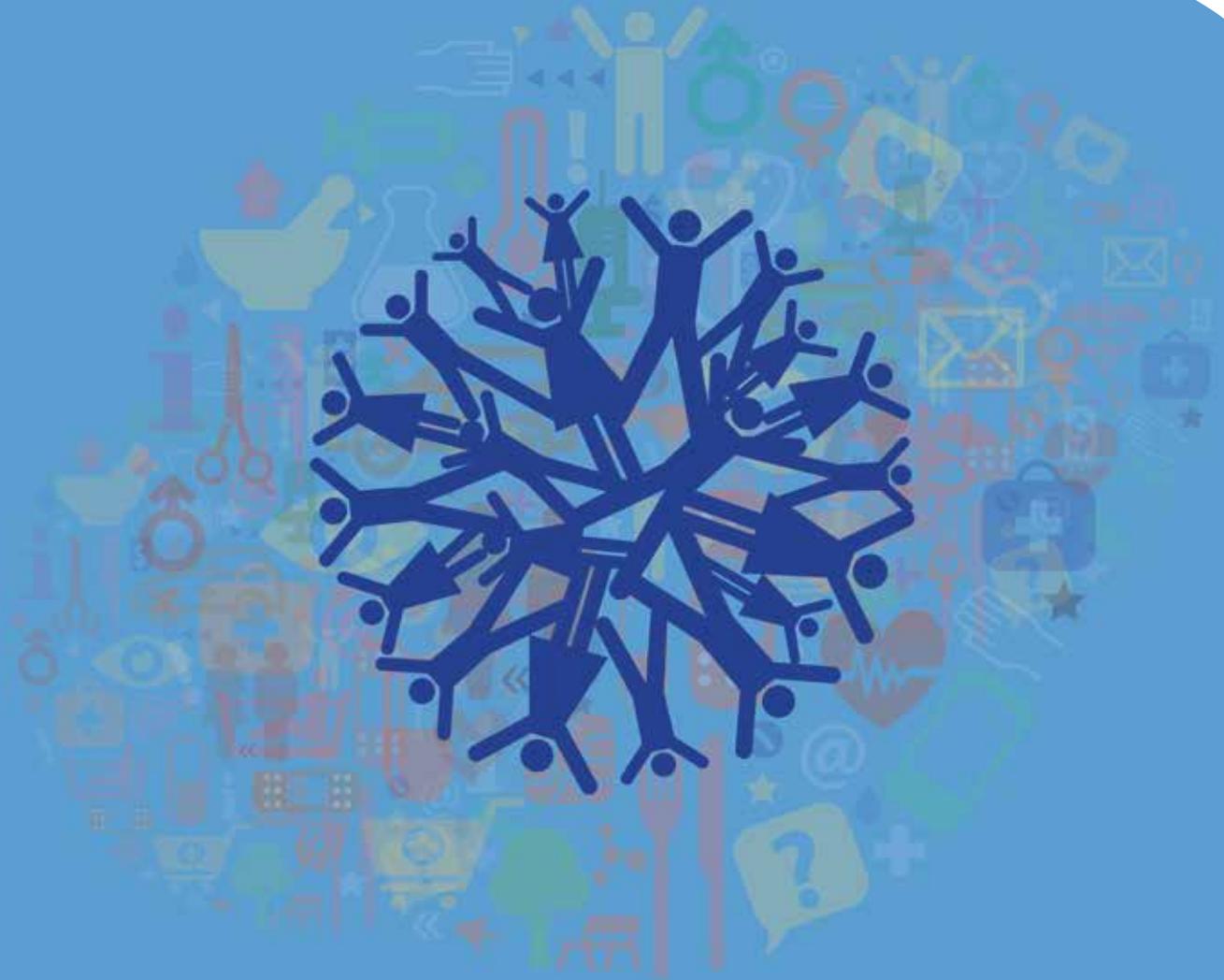


BSBMED301

Interpret and apply medical terminology appropriately

Release 1



Learner guide

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Aspire Version 1.1



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Before you begin

This learner guide is based on the unit of competency *BSBMED301 Interpret and apply medical terminology appropriately*, Release 1. Your trainer or training organisation must give you information about this unit of competency as part of your training program. You can access the unit of competency and assessment requirements at: www.training.gov.au.

How to work through this learner guide

This learner guide contains a number of features that will assist you in your learning. Your trainer will advise which parts of the learner guide you need to read, and which practice tasks and learning checkpoints you need to complete. The features of this learner guide are detailed in the following table.

Icon	Feature	How you can use each feature
	Learning content	▶ Read each topic in this learner guide. If you come across content that is confusing, make a note and discuss it with your trainer. Your trainer is in the best position to offer assistance. It is very important that you take on some of the responsibility for the learning you will undertake.
	Examples	▶ These highlight key learning points and provide realistic examples of workplace situations.
	Practice tasks	▶ Practice tasks give you the opportunity to put your skills and knowledge into action. Your trainer will tell you which practice tasks to complete.
	Summaries	▶ Key learning points are provided at the end of each topic.
	Learning checkpoints	▶ There is a learning checkpoint at the end of each topic. Your trainer will tell you which learning checkpoints to complete. These checkpoints give you an opportunity to check your progress and apply the skills and knowledge you have learnt.

Foundation skills

As you complete learning using this guide, you will be developing the foundation skills relevant for this unit. Foundation skills are the language, literacy and numeracy (LLN) skills and the employability skills required for participation in modern workplaces and contemporary life.

The following table outlines specific foundation skills noted for your learning in this learner guide.

Foundation skill area	Foundation skill description
Learning	<ul style="list-style-type: none"> ▶ Understanding your job role, organisational procedures and legal responsibilities ▶ Managing your work and seeing how well you are going and making goals for yourself at work ▶ Seeking professional development opportunities for continuous improvement
Reading	<ul style="list-style-type: none"> ▶ Understanding how documents are presented and being able to navigate through documents ▶ Understanding industry- and job-specific terminology ▶ Interpreting key information in relevant documents ▶ Understanding routine workplace checklists and documentation
Writing	<ul style="list-style-type: none"> ▶ Planning, drafting and writing reports and documents ▶ Communicating through written letters, email and online ▶ Recording progress ▶ Reporting incidents
Oral communication	<ul style="list-style-type: none"> ▶ Clarifying instructions ▶ Providing information ▶ Supporting others through encouragement, negotiation and conflict resolution
Numeracy	<ul style="list-style-type: none"> ▶ Calculating costs, weights, measurements of height and distance ▶ Interpreting measurements
Teamwork	<ul style="list-style-type: none"> ▶ Working well with other people by cooperating, collaborating, encouraging and building rapport
Planning and organising	<ul style="list-style-type: none"> ▶ Planning your workload and commitments ▶ Implementing tasks ▶ Completing work on time ▶ Knowing how to deal with hazards and risks
Making decisions	<ul style="list-style-type: none"> ▶ Understanding and applying decision-making processes ▶ Reviewing the impact of your decisions
Problem-solving	<ul style="list-style-type: none"> ▶ Identifying problems ▶ Working out how to fix a problem using problem-solving processes and reviewing the outcome
Innovation and creation	<ul style="list-style-type: none"> ▶ Recognising opportunities to develop and apply new ideas ▶ Generating ideas by thinking of new ways to do something ▶ Making suggestions to improve work

Foundation skill area	Foundation skill description
Technology and digital literacy	<ul style="list-style-type: none"> ▶ Efficiently using digitally based technologies and systems correctly and safely ▶ Accessing, organising and presenting information ▶ Using equipment correctly and safely

What do you already know?

Use the following table to identify what you may already know. This may assist you to work out what to focus on in your learning.

Topic	Key outcomes	Rate your confidence in each section
Topic 1 Interpret instructions containing medical terminology	1A Interpreting and documenting instructions	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	1B Understanding basic components of medical terminology	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
Topic 2 Use medical terminology to carry out routine tasks	2A Responding to workplace requirements	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	2B Using appropriate terminology to communicate	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident



Topic 1

In this topic you will learn about:

1A Interpreting and documenting instructions

1B Understanding basic components of medical terminology

Interpret instructions containing medical terminology

Health information is constantly shared and exchanged amongst health professionals.

People working in the health sector use a known list of medical terms and abbreviations with the knowledge that others working in the field will be able to correctly interpret what is communicated. This ensures consistency in what is communicated across the industry. Health information must never be ambiguous or open to interpretation; a patient's health may be placed at risk when instructions or information is unclear or changed by mistake.

