a guide only. The Clinical pathway is usually kept on a clip board at the foot of the patient's bed, and looks a bit like a checklist. Ask your supervising therapist to show you one.

When working under the direction of a physiotherapist, you may be required to document on these clinical pathways, treatments such as:

- mobility exercises performed
- orthopaedic splints and slings re-applied at end of treatment session



Activity 9: Rationale and Processes Part A

Respond to the case study below. You may use the space provided below to write down a draft response. Record your final answer in the Assessment Guide.



Case Study: Rationale and Processes

You have been working as an allied health assistant independently in a community setting for one year. One of your patients, who you are seeing for mobility exercises, has developed a chest infection.

Under the guidance of your supervising physiotherapist, you are treating another patient for what you believe is a similar infection, and both patients are about the same age. Because of this, you feel confident that you can help your first patient.

He really looks unwell and he asks you to do something to help, reporting that he can't sleep because of the coughing.

1. Outline your response to this patient's request. Consider who you may need to communicate with.

2. What information would you report to your physiotherapist?



Activity 9: Rationale and Processes Part B

Respond to the case study below. You may use the space provided below to write down a draft response. Record your final answer in the Assessment Guide.



Case Study: Rationale and Processes

You are working with a person who is in hospital with an exacerbation of COPD (worsening of their chronic obstructive pulmonary disease due to an infection). The patient has needed extra oxygen through nasal prongs or a mask, but now they are getting better, they need to 'wean off' the oxygen in order to return home. You have just mobilised this person without using their oxygen cylinder, as per the physiotherapist's request.

You have assisted the patient back to bed and the physiotherapist has requested you re-apply the patient's oxygen. You were not the person who removed the oxygen before treatment, and the oxygen has been turned off.

1. What should you check to ensure that this is done safely?

2. What would you need to record and where would you record these details?

Therapy Support Rationale

When working as an AHA, you may be involved in treatment programs with numerous different goals. Patient-specific exercise programs and exercise for mobility are covered in the other units of competency in the physiotherapy skill set. This section will cover the areas of respiratory physiotherapy, and electrotherapy treatments with which you may also be required to assist in your role as an AHA.

Respiratory System treatment

A major focus of physiotherapy treatment, particularly within the hospital setting, is maintenance of respiratory function. Patients in hospital often may be:

- unwell
- fatigued
- confined to bed for one reason or another (e.g. in traction or medically unstable)
- in pain
- awaiting or recovering from surgery

These patients are at a much higher risk of developing respiratory complications such as pneumonia. After all, there are a lot of sick people in hospital so your patients will be exposed to many forms of illness. Exercise programs developed by the physiotherapist can be very effective in reducing this risk.

You may be asked to complete a respiratory support program with a patient, which may involve:

- mobilising (taking the patient for a walk, with or without a walking aid)
- deep breathing exercises
- supervising bed or gymnasium exercise programs to help lung expansion
- positioning a patient to assist with air entry into the lung or to assist with sputum removal.
- use of incentive spirometry (e.g. Triflo)
- use of PEP, Flutter, Acapella and etc. (these are all devices that may help a patient to achieve the goals of sputum removal)



Your supervising physiotherapist will provide you with the instructions and training you need to perform these tasks.

You will need to monitor and report the following to your physiotherapist, and record in the medical chart:

- program completed
- sputum produced
- reports from patient (e.g. fatigue), etc.
- any signs of adverse reaction to the treatment, or unexpected events which occur during treatment, (e.g. Sudden or increased shortness of breath, significant pain, blood in sputum, wheezing or other abnormal breathing sounds, blue lips, sweating, flaring of the nostrils etc).



These adverse reactions need to be reported promptly to your physiotherapist, nurse or medical team. The monitoring and reporting component of supporting the patient's program is vital to ensure effective and safe treatment.

Mobility Treatment

Patients in hospital and in the community are often limited with their mobility and this in turn impacts on their respiratory function. Physiotherapy treatment programs are very effective in improving and maintaining a patient's mobility and this can have important flow-on effects by making sure their lungs are also 'exercised', thus helping to prevent lung collapse and aid the removal of secretions.

Exercising for Mobility is covered in detail in the unit *HLTAH403B Deliver and monitor exercise program for mobility*, but here is a quick overview.

