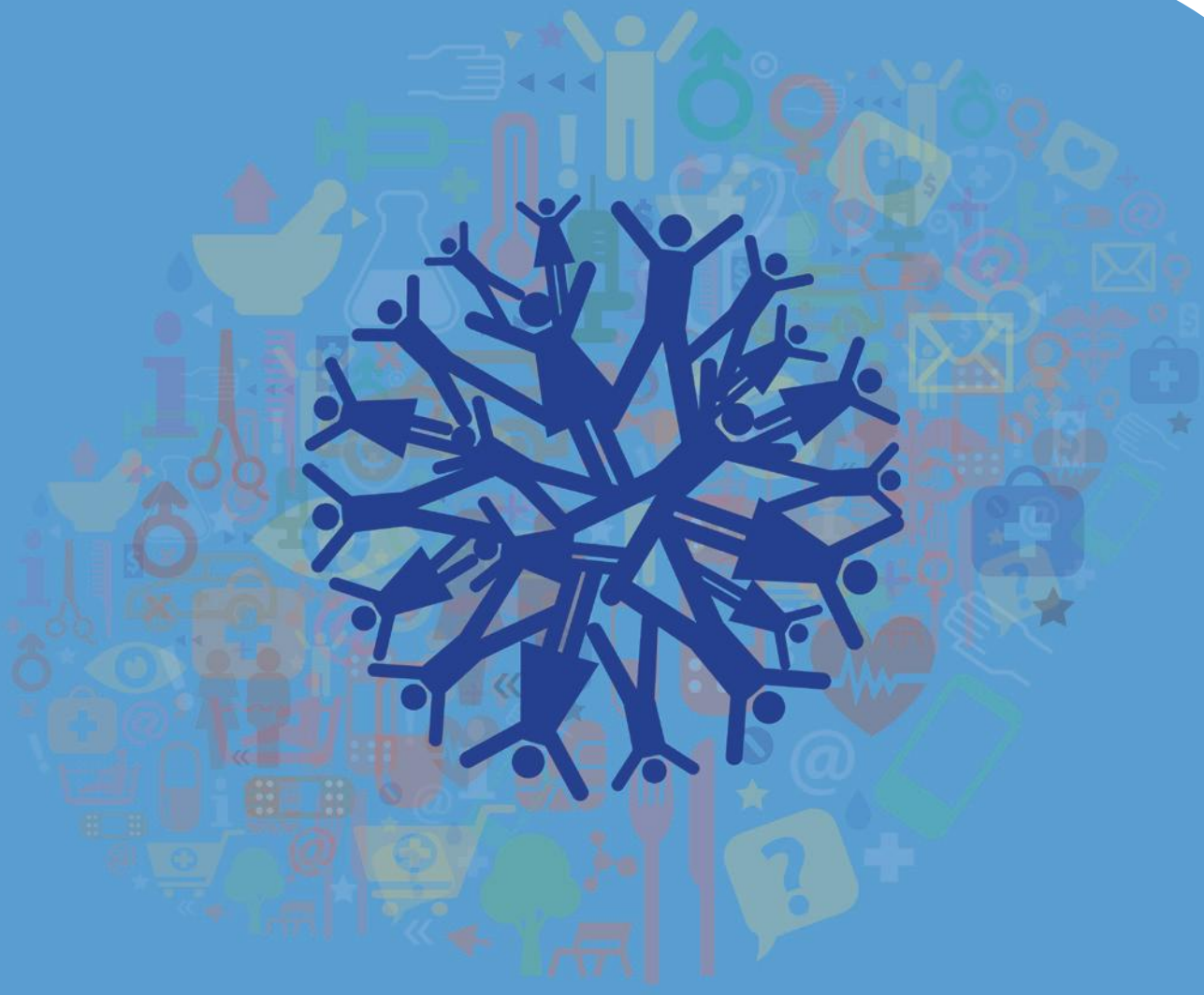
HLTHPS007
Administer and monitor medications

Release 1



Learner guide

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HLTHPS007

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Aspire Version 1.5

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Version control and modification history

Version	Release date	Modification
Release 1, version 1.1	April 2017	First release
Release 1, version 1.2	February 2019	Minor corrections as part of our continuous improvement program. Updated broken URL links.
Release 1, version 1.3	July 2019	Updated to reflect the new Aged Care Quality Standards
Release 1, version 1.4	September 2020	Updated Drugs and Poisons Acts table on p. 27
Release 1, version 1.5	June 2022	Updated Drugs and Poisons Acts table on p. 27

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HLTHPS007 Administer and monitor medications Release 1

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Contents

Before you begin

This learner guide is based on the unit of competency *HLTHPS007 Administer and monitor medications*, 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.

Feature of the learner guide	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 and case studies	▶ Examples of completed documents that may be used in a workplace are included in this learner guide. You can use these examples as models to help you complete practice tasks and learning checkpoints. ▶ Case studies highlight 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.
Video clips	▶ Where QR codes appear, learners can use smartphones and other devices to access video clips relating to the content. For information about how to download a QR reader app or accessing video on your device, please visit our website: www.aspirelr.com.au/help 
Summary	▶ 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	▶ 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	▶ 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	▶ Planning, drafting and writing reports and documents ▶ Communicating through written letters, email and online ▶ Recording progress; reporting incidents
Oral communication	▶ Clarifying instructions ▶ Providing information ▶ Supporting others through encouragement, negotiation and conflict resolution ▶ Using body language to model desired behaviour and responding to others' body language
Numeracy	▶ Calculating costs, weights, measurements of height and distance ▶ Interpreting measurements
Teamwork	▶ Working well with other people by cooperating, collaborating, encouraging and building rapport
Planning and organising	▶ Planning your workload and commitments ▶ Implementing tasks ▶ Completing work on time ▶ Knowing how to deal with hazards and risks
Making decisions	▶ Understanding and applying decision-making processes ▶ Reviewing the impact of your decisions
Problem-solving	▶ Identifying problems ▶ Working out how to fix a problem using problem-solving processes and reviewing the outcome
Innovation and creation	▶ 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	▶ 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 Identify situations that are a potential risk to the safe administration of medications	1A Access and read information to identify substance incompatibilities based on care plan and delegation	☐ Confident ☐ Basic understanding ☐ Not confident
	1B Identify environmental and time management issues that may impact or contraindicate administration of medication	☐ Confident ☐ Basic understanding ☐ Not confident
	1C Report potential risks related to medication administration to the delegating health professional	☐ Confident ☐ Basic understanding ☐ Not confident
	1D Confirm identity and whether any allergies exist	☐ Confident ☐ Basic understanding ☐ Not confident
	1E Identify drugs and poisons schedules and classifications as determined by law	☐ Confident ☐ Basic understanding ☐ Not confident
	1F Identify limitations in your own capability in relation to undertaking medication administration and reporting to the delegating health professional	☐ Confident ☐ Basic understanding ☐ Not confident