Like learning a new language, learning a full list of medical terminology becomes easier with practice. As you immerse yourself in it, you will become more proficient. You will soon learn the value of using abbreviations and medical terminology in the communications you carry out as part of your job. This will save you time and increase your productivity. You will find yourself incorporating medical terms and abbreviations into your language when speaking to others, and when writing and producing documents as part of your everyday routine tasks.

1A Interpreting and documenting instructions

Knowledge of medical terminology is essential for a career in the health sector.

Medical terminology is widely used to communicate patient healthcare requirements and supports. In organisations that provide health services, a team of people made up of administrative staff, health assistants, allied health professionals and medical staff and specialists will be constantly collaborating and exchanging information. To fulfil the requirements of your job, you will need to interpret instructions containing medical terminology given to you by your supervisor and other staff.



Medical terms used to communicate health information

- ▶ Terms used in correspondence and medical forms
- ▶ Terms relating to areas of the patient's body requiring attention
- ▶ Descriptions of symptoms and signs of illness or ill health
- ▶ Names of diseases and disorders
- ▶ Names of tests or procedures to diagnose illness
- ▶ Types of treatments or procedures to treat illness or discomfort
- ▶ Abbreviations for terms used in health records
- ▶ Names of instruments, equipment and resources required for treatments
- ▶ Medication or drugs, including generic and brand names

Health workers who do not have a good understanding of medical terminology are at risk of misinterpreting written or verbal instructions. This gap in knowledge can compromise the delivery of appropriate and safe care to patients. It can mean that key information is missed or not passed onto others as it was intended. For example, patients could have their personal details incorrectly recorded, be given the wrong treatment or be moved when they should remain where they are. Each of these has the potential to adversely affect the health of patients and leave the organisation vulnerable for not performing their duty of care.

Interpreting abbreviations

The use of abbreviations saves time when documenting health information.

Abbreviations are used in the same way as medical terminology, but they are a shorthand way to document and communicate written health information.

Abbreviations may be used in many areas of your work, including in relation to:

- ▶ names of medical services, hospitals or health organisations
- ▶ people providing health services to a patient
- ▶ different areas of medicine, medical procedures, medical equipment and instruments
- ▶ recording medical information.

Every organisation will have a slightly different protocol for the use of abbreviations to document information. If your job involves documenting patient health records, your supervisor may give you some examples of completed documents for your reference.

Some organisations may restrict the use of abbreviations in certain circumstances. These may be important to limit the potential risk to the patient if information is communicated or recorded incorrectly. For example, abbreviations may not be allowed when recording or using a patient's name. A mix up with the identity of a patient could mean a patient receives the wrong treatments or support. You and other staff may be required to sign documents using your full name rather than providing a quick initial of your signature. This is to ensure that the responsible person can be identified at a later date. Always check with your supervisor and the organisational policies and procedures to find out what rules apply in your workplace.

Interpreting instructions

Correctly interpreting instructions will be one of the most important things you do as a health worker.

You may receive instructions in written documents (either paper-based or accessed electronically), such as processes or procedures on how to perform tasks. Instructions from your supervisor may also be given to you verbally. To perform your job safely and within the boundaries of your responsibilities, the instructions you receive must be interpreted accurately. You may find it helpful to write down any verbal instructions you receive to make sure they are not forgotten.

It is your responsibility to exchange information with others in your team. This may be part of a handover at the end of a shift, or to communicate important information about tasks completed or still to be performed. Your position may involve attending and contributing to staff meetings, taking notes given to you from your supervisor and recording verbal information in patient records. You will be expected to be able to accurately interpret oral information provided by other health professionals. You must always clarify with your supervisor or other senior personnel if you do not fully understand the instructions you have been given. It is always better to confirm instructions or information rather than put the health of another person at risk.

Example

Interpreting and documenting instructions

Brad is an allied health assistant who is attending his first allied health staff meeting. He works in a large private practice that employs 11 staff. The staff is made up of four allied health professionals, five senior allied health practitioners and two allied health assistants. The staff meet every three weeks to discuss complex cases and the senior staff mentor the new, less experienced staff in their professional practice. This week Brad is taking the minutes of the meeting.



Brad listens carefully to the discussion as each staff member presents a case study and the senior staff ask questions and make comments.

One of the physiotherapists describes a case study of a patient who presented with lower back pain. As the case study is explained, Brad recognises various medical terms used to describe the muscles, organs and bones and the types of treatment the physiotherapists have been using. When he hears the terms 'renal', he understands that the patient's pain may be connected to his kidneys. Brad reads through his notes and corrects some spelling of medical terms. He finishes writing his notes and takes them to his supervisor for checking.

Producing documents

Accurate administration of records is a vital part of professional practice and the delivery of quality healthcare.

The type of instructions you will be given and the extent of the records you need to keep will vary according to the responsibilities of your job role. Every document relating to the delivery of health services to patients is important and may need to be referred to in the future.

Records must be an accurate account of the services and information provided to patients. Good clinical record-keeping involves accurate and up-to-date information that uses correct medical terms and abbreviations. Documentation must always be prepared to the professional standards expected of your organisation. These requirements will be outlined in various policies and procedures that you will need to become familiar with. These standards apply to both electronic or paper-based records.

Why health records are important

- ▶ A patient (or a family member) can request copies of their health records to review information about services provided to them.
- ▶ Records can be examined to determine where processes and procedures can be improved.
- ▶ Records will be examined during audits and compliance checks.
- ▶ Records can reveal the quality of healthcare provided by individual health workers or the service where they are employed.
- ▶ Records can be used as evidence in an investigation, such as a serious incident or a patient or family complaint.
- ▶ Records create a written history that can be referred to by health professionals to make decisions regarding ongoing treatment.
- ▶ Some health records are used by organisations to obtain funding and must accurately reflect services provided to each patient.

Example

Health policy document

This excerpt from a policy statement from the Health Department for the NSW Government describes the requirements for the documentation and management of healthcare records across public health organisations in the NSW public health system.

‘The policy requires that a health care record is available for every patient / client to assist with assessment and treatment, continuity of care, clinical handover, patient safety and clinical quality improvement, education, research, evaluation, medico-legal, funding and statutory requirements.’

‘Any health care record is an important document and must provide an accurate description of each patient and the episodes of care or contact with health care personnel no matter what level of treatment or service they are being provided. These records can become part of a permanent record for the patient’s future care.’

Source: State of New South Wales NSW Ministry of Health <https://www1.health.nsw.gov.au>

Checklists for routine tasks

Checklists are increasingly used in healthcare to clearly outline procedures and ensure the safety of patients.

Checklists help to ensure:

- ▶ errors are reduced due to lack of information or inconsistent procedures
- ▶ a procedure is completed in the correct order and without any steps being missed.

A checklist requires the reader to quickly interpret an instruction, carry out the task and check it off when completed. You may be required to complete checklists that use medical terms and abbreviations. The document you will be required to use will vary in its layout and complexity.

Type of checklist	Description	Example
Information to provide to patients on the phone or at the reception desk	Includes information to gather from a patient and information that needs to be given to a patient.	<ul style="list-style-type: none"> ▶ Procedure for answering the phone at reception ▶ List of responses to commonly asked questions from patients ▶ Information about services provided to patients ▶ Procedure for accessing and recording health history information online ▶ Procedure for making appointments
Cleaning and infection control checklist	Grouped by daily of weekly tasks according to the workflow.	<ul style="list-style-type: none"> ▶ Procedures for cleaning hand-washing areas, food preparation areas, sterilisation areas, treatment areas, storage and disposal of waste, etc. ▶ Hand-washing procedure

Type of checklist	Description	Example
Equipment checklist	Grouped into equipment categories or according to workflow.	<ul style="list-style-type: none"> ▶ Procedures for setting up treatment tables, measuring equipment, exercise equipment, etc. ▶ List of requirements for treatment rooms or patient service areas
Procedures to complete tasks	Grouped according to the workflow or the order in which they should be carried out.	<ul style="list-style-type: none"> ▶ Instructions for preparing patient documentation ▶ Procedure for preparing a patient for treatment, such as information to provide on clothes to be removed, changing area, waiting period, etc.
Workplace health and safety (manual handling)	Grouped according to tasks and may include photos or images.	<ul style="list-style-type: none"> ▶ Procedures for how to lift, move or transport a patient, including using equipment correctly and safely, such as bed to wheelchair, chair to shower, etc.
Health measurements and data collecting (diagnostics)	Grouped according to the workflow or order in which they should be carried out.	<ul style="list-style-type: none"> ▶ Procedure for taking blood pressure, temperature, etc. ▶ Procedure for the correct use of diagnostic measuring equipment, such as weight or height measurements or ROM (range of movement)
Evaluation checklist	Grouped according to areas of service/tasks being evaluated.	<ul style="list-style-type: none"> ▶ List of statements about services provided with indication of level of satisfaction, such as a scale from 1–10 ▶ Feedback forms on level of service provided to patients.