You may be asked to complete a mobility program including:

- walking
- sit to stand
- balance training
- stair climbing, etc

Some of the equipment you may use during mobility treatment sessions includes:

- walking aids (rollator frames, four wheel walkers, pick-up frames, walking sticks, axillary crutches, forearm crutches and four point sticks).
- walk belts
- hoists (sling hoists, sit to stand hoists and walking hoists)
- wheelchairs
- slide boards
- parallel bars

You will need to monitor and report the following to your physiotherapist, and/or record in the medical chart:

- distance mobilised
- exercises performed
- aids used
- reports from patient (e.g. fatigue, pain)
- adverse events (e.g. falls, pain etc). These adverse reactions need to be reported promptly to your physiotherapist, nurse or medical team

Mobilising a patient works on their respiratory system like this:

- muscles require more oxygen when they are working than when they are at rest
- an 'oxygen demand' is created
- the body responds to this demand by:
 - Increasing the respiratory rate (number of breaths per minute) to get more oxygen into the lungs.
 - Increasing the depth of each breath so that more of the alveoli (small air sacs) are inflated. This means that greater area of lung is involved in oxygen exchange
 - Increasing the heart rate so that blood is moving around the body more quickly. This allows for the pick-up of more oxygen by the blood as it passes through the lungs. It also allows for the drop-off of carbon dioxide (a waste product of muscles in action) from the blood into the lungs. This is then breathed out

Electrotherapy Support

Electrotherapy is the use of electrical energy or physical agents as a medical treatment (Singh, 2005). Electrotherapy treatment may be used to:

- reduce pain
- improve range of motion
- reduce swelling
- improve wound healing
- improve circulation

Some of the forms of electrotherapy and physical agents used are included below:

- ultrasound (heating or no heating)
- wax baths
- infrared lamps
- hot packs

- cold packs
- electrical stimulation (e.g. TENS or FES- ask your therapist about these if you are not familiar with them)
- laser

(Australian Physiotherapy Association, 2001)



Contra-indications are absolute reasons **not** to use this type of electrotherapy (modality). **Precautions** are things that **need to be considered**, when deciding whether this modality is appropriate. You are not required to make these decisions.

Your physiotherapist is responsible for making treatment decisions, (including modality, dose, duration, delivering warnings, identifying contraindications and etc.). It is however important that you understand these treatment modalities because you may be required to support your physiotherapist in their use.

Working as an allied health assistant with a physiotherapist may require you to be involved in setting up this equipment, preparing the patient, and supervising the electrotherapy treatment. Electrotherapy use varies significantly between facilities and it is important that you understand what your role is within your facility, and the risks associated with electrotherapy use.

Some of the potential complications with electrotherapy include:

- burns (heat, chemical, electrical - even ice burns)
- skin irritation
- sensation loss
- eye damage (with laser)
- muscle damage from excessive stimulation
- electric shock

If you identify any complications during the use of electrotherapy, you must switch off the equipment immediately in a manner appropriate to the modality, (or remove heat or cold pack), and immediately notify your physiotherapist.

If you encounter any medical emergency during this treatment session, start the established medical emergency protocol as per your facility. A medical emergency is an injury or illness that poses an immediate risk to a person's life or long-term health.



The physiotherapist is responsible for providing specific instructions for use with electrotherapy, and must be on site and available to respond immediately in the event of an adverse reaction or an emergency.

3.2 Equipment and Materials Management

In the role of an AHA, you will be required to competently use a wide variety of equipment. Equipment can be placed into a number of groups:

Purpose	Examples
Functional	chairs, treatment beds, trolleys
Treatment	electrotherapy, orthopaedic and respiratory
Supportive	slings, splints, therapeutic clothing-braces
Mobility aids	walkers, crutches, walking sticks and frames
Mechanical lifting devices	hoists, tilt tables, lateral transfer air mats
Medical and Emergency	Defibrillators, SAED resuscitation, O ₂ delivery

Many types of equipment and materials are used in exercise and positioning programs.

Equipment	Use
Arm cycles	Can be used to improve endurance and cardiovascular fitness
Cycle ergometers	Can be used for lower limb strengthening, endurance and cardiovascular training.
Free weights	Can be used for strength training - developing the strength and size of skeletal muscles
Pulleys	Can be used for strengthening upper and lower limb muscles. May also be able to assist clients in doing exercises in an active-assisted manner e.g. straight leg raise (SLR)
Rowing machine	Can be used to improve endurance and cardiovascular fitness
Stair climber or stepper	Can be used to increase cardiovascular fitness and endurance
Standing frames	Standing frames can be used as part of a postural management

	<p>program, and can assist to increase independence, mobility, and self-esteem. Standers may be used by people with mild to severe impairments, including spinal cord injury, traumatic brain injury, cerebral palsy, spina bifida, muscular dystrophy, multiple sclerosis and stroke.</p>
Exercise balls	Can be used as part of strengthening programs or balance and stability training
Resistance bands	Can be used for strengthening muscles isometrically and isotonicly
Tilt tables	Can be used with clients who have had periods of bed rest and are too weak to stand, or to reintroduce to a vertical position. Tilt tabling can be used to facilitate weight bearing, prevent muscle contractures, improve lower limb strength and increase arousal.
Treadmills	Can be used for exercise testing, to improve endurance and cardiovascular fitness, and in gait retraining
Incentive spirometer	Can be used with clients post-operatively or in appropriate clients with poor respiratory effort or signs of collapse in the lungs. The client should be encouraged to take a slow deep breath in, holding the breath for 2 to 3 seconds at full breath in, with expansion of the lower chest.
Walking frames (rollators, four wheeled walkers, and hopper frames)	Can be used with any client who needs additional support to maintain balance and stability during mobilisation.
Wedges, cushions and foam	Can be used to support limbs and trunk in a desired position, or prevent unwanted movement
Weight-training machines	Can be used for strengthening exercises