Topic	Key outcomes	Rate your confidence in each section
Topic 2 Prepare for medication administration	2A Confirm authority to proceed with delegation of medication administration	☐ Confident ☐ Basic understanding ☐ Not confident
	2B Clarify your own role and limitations in providing assistance with medication administration	☐ Confident ☐ Basic understanding ☐ Not confident
	2C Check all equipment, including dose administration aids	☐ Confident ☐ Basic understanding ☐ Not confident
	2D Follow infection control procedures	☐ Confident ☐ Basic understanding ☐ Not confident
	2E Confirm medication administration route and procedure	☐ Confident ☐ Basic understanding ☐ Not confident
	2F Confirm purpose and function of prescribed medications	☐ Confident ☐ Basic understanding ☐ Not confident
	2G Accurately calculate medication dosages according to authorised documented request	☐ Confident ☐ Basic understanding ☐ Not confident
	2H Prepare medications according to delegated role and in line with legal and environmental guidelines	☐ Confident ☐ Basic understanding ☐ Not confident
Topic 3 Identify and prepare the person for administration of medication	3A Greet and identify the person and prepare for medication administration	☐ Confident ☐ Basic understanding ☐ Not confident
	3B Check the person's medication according to organisational guidelines and the delegation from the health professional	☐ Confident ☐ Basic understanding ☐ Not confident
	3C Accurately explain the administration procedure to the person	☐ Confident ☐ Basic understanding ☐ Not confident
	3D Check the person for physical or behavioural changes	☐ Confident ☐ Basic understanding ☐ Not confident

Topic	Key outcomes	Rate your confidence in each section
Topic 4 Administer medications within legal parameters	4A Administer medications as delegated within your role responsibility	☐ Confident ☐ Basic understanding ☐ Not confident
	4B Administer medications correctly according to defined legislation, organisational procedures, professional standards and instructions	☐ Confident ☐ Basic understanding ☐ Not confident
	4C Oversee and observe the person when taking medication	☐ Confident ☐ Basic understanding ☐ Not confident
	4D Dispose of all used and unused medication and containers, according to organisational procedures	☐ Confident ☐ Basic understanding ☐ Not confident
	4E Identify signs that when-necessary medications may be required, then inform	☐ Confident ☐ Basic understanding ☐ Not confident
	4F Record administration of medications according to organisational policy	☐ Confident ☐ Basic understanding ☐ Not confident
	4G Provide accurate information on medication administration	☐ Confident ☐ Basic understanding ☐ Not confident
Topic 5 Monitor the person's response to administered medication	5A Identify possible acute and delayed adverse reactions to medications and respond	☐ Confident ☐ Basic understanding ☐ Not confident
	5B Implement an emergency response for identified acute and delayed adverse reactions	☐ Confident ☐ Basic understanding ☐ Not confident
	5C Record and report response to emergency strategies	☐ Confident ☐ Basic understanding ☐ Not confident
	5D Identify signs of pain and report to the health professional	☐ Confident ☐ Basic understanding ☐ Not confident
	5E Observe and record response to pain-relieving medication and report	☐ Confident ☐ Basic understanding ☐ Not confident

Topic	Key outcomes	Rate your confidence in each section
Topic 6 Handle medication contingencies	6A Report medication refusal or incomplete ingestion to the supervising health professional	☐ Confident ☐ Basic understanding ☐ Not confident
	6B Clearly identify contaminated or out-of-date medication and implement safe disposal	☐ Confident ☐ Basic understanding ☐ Not confident
	6C Observe and record changes in the person's condition and report them	☐ Confident ☐ Basic understanding ☐ Not confident
	6D Record and report any inconsistencies	☐ Confident ☐ Basic understanding ☐ Not confident
Topic 7 Complete medication distribution and administration	7A Manage medication equipment and used containers according to infection control guidelines	☐ Confident ☐ Basic understanding ☐ Not confident
	7B Complete arrangements and procedures to replenish dose administration aids and supplies	☐ Confident ☐ Basic understanding ☐ Not confident
	7C Store medication charts, care plans and treatment sheets	☐ Confident ☐ Basic understanding ☐ Not confident
	7D Complete medication storage procedures	☐ Confident ☐ Basic understanding ☐ Not confident

Topic 1

In this topic you will learn how to:

1A **Access and read information to identify substance incompatibilities based on care plan and delegation**

1B **Identify environmental and time management issues that may impact or contraindicate administration of medication**

1C **Report potential risks related to medication administration to the delegating health professional**

1D **Confirm identity and whether any allergies exist**

1E **Identify drugs and poisons schedules and classifications as determined by law**

1F **Identify limitations in your own capability in relation to undertaking medication administration and report to the delegating health professional**

Identify situations that are a potential risk to the safe administration of medications

Aged and community services workers have a duty of care to ensure prescribed medications are safely handled by the residents themselves or by staff involved in managing and assisting individuals with medications.

Where a resident or individual is assessed as not competent to self-manage medications, or requests staff to manage them on their behalf, staff have a duty of care to identify situations that pose a potential risk to the safe administration of medication. Workers should always ensure that they administer the right medication to the right patient, in the right dosage at the right time.

Certain medications are frequently confused with another with a similar name or appearance, so it is important to make sure you are giving the correct one. It is equally important to monitor the person's response, and identify any adverse medication reactions/interactions or allergic reactions, particularly when a person has recently been prescribed a new medication regime.

1A Access and read information to identify substance incompatibilities based on care plan and delegation

Key sources of information exist to ensure workers can identify potential risks to administering medications safely, including identifying substance incompatibilities. For example, the Australian Pharmaceutical Advisory Council (APAC) has developed *Guidelines for medication management in residential aged care facilities.* These guidelines recommend that each facility has a medication advisory committee with general practitioners, pharmacists (supplying pharmacists and if different, the pharmacist conducting medication reviews), residential aged care facilities (RACF) management and staff (including nurses), and resident advocates working together to facilitate the quality use of medicines.

Another key source of information is the person's care plan, which describes the specific care needs, what care (including medications) is needed and how and when the care should be provided.

It is important you are aware of common conflicts and/or incompatibilities between medication, the goal and/or desired effect that the medication should produce and to be mindful of inappropriate reactions that might be caused by a particular medication regime. Make sure the information you are accessing on common conflicts and/or incompatibilities between medication is current; you will need to regularly revise it, when appropriate.

Delegation of particular care tasks

Delegation of care tasks should only be done in accordance with organisational principles, practices and regulatory frameworks relevant to the work. Registered nurses may delegate aspects of care to other nurses and to other care workers. Registered nurses must consider the needs of clients and the skills of the other care workers to ensure that delegation does not jeopardise the provision of safe care.

The registered nurse may delegate medication administration only to care workers who have been appropriately trained and assessed, and who accept the delegation within the context of a care plan or the organisation's written instructions.

All workers must have a clear understanding of their role, accountability and responsibilities; follow organisational policies and procedures; and always ask their supervisor if they are unsure of what to do.

Delegation instructions include:

- the medication and its specific purpose
- the medication's form and instructions such as 'enteric-coated – do not crush'

- dosage and related instructions on how to measure the medication
- the route or how the medication is to be taken into the body
- contraindications providing information about whether the medication will react with other medications or treatments
- contraindications providing information about whether the medication will negatively affect people with particular symptoms or conditions
- any other relevant instructions or information, especially information specific to the individual.

Delegated task instructions

It is important that you clearly understand the instructions that relate to the care task delegated to you.

Below is a list of things you must be able to do to follow instructions concerning delegated tasks.

Requirements for following instructions about delegated tasks
▶ Accurately read and interpret relevant medical/medication terminology, instructions, measurements and calculations.
▶ Accurately interpret commonly accepted medication abbreviations.
▶ Apply a basic knowledge of commonly used medications.
▶ Apply a basic understanding of medication groups and categories, and their effect on body systems and major disorders.
▶ Adhere to the principles, practices and regulatory framework underpinning delegation and supervision, accountability and responsibility.

Pharmacology

Pharmacology is the study of medicines and drugs. Your understanding of pharmacology is on a need-to-know basis. Be familiar with the pharmacology of medications you help administer so you can better understand the effects, and can effectively monitor the person. For more information about pharmacology, you can access either the professional or consumer version of the MSD Manual at: http://aspirelr.link/msd-manuals

There are three important aspects of pharmacology:

- Pharmacodynamics
- Pharmacokinetics
- Pharmacotherapeutics

Pharmacodynamics

Pharmacodynamics is the study of the biochemical and physiological effects of commonly used pharmacology on the body. It looks at how the body reacts to certain drug types, and the relationship between concentration and effect of the drug.