Procedural checklist

The following is a checklist for admitting new patients.

Procedure for admitting new patients

Instruction: Tick off each of the following items as you complete each task

Before the client/patient arrives

Prepare the following documents:

- Service information
- Client history
- Payment forms

When the client/patient arrives

- Greet client and ask their preferred name
- Introduce yourself
- Explain the purpose of the admission information
- Gain consent to gather personal information
- Ensure privacy – move to quiet area if necessary

Obtain personal details and complete documentation

- DOB (date of birth)
- Billing information – Medicare and private health insurance details
- Contact details including address and contact phone numbers
- NOK (next of kin)
- Culturally and linguistically diverse status
- Presenting complaint – C/O (complains of)
- Medical history
- FH (family history)
- List of current medications including ADR (adverse drug reaction)
- Previous AHW (allied health worker) or other specialists visited for current complaint

Final steps

- Inform client of the next step in the appointment process
- Ask them if they have any questions and provide responses
- Indicate where they must wait for the health professional who will be assessing them
- Thank the client for their time



Practice task 1

Question 1

Which of the following statements relate to interpreting medical terminology? Select all that apply.

- Health workers use medical terms because they have confidence it will be understood by their colleagues.
- Misinterpreting medical terms can result in the health of patients being adversely affected.
- When you are confident in your use of medical terms, you will no longer be required to confirm instructions with your supervisor.
- Medical abbreviations increase productivity and should be used as much as possible to save time.
- Health documents must be verified by others and prepared according to the standards of the organisation.
- Checklists are used to ensure procedures are completed correctly and that important steps are not missed.

Question 2

Which of the following statements are correct? Select yes or no for each one.

- | | | |
|--|-------|------|
| a. Medical terminology ensures there is consistency and that standard terms are used among health professionals. | * Yes | * No |
| b. Medical terminology is used for the names of medical specialists, treatments, procedures and equipment. | * Yes | * No |
| c. Learning medical terms means you can explain medical information to patients and their family. | * Yes | * No |
| d. Health records can be completed up to two days after the patient has left the service. | * Yes | * No |
| e. Health records can be used as evidence of non-compliance. | * Yes | * No |

1B Understanding basic components of medical terminology

Many of the medical terms you will learn may appear familiar to you and you may see patterns and similarities to words you use every day.

Many words in the English language are made up of word parts and are based on Greek and Latin origins. This is the same for medical terms. For example, we hydrate our bodies when we drink water. 'Hydrate' comes from 'hydro' meaning water. There are thousands of similar examples like these in the English language.

Your duties may require you to know the names of medical equipment and instruments used in treatments or procedures. These may be very specific to an area of health where you work, such as exercise or rehabilitation equipment used in a physiotherapy clinic. You may need to set up equipment or check and maintain stock levels as required.



Medical terminology follows a system of two or three components that can be broken down into parts. Each of the parts have specific meanings that, when put together, give the term its meaning.

Most medical terms are made up of three basic components:

- ▶ word root (the base of the term or central part of the word)
- ▶ prefix (letter groups in front of the word root)
- ▶ suffix (letter groups at the end of the word root).

Prefixes and suffixes are groups of letters that are not words themselves, but change the meaning of a word when added to a word root.

Here is an example of a term describing a medical condition that includes four components.

Word: Hyperthyroidism

Components: Hyper/thyroid/ism

Prefix: hyper (meaning over-active)

Word root: thyroid (refers to the thyroid gland)

Suffix: ism (referring to a condition)

Word meaning: A condition that is caused by an overactive thyroid gland.

At first glance new medical terms that you are not familiar with may look intimidating because they may be long and difficult to read and pronounce. However, with practice, you will begin to recognise word parts as they get repeated in different words. You will learn to break down the word into its separate parts, and the meaning of the term will become clear.

Common medical prefixes

Prefixes are word parts that come before the root or roots used in a word.

Prefixes are generally used to convey the following meanings:

- ▶ Quantity – numbers, metric measurement
Example: ‘tri’ meaning three, as in triceps muscle
- ▶ Negatives – not, without, against
Example: ‘anti’ meaning against, as in antibiotic
- ▶ Degree, size and comparison – big/small, fast/slow
Example: ‘mega’ meaning big, as in megacolon and ‘micro’ meaning small, as in microscopic
- ▶ Time, position and direction – above/below, before/after
Example: ‘ante’ meaning before, as in antenatal and ‘post’ meaning after, as in postnatal.

Here are some examples of prefixes found in medical terms.

Prefix	Meaning
Ab-	Away from
Ad-	Towards
Ante-	Before, forward
Anti-	Against
Brady-	Slow
Circum-	Surrounding
Contra-	Against
Cry-	Cold
Di-	Double, two
Dys-	Difficult, defective
Ect-	Outside
End-	Inside
Epi-	On
Glyc-	Sugar
Fore-	Before or ahead

Prefix	Meaning
Hemi-	One half
Hyper-	Over, excessive
Hypo-	Under, deficient
Hydro-	Water
Homeo-	Stability, same
Inter-	Between, among
Intra-	Within, on the side
Macro-	Large
Neo-	New
Para-	Beside
Peri-	Around
Post-	After
Pre-	Before, in front of
Semi-	Half
Stom- Stomat-	Opening created
Sub-	Under, beneath
Super-	Above, over
Supra-	Above, on the upper side
Syn-	With, together
Therm-	Heat
Tox-	Toxic, poisonous
Trans-	Across, beyond
Ultra-	Excessive

Common medical suffixes

Suffixes are word parts that follow the root or roots used in a word.

They are found at the end of the word. Every medical term ends in a suffix.

Suffixes are generally used to convey the following meanings:

- ▶ Medical conditions and diseases
Example: 'ia' as in hypothermia

- ▶ Medical instruments
Example: ‘graph’ meaning instrument to record data, as in electrocardiograph
- ▶ Diagnostic measurement tools
Example: ‘scope’ as in stethoscope
- ▶ The condition of body fluids
Example: ‘aemia’ as in leukaemia
- ▶ The senses and body functions or processes – vision, hearing, breathing, growth
Example: ‘opia’ as in myopia
- ▶ Denoting people and areas of specialty
Example: ‘logist’ as in cardiologist

Here is a list of examples of suffixes found in medical terms across a wide range of health areas.

Suffix	Meaning
-algia	Pain, painful
-asis	Condition
-blast	Young cell
-crine	To secrete
-cyte	Cell
-ectomy	Cut out
-emia	Blood condition
-graph	Instrument to record data
-gram -gramme	Record or picture
-itis	Inflammation
-ism -osis	Condition
-ist	Specialist
-leptisi -lepsy	Attack, seizure
-logy	Study of
-megaly	enlargement
-oid	Resembling
-phagia	Eating, swallowing

Suffix	Meaning
-phobia	Fear
-phili(ia)	Attraction to
-plasty	Plastic surgery
-plegia	Paralysis
-poiesis	Production
-rrhoea	Flowing, discharge
-rupt	Break or burst
-scler	Hardening
-scope	Instrument for examination
-stalsis	Contraction
-stenosis	Abnormal narrowing
-stomy	Creating an opening
-tic	Pertaining to
-tomy	Incision
-ula	Small
-ule	

Word roots used in medical terms

Word roots provide the basic meaning of a word.

Word roots can be found on their own or added to another word root to form a new word. A prefix or suffix can be added to a word root to change the meaning of the word. For example, the prefix 'para', meaning beside, can be added to the word root 'thyroid'. It changes the meaning of the word to 'beside the thyroid'.

Word roots are generally used to convey the following meanings:

- ▶ Body structures or anatomy – the cells, tissues, glands, organs, cavities and regions of the body
Example: 'pneumon' meaning lung, as in pneumonia
- ▶ Body fluids – blood, sweat, tears, saliva, mucus, pus, bile, urine, etc.
Example: 'sial' meaning saliva, as in sialogram
- ▶ Chemical compounds – substances such as sugar, protein, fat, oxygen, poison and drugs
Example: 'gluc' meaning sugar, as in glucose
- ▶ Physical factors – temperature, light, sound, electricity, radiation
Example: 'therm' meaning heat, as in thermometer

- ▶ Agents of infection – bacteria, viruses, fungi
Example: ‘myc’ meaning fungus, as in mycosis
- ▶ Colours
Example: ‘leuk’ meaning white, as in leukaemia

Here are some common word root examples used in medical terms. The meanings of the words have been provided.