Equipment Inventory and Storage

Allied health assistants are usually responsible for maintaining an inventory of equipment, and reporting to the physiotherapist any items that require attention or maintenance, beyond simple cleaning and local infection control measures.



Your facility will have protocols for standard cleaning of equipment and specific infection control measures, with which you need to be familiar. Many facilities also have an infection control department that can provide further information on products to be used in specific infection control situations.

Equipment inventories should record information such as:

- model, make and colour
- name of manufacturer
- year purchased and cost
- any identifying numbers or codes
- unit allocated and location stored
- safe working load (SWL)
- asset number
- when the item is due for maintenance or replacement
- audit date and comments regarding condition of equipment
- identification of lost equipment



All equipment must be labelled with safe working load (SWL), which identifies the upper limit of load for which it can safely be used. This information is essential to reduce risk of injury to the patient, yourself or others.

Equipment inventories and audits allow your department to identify faulty equipment, lost equipment and equipment shortages.

Allied health assistants are also responsible, (along with other staff members) for storage of equipment. You should establish areas where clean equipment is stored, and ready for use, and other areas where used equipment which requires cleaning, is stored, and ensure that all staff are aware of these areas.

Some equipment is single patient use, so as an AHA you may be responsible for maintenance of appropriate stock levels, ordering and disposal of this equipment (see chart below).

Cleaning of Equipment

Allied health assistants are also responsible for cleaning of equipment and some departmental and clinical areas, as per infection control policies and procedures. This is essential to ensure that infections and diseases are not spread from patient to patient. You should discuss with your physiotherapist any concerns you have with cleaning of equipment. There will be specific chemicals to be used in different situations: wiping down an exercise mat, where body fluids such as pus, urine or blood were spilled, will require different treatment from a mat which has just gathered dust from storage.

Management of Stock

In many departments, allied health assistants are required to assist with stock management. You may be required to identify low stock levels, order stock and manage the department store room. Included below is an example of a checklist which could be used to manage stock and establish a cleaning regime.

Stock Checklist

Environment	Date	Comments	AHA initial
Linen replenished		<i>Order patient gowns Med x 4</i>	
Electrotherapy trolley		<i>Wheel has been replaced</i>	
Cleaning materials		<i>Well stocked</i>	
Furniture		<i>Wiped down with AGAR solution due 2 days</i>	
Infection control		<i>Fully stocked gloves all sizes and order M masks</i>	
Respiratory room		<i>O₂ cylinder empty—added additional from stock</i>	
Emergency buzzers		<i>Tested – nil problem</i>	
Call buzzers		<i>Bay 2 has loose lead - Fammis done</i>	

Equipment	Date	Comments	AHA initial
Mobility aids		<i>Walker 3 requires maintenance brakes</i>	
Hoists/treatment beds		<i>Wiped down with AGAR solution</i>	
Stock cupboard 1		<i>Corset, braces and stockings fully sized and stocked</i>	
Stock cupboard 2		<i>Order more black pens + sticky notes</i>	
Exercise stock		<i>1 kg weights –contact PT replace</i>	
Treadmill and bikes		<i>Bike 2 needs new pedals soon-report PT</i>	



Activity 11: Equipment and Materials

Respond to the case study below. You may use the space provided below to write down a draft response. Record your final answer in the Assessment Guide.



Case Study: Equipment and Materials

A large group of patients has been using the gym for an exercise session this morning. The room was re-arranged to accommodate the number of people, and some equipment may have been moved. The floor looks wet in some places, but some of the patients had water bottles so it could just be water. The physiotherapist is going to use the gymnasium after lunch.

1. What would you do to ensure the gymnasium is safely prepared for the afternoon session?

3.3 Monitoring Requirements

As an allied health assistant you will be required to monitor:

- your work and working relationships
- your treatment
- your patients while they are completing their program

Monitoring Work and Working Relationships

This information is essential to ensure that you are working as part of an effective healthcare team. You need to monitor your relationships with:

- your physiotherapist
- your patients
- other members of the health care team; and
- patients' families

Regular performance appraisal and development (PAD) should be completed with your supervisor, which formalises this monitoring process and assists in improving work performances. PADs are also a useful means of communicating your training needs to your supervisor, especially if you do not feel confident with a particular task.