Here is some more information.

Common effects of medications on the body

- Stimulating action through receptor agonism, where the drug causes more cell activity
- Depressing action through receptor agonism, where the drug causes less cell activity
- Blocking/antagonising action, where the drug binds to the receptor but does not activate it
- Stabilising action, where the drug neither depresses nor stimulates
- Exchanging or replacing substances
- Direct beneficial chemical reaction
- Direct harmful chemical reaction (such as caused by poison)

Important pharmacodynamic terms

- Desired activity
- Undesirable effects
- Therapeutic window, which is the amount of medication required to be effective before it has adverse effects
- Duration of action, which is the length of time the drug is effective
- Receptor binding effect, which is the study of how molecules bind
- Law of mass action, which relates to large-scale binding effects of numerous molecules
- Selectivity is when the drug enters a site, and reacts onto the cells or tissues intended to produce a reaction
- Receptors are structures on the cell membrane that allow a molecule to attach to the cell
- Agonist drugs activate and stimulate receptors, which trigger a response
- Antagonist drugs block the body's access to natural agonists, which are usually neurotransmitters to prevent a natural cell response
- Enzymes regulate chemical reactions in cells; some drugs target enzymes instead of receptors. They can be inhibitors or activators.

Pharmacokinetics

Pharmacodynamics study the effect of drugs on the body. Pharmacokinetics, on the other hand, is the study of what the body does to the drug. Pharmacokinetics is the action of commonly used pharmacology in the body over a period of time, including the processes of absorption.

Below are brief descriptions of key pharmacokinetic actions.

Drug absorption

Absorption is affected by chemical compound of the drug, and the route of administration. Absorption may be:

- passive diffusion; drugs diffuse across cell membranes passively
- facilitated passive diffusion; certain molecules can be released to slow or speed up absorption
- active transport; requires energy expenditure
- pinocytopsis; fluid or particles are engulfed by a cell

Routes of administration include:

- oral administration
- parenteral administration
- controlled-release forms.

Bioavailability

Bioavailability is the strength and the rate that the medication accesses the site of action. It may be affected by dosage form.

Distribution

Different structures and functions in the body, such as blood flow rate and tissue mass, pH, and permeability of cell membranes effect the evenness of drug distribution around the body.

Metabolism

Metabolism refers to how the chemicals are changed or used. The liver generally metabolises medication. Actions used in metabolism include hydration, condensation and reduction.

Excretion

Excretion is how drugs are removed from the body. Most drugs are eliminated through kidneys in the urine.

Pharmacotherapeutics

Pharmacotherapeutics is the study of the therapeutic uses and effects of pharmacology used for common medical conditions. It looks at the beneficial and adverse effects of drugs.

Pharmacists will have the most extensive knowledge of pharmacotherapeutics; however, nurses and doctors will also have training in pharmacotherapeutics.

Use the internet to look up the names of specific drugs you are administering for detailed information about the pharmacotherapeutics of each drug. Useful sites include Medicines Information at: http://aspirelr.link/medicines-information or Consumer Medicine Information (CMI).

When a drug is taken, one or more of the following outcomes might occur.

Possible outcomes of a drug
Desired effect
The drug is working correctly
Unwanted effect
Side effects or adverse drug reactions
Drug interactions
An increase or decrease in the actions of one or more drugs, resulting in side effects or failed treatment
No apparent effect
The person's health professionals need to be alerted

Monitor effects of medication

Because older people can be more likely to experience problematic side effects caused by drug toxicity, aged care workers should familiarise themselves with the known therapeutic and non-therapeutic effects of medications they are administering as outlined below.

Known therapeutic and non-therapeutic effects of medications
▶ The potential side effects of a drug and how long they might last
▶ The rarer adverse reactions associated with taking the drug
▶ The expected therapeutic effect of the drug, including how soon a person might experience results

Unwanted side effects

Sometimes the unwanted effects are predictable (known side effects or adverse effects) and some are unexpected and unpredictable.

Unwanted effects are displayed either as physical changes such as rashes, vomiting, fainting or blurred vision; anaphylactic or allergic reactions; or behavioural changes such as confusion, irritability, agitation or lethargy.

You must understand:

- the name of the drug and what it is used for
- the dose – measurement and frequency
- any precautions that need to be followed while the person is taking the drug
- contraindications for using the drug
- the potentially serious side effects the patient should report to their health professional/s
- side effects that need not be reported to their health professional/s unless they persist
- the need to monitor for effects that can be attributed to the drugs the person is taking.

Access accurate information

It is important that you have access to accurate information about medicines, and provide consumers with appropriate information if necessary. For example, workers and people you support can use the consumer medicine information (CMI) database to obtain consumer information from the manufacturer about the medication in a timely manner.

You will also need to access and use the person's personal care plan. The care plan will outline the medications they require, dosages, possible side effects and possible responses. Medication information should be regularly reviewed and updated for accuracy. If you notice the medication is not effective or has adverse side effects, you must notify a health professional immediately, because the medication information may need to be updated.

Abbreviations

Workers must be able to accurately read, understand and interpret relevant medical/medication terminology and commonly accepted medication abbreviations.

Below is a list of common medical/medication abbreviations with their meaning.

Abbreviation	Meaning
a.c.	before meals
b.i.d. or bd	twice/day
cap	capsule

Abbreviation	Meaning
ec	enteric-coated
elix	elixir
fl	fluid
gtt	drop
h.s.	at hour of sleep (bedtime)
inj or IJ	injection
L	litre
mane	morning
ml	millilitres
nocte	night
p.c.	after meals
p.o.	by mouth
PR	per rectum
q	every – for example, q8h means every 8 hours
q.a.m	every morning
q.d.	every day
q.i.d.	four times/day
q.o.d.	every other day
q.p.m	each evening
subling or SL	sublingual (under the tongue)
supp	suppository
t.i.d. or tds	three times/day
tab	tablet
tbsp	tablespoon
tsp	teaspoon
č	with
š	without

Medication administration errors

Errors will occur in all workplaces and with all tasks, including administering medications to clients. It is imperative that workers aim to minimise any medication administration errors and, more importantly, that they can quickly identify and report the occurrence of any administration errors.

The principles of safe medication administration are often called five rights (5Rs) – give the right drug via the right route in the right dose to the right patient at the right time. Some organisations also use the nine rights. These are similar to the five rights, but they also include the right of the person to refuse their medications, the right of the person to know what the drug they are taking is for, the right to documentation being used and updated as required, and the right to having a drug prepared in the correct way.

Poor penmanship, misinterpreting someone's written information and errors in transcription often contribute to medication errors or medication accidents. It is increasingly common for medical facilities to use a computerised system that lowers the risk of human error by reducing the number of steps involved in the process. Computerised systems can automatically check and validate information against the person's care plan when it is entered into the computerised system, and sound an alert for information incompatibility or contraindications.

The most common errors include:

- wrong drug
- wrong route
- wrong dose
- wrong patient
- wrong timing of drug administration.

Substance incompatibilities and contraindications

The majority of information about substance incompatibilities will be provided in the person's care plan, or in the instructions given by the person authorised to delegate the medication administration task. In order to identify substance incompatibilities and/or contraindications, workers should refer to the individual's care plan and the delegation instructions. You can source additional material from MIMS online or the Australian Medicines Handbook (AMH).

It is particularly important to closely monitor people who have only recently started taking a drug, because any changes that happen in the first few days may be caused by the drug.