Word root	Meaning	Word example	Word meaning
abdomin	abdomen	abdominopelvic	Lower torso
arthr	joint	arthroscopy	Procedure that examines inside the joint
bacter	bacteria	bactericide	Substances that kill bacteria
brach	arm	brachialis	An arm muscle
card	heart	cardiac arrest	Heart attack
carcin	cancer	carcinogen	Cancer-causing agent
cerebr	brain	cerebrospinal fluid	Fluid found inside the spinal cord
chem	drug/ chemical	chemotherapy	Group of drugs prescribed to kill cancer
col, colon	large intestine	colectomy	Procedure where the colon is removed
cost	rib	costal cartilage	Area of the ribs
derm	skin	dermal therapy	Treatment for the skin
dent, dont	tooth/teeth	dentist	Tooth specialist
dors	back	dorsal	Back of
fossa	hollow depression or trench	fossa ovalis	Opening in the fascia of the thigh
gastr	stomach	gastroenteritis	Inflammation of the stomach and intestines
gingiv	gums	gingivitis	Inflammation of the gums
hepat	liver	hepatitis	Inflammation of the liver
haem	blood	haemoglobin	Protein in red blood cells

Word root	Meaning	Word example	Word meaning
hyster	uterus	hysterectomy	Surgical removal of the uterus
kerat	cornea (skin or eye)	keratin	Protein found in the skin
lact	milk	lactation	Secreting milk
lip, adip	fat	liposuction	Procedure that removes fat from areas of the body
leuc	white	leucocyte	Type of white blood cell
mamm	breast	mammary gland	Breast tissue
melan	black colour	melanoma	Type of dark-coloured skin cancer
natal	birth	neo-natal	Newborn baby
neur	nervous/ nerves	neuroscience	Study of the nervous system
ophthalm	eye	ophthalmology	Study of the eye
oss	bone	ossification	Hardening of the bones
ov	eggs	ova	Female egg
pector	chest	pectoralis	Name for a chest muscle
pelv	pelvic or hip bone	pelvis	Area around the lower torso
pulm	lung	pulmonary	Relating to the lungs
ren	kidney	renal	Relating to the kidney
thorac	chest, rib cage	thoracic vertebrae	Middle section of vertebrae
thromb	clotting of blood	thrombus	Blood clot
thyr	thyroid gland	hypothyroid	Underactive thyroid gland
ur	urine, urinary system	uremia	high levels of urea in the blood
vas	blood vessel	vasodilation	Opening/widening of the blood vessels

Putting words together

When various components of a word are put together, combining vowels like i or o are sometimes used to help with the pronunciation.

These may be added between a word root and the prefix or suffix.

Here are two examples:

- ▶ In the term osteopathy, 'oste' is the word root, o is the combining vowel, and 'pathy' is the suffix.
- ▶ In the term cardiovascular, two word roots are joined, 'cardi' and 'vascular', with o as the combining vowel.

The following table provides you with examples of word roots used in anatomy terms (study of the names of the parts of the human body).

Complete word	Prefix	Word root	Suffix	Definition
Bradycardia	brady- (slow)	-card- (heart)	-ia (condition)	Slow heart rate
Electrocardiograph	electro- (electric)	-card- (heart)	-graph (measure)	Device used to measure the electrical activity of the heart
Hypertension	hyper- (high/over- active)	-tension (pressure)		Abnormally high blood pressure
Ophthalmologist		ophthalm- (eye)	-logy (study of) -ist (specialist)	A specialist who diagnoses and treats eye disorders
Periodontitis	peri- (around)	-odont- (tooth)	-itis (inflammation)	Inflammation of the area around the tooth, i.e. gums

Example

Recognising word roots

Luke has been assisting his supervisor to provide treatments to an elderly patient. Luke's supervisor has asked him to finish writing the treatment plan notes. Luke needs to document the patient's existing health condition based on the information provided by the patient during the appointment.

Luke uses his knowledge of medical terms and refers to his list of abbreviations that his supervisor has given him. This is what he writes:

'Patient X has had IDDM for 10 years. He consults his GP regularly and is under the supervision of an endocrinologist and ophthalmologist. Patient reports blood glucose levels (BGL) are within normal levels.'

'Recommendations: Monitor condition of feet for wounds (compromised skin integrity).'

Luke's supervisor checks his notes before they are saved and filed as a medical record.



Eponyms

Not all medical terms can be broken down easily into basic word parts.

Eponyms are a group of medical words that are not made up of roots, prefixes and suffixes. Eponyms are words or phrases formed from or including one or more names. They are often used to honour people who pioneered procedures or made significant medical discoveries.

Sometimes eponyms are derived from the identification of a disease, such as:

- ▶ the name of the patient such as ‘Christmas disease’ (named after Stephen Christmas, the first patient described with haemophilia B)
- ▶ a place (e.g. ‘Ross River virus/fever’)
- ▶ a mythical character (e.g. ‘Achilles tendon’).

Eponyms may be used to name diseases and disorders, symptoms and signs, parts of the body, medical tests, surgical procedures, pieces of equipment, bacteria and viruses. They are perhaps the most difficult group of words to spell because there are no rules governing the spelling of names and many are foreign names.

Other common examples include Alzheimer’s disease and Pap smear. Alzheimer’s disease was named after Alois Alzheimer (1864–1915), a German neurologist, who first described the disease in 1906. Alzheimer’s is an incurable degenerative disease of the brain. The Pap smear was named after George Papanicolaou (1883–1962), an American physician of Greek ancestry. This procedure is a test for the early detection of cancer of the cervix.



Practice task 2

Question 1

Match each prefix on the left to its definition on the right.

- | | |
|-----------|--------------------------|
| * Peri- | * Before, forward |
| * Dys- | * Slow |
| * Neo- | * Surrounding |
| * Brady- | * Difficult or defective |
| * Inter- | * One half |
| * Hemi- | * Under-active |
| * Ultra- | * Between |
| * Circum- | * New |
| * Sub- | * Around |
| * Ante- | * Below |
| * Hyp- | * Across |
| * Trans- | * Excessive |

Question 2

Match each suffix on the left to its definition on the right.

- | | |
|------------|-------------------|
| * -plasy | * Condition |
| * -rupt | * Cell |
| * -logy | * Cut out |
| * -stalsis | * Study of |
| * -tic | * Tumor |
| * -oma | * Fear |
| * -tomy | * Plastic surgery |
| * -cyte | * Break or burst |
| * -phobia | * Contraction |
| * -asis | * Pertaining to |
| * -ectomy | * Incision |

Question 3

Match the start of each word on the left with an appropriate ending to make a medical term.

- | | |
|-----------|-----------|
| * Carcino | * gram |
| * Epi | * gen |
| * Lipo | * flexion |
| * Angio | * dermis |
| * Neuro | * tonitis |
| * Dorsi | * suction |
| * Thrombo | * surgeon |
| * Peri | * cyte |

Anatomical terms

There are hundreds of anatomical terms used across different specialty areas of health.

Anatomical terms are used to describe different regions of the body. In practice, health workers use these terms rather than the more commonly used words to describe areas of the body. For example, 'oral' is used to refer to the mouth and 'axillary' is used to refer to the armpit. Here are some examples of terminology used to describe different areas of the body.

Word	Meaning
Abdominal	Anterior (front) torso, below the diaphragm
Antebrachial	In front of the elbow
Axillary	Armpit
Brachial	Arm
Cranial	Head
Cutaneous	Skin
Digital	Fingers and toes
Dorsal	Back
Oral	Mouth
Femoral	Upper leg/thigh
Gluteal	Buttocks
Inguinal	Groin
Occipital	Back of lower skull
Pedal	Foot
Pelvic	Lower portion of torso
Popliteal	Area behind knee
Tarsal	Ankle
Temporal	Side of skull
Thoracic	Chest
Umbilical	Area around navel

Anatomical directions

Specialised medical terminology may be used to describe the position or location of a structure of the body, according to the anatomical landmark it is near.

For example, the fibula bone in the lower leg is on the lateral side of the leg, meaning out to the side or away from the central line of the body. The skin is a superficial organ, meaning it is close to the surface of the body compared to the layer of fat or adipose tissue that lies deeper under the skin. The following terms are examples of anatomical directions.

Word	Meaning
Anterior	Front of
Inferior	Below or towards the feet
Proximal	Closest to the trunk of the body
Lateral	Away from the midline of the body
Cranial	Closer to the skull
Deep	Deep under the surface
Posterior	Back of
Superior	Above or towards the head
Distal	Away from the trunk of the body
Medial	Towards the midline of the body
Caudal	Towards the bottom of the body
Superficial	Close to the surface

Terms describing movement

Many specialty areas of health take measurements and record the movements of the body.