Monitoring Treatments

Monitoring treatments allows us to determine whether treatment has been effective, and allows modification of treatment, so goals are achieved. Monitoring also allows you to build up knowledge about what to expect from treatment.

Naturally, during any treatment intervention, it is important to closely monitor patients for any form of adverse reaction. It may be important to do pre- and post-exercise measures of blood pressure, heart rate and oxygen saturations, as well as test blood sugar levels in clients with diabetes. This may be done by the nursing staff.

Things to look out for include:

- pallor (skin becoming pale)
- excessive sweating or clamminess
- sudden or excessive shortness of breath not related to increased activity, (e.g. increased breathing rate, 'gaspings' for breath etc)
- increased cough or wheeze
- light-headedness or dizziness
- musculo-skeletal pain

- nausea or vomiting
- confusion
- chest heaviness, pain or tightness, angina (referred chest pain originating from the heart)
- rapid heart rate, palpitations or irregular heartbeat*

*You may not be able to observe these signs unless the client is wearing a heart monitor. Clients may however complain of palpitations or a 'racing' pulse.



Delayed onset muscle soreness (DOMS) is the pain or discomfort often felt 24 to 72 hours after exercising, which generally eases within 2 to 3 days. This can be quite a common side-effect to any new exercise regime. However in some client groups, such as clients who have had a stroke, this muscle soreness may impair their function and ability to perform activities of daily living (ADLs). **It is important to prevent overworking the muscle groups for these clients.**



The National Physical Activity Guidelines for Australians were developed to promote the minimum level of physical activity required for good health. Further information regarding the health benefits of physical activity may be obtained from:

<http://www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-phys-act-guidelines>

Providing feedback to your physiotherapist about treatment progress forms a vital component of the physiotherapist's monitoring of the exercise program of each patient. Information which you should provide to your physiotherapist includes:

- components of the program completed or not completed
- any subjective patient reports, e.g. pain, fatigue
- adverse events during treatment, e.g. falls. Please note: if you do experience any adverse events during treatment, an incident report will need to be completed
- your subjective reports of the treatment session

Monitoring Patients

It is vital to monitor patients while they are completing their program. Monitoring may be subjective reports, or specific monitoring tools/measures. There are many measures which may be used to monitor patients, including:

- Rating of perceived exertion (RPE) Scale. This requires that the patient rate their perceived exertion against a scale. A commonly used RPE scale is the Borg's Scale included below. The patient rates their effort from 6–20. This scale is often used for cardiac rehabilitation, respiratory testing, and walking programs. It can also be used to set the exercise intensity, by asking a patient to walk at a speed which causes a rating of, for example 11 (fairly light effort). Your physiotherapist will set the level at which they want someone to work and you may be required to monitor them.

The Borg Scale - Rating of Perceived Exertion

Rating Score	How much effort you feel you are using when performing any activity or exercise
6	
7	Very Very Light
8	
9	Very Light
10	
11	Fairly Light
12	
**13	Somewhat Hard **
14	
15	Hard
16	
17	Very Hard
18	
19	Very, Very Hard
20	

- Heart rate (HR). A patient's HR may be monitored during an exercise program prescribed by the physiotherapist. HR can provide a guide about the intensity at which an individual is exercising. Below is a table which converts HR in terms of beats per minute (bpm) into an RPE. Your physiotherapist will set the desired HR for each patient, but you may be required to monitor a patient while they are completing their program to ensure that they maintain their HR within the desired range.

Heart Rate	RPE	Classification
< 90 bpm	< 9	very light
~ 100 – 110 bpm	10 - 11	light
~ 120 – 130 bpm	12 - 13	moderate
~ 140 – 160 bpm	14 - 16	heavy
> 160 bpm	>16	very heavy

- Vital Signs Monitoring. These are measures like heart rate (HR), blood pressure (BP), O₂ saturations (oxygen levels in the blood), and respiratory rate (RR). A physiotherapist may record these results to ensure that the exercise intensity is appropriate, or to assess improvement with an exercise program. They may also be used to assess whether it is appropriate for a patient to participate in a physiotherapy intervention. As an allied health assistant, you may be required to record some of this information, and it is vital that you know where the equipment is stored within your facility. Normal values are reported in the table below. These normal values are for fit and healthy people. Some of your patients will never display the normal values listed below.

Normal Values

SYSTEM	NORMAL
Heart rate (adult)	60-100 bpm*(at rest)
Blood pressure	120/80 mm Hg
O ₂ saturation	97 -100 % on room air
Respiratory rate	12-20 per minute

- Additional monitoring. Patients may have lots of monitoring or other devices attached to them. Just a few examples include electrocardiographs (ECG), arterial lines, extra-ventricular drains, oxygen saturation monitors and etc. You need to discuss with your physiotherapist any other monitoring devices which you may come across.