You must have a clear understanding of your role, accountability and responsibilities relating to administering and monitoring medications. You should always read, understand and follow organisational policies and procedures, and always ask their supervisor if they are unsure of what to do.

Example

Access and read information to identify substance incompatibilities

In accordance with her service's medication management policies and procedures, Lilly asks Huang, an 82-year-old person she supports, whether his medication regime has changed recently. Huang's Chinese herbalist has recommended that he take Feverfew tablets to alleviate the symptoms and frequency of the migraine headaches he has been experiencing.

Lilly reports that Huang has recently started taking Feverfew herbal treatments to her supervisor; he is already taking the anticoagulant drug warfarin. Lilly's supervisor is a registered nurse and she instructs Lilly to discuss this situation further with Huang. Lilly advises Huang that he should talk to his doctor and/or a pharmacist about the risks of Feverfew having an additive anticoagulant effect while he is on warfarin.

Practice task 1

1. What is the difference between pharmacodynamics and pharmacokinetics?

2. What document could you read to identify possible substance incompatibilities?

Click to complete Practice task 1

1B Identify environmental and time management issues that may impact or contraindicate administration of medication

Some people, such as older people, tend to take a large number and wide variety of medications that may often be prescribed by several physicians. This situation can result in the deliberate or unintentional misuse of prescription drugs, sometimes because each provider focuses on an area of expertise that might require pharmacotherapy (the treatment of disease through the administration of drugs). If these providers do not have an effective system of relaying changes in the treatment plans to other providers, confusion and adverse polypharmacy as a result of multiple diagnoses can lead to complex medication regimens. The use of multiple medications increases the likelihood of adverse drug reactions or interactions.

A drug's pharmacodynamics can be affected by physiological changes due to disorders such as malnutrition or Parkinson's disease, or due to ageing or other drugs. The ageing process can also affect a drug's pharmacokinetics, which in turn can affect how the drug works and the appropriate dosage. For example, when age-related bodily changes decrease absorption or distribution of the drug, a higher dosage may be needed. On the other hand, age-related changes that decrease drug metabolism and elimination may mean that a lower dosage may reach the same original effect.

Other issues that may impact the safe administration of medication include drug interactions and side effects, cross-infection and complementary therapies.

Drug interactions and side effects

The effects of drug interactions are usually unwanted and sometimes harmful. Interactions may increase or decrease the actions of one or more drugs, resulting in unwanted side effects or failed treatment, so it is important for workers to closely monitor the person for any physical or behavioural changes.

Drug-to-drug interaction

Taking more than one drug might have unintended and unwanted side effects ranging from mild to serious. Most adverse drug–drug interactions are either pharmacodynamic, meaning what a drug does to the body, or pharmacokinetic, which relates to the onset, duration and intensity of a drug's effect in nature.

Drug–drug interactions can involve prescription or non-prescription (over-the-counter) drugs. Common drug-to-drug interactions that a worker should know about can involve antidepressants, antihypertensives, digoxin, oral corticosteroids, sedatives, warfarin and even aspirin.

Warfarin, for instance, is an anticoagulant and causes blood thinning. Aspirin inhibits clotting. The risk of taking both together can cause bleeding.

Older people are more susceptible to drug interactions than younger patients because of age-related physiological changes and because they often have multiple diseases and the number of different drugs they are taking at any one time is higher.

Sunlight sensitivity

When combined prescriptions, over-the-counter medications, supplements and/or herbal or alternative treatments are taken, the substance or combinations may react. Such reactions can cause sensitivity to sunlight as a symptom; for example, some high blood pressure medications can cause sensitivity to sunlight.

Drug–nutrient interaction

Drugs can affect the way the body uses nutrients in food and conversely, nutrients in food can affect the action of medications. Medications can change the way a nutrient is absorbed, metabolised or excreted. In addition, the food a person eats can make medications work faster, slower, or even prevent them from working at all; for example, calcium rich foods such as dairy foods can limit the effectiveness of tetracycline antibiotics.

The effects of medication may also be changed depending on how hydrated the person is at the time of administration. The body needs water to function normally and process medications effectively. Dehydration can cause electrolyte abnormalities, a decrease in blood flow and lowered blood pressure, which can lead to kidney failure. The young and elderly are particularly susceptible to dehydration.

Hydration

The effects of medication may also be changed depending on how hydrated the person is at the time of administration. The body needs water to function normally and process medications effectively. Dehydration can cause electrolyte abnormalities, a decrease in blood flow and lowered blood pressure, which can lead to kidney failure. The young and elderly are particularly susceptible to dehydration.

Drug–disease interaction

Drug–disease interactions refer to specific drugs that may be administered for a secondary reason, which can worsen or exacerbate a person's existing condition, disease or disorder. For example, anticholinergic drugs that are used to treat a variety of conditions such as gastrointestinal disorders, genitor-urinary disorders and respiratory disorders such as chronic obstructive pulmonary disease (COPD) are a common cause of drug–disease interactions. A person with dementia might become more confused if they are given an anticholinergic drug such as Atrovent for the treatment of bronchiectasis (a form of COPD).

When treating infection, the health professional must be able to determine whether disease is bacterial or viral. Viral infections may be a contraindication for antibiotics as the antibiotics will be ineffective. Organisms may become immune to antibiotics so antibiotics should be used with caution.

Alcohol

Many prescription and over-the-counter drugs may adversely interact with alcohol. Alcohol may render the medication useless. It may also react negatively with medication, causing toxicity to the body. Alcohol can also intensify the effect of medication, for example, might make a person drowsier. Heart medications, for example, when mixed with alcohol, may cause rapid heartbeat and changes in blood pressure. Blood-thinning medications like warfarin may lead to internal bleeding when mixed with alcohol. Alcohol when mixed with acetaminophen, an over-the-counter medication, can damage the liver. There are serious consequences of using alcohol together with antihistamines.

Cross infection

When you administer medications you need to be aware of the risk of cross-infection as you carry out their tasks. You may administer oral medication from a blister pack or a dosette box that has been filled by a pharmacist, doctor or registered nurse, or directly from the service user's labelled pharmacy container.

Understand and apply infection-control procedures and precautions to prevent or minimise the risk of transmission of infection between staff and people you support.

Standard precautions need to be followed for all medication administered such as:

- thorough hand-washing before and after administration of medications
- observing good personal hygiene habits
- using a non-touch approach for medications, such as carefully pouring tablets from a stock bottle into the lid and then into a medicine cup.

Complementary therapies

Complementary therapies are therapies that adopt a holistic approach to health and health problems, including therapeutic massage, reflexology, acupuncture, aromatherapy, osteopathy, naturopathy and homeopathy, pet therapy and music therapy. Complementary drug therapies include nutritional supplements; alternative medicines; vitamin, mineral, herbal, aromatherapy and homoeopathic products, and preparations that are sold over the counter.

Complementary medicines may interact with each other and with prescribed medicines, and cause adverse reactions. Other potential adverse drug reactions can be caused by non-adherence to medication and/or care plans – which, of course, can adversely impact the effectiveness and outcomes of that plan – and by mistakes leading to overdosing or underdosing.

Safe operating procedures

Non-adherence to a medication regime can adversely affect the effectiveness and outcomes of that regime. Workers must ensure that safe operating procedures are followed as listed below. Take time and care to follow medication procedures.

Storage temperature

- Medications are stored at the recommended temperature.

Expiry date

- Medication/treatments that are past their expiry date are returned unused to the pharmacy.

Administration records

- Staff sign a medication sheet once a dose has been administered.