These terms are used to describe the degree of movement a person has in their joints and muscles. Here are some examples.

Movement	Definition
Flexion	Bending movement that decreases the angle of the joint, moving the joint into a curved or bent position
Extension	Bending movement that increases the angle of the joint, straightening the joint
Abduction	Movement of a body part away from the midline of the body
Adduction	Movement of a body part towards the midline of the body

Movement	Definition
Depression	Movement of a body part in an inferior direction (downwards)
Elevation	Movement of a body part in a superior direction (upwards)
Plantarflexion	Movement of the toes and foot away from the shin; increases the angle at the ankle (such as standing on tip toes)
Dorsiflexion	Movement of the toes and foot towards the shin; decreases the angle at the ankle
Supination	Rotational movement where the forearm and upper arm are turned outwards
Pronation	Rotational movement where the forearm and upper arm are turned inwards
Inversion	Movement of the foot that tilts the sole towards the midline of the body
Eversion	Movement of the foot that tilts the sole away from the midline of the body

Common acronyms and abbreviations

Acronyms and abbreviations can be used in many ways to save time and abbreviate commonly used medical terms in written documents.

The type and number of abbreviations you need to learn will vary according to the area of health you specialise in.

For example, they may be used to:

- ▶ shorten the names of health professionals, such as OT meaning occupational therapist.
- ▶ refer to diseases such as CF for cystic fibrosis or RA for rheumatoid arthritis.

Almost all abbreviations are written without using punctuation marks or full stops; for example, CVD (meaning cardiovascular disease) rather than C.V.D. Abbreviations are usually capitalised. Exceptions to this rule are the abbreviations used for medications and prescriptions, which are often in lower case.

The following is a list of common medical acronyms and abbreviations.

Acronym/abbreviation	Meaning
A&E	Accident and emergency
ABI	Acquired brain injury
ACF	Aged care facility
Abx	Antibiotics
ADM	Admission
ADR	Adverse drug reaction

Acronym/abbreviation	Meaning
AHW	Allied health worker
AOD	Alcohol and other drugs
BBV	Blood-borne virus
BBC	Basil cell carcinoma
BP	Blood pressure
Bid	Two times a day
BMI	Body mass index
BMR	Basal metabolic rate
BS	Blood sugar
BGL	Blood glucose levels
CALD	Culturally and linguistically diverse
C	Celsius
CO ²	Carbon dioxide
C/O	Complained of
CDM	Chronic disease management
CHW	Community health worker
CPR	Cardiopulmonary resuscitation
COPD	Chronic obstructive pulmonary disease
CVD	Cardiovascular disease
DOB	Date of birth
DTP	Diphtheria, tetanus, pertussis
DSP	Disability support pension
EN	Enrolled nurse
ENT	Ear, nose and throat
ECG	Electrocardiogram
FH	Family history
GI	Gastrointestinal
g	Gram
HACC	Home and community care

Acronym/abbreviation	Meaning
HO	History of
Hib	Haemophilus influenza type B
HBV	Hepatitis B virus
ICU	Intensive care unit
IDDM	Insulin-dependent diabetes mellitus
IDU	Injecting drug user
IV	Intravenous
Kg	Kilogram
L	Left
LBW	Low birth weight
LOW	Loss of weight
LRQ	Lower right quadrant
Max	Maximum
MBS	Medical benefits scheme
mg	Milligram
Mid	Middle
MI	Myocardial infarction
MMR	Measles/mumps/rubella (vaccine)
MRI	Magnetic resonance imaging
MRSA	Methicillin resistant staphylococcus aureus
NOK	Next of kin
NSAIDS	Non-steroidal anti-inflammatory drugs
OPD	Once per day
OT	Occupational therapy
OTC	Over the counter
O	Oxygen
P	Pain
PHC	Primary health care
QID	Four times a day (from the Latin 'quater in die')

Acronym/abbreviation	Meaning
R	Right
Rx or P _x or R _x	Medical prescription, prescription drug or remedy
SF	Schedule fee
Soln	Solution
Sup	Superior
TB	Tuberculosis
Tx	Treatment, therapy or transplant
ULQ	Upper left quadrant
USS	Ultrasound scan
URI	Upper respiratory infection
UTI	Urinary tract infection
VS	Vital signs
WBC	White blood cells
WBAT	Weight bearing as tolerated
W/O	Without
WT	Weight
x	Times
XR	X-ray
YO	Years old

Specialist abbreviations

Along with common abbreviations, more specialised abbreviations may be used to describe a patient's condition.

Medical acronyms and abbreviations are used to describe parts of the human body when completing health records or treatment plans when the patient's symptoms and treatments are documented.

Here are some examples of abbreviations that you may find on a patient's treatment plan.

Acronym/abbreviation	Meaning
AROM	Active range of motion
A/C joint or ACJ	Acromioclavicular joint

Acronym/abbreviation	Meaning
ACL	Anterior cruciate ligament
BK	Below knee
CTS	Carpal tunnel syndrome
CVS	Cardiovascular system
DF	Dorsiflexion
Ext	Extension
Flx	Flexion
FWB	Full weight bearing
Gluts	Gluteal muscles
I/T	Intermittent
Jt	Joint
LBP	Lower back pain
Ligs	Ligaments
LTG	Long-term goal
MS	Musculoskeletal
Movt	Movement
NWB	Non-weight-bearing
OA	Osteoarthritis
PE	Physical examination
PF	Plantarflexion
PFx	Pelvic floor exercises
PNI	Peripheral nerve injury
Post-op	After surgery
PROM	Passive range of motion
Quad	Quadricep muscle
Rehab	rehabilitation
Rep	repeated
ROM	Range of movement
Rotn	rotation

Acronym/abbreviation	Meaning
SIJ	Sacroiliac joint
TENS	Transcutaneous electrical nerve stimulation
Traps	Trapezius muscle
US	Ultrasound
WNL	Within normal limits
C1-7	Cervical vertebrae
T1-12	Thoracic vertebrae
L1-5	Lumbar vertebrae
S1-5	Sacral vertebrae

Example

Using abbreviations

Dev has been employed as an allied health assistant for two weeks in a busy speech pathology practice. He is becoming familiar with the abbreviations the therapists use in their documentation. He has been compiling his own list of commonly used abbreviations to help him learn them. He refers to the staff handbook and notes that his organisation does not allow abbreviations to be used on consent forms, incident reports and in images of documentation. He lists the abbreviations that are not to be used in the documentation related to patients:



- ▶ patient/service user's name
- ▶ names of drugs
- ▶ +++, >, < (+ve, -ve can be used instead to mean positive or negative)



Practice task 3

Complete the table with an example of an acronym or abbreviation for each letter of the alphabet.

Letter	Abbreviation	Meaning
A		
B		
C		

Letter	Abbreviation	Meaning
D		
E		
F		
G		
H		
I		
J		
K		
L		
M		
N		
O		
P		
Q		
R		
S		
T		
U		
V		
W		
X		
Y		



Summary

- ▶ Medical terminology is widely used to describe and communicate many different aspects of a patient's healthcare requirements.
- ▶ You may receive written or verbal instructions that you need to be able to understand and follow.
- ▶ Interpretation and the correct use of medical terminology is essential so you can perform your job safely and effectively.
- ▶ Always clarify and ask questions if you do not fully understand any instructions or information.
- ▶ Good clinical record-keeping involves keeping an accurate account of services provided and using the correct medical terminology.
- ▶ A checklist will often include a number of medical terms and abbreviations that you need to be able to quickly interpret and carry out.
- ▶ Most medical terminology follows a system of two or three components that can be broken down into parts. Each of the parts have specific meanings that, when put together, give the medical term its meaning.
- ▶ There are many areas of specialisation in the health industry. The terms you need to know will depend on your area of specialisation.