Patients with a spinal cord injury, particularly those who have tetraplegia, may suffer from a condition called autonomic dysreflexia. This is an overactivity of the autonomic nervous system which leads to a sudden onset of excessively high blood pressure.

This is a medical emergency.

It can be triggered by any painful or strong stimulus below the level of the injury, which may include bladder or bowel distension, urinary tract infection, scrotal compression, menstruation, gallstones, catheter kinking or even constrictive clothing. Signs and symptoms include elevated blood pressure, pounding headache, profuse sweating, red blotches on skin, flushed face and goose bumps. It is important to remember that patients with a spinal cord injury generally have a lower than normal resting blood pressure, therefore may be symptomatic with a blood pressure in what would be considered the normal range for the general population.

Patients should be sat up with legs dangling down if possible, and the blood pressure should be regularly monitored. It is important to try to identify the source of the irritation and relieve it as able. The most common causes are bladder, bowel and skin, so check the catheter or the patient should self catheterise; check the bowel; and loosen any restrictive clothing. If blood pressure does not reduce or the cause cannot be found, the patient may require pharmacological intervention and should seek urgent medical treatment.

During the session, it is important for clients to be aware of the Borg's or rate of perceived exertion scale (RPE) and be regularly reviewing the level at which they are working. It is also worthwhile to monitor pain levels during exercise, using a visual analogue scale (VAS) or numerical scale.

Monitoring and Assessment Tools

As part of treatment, your physiotherapist will use a wide range of assessment tools. Some of the more common assessment tools that you may come across, and potentially be involved in using, include:

- 6 minute walk test (6 MWT)
- 10 metre walk test (10 MWT)
- timed up and go (TUG)
- standing balance tests eyes open and closed (EO and EC) – may also be tested while patient is standing on foam blocks to test balance on an unstable surface
- step up (number of times the patient can step up onto a standard block height over 15 seconds)

- motor assessment scale for neurological patients (MAS)
- clinical outcome variable scale for other rehabilitation patients (COVS)



There are many standardised tools that may be used to assess a patient. The specific tools that are used will depend upon the facility you work in and the preferences of the physiotherapist. The Queensland Health Intranet site is an excellent resource for assessment and monitoring tools.

Recording

Any assessment results must be recorded, and as an allied health assistant you may be required to assist in the recording of these results.

Recording may be:

- Directly into patient's medical chart
- Into a clinical pathways document
- Into parallel physiotherapy records until patient discharge
- Into the patient bedside chart
- Onto physiotherapy assessment forms

The physiotherapist will clarify this, and will ensure appropriate training is given, if required.



If you are asked to do something for which you have not been trained, or in which you do not feel confident, it is your responsibility to tell your supervising physiotherapist so that suitable or further training can be arranged.

Monitoring Service

We have discussed some ways we measure and monitor the immediate responses to our sessions, but what else should we do?

It is all our responsibility to always look for ways to improve the service.

- Are we providing current proven methods of treatment?
- Are we working efficiently?
- Could we use our time better?
- Do we have all the right equipment for what we are doing?
- Do we have all the skills and training needed?
- Do our patients think we are doing a good job?

All staff within the organisation/service should ask themselves these questions regularly and assess the responses critically.

How do we do this?

Evaluate service delivery through:

- patient satisfaction surveys
- staff surveys
- work role evaluations
- performance appraisal and development (PAD)
- audits
- inventories

Information from the evaluation can be used to guide:

- quality improvement activities and initiatives
- professional development activities
- future planning ideas

As part of the allied health team, you should actively and enthusiastically take part in these activities.



Activity 12: Monitoring Requirements Part B

You have been ordering stock for the work area now for a few months, and you have some ideas about how you may be able to do this more efficiently. You think it will save time and make re-ordering easier to track. You may find it helpful to refer to the following quality cycle.

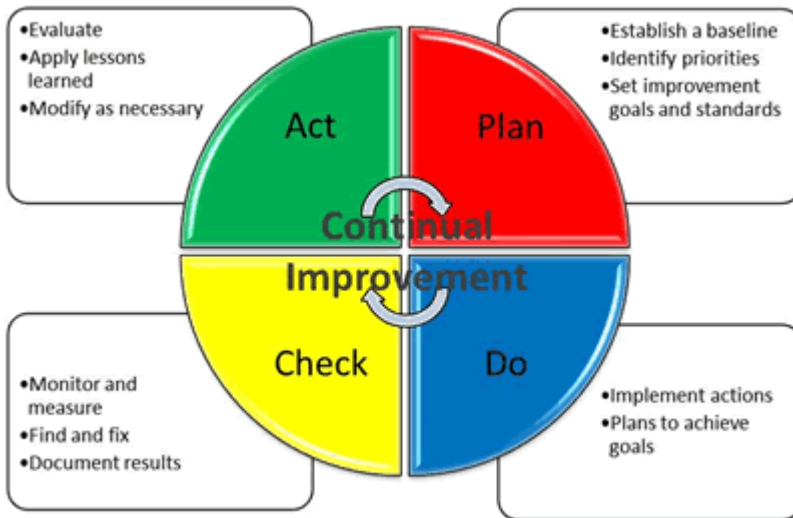


Figure 5 - Quality Cycle (Queensland Health, 2017)