Disposal

- Any damaged/soiled medication is placed in a container labelled 'medication for disposal', including medicines that have been spilled on the floor, then the container is stored in a secure place until the medication can be returned to the pharmacy accompanied by a 'medication error' form.

Consultation

- Staff consult with the relevant health professional to check any medication concerns they have, such as situations when the person refuses to take some of or all of their medications, medication looks different from the person's usual medication (higher/lower number of tablets, different look, colour), the person only wants to take some medication and leave the rest till later, the person spits out some or all of their medication, or they vomit soon after taking their medication.

Medication incident form

- Staff complete a medication incident form to document medication errors and actions taken, any information gaps in the signing record, that the person has missed dosages or taken a part dosage (failed to swallow all and/or vomits).

Time management issues that may impact or contraindicate administration of medication

Community services workers are often busy and organisations are often under-resourced. The result may be that you do not read medication procedures correctly, or do not pick up if there is a medication error in a person's care plan.

When monitoring and administering medication, pay particular attention to the details and possible contraindications of the medication being administered. Get in the practice of looking up specific medications on the Therapeutic Goods Administration (TGA) website at: http://aspirelr.link/tga-medicines or MIMS at: http://aspirelr.link/mims-australia.

Potential reactions to medication

If safety procedures are not correctly followed, or contraindications occur due to environmental, physical or behavioural factors, there may be serious consequences.

Below are some potentially negative outcomes.

Anaphylactic reactions

Anaphylaxis is an allergic reaction that possibly causes death. Symptoms include itchy rash, swelling of the throat and low blood pressure. The symptoms usually escalate quickly and require immediate medical attention.

Some people are allergic to penicillin, and other prescription drugs, over-the-counter medications such as aspirin or herbal treatments. These reactions may result in anaphylaxis.

Anaphylaxis is treated with an injection of adrenalin. First aid should always be used.

Contraindications for medication use

Some treatments may be risky for people who have allergies, are pregnant or have high blood pressure. Contraindications may also be caused by drug-on-drug interactions, such as taking both aspirin and warfarin to thin the blood. Contraindications may result in anaphylaxis.

Always read administration instructions and warnings, and consult the person's care plan for specific information.

Consequences of incorrect use

Incorrect use may involve:

- using vitamins or complementary medicines with medication
- using other medications that cause contraindications
- taking the incorrect dosage
- taking medication too frequently or too infrequently.

Consequences include:

- adverse effects, such as anaphylaxis
- no effect; the medication does not do what it is supposed to do
- the medication negatively effects the other medication.

Example

Identify environmental and time management issues that may impact or contraindicate administration of medication

Jean is 74 years old. She has indicated that her asthma has worsened recently and her chest is really tight. Jean's care worker has noticed that she has a chronic cough, especially at night. On checking Jean's care plan, the care worker notices that Jean has recently been prescribed Betaloc®, which is a beta blocker used to treat high blood pressure. She reports her observations to the registered nurse, who contacts Jean's treating physician. The physician discontinues the use of Betaloc® and prescribes ADEFIN XL® tablets (calcium channel blockers), because it is considered a safe drug for the treatment of patients with blood pressure who experience asthma simultaneously.

Practice task 2

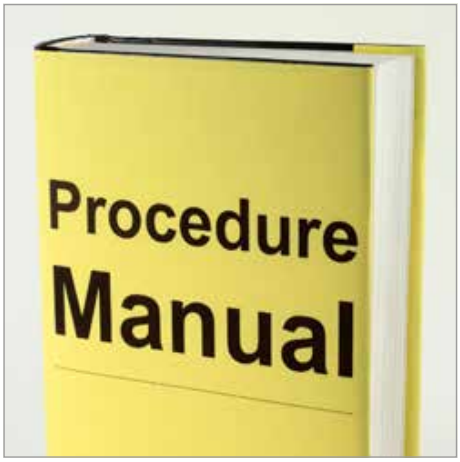
1. Identify three time management issues that may cause a contraindication when medication is administered.

2. Identify three environmental issues that may cause a contraindication when medication is administered.

3. Identify substance incompatibilities that may relate to using warfarin and aspirin.

Click to complete Practice task 2

1C Report potential risks related to medication administration to the delegating health professional



Organisational policies and procedures will determine how care workers should report potential risks related to medication administration to their supervisor or a relevant health professional. Potential risks in an aged care setting may include allergic reactions, immunisation status and/or medication incompatibilities, and these must be reported immediately to your supervisor by following the organisation's guidelines or procedures.

Historically, medication administration and monitoring was considered to be the role of a registered nurse, because there was a lack of guidelines or legislation for best and safe practice relating to the delivery of medication.

Research and risk analysis by government departments have now identified the skills and competencies required for care workers to safely undertake this task, and this has led to significant shifts in work practices and legislation. It is now common practice for attendant care workers to administer oral medications once they have received appropriate training, and are under the supervision of a health professional who delegates the work to the care worker.

Best practice requires that workers carefully monitor and assess the client for any unwanted or unexpected effects resulting from the medication. Such a situation may require an immediate review of the client care plan. Be guided by your organisation's medication management policies and procedures if there are any suspected adverse medicine events, and always ask for advice from your supervisor.

Potential risks related to medication

There is a range of risks associated with the administration of medication. Observe the person taking medication for physical and visible signs of a contraindication. You may need to measure the person's blood pressure or temperature to confirm your observations.

Consult the person verbally before medication is administered. You need to know whether they have taken another medication without your knowledge, or if they are pregnant or have an allergy not documented. If you are not sure what contraindications may occur, consult your supervisor or the delegating health professional.

After medication is administered, observe the person's condition and notify the delegating health professional if changes are unexpected.

Potential risks related to medication:

- Allergic reactions, such as anaphylaxis
- Contaminated or outdated medication
- Contraindications that affect other medication
- Risks to pregnancy
- Low or high blood pressure
- Dizziness or numbness
- Pain
- No reaction at all
- Death

Drug toxicity

Adverse drug reactions and adverse drug events can also be due to drug toxicity, which can happen when the person receives too much medication (over dosage), the drug accumulates in the body over time or the person's body is unable to eliminate the drug.

Older people often have increased sensitivity to a drug's effect because of age-related changes in pharmacokinetics and pharmacodynamics. This means that the average daily dose required for some medications differs dramatically from person to person, increasing the risk of dose-related reactions such as low blood pressure with antihypertensive medications and low blood sugar with insulin. Common drugs that cause drug toxicity in older people include warfarin, insulin and digoxin.

A 'normal' dosage can commonly have a greater effect in older people so they should be closely monitored so that a suspected relationship between the medications a person is taking and a reaction can be brought to the attention of the person's health professional/s.

Older people's increased risk

- Because older people can be more likely to experience problematic side effects caused by drug toxicity, aged care workers should familiarise themselves with the known therapeutic and non-therapeutic effects of medications they are administering, including:
  - the potential side effects of a drug and how long they might last
  - the rarer adverse reactions associated with taking the drug
  - the expected therapeutic effect of the drug, including how soon a person might experience results.

Risk factors

- Drug-toxicity risk factors include:
  - the number of drugs a person is taking
  - any prior history of drug toxicity
  - cardiac, liver disease or renal impairment
  - the presence of four or more medical conditions.

Supervisors

Know who to report to when an incident occurs. You may report to your supervisor, or other health professionals in a variety of healthcare settings.

A supervisor is authorised to instruct, advise and monitor another person in order to ensure safe and effective performance in carrying out the duties of their position. The supervision level, form and frequency must be established by the delegating health professional for all work delegated to another worker, and supervision may be conducted in person, in print through written notes or instructions, or via electronic communication media such as emails, SMS and telephone or video conferencing, where necessary.