Learning checkpoint 1

Interpreting instructions containing medical terminology

Part A

1. Identify the prefix and its meaning in the following words.

Word	Prefix	Meaning of prefix
a. Endoscope		
b. Bradycardia		
c. Abdomen		
d. Interventricular		
e. Hemiplegia		

2. Identify the suffix and its meaning in the following words.

Word	Suffix	Meaning of suffix
a. Neuralgia		
b. Arteriosclerosis		
c. Appendicitis		
d. Cardiomegaly		
e. Dysphagia		

3. Identify the word root and its meaning in the following words.

Word	Word root	Meaning of word root
a. Hepatomegaly		
b. Hysterectomy		
c. Dermatitis		
d. Pulmonary		
e. Renal		

4. Use a medical dictionary or glossary to make your own medical terms using the following word parts.

	Medical term	Meaning of medical term
Prefix		
dys-		
hyper-		
tachy-		
Suffix		
-ectomy		
-itis		
-stomy		

	Medical term	Meaning of medical term
Word root		
cardi		
haem		
neur		

5. Match each acronym or abbreviation on the left to its meaning on the right.

- | | |
|--------|---|
| * Rot | * Antibiotics |
| * GI | * Blood pressure |
| * Soln | * Chronic obstructive pulmonary disease |
| * COPD | * Gastrointestinal |
| * IV | * Intensive care unit |
| * Tx | * Intravenous |
| * BP | * Lower back pain |
| * Abx | * Next of kin |
| * ICU | * Rotation |
| * LBP | * Solution |
| * XR | * Therapy or treatment |
| * NOK | * X-ray |

6. Rewrite the following sentences using non-medical terminology:

a. The patient C/O severe P in the LRQ.

b. The gastroenterologist made a deep surgical incision lateral to the stomach.

c. The sutures were made inferior to the umbilicus.

d. The adrenal glands are superior to the kidneys.

Part B

Checklists are used for procedures to ensure the task is carried out correctly.

Number each step from 1 to 7 in the order you would follow to make an appointment with a patient on the telephone.

- Ask if they would like an appointment with a particular person/practitioner.
- Once the details are decided, confirm the date and time.
- Say 'Good morning/afternoon/evening, [name of the company], [your name] speaking'.
- Ask for their first and last name and contact phone number. Ask for spelling clarification as necessary.
- Actively listen to the person on the other end of the phone to determine the purpose of the call.
- Say 'Thank you [person's name], see you on [date booked]'.
- Ask when they would like the appointment and discuss options and availability. Apologise if you haven't been able to offer the exact date/time they wanted.

Part C

You have been instructed by your supervisor to rewrite the information from a referral letter for a patient. Your supervisor has instructed you not to use any abbreviations or medical terms in the referral letter.

Rewrite the information provided in the letter using no medical terms or abbreviations. A medical dictionary may be helpful to use.

Dear Mr Jones,

Re: Mr Smith

Please review Mr Smith for suitability for arthroscope and/or debridement R knee joint.

Mr Smith has C/O P in R knee for 8 months. XR reveals non-uniform joint space loss, osteophyte formation and subchondral sclerosis indicating primary osteoarthritis.

Comorbidities include: Obesity, CVD with SOB, haematuria

Medications: 1g paracetamol QID, 40mg Simvastatin.

Yours sincerely,

Robert Johns

Physiotherapist



Topic 2

In this topic you will learn about:

2A Responding to workplace requirements

2B Using appropriate terminology to communicate

Use medical terminology to carry out routine tasks

Communication skills are essential if you are to provide excellent service to patients and be valued by your team.

Good communication involves asking questions and seeking clarification. You will need to use medical terminology and abbreviations in written documents and when speaking to others.

Many routine tasks you complete every day will require you to adapt your communication style for a range of different reasons, including:

- ▶ to meet a patient's medical or social needs or level of understanding
- ▶ to clarify instructions given to you from your supervisor
- ▶ to communicate a change in procedures, such as improvements in safety
- ▶ to deliver services in different locations, such as in a person's home
- ▶ when working autonomously without direct supervision.

2A Responding to workplace requirements

Policies and procedures ensure the correct, safe and legal delivery of services to patients.

Policies outline the course of action employees must follow. The instructions you receive and your actions at work should be underpinned by these requirements. Procedures are the specific methods or procedures you must follow in your daily routines and will reflect organisational policies.



Policies and procedures form part of the registration and regulatory requirements for many health services. These regulations apply to all medical and health services, such as hospitals, community health settings, and privately owned and run practices, including patient's homes and residential care homes. Organisational policies and procedures are often explained during an induction and form part of the service's staff handbook. A written job description may also outline relevant policies and procedures you need to follow to perform your job safely and efficiently.

Health and safety policies and procedures

Work health and safety (WHS) policies and procedures ensure the health of patients and workers.

WHS covers many aspects of the work environment. Infection control and manual lifting are particularly important aspects of WHS if you work in the health industry. This is because anyone working in the health industry is likely to be in contact with people who are unwell. There is also a higher risk of musculoskeletal injury by lifting or moving heavy objects (including patients) incorrectly.

The instructions provided in procedural documents need to be carried out accurately if risk to workers is to be reduced. If procedures contain medical terms or abbreviations, you must be able to interpret them correctly. For example, a hand-washing procedure will outline how and when hand washing should occur so standards of hygiene are maintained and cross-infection is prevented. Your employer may also require that protective clothing such as gloves and aprons be worn when performing some tasks. Training can be provided to ensure that medical terms and procedures are understood and followed.

Examples of general policies for staff in a health service

- ▶ Code of conduct
- ▶ Work health and safety policy
- ▶ Manual-handling policy
- ▶ Incident/accident reporting
- ▶ Infection prevention and control
- ▶ Customer complaints policy
- ▶ Performance review policy
- ▶ Equal opportunity, anti-harassment and bullying policy
- ▶ Issue and conflict resolution policy
- ▶ Professional development policy
- ▶ Confidentiality and communicating with patients
- ▶ Maintaining professional boundaries with patients
- ▶ Medication ordering and administration
- ▶ Security of health records

Examples of procedures for allied health workers

- ▶ Hand-washing procedure
- ▶ Setting up the treatment room
- ▶ Removal and replacement of laundry
- ▶ Cleaning treatment areas procedure
- ▶ Moving patients safely
- ▶ Lifting heavy items
- ▶ Preparing patients for treatment
- ▶ Taking blood pressure
- ▶ Correct use of diagnostic equipment
- ▶ Preparing and processing medical accounts
- ▶ Referral letters procedure
- ▶ Client admissions procedure
- ▶ Handling client complaints
- ▶ Emergency support, CPR and first aid procedure
- ▶ Emergency evacuation procedure
- ▶ Incident reporting procedure
- ▶ Chemical safety and storage
- ▶ Maintaining patient records
- ▶ Use of business and medical technology
- ▶ Completing timesheets
- ▶ Reading work schedules
- ▶ Answering the phone and making client appointments

Example

Procedure for responding to complaints by phone

The following is a procedure for responding to client complaints made by phone.

The caller may be angry or upset. Remain polite and calm at all times. At the end of the conversation, record the conversation in the complaints register, including the date and time of the call and your name.

Follow these steps:

- ▶ Ask for their name and write it down.
- ▶ Use their name during the conversation.
- ▶ Ask what they are making a complaint about and write down the details.
- ▶ Let them know you are listening to them.
- ▶ Once they have finished, repeat the problem back to them so they know you have heard them and to ensure the details are correct.
- ▶ Confirm you will pass the information on to a supervisor/manager who will be in contact with them shortly.
- ▶ Ask for their contact details. Repeat back the details to confirm you have accurately recorded them.
- ▶ Apologise for the problem/difficulty they have experienced.
- ▶ Confirm again you will pass the information on and that they will get a response as soon as possible.
- ▶ Before finishing the call, say, 'Thank you [name] for taking the time to contact us. [The manager] will be in touch very soon'.

Seeking clarification and assistance

Part of your supervisor's role is to confirm that you understand and can confidently follow instructions.

At the beginning of a new job, you are likely to be introduced to new and unfamiliar words. Your supervisor can help you interpret relevant policies and procedures and guide your learning of medical terms or abbreviations. You may be offered training in correctly uploading health information into a database or have an experienced staff member work alongside you until you become confident. You may be given examples of documents that you can use as a reference for drafting and recording health information.

The most important contact for clarifying medical terminology and abbreviations is your supervisor. You can ask them to read over and add comments to documents you have written and help you with spelling and pronunciation. Don't hold back on requesting advice; remember the possible negative consequences to a patient if you misinterpret instructions or information.

For example, the medical terms 'ilium' and 'ileum' are homonyms, which means they are pronounced the same way, but have different meanings. 'Ilium' refers to one of the bones which makes up each half of the pelvis. 'Ileum' is one of the segments of the small intestine. Another example is the prefixes 'hyper-' and 'hypo-', which sound similar but have opposite meanings. For example, hyperthyroidism refers to an over-active thyroid gland, whereas hypothyroidism refers to an under-active thyroid gland.

Purpose and audience of documents

Documents that you need to become familiar with have different purposes.