<http://qheps.health.qld.gov.au/darlingdowns/html/quality-safety/quality.htm>

Answer the following question. You may use the space provided below to write down a draft response. Record your final answer in the Assessment Guide.

1. How do you go about doing this?

More space is provided on the next page

Key Points

This section of the Learner Guide has covered information related to the topic of Programs and Treatments. On completion of this section you should be able to:

Rationale and Processes

- Defend the rationale and processes for different programs and treatments including respiratory care, mobility and electrotherapy.
- Outline the use of clinical pathways.

Equipment and Materials Management

- List equipment and materials used in different programs and treatments.
- Explain the components of equipment inventory and the process for equipment cleaning.
- Contribute to stock management

Monitoring

- Perform monitoring requirements for different programs and treatments.
- Identify the dangers of electrotherapeutical modalities and the risks involved to client and staff in the vicinity of such apparatus.
- Identify signs of adverse reactions to different programs and treatments.

SELF-COMPLETION CHECKLIST

Congratulations you have completed the topics for Learning Guide: Assist with physiotherapy treatments and interventions.

Please review the following list of knowledge and skills for the unit of competency you have just completed. Indicate by ticking the box if you believe that you have covered this information and that you are ready to undertake further assessment.

Assist with physiotherapy treatments and interventions

Essential Knowledge	Covered in topic
A working knowledge of the rationale and processes for different programs and treatments	<input type="checkbox"/> Yes
A working understanding of the basic anatomy and physiology of the lungs	<input type="checkbox"/> Yes
A working knowledge of the basic reaction to pain within the body	<input type="checkbox"/> Yes
A working knowledge of the signs of adverse reactions to different programs and treatments	<input type="checkbox"/> Yes
A working understanding of the psychological effects of disability due to injury or disease and strategies used to cope with this	<input type="checkbox"/> Yes
A working understanding of the signs of adverse reaction to different programs and treatment	<input type="checkbox"/> Yes
A working understanding of the dangers of electrotherapeutical modalities and the risks involved to patient and staff in the vicinity of such apparatus	<input type="checkbox"/> Yes
Relevant National and State/Territory legislation and guidelines, including Australian Physiotherapy Association (APA) Guidelines	<input type="checkbox"/> Yes
Roles, responsibilities and limitations of own role and other allied health team members and nursing, medical and other personnel	<input type="checkbox"/> Yes
A working knowledge of factors that facilitate an effective and collaborative working relationship	<input type="checkbox"/> Yes
A working knowledge of the equipment and materials used in different programs and treatments	<input type="checkbox"/> Yes
A working knowledge of the monitoring requirements for different programs and treatments	<input type="checkbox"/> Yes

A working knowledge of record keeping practices and procedures in relation to diagnostic and therapeutic programs/treatments	<input type="checkbox"/> Yes
OHS policies and procedures that relate to the Allied Health Assistant's role in implementing physiotherapy mobility and movement programs	<input type="checkbox"/> Yes
Infection control policies and procedures that relate to the AHA's role in implementing physiotherapy mobility and movement programs	<input type="checkbox"/> Yes
Supervisory and reporting protocols of the organisation	<input type="checkbox"/> Yes



Activity 13: Questions

For this task you are required to answer questions that relate to your work as an allied health assistant in assisting with physiotherapy treatments and interventions.

You may use the space provided below to write down a draft response. Record your final answer in the Assessment Guide.

Questions

- 1 What are the key roles of an allied health assistant?

- 2 What are the key responsibilities within this role?

Activity continues on the next page



Activity 13: Questions (continued)

3 What are the limitations of working as an allied health assistant?

4 One of the roles of the allied health assistant may involve completing an exercise program with the patient to assist the patient in reaching their goal/s. List some of the goals the patient may have for an exercise program.

Activity continues on the next page



Activity 13: Questions (continued)

- 5 List some of the adverse reactions to different programs and treatments, possible reasons for this reaction and what allied health assistants (AHA) may do if the patient had this adverse reaction to treatment.

Adverse Reactions	Possible Reason for adverse reaction	What AHA would do if the patient has adverse reaction?
i.		
ii.		
iii.		
iv.		
v.		