Supervisors will also be involved in correcting and developing non-clinical aspects with workers, such as time management, organisational requirements, communication skills and other factors that support the effective provision of clinical care and working within a team.

The frequency and form of supervision will be determined by factors such as the competency and task maturity of the person being supervised, and the need to review and assess conditions and progress in order to establish or alter treatment plans.

Healthcare team

There is a range of healthcare professionals and workers who are involved in medication management and the provision of medication information and assistance to people you support and workers. These following healthcare professionals can provide valuable information about potential risks, incidents or medical emergencies. If the incident is an emergency, you should call an ambulance.

Members of the healthcare team

Medical practitioner
Conduct health assessments, develop healthcare plans and written medication orders (prescriptions) and monitor medication effects on an ongoing basis.

Pharmacist Dispense medications, including preparing dose administration aids (DAAs)
Registered nurse Manage and administer medications and supervise care workers delegated to perform medication administration tasks
Complementary medicine therapist For delegation within legislative requirements, specific to their area of expertise where included in the care plan
Dentist For medications relevant to dental hygiene or procedures

Follow procedures for reporting risk

Reports have two main functions: communication and accountability. You need to communicate to your supervisor, or appropriate health professional that more assistance is required. You must complete written reports for yours and the organisation's accountability and liability.

Reports to the appropriate authority or person must be made immediately. The risk or potential risk to the person could be serious if the issue is not addressed as soon as possible. If the incident is critical, report to emergency services. If you know the person is safe, phone your supervisor for advice, and possibly arrange a referral to the person's medical practitioner or pharmacist.

Procedures for reporting medication risk:

- Assess urgency of risk, and address priorities.
- Prioritise the person's safety.
- Use the most appropriate method, form or template for completing report.
- Ensure accuracy, specificity and objectivity of information.
- Check that spelling of terms, especially medication, is correct.
- Submit a report to the appropriate person in a timely manner and maintain a copy for the person being supported.

Example

Report potential risks related to medication administration to delegating health professional

Here is an example of a medication incident form. Organisations can customise their forms.

Details of medication incident						
Date of incident						
Time of incident						
Nature of incident	Wrong medication	Missed medication	Wrong dose	Wrong time	Wrong resident	Wrong route
Name of person						
Activity in which person was engaged at the time of the incident/injury						
Location where incident occurred						
Name of treating person						
Witnesses to incident	Name Phone contact					
	Name Phone contact					
Description of incident						
Immediate response actions						
Person reporting who identified error						
Person/s who may have been responsible for the error						
Signature						
Reported to	Name Position					
	Name Position					

Practice task 3

1. Identify three potential risks that may relate to medication administration.

2. If a potential risk occurs, who should it be reported to?

3. How would you make a report if a person presents with a sudden unexpected physical reaction to medication?

4. Identify three risk factors for drug toxicity.

Click to complete Practice task 3

1D Confirm identity and whether any allergies exist

It is crucial that care workers who are administering and monitoring medications have the knowledge and skills to check and confirm the identity of the individual receiving the medication.

Check that you are giving the right medication to the right person before you administer the medication. Here are techniques for checking and confirming the identity of people you support.

Techniques for checking and confirming the identity:

- Confirming the person's identity with the health professional who delegated the task of medication administration, such as nursing/care staff
- Checking the person's identity with another staff person if you are unsure
- Confirming the identity with the individual verbally by asking questions such as, 'Can you tell me your name and date of birth please?'
- Confirming the identity with the individual using recognition by response
- Confirming the identity with the individual using augmentative and alternative communication methods
- Checking the person's identification bracelet or other forms of identification
- Checking the name on the medication label; remember that residents can share the same and/or similar names
- Checking the person against the file name and photograph on documentation such as a medication chart

Mistaken identity

Patient identification errors can have serious consequences. If you are unsure, always check (and check again) until you are certain that it is the right client receiving the medication; never assume or take risks about a person's identity.

Why patient identification errors may be caused
▶ Language barriers or someone experiencing difficulties communicating clearly
▶ The person experiences memory loss – an identity bracelet or information chart by their bed is ideal if the person in care has memory loss
▶ The person has impaired cognition from a critical illness or medication effects
▶ The person has a disability that affects communication or cognitive functioning
▶ People with different medication requirements can have the same (or similar) names

Check for allergies

Always check medication charts, care plans and other documentation for information on allergies or potential allergic reactions that the client has reported or experienced in the past. However, be aware that an adverse drug reaction (ADR) or adverse drug event (ADE) can occur in care settings from errors in medication allergy documentation. Make sure that you always ask the person about allergies to medications. For example, 'Mrs Wong, have you had 'x' before? Did you experience an allergic reaction?'

Listen to the person's own concerns about their medication regime. Listen respectfully, ask questions and answer the person's questions within your own ability, job role and delegation. If appropriate, double-check the medication order and indicate to the person that you will report their concerns to your supervisor and/or their health professional/s.

It is important to report to your supervisor if the person has questions whether s/he should be taking the medication, is finding the side effects too debilitating or is concerned that they are not feeling any better.

Types of allergic reactions

Medication can produce a predictable, positive effect where the drug works as it was intended and produces a therapeutic effect. However, medication can produce side effects or adverse drug reactions that are unintended secondary side effects that may or may not be harmful to the person. Medication can also cause allergic reactions that can range from mild to anaphylactic.

Sometimes the unwanted effects are predictable (known side effects or adverse effects), and some are unexpected and unpredictable. The onset of symptoms will vary widely because of individual differences between clients, but will generally happen within seconds or minutes of exposure to the allergen.

Always check the person's medication chart, as this will include details of any known or suspected allergies, drug intolerances and/or recent adverse drug reactions.

The following information outlines the range and severity of the allergic reaction and effects.

Mild and/or short-term allergic reactions

- Rashes
- Itching of the skin (pruritus)
- Wheezing

Less common but more intense reactions

- Difficulty breathing
- Itching or swelling
- Feeling faint
- Racing heart
- Severe nausea
- Severe diarrhoea
- Sudden behavioural changes such as depression, anxiety or confusion

Symptoms of anaphylactic shock – a life-threatening event

- Hives (urticaria)
- Angioedema – acute swelling of the body commonly affecting the face and airways that often disfigures the person
- Respiratory system manifestations such as extreme difficulty breathing
- Gastrointestinal manifestations such as nausea, vomiting, diarrhoea, abdominal pain
- Cardiovascular manifestations such as dizziness, syncope, hypotension

Example

Confirm client identity and if any allergies exist

Sally, an aged care worker, says to an older person, 'Are you Mrs Smith?' The woman answers 'Yes' so the Sally then asks, 'You aren't allergic to penicillin, are you?' Unfortunately, the person she is speaking to has dementia and is not Mrs Smith. When given the medication, it causes a severe reaction and the woman goes into anaphylactic shock.

The incident investigation team identifies that the personal care worker did not follow the facility's protocol. She should have asked the person to state her name and date of birth – 'What is your name and date of birth?' – and then confirmed that the answer corresponded with the medication administration chart, along with conducting a visual check against the photo identification included in the chart.

Practice task 4

1. What indications might suggest that a person has a mild allergy to medication?

2. A person has hives and swelling after taking medication. The chart in front of you does not mention risk of anaphylaxis. What are other possible causes of this reaction?

3. What three ways could you confirm a person's identity before administering medication?

Click to complete Practice task 4

1E Identify drugs and poisons schedules and classifications as determined by law

Legislation regulates the manufacture, supply, possession and use of medicines and poisons, and stipulates requirements about particular substances such as Schedule 8 poisons (controlled drugs) and Schedule 4 poisons (prescription-only medicine). Differences currently exist with regard to the regulation of drugs and poisons between Australian states and territories, so care workers must understand and comply with the laws and regulations relevant to their workplace when administering medications; some examples are listed in the following information.