Some forms are designed to be completed by patients and other documents must be completed by staff. Your supervisor or other senior workers can assist you to become familiar with these. There may be examples or templates to use that show the different layout and writing style of documents. Templates are used to maintain consistency in the format and style of documents with a particular purpose. For example, a referral letter used to introduce a patient to another health professional has a layout and tone that is different to a letter sent to a patient about a late payment or change in appointment. Even handover notes provided to a colleague at the end of a shift need to conform to the same professional standards as other health records.

Examples of documents used in allied healthcare

- ▶ Client history form
- ▶ Referral letter
- ▶ Medication charts
- ▶ Client consent form
- ▶ Medical release form
- ▶ Clinical assessment form
- ▶ Case notes
- ▶ Treatment plan
- ▶ Equipment/stationery order form
- ▶ Clinical handover template form
- ▶ Incident reports
- ▶ Patient education resources

Example

Client history form template**Therapeutic Massage Clinic**

18 Worbly Road, Botham

07 3248 1245

Date:

Name of practitioner:

Personal information

Full name:

Address:

DOB:

Contact number:

Billing information:

Occupation:

Emergency contact
details (including NOK):

Health information:

Presenting condition:

Medical history:

Current level of exercise:

Active/passive ROM test results:

Name:

Signature:

Date:

Sources of information for medical terminology

There are a number of different ways to improve your memory of medical terms.

The most effective way to learn is to practise applying these terms as part of your work under the close scrutiny of your supervisor. Here are some other sources you can use to improve your skills and knowledge of medical terminology and abbreviations.

<p>Textbooks and medical dictionaries</p>	<p>Textbooks on health or anatomy and medical dictionaries provide lists of medical terms and common abbreviations and their meanings. These books may have been purchased as part of your formal study and can be found in most libraries.</p> <p>There is also a large number of dictionaries that are available online. Additional information such as medical procedures and the names of medical conditions can be searched for alphabetically.</p> <p>Medical dictionaries can also be downloaded as an app for your mobile phone. This may be helpful to have a quick reference guide.</p>
<p>Online quizzes/tutorials</p>	<p>Various learning quizzes can be completed to test your knowledge and practise your skills. This includes matching terms to definitions, multiple choice, true/false questions and other styles of questions.</p>

Checking spelling

Medical terms and abbreviations used in documents must be spelled correctly.

Correct spelling avoids confusion and mistakes, which can lead to inappropriate care or putting the safety and health of staff and patients at risk.

Take the time to edit your work and allow time to refine it to ensure medical terms are used correctly. Online databases used to record information may use options in drop-down boxes for you to choose. This feature removes the possibility of misspelling, but you must still be able to interpret and recognise meanings of terms so they are correctly applied.

Your organisation may rely on records that are handwritten, so spelling is still very important. Initially, you may ask your supervisor to check the documents you write before they are filed or forwarded to another person. It may be an organisational requirement that in your early weeks of employment all your documentation will be checked and verified by a supervisor before being uploaded to a database.

You should also note that American dictionaries spell words differently compared to Australian/English dictionaries. The Australian/English spelling tends to follow the original Greek and Latin spelling of medical terms, whereas the American spelling is often simplified. For example, the medical term ‘faeces’ derives from Latin and refers to the waste matter that is discharged from the intestine. It is pronounced ‘fee-sees’ and is spelt ‘faeces’ in an Australian/English dictionary, but is spelt ‘feces’ in an American one.

Example

Clarifying spelling

When the administration staff are busy or on a lunch break, Sally steps in and assists with reception duties. She is typing a referral letter for a patient. The last paragraph of the letter written by the speech pathologist begins 'He is currently taking Lasix'. Sally has never heard of Lasix, which is a brand name of furosemide, a diuretic drug prescribed for treatment of fluid retention. The writing is unclear and Sally is unsure if the word is actually 'losec', a medication frequently prescribed as a treatment for duodenal ulcers.



Her supervisor is out of the office, so she can't ask her what she means. She types 'He is currently taking losec' and intends to check this detail later on with her supervisor. Unfortunately, she becomes very busy in the afternoon and the question is not brought to the supervisor's attention. The letter is sent via email. Sally should have circled the word 'losec' and written a note to herself to remind her to ask her supervisor about the word.

Pronunciation of medical terms

It is common to mispronounce unfamiliar words when you are first learning them.

As described earlier, medical terms are made up of different parts and each part has a meaning. The structure of these words can help your pronunciation. Try pronouncing each of the components or syllables of the word separately, then say them a bit faster by beginning to join the components together. Keep pronouncing each word part until you get a rhythm and you can pronounce the entire word smoothly and fluidly.

You may be asked to deliver a message in person and this is when correct pronunciation is important. Make sure the message is given clearly and slowly. You may like to have a written note of the message you want to communicate so you can refer to it if necessary. Your note will have the medical terms spelled correctly, and you can show the note to the appropriate person if you are having trouble with pronunciation.

Ways to practice your pronunciation

- ▶ Listen carefully to the way your supervisor and colleagues pronounce words. Copy their pronunciation until you feel confident.
- ▶ Use the pronunciation feature offered in some online medical dictionaries. These may use an American accent that may sound a bit different to the way an Australian would pronounce the words.
- ▶ Practise pronouncing unfamiliar words into the voice memo or voice service app on your phone. Play the recording back and repeat until you can speak the word confidently.
- ▶ Ask your supervisor or colleagues to correct your pronunciation and to help you practise and get the phrasing correct.

Example

Practising pronunciation

Jane didn't know the meaning of the word 'dysmenorrhoea' when she encountered it on a pre-admission form while organising a patient's stay in the hospital. Jane looked it up in a medical dictionary. The dictionary definition was 'pain associated with menstruation'. It also explained that the pronunciation was 'diss-men-a-rear'. However, Jane didn't feel confident in pronouncing it out loud to anyone.

Jane pointed to the word and asked her supervisor what it meant. She was told that it meant painful periods. Jane listened to the way her supervisor spoke the word. Jane had never heard anyone use the word before. She read the dictionary advice. She listened to other people and practised pronouncing the word until she could say the word with confidence.



Practice task 4

Question 1

Which of the following statements relate to using medical terms as part of your job? Select all that apply.

- Procedures for hand washing are important for reducing the spread of disease.
- Health workers are at risk of injury when they don't follow procedures for lifting heavy objects correctly.
- Interpretation of policies will vary according to each individual worker.
- Documents will need to be set out and formatted according to organisational procedures.
- Policies outline the specific steps you need to take to complete tasks.

Question 2

Which of the following statements are correct? Select yes or no for each one.

- a. Drop-down boxes in computer entry programs eliminate the need to spell and interpret the meanings of medical terms and abbreviations. * Yes * No
- b. Templates help to maintain consistency in the format and style of documents. * Yes * No
- c. You should listen carefully to the way your supervisor pronounces words and ask them to correct your pronunciation. * Yes * No
- d. Using a variety of online tools to learn medical terms means your supervisor doesn't need to check your work. * Yes * No

2B Using appropriate terminology to communicate

Every health worker should respect the communication needs of others.

Your ability to perform your job will be measured by the way you communicate with all people. As a health worker, you must respond appropriately to a diverse range of people. You will need to adjust the way you communicate to the different people you interact with across the work day. For example, how you communicate information to patients will be different to the way you communicate with colleagues, health professionals and your supervisor.



Working as part of a medical team will help you to pick up terminology quickly, as you will often hear medical words and phrases being used. After some time your confidence will build and you will soon be asked to contribute in meetings, explain information to patients and produce documents that include medical terms.

You will receive verbal instructions that need to be followed, such as making appointments, locating documents or health information, or passing on messages to others. Listen carefully to the medical terms being spoken. Making notes for yourself can be a simple and effective way to record verbal instructions.

Meeting communication requirements

Identify the audience's requirements to determine what needs to be communicated.

Communicating medical information requires you to be attentive. Active listening and questioning can help improve your communication skills by ensuring you pay full attention to the person giving the information. After you have received some verbal information, repeat back to the person what you have heard and understood to be the meaning. For example, if a supervisor is explaining a procedure using medical terms, you can repeat back to them what you believe they have meant to confirm you have interpreted the terms correctly.

The complexity of information you are given and the way information needs to be shared may need to change or be adapted to suit the needs of the people receiving it.

Communication should be adjusted according to:

- ▶ the audience’s level of expertise or knowledge, such as a patient, a supervisor, a colleague or another health specialist
- ▶ previous interactions and experience with services, such as patients who have been attending the healthcare service for some time
- ▶ the person’s age; for example, children and adolescents may need to have an adult present to communicate on their behalf
- ▶ cultural sensitivities, such as persons identifying as Aboriginal or Torres Strait Islander who may want some information shared with other family members
- ▶ physical abilities, such as difficulties hearing, reading or writing
- ▶ level of English language skills, such as a patient requiring information in a language other than English
- ▶ health conditions that can interfere with comprehension and concentration, such as acquired brain injury, mental health issues or effects of an alcohol or drug addiction.