Activity continues on the next page



Activity 14: Scenario

For this task you are required to read and respond to the scenario provided.

You may use the space provided below to write down a draft response. Record your final answer in the Assessment Guide.

Scenario

Peter's car was stationary at an intersection when a truck failed to stop and struck him from behind. Peter sustained several injuries including broken ribs, pelvis and right arm, as well as extensive bruising and scalp lacerations. He was unconscious for a few minutes. After initial treatment at a major trauma hospital and an extended stay in a rehabilitation hospital, Peter now attends an allied health service where he continues his recovery. Peter's physical injuries continue to heal and he is left with ongoing pain affecting his pelvis and chest.

The physiotherapist in your department has been asked to see this patient. You are going to assist the physiotherapist with the treatment program.

- 1 What do you think would be included in Peter's client care plan? Ensure that you consider all injuries that Peter has, and how the physiotherapy team may be involved.

More space is provided on the next page



Activity 14: Scenario (continued)

Considering Peter's injuries, what are some of the signs Peter may show if he experiences adverse reactions to treatment?



Activity 15: Workplace Observation Checklist

You will be observed providing assistance to deliver and monitor a client-specific exercise program.

You will need to deliver and monitor exercise programs on at least two occasions to demonstrate competence.

Workplace Observation Checklist

Supervisor to date and sign (draft only, please record in the Assessment Guide)

Essential Skills and Knowledge <i>The learner demonstrates the following skills and knowledge:</i>	1 st observation date & initial	2 nd observation date & initial	Comments	*FER
Demonstrates understanding of the rationale and processes for different programs and treatments				
Demonstrates understanding of basic anatomy and physiology of the lungs				
Demonstrates understanding of the basic reaction to pain within the body				
Demonstrates understanding of the signs of adverse reaction to different programs and treatments				
Demonstrates understanding of the psychological effects of disability due to injury or disease and strategies used to cope with this				
Applies understanding of the dangers of electrotherapeutical modalities and the risks involved to client and staff in the vicinity of such apparatus				

Complies with national and state/territory legislation and guidelines, including Australian Physiotherapy Association (APA) Guidelines				
Works within own role and responsibilities and knows the limitations of self and other allied health team members and nursing, medical and other personnel				
Works independently and as part of a (multidisciplinary) team				
Works effectively with non-compliant clients				
Facilitates effective and collaborative working relationships				
Uses equipment and materials from different programs and treatments to industry standard				
Monitors requirements for different programs and treatments				
Reports changes in client performance to supervisor				
Keeps records according to practices and procedures in relation to diagnostic and therapeutic programs/treatments				
Complies with OHS and infection control policies and procedures that relate to the allied health assistant's role in implementing physiotherapy mobility and movement programs				
Follows supervisory and reporting protocols of the organisation while				

working under direct and indirect supervision				
Uses procedures to move and position clients in a safe manner				
Communicates effectively with clients, co-workers and supervisors				
Uses skills in time management, personal organisation and establishing priorities in work role				

RESOURCES

The following is a list of websites that you may find useful to gain further information:

- Allied Health Assistance Documentation Manual. Models of Care: Meeting individuals and community needs through workforce design.
<http://qheps.health.qld.gov.au/ahwac/docs/MOC/mocahaguidedoc.pdf>
- Arthritis Australia: <http://www.arthritisaustralia.com.au/>
- Australian Physiotherapy Association: <http://www.physiotherapy.asn.au/>
- Australian Physiotherapy Council: <http://www.physiocouncil.com.au/>
- Osteoporosis Australia: <http://www.osteoporosis.org.au/>
- The National Physical Activity Guidelines for Australians – Brochure:
<http://www.health.gov.au/internet/main/publishing.nsf/content/health-publth-strateg-phys-act-guidelines>

Queensland Health policies and procedures links:

- Anti-Discrimination Policy
http://https://www.health.qld.gov.au/_data/assets/pdf_file/0024/164058/qh-pol-101.pdf
- Orientation and Induction
https://www.health.qld.gov.au/_data/assets/pdf_file/0034/395845/qh-pol-183.pdf
- Workplace Equity and Harassment Officers Policy
https://www.health.qld.gov.au/_data/assets/pdf_file/0034/395854/qh-pol-265.pdf
- Queensland Health Occupational Health and Safety Policy
<http://qheps.health.qld.gov.au/safety/home.htm>

References

Australian Physiotherapy Association 2001, Guidelines for the Clinical Use of Electrophysical Agents, Australian Physiotherapy Association, Central Victoria.