Laws regarding medication administration
ACT
Medicines, Poisons and Therapeutic Goods Act 2008 (ACT)
NSW
Poisons and Therapeutic Goods Act 1966 (NSW) Poisons and Therapeutic Goods Regulations 2008 (NSW)
NT
Medicines, Poisons and Therapeutic Good Act 2012 Medicines, Poisons and Therapeutic Goods Regulations 2014 (NT)
QLD
Queensland Health (Drugs and Poisons) Regulations 1996 (Qld) Amendments to the regulations affecting specific professions were effective as of November 2018. You can read more here: https://aspirelr.link/qld-poisons-regulations
SA
Controlled substances Act 1984 Controlled Substances (Poisons) Regulation 2011 (SA)
TAS
Poisons Act 1971 (Tas.) and Poisons Regulations 2018 (Tas.)
VIC
Drugs, Poisons and Controlled Substances Act 1981 Drugs, Poisons and Controlled Substances Regulations 2017 (VIC)
WA
Medicines and Poisons Act 2014 Medicines and Poisons Regulations 2016 (WA)

Schedule 2, 3, 4 and 8 medications

The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) in Australia classifies substances (medicines, drugs, poisons) into schedules, which are based primarily on the toxicity of the substance. The SUSMP is a guide used to promote a common reference point when packaging or labelling various substances, and for inclusion in the different state and territory legislation.

Of particular relevance are the Schedule 2, 3, 4 and 8 medications, which the SUSMP classifies as below.

Schedule 2 (S2) medications

- Pharmacy medicine
- Available for safe use in a pharmacy or can be sold by a licensed person
- Include diarrhoea medicines, antihistamines

Schedule 3 (S3) medications

- Pharmacist-only medicine
- Available for the safe use by the public, and should be provided with pharmaceutical advice
- Do not require a prescription but require permission of the pharmacist; purchasers may be required to produce ID
- Include hydrocortisone cream for skin irritations, pseudoephedrine, some asthma inhalers, emergency contraceptive pill

Schedule 4 (S4) medications

- Labelled as prescription-only medicine
- Defined as substances for which the use or supply should be by or on the order of persons permitted by state or territory legislation to prescribe (such as a doctor), and should only be available from a pharmacist on prescription
- Include cardiovascular drugs, antibiotics, diuretics, sleeping tablets, some pain killers (Panadeine Forte®) among numerous others; some S4 poisons are referred to as ‘drugs of dependence’, this is because medication such as benzodiazepines, propoxyphene (Di-Gesic®, Doloxene®), anorectic drugs (Tenuate Dospan®, Duromine®) and anabolic steroids are known to be subject to misuse and trafficking

Schedule 8 (S8) medications

- Labelled as a controlled drug
- Defined as substances that should be available for use but require restrictions relating to manufacture, supply, distribution, possession and use to reduce misuse and physical or psychological dependence
- Include cocaine, morphine (Avinza®, MS Contin®, Roxanol®), pethidine (Meperidine, Demerol®), oxycodone (OxyContin®, Roxicodone®), methadone (Dolophine®, Methadose®), hydromorphone (Dilaudid®), flunitrazepam (Rohypnol®), fentanyl (Actiq®, Fentora®, Duragesic®), ketamine (Ketalar®)

S4 and S8 medications

The administration of Schedule 4 or Schedule 8 drugs to a person receiving high-level care must be managed by a registered nurse. However, the registered nurse may decide to delegate the administration of medication to someone with appropriate qualifications such as an authorised enrolled nurse, enrolled nurses who are not authorised and aged care workers with appropriate medication administration training.

When administering Schedule 4 or Schedule 8 poison, refer to:

- written instruction of a medical practitioner
- oral instructions of a medical practitioner (phone orders for emergency) or a written transcription of medical practitioners' instructions
- directions for use supplied on the drug container/packaging.

Keep records

It is generally anticipated that a person not requiring high-level care is likely to be personally involved in the management and administration of their own prescribed medicines with advice and guidance from relevant health professionals.

Your agency must keep current and accurate records of all medications used, as outlined below.

Records required to be kept of all medications used
▶ Record transactions of Schedule 8 or 9 medications in a drug register or administration book.
▶ Investigate discrepancies in records and notify the appropriate authority of unresolved discrepancies.
▶ Notify the appropriate authority of the loss, destruction or theft of records relating to Schedule 8 or 9 medicines.

Storage

Aged care services must take extreme care when storing medications and adhere to the requirements set out below.

Medication storage requirements
▶ Store Schedule 4 medications in a lockable storage facility.
▶ Take all steps to prevent unauthorised access to Schedule 4 and Schedule 8 drugs.
▶ Store Schedule 8 and 9 medications in a lockable room or lockable storage facility that is attached firmly to the floor or wall.
▶ Ensure that all Schedule 4, 8 and 9 medications are locked away except when they need to be administered.

Example

Identify drugs and poisons schedules and classifications as determined by law

Sandra knows that residents with dementia often can't tell their care workers when something is wrong or how they are feeling. She is worried about a resident's reactions to her medications, and notices that she is being given oxycodone 5mg orally every 4 hours. Sandra knows that oxycodone is a Schedule 8 medication that is classified as a drug of dependence. She raises the concern with the registered nurse that although the medication chart indicates that oxycodone 5mg, orally, can be given as needed every 4 hours, (for lower back pain), the resident is being given the drug every 4 hours but not on request. Her concern is that the drug is being administered based on time rather than confirmed need or pain being experienced by the resident.

Practice task 5

1. Use the internet to find out how Schedule 4 medications should be stored according to the *Poisons and Therapeutic Goods Act 1966* (NSW).

2. What type of medication are Schedule 8 medicines? Give three examples.

3. Describe and identify examples of Schedule 2 and Schedule 3 medicines.

Click to complete Practice task 5

1F Identify limitations in your own capability in relation to undertaking medication administration and report to the delegating health professional

The Australian Government's Department of Health and Ageing advises that the Australian Pharmaceutical Advisory Council (APAC) Guidelines for medication management in residential aged care facilities take into account existing professional standards and relevant legislation. It also advises that the guidelines make recommendations with regard to policies and practices in individual facilities to ensure that all areas of medication management and decision-making work together as a coordinated whole using a teamwork approach.

Different care team members will have different roles, abilities and responsibilities that they must clearly understand. This is particularly true when administering and monitoring medications, and it is imperative that everyone works strictly within their job boundaries and is aware of their capabilities and their limitations.

Responsibilities

Drugs need to be administered by the correct person in the correct way. You are only permitted to administer drugs using certain routes, and need to know the limitations of your role.

You need to know who the delegating health professional is so you can obtain instructions for how to administer drugs, and who to report to if there are complications.

It is the responsibility of a registered nurse (RN) to provide guidance, assistance, support and clinically-focused supervision to aged care workers, ensuring that workers clearly understand their accountability and are willing to accept the delegation of set tasks. Such supervision can either be direct, where the supervisor observes, works with, guides and directs the aged care worker who is being supervised or indirect, where the supervisor does not constantly observe an aged care worker's activities, but is available to assist and advise the care worker if required. Care and community services workers have the following responsibilities.

Indicate level of ability

- Indicate to the supervising RN if they are unable to perform the activity safely (tell the RN if the task/s is beyond their ability).

Understand legislation

- Fully understand the extent of the delegation, including any associated monitoring and reporting requirements and, if needed, request guidance and/or assistance.