Communicating with patients

Every patient has the right to ask questions to clarify their understanding about their health.

The number of interactions you have with patients will vary across the working day. You may be involved in greeting patients and helping them feel relaxed, providing information about a procedure or asking questions to obtain information. These communications may require you to use certain medical terminology.

The aim of effective communication is to ensure the correct message is received. When you are speaking with patients, difficult medical words may confuse them and jargon or complex medical terms should be avoided. You may offer to read an instruction out loud or explain a written document so the person is able to fully understand the information you are giving them. This is particularly important when obtaining consent from a patient to receive a health or medical treatment.

Purpose of communicating	Explanation	Type of communication
To collect information for an appointment	You may be the first interaction with a potential new patient. The information you collect may include health information or more detailed questions that are important for determining the treatment they require. You may also need to provide information on fees and payment requirements.	Oral and written
To document medical history or information	These important records include accurately documented information on the person’s medical history, including health conditions.	Oral and written

Purpose of communicating	Explanation	Type of communication
To prepare a patient for admission	Admission information forms the official record of a patient's personal information, including contact details. You may be required to give information on the costs of services and payment requirements to a patient.	Oral and written
To explain a routine task or procedure to a patient	When providing a service to a patient, health workers must always seek permission (where possible) and explain what they intend to do. This shows courtesy and respect.	Oral explanation, can be reinforced with a written consent form/signature

Example

Communicating effectively with patients

Marita works in an aged care hostel for low-care clients. She is interviewing Bill and assisting him to complete his admission form.

She asks Bill about his medical history. Bill tells her, 'I had a bit of trouble with a hypa-active thyroid'. Marita questions Bill, 'A hypoactive or a hyperactive thyroid?' Bill replies, 'I'm not really sure. All I know is that made me put on weight'. Marita responds, 'It sounds like you had a hypoactive thyroid, so I will make a note for my supervisor to confirm this with your GP'. Marita notices that Bill appears to be a healthy weight. She says, 'Are you currently taking any medication for your thyroid?' Bill tells Marita that he is currently taking medication. Marita records this information on the form.

In this situation Marita used her knowledge of medical terms to record the information. She used questioning to help establish information, including the correct terminology. Marita also showed knowledge of how problems with the thyroid affect the body. Her job is to record the information and not make a diagnosis, so she adds these queries to her notes that her supervisor will read to confirm Bill's thyroid condition.



Communicating with other health professionals

Communication flow within an organisation and between health workers is essential for effective health services and care.

Responding quickly and correctly to requests for information is an important skill in the workplace. In a health environment, people ask for information all the time or you may be asked to perform a particular task at short notice. You may need to carry out procedures that ensure patients move seamlessly in and out of appointments or that the treatment rooms are prepared in time for each appointment. You will need to work closely with your supervisor and other health professionals to interpret documents and share information with other staff.

When you communicate with other health workers, medical terms and abbreviations will form part of the communication.

You may need to communicate to other members of the health team to:

- ▶ exchange patient information during a shift handover
- ▶ arrange a referral or transfer to another health practice or department
- ▶ receive instructions on lifting, turning or moving patients
- ▶ communicate changes in a patient's condition or behaviour
- ▶ explain how to complete documents or upload information onto a database
- ▶ clarify instructions on processes or steps in a task
- ▶ demonstrate a procedure to complete a task
- ▶ discuss healthcare in staff meetings
- ▶ review a care or treatment plan.



Practice task 5

Which of the following statements are correct? Select yes or no for each one.

- | | | |
|---|-------|------|
| a. If a supervisor is not close by, you can check your instructions with the patient. | * Yes | * No |
| b. Active listening involves summarising instructions provided by the person to check your understanding. | * Yes | * No |
| c. Adjust the way you communicate with others by learning to speak in a language other than English. | * Yes | * No |
| d. When providing a service to a patient, you must ask them for their permission before you begin. | * Yes | * No |
| e. Adjust your use of medical terminology to accommodate a person's level of expertise or knowledge. | * Yes | * No |



Summary

- ▶ Policies and procedures provide a framework for the behavior and actions of staff so operations are conducted legally and efficiently.
- ▶ As a new employee, you may wish to do your own study to learn the terms you are required to use at work, such as in textbooks or online medical dictionaries.
- ▶ Patients have the right to receive health information that is clearly communicated and to ask questions to clarify their understanding.
- ▶ Communication flow within an organisation and between health workers is important for the effective provision of services and care.
- ▶ Documents will have different purposes and be directed at different audiences, such as a patient, a colleague or your supervisor. Each of these documents may require a different style of writing.
- ▶ Misspelling causes confusion and mistakes, which can lead to inappropriate care or risks to health and safety.
- ▶ When exchanging information with others, ensure you use the correct pronunciation.



Learning checkpoint 2

Using medical terminology to carry out routine tasks

Part A

Read the case study, then answer the questions that follow.

Case study

Below is a copy of health notes written by a medical specialist about a patient. Betty is an allied health worker who has been asked by her supervisor to upload this health history information into the patient's file on the service's database.

This patient is a 40-year-old female who has been complaining of pelvic pain, often accompanied by haematuria and dysuria, since she underwent cystoscopy three weeks ago, at which time marked cystitis was noted. She had an ultrasound of her kidneys at the same time, which was entirely normal.

On admission, she was asymptomatic, but urine testing revealed she still had blood in her urine. She was referred for another cystoscopy, which revealed a carcinoma located about 1cm from the posterior urethral valves. A partial cystectomy was carried out and the lesion was cleared.

1. Betty is not confident interpreting the medical terminology contained in the document. Match each action Betty can take to improve her skills with the explanation.

- | | |
|---|---|
| * Check pronunciation | * A verbal explanation can help build confidence and clarify understanding. |
| * Complete online quizzes | * She can use this to refer to medical terms and common abbreviations and their meanings. |
| * Check spelling and edit | * Tutorials can be used to test her knowledge and memory. |
| * Follow instructions in a procedure document | * These reflect organisational policies and outline the steps required. |
| * Seek assistance from a supervisor | * She can proofread her documents and refer to a supervisor for clarification. |
| * Use a medical dictionary | * She should listen carefully to the way colleagues use words when they are speaking to each other. |

2. Betty has been asked to verbally communicate the patient’s medical history to other people at the service, including the patient, her colleagues and other health professionals.

Which of the following statements are factors Betty needs to consider when communicating to others? Select all that apply.

- Patients may get confused when jargon and complex medical terms are used.
- Reading a document out loud to a patient can breach the patient’s privacy.
- Asking a supervisor to read terms out loud and let you repeat them can help to improve your pronunciation.
- A health professional will be familiar with medical terms, so these terms do not need to be explained.
- Most patients have a basic level of knowledge of health gained from searching the internet.
- Regular meetings need to be scheduled to hand over and explain information to colleagues about a patient’s condition.

3. Find the correct meaning for each of the medical terms referred to in the patient’s health history document. A medical dictionary may be useful.

Pelvic	
Haematuria	
Dysuria	
Cystoscopy	
Cystitis	
Ultrasound	
Asymptomatic	
Posterior	
Carcinoma	

Part B

Read the case study, then answer the questions that follow.

Case study

Your supervisor has asked you to follow the clinic procedure to admit a new patient to the clinic.

When the new patient arrives, you are at the reception desk and you greet her and ask for her preferred name. She tells you she prefers to be called Liz. You ask the patient to sit with you in the waiting room so you can complete her admission forms. Once seated, you begin to complete the documentation. However, the patient is not telling you what you need to know. She appears embarrassed when you ask her about her medical history and about her private health insurance. The patient eventually stops speaking and you don't have the information you require to complete the forms.

Your supervisor has been watching the interaction and walks over. She asks you to pause with the admission procedure and move to a small office near the waiting room. In the office, your supervisor says she will complete the admission forms with the patient and asks you to stay in the room and listen.

1. What documents should you have prepared in advance, ready for the patient's arrival?

2. Which of the following statements explain why the patient did not want to share information? Select all that apply.

- The interview was conducted in a busy area where she could be overheard by others.
- The patient didn't know why the information was required.
- The patient was unable to pay the fees.
- The patient was unhappy about having to have a medical procedure.
- The patient didn't know who you were because you did not introduce yourself properly.