Better Health Chanel 2011, *Lymphatic System*, Victoria Health, viewed on 8 February 2017, <https://www.betterhealth.vic.gov.au/searchresults?q=lymphatic%20system>>

Brain, JD 2006, *Diaphragm's Role in Breathing*, Merck & Co Inc, Whitehouse Station, New Jersey, viewed 8 February 2010, <http://www.merckmanuals.com/home/sec04/ch038/ch038e.html>.

Churchill Surgical Physiotherapy Team, 2015, *Physiotherapy Advice after Abdominal Surgery-Information for Patients*, Oxford University Hospitals NHS Trust, viewed 25 January 2017, <http://www.ouh.nhs.uk/patient-guide/leaflets/files/11733Pabdominal.pdf>

DDHHS, 2017, Quality, viewed 2 February 2017, <http://qheps.health.qld.gov.au/darlingdowns/html/quality-safety/quality.htm>

Dorling Kindersley 2010, *Gas Exchange*, Dorling Kindersley Books, London, UK, viewed 8 February 2017, <http://www.sciencebook.dkonline.com/51.html> .

Guze, C n.d., *Circulatory System*, CarolGuze.com, viewed 2 February 2010, <<http://www.carolguze.com/text/102-22-Circulatory%20System.shtml>>.

International Association for the Study of Pain 2012, *IASP Pain Taxonomy*, International Association for the Study of Pain, Seattle, WA, viewed 8 February 2017, <http://www.iasp-pain.org/Taxonomy>

Laurien, L n.d., *Nervous System -- Groups Of Nerves*, American Medical Association, Chicago, Illinois, viewed 8 February 2017, <http://www.spinalcordinjuryzone.com/info/7448/nervous-system-groups-of-nerves>.

Lieberman, J & Bockenek, W 2016, *Therapeutic Exercise*, eMedicine, Omaha, NE, viewed 8 February 2017, <http://emedicine.medscape.com/article/324583-overview>.

Mann, E & Carr, E 2006, *Pain Management*, Blackwell Publishing Ltd, United Kingdom.

Melzack, R 1975, *The McGill Pain Questionnaire: Major properties and scoring methods*, Centre for Evidence Based Physiotherapy, 2010, viewed 8 February, 2017, <http://www.sciencedirect.com/science/article/pii/0304395975900445>.

Myers, J & Nieman, D (eds.) 2010, *ACSM's Resources for Clinical Exercise Physiology 2nd edn*, Lippincott Williams & Wilkins, China.

Public Service Commission 2010, *Code of Conduct- For the Queensland Public service*, Public Service Commission Brisbane, Queensland, viewed 30 September 2011, <http://www.psc.qld.gov.au/library/document/catalogue/equity-ethics-grievance/gps-code-conduct.pdf>.

Queensland Health 2016, *Diseases and Infection Prevention*. Centre for Healthcare Related Infection Surveillance and Prevention (CHRISP), Brisbane, Queensland, viewed 2 February 2017, <https://www.health.qld.gov.au/chrisp>

Queensland Health 2017, *Clinical Incident Management Resources*, Patient Safety and Quality Improvement Service, Queensland Health, Brisbane, Queensland, viewed 2 February 2017, <http://qheps.health.qld.gov.au/psu/clinicalincident/default.htm>.

Queensland Health 2014, Performance and Development, viewed 5 January 2017, <https://www.health.qld.gov.au/system-governance/policies-standards/doh-policy/policy/gh-pol-189.pdf>

Queensland Health 2014, Work Health and Safety Policy, Queensland Health, viewed on 24 November 2016, <https://www.health.qld.gov.au/system-governance/policies-standards/doh-policy/policy/gh-pol-401.pdf>

Queensland Health 2015, Department of Health Policy Framework, Queensland Health, Brisbane Queensland, viewed 28 November 2016, <https://www.health.qld.gov.au/system-governance/policies-standards/types/default.asp>

Queensland Health 2016, *Guidelines for allied health assistants documenting in health records*, Queensland Health Electronic Publishing Service, Allied Health Profession's Office of Queensland, Brisbane, Queensland, viewed 7 November 2016, <https://www.health.qld.gov.au/ahwac/docs/aha/ahadocguide.pdf>

Singh, J (ed.) 2005, *Textbook of Electrotherapy*, Brothers Medical Publishers, New Delhi.

The Australian Council on Healthcare Standards (ACHS) 2006, *Submission to Productivity Commission, Review of Australian Government's Relationship with Standards Australia Limited and the National Association of Testing Authorities Australia*, The Australian Council on Healthcare Standards, Ultimo, NSW, viewed 2 February 2017,
http://www.pc.gov.au/inquiries/completed/standards/submissions/ampac_technologies_pty_ltd/sub056.pdf

Wellness & Lifestyles Australia 2009, *Physio Assistants/Aides*, Wellness & Lifestyles Australia Ltd, Kent Town, SA, viewed 22 February 2017,
<https://wellnesslifestyles.com.au>