Follow policies and procedures

- Follow the agency's medication administration policies and procedures, including reporting procedures for medication incidents/errors and completing documentation related to the agency's medication procedures.

Monitor and report

- Monitor the person and report any changes to their health status to the registered nurse.

Respond to emergencies

- Respond appropriately to medical emergencies by:
  - knowing your limits – do not do more than you are able to
  - staying calm
  - raising the alarm – report the situation to your supervising registered nurse
  - providing basic life support – if trained and certified to do so (hold current first-aid certificate)
  - knowing where to find emergency supplies
  - knowing your facility's standard medical emergency procedures and your role in medical emergencies.

Identify your own limitations

The scope of your role and your ability to administer medication or monitor changes will be accessible in your position description and in your organisation's policies and procedures. You can also clarify your role and limitations with your supervisor and the RN.

Workers who support people in aged care or disability care will undergo medication administration training. In your training, you will find out more about your limitations and capabilities.

General limitations of a support worker in administering medication:

- You are not permitted to administer medication intravenously or in any way that punctures the skin.
- If medication is administered intravenously, this must be done by a nurse, doctor or the person themselves.
- Report and document any side effects or unexpected responses immediately.
- Always use safety procedures, such as infection control when handling or administering oral or suppository medication.
- Always follow the person's medication chart and care plan exactly, and report any concerns immediately.
- You are not permitted to administer medication intravenously.

- If medication is administered intravenously, this must be done by a nurse, doctor or the person themselves.
- Only administer medication after having completed medication training.

Report to delegating health professional

A report should be made whenever medication is administered. This may be as simple as completing the person's medication chart, communicating with others that medication has been administered. Make note of any particulars, such as dosage, and whether there were issues administering medication.

If health changes occur, you are unsure about dosage or administration procedures, report to the delegating health professional as soon as possible. The person may have an allergic reaction to medication, or may be responding to toxicity, or because of a contraindication.

Urgent reports should be made by phone or in person. Always complete formal documentation as well as verbal reports.

Example

Identify limitations in your own capability in relation to undertaking medication administration and report to the delegating health professional

Mr Laing, who has been diagnosed with multiple forms of dementia, has recently been admitted to the facility. He is restless and becomes very agitated every time Leon approaches him to put him on the nebuliser. Leon feels uncomfortable and unsafe around Mr Laing, and indicates to the registered nurse that he would like to be closely supervised the next time he administers the medication to Mr Laing.

Practice task 6

1. What three things could you do to check that you are capable of administering medication?

2. Who could you report to if you are unsure how to administer medication?

3. Outline three aspects of your role and responsibilities when administering medication.

Click to complete Practice task 6

Summary

1. Care workers should familiarise themselves with the known therapeutic and non-therapeutic effects of medications they are administering.
2. A registered nurse may delegate the administration of oral and topical medication to an appropriately trained, confident and competent aged care worker. However, workers are prohibited from administering medications or any other additives/substances by any other routes.
3. It is vitally important for carers to check and confirm the identity of the individual who is to receive the medication before they administer medication.
4. Medication can result in both therapeutic (desired) results and undesirable results ranging from mild side effects to serious allergic reactions.
5. Workers should communicate any concerns they have about a person's health status or reaction to medication to their supervising registered nurse, in the first instance, and be alert to a person's own concerns about their medication regime.
6. Although legislation varies between Australian states and territories in relation to obligations for Schedule 8 poisons (controlled drugs) and Schedule 4 poisons (prescription-only medicine), in general the administration, storage and record-keeping requirements related to Schedule 4 or Schedule 8 poisons are managed by a registered nurse.
7. The registered nurse who delegates the administration of medication to a worker is responsible for providing (directly and/or indirectly) the necessary guidance, direction and support an aged care worker requires to safely perform the task/s.
8. Workers can and should tell their supervising registered nurse if they are unable to safely perform an activity associated with medication administration.

Learning checkpoint 1
Identify situations that are a potential risk to the safe administration of medications

This learning checkpoint allows you to review your skills and knowledge in identifying situations that are a potential risk to the safe administration of medication.

Part A

1. Explain how you can identify the basic pharmacology of drugs you are administering.

2. Explain what drug toxicity is, and identify risk factors.

3. Describe what Schedule 2, 3, 4 and 8 medicines are, and identify the legislation you would refer to for information about how to administer each of these medicines.

4. Focus on the contraindications or incompatibilities of any of the follow interactions, and explain what the response might be:
   - Warfarin and aspirin
   - Medication and diet
   - Medication and sunlight
   - Infection
   - Alcohol
   - Age
   - Processes
   - Hydration

5. Describe the roles and responsibilities of those involved in assisting with medications and limitations of your own role.

Part B

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

Case study

Ahmed Walid supports Dave in a residential care setting. Dave has autism, schizophrenia and bipolar disorder. He takes lithium to treat manic episodes, and his doctor has ordered diazepam to be taken as needed.

Dave's medications are stored in a blister pack, with Dave's care plan, and medication administration records. Ahmed Walid checks Dave's MAR each time he is on shift to make sure nothing has changed. On one occasion, Dave has purchased a bottle of whiskey, and has poured himself a glass. Ahmed Walid checks the MAR and learns that Dave was given diazepam only one hour ago, due to a heightened episode of behaviour of concern.

1. Explain how Ahmed Walid should identify and report potential risks related to medication administration to the delegating health professional.

2. The delegating health professional, Dave's doctor, has prescribed treatment for a bacterial infection. Ahmed Walid assumes the doctor is aware of any interactions with drugs that Dave already takes, but he is responsible for double-checking possible risks before administering medication. Explain how Ahmed Walid could confirm that Dave's identity matches medication and if allergies exist.

3. Dave has a particularly manic episode one afternoon while Ahmed Walid is on shift. When he consults Dave's MAR, he learns that he should administer p.r.n. medication, which in this case is diazepam. Ahmed Walid has never administered p.r.n. medication before, and is not sure if it is within his role and limitation. Explain how Ahmed Walid can be sure.

Topic 2

In this topic you will learn how to:

- **2A Confirm authority to proceed with delegation of medication administration**
- **2B Clarify your own role and limitations in providing assistance with medication administration**
- **2C Check all equipment, including dose administration aids**
- **2D Follow infection control procedures**
- **2E Confirm medication administration route and procedure**
- **2F Confirm purpose and function of prescribed medications**
- **2G Accurately calculate medication dosages according to authorised documented request**
- **2H Prepare medications according to your delegated role and in line with legal and environmental guidelines**

Prepare for medication administration

Aged and community services workers will work in a variety of different settings, including residential aged care facilities, people's homes, group homes or in respite services.

When administering and monitoring medications, workers are required to assess and monitor the health status of a person in care; safely administer medication by following instructions and/or organisational policies, procedures and protocols; monitor and/or observe for both the desired and undesired effects of medication; and report any changes in the health status of a person to their supervisor.

Preparing for medication administration requires aged care workers to apply strict medication administration protocols, standard precautions for infection control and any other relevant health and safety measures to protect individuals under their care. It also requires the worker to discuss the procedures with the person and encourage participation while providing privacy, seeking assistance from other staff if required and safely managing exposure to the treatment area while administering medications.

2A Confirm authority to proceed with delegation of medication administration

Managers and care workers who provide care services have different responsibilities and authority when it comes to assisting with or administering medications, but everyone must understand and follow the organisation's policies and procedures. They will also be expected to implement the recommendations of the APAC Guidelines for medication management in residential aged care facilities.

Compliance

- Medications must be administered strictly in compliance with advice, instruction and relevant legislation, including mandatory annual reconfirmation of the essential knowledge and competency of care workers by the employer within the service provider's performance management framework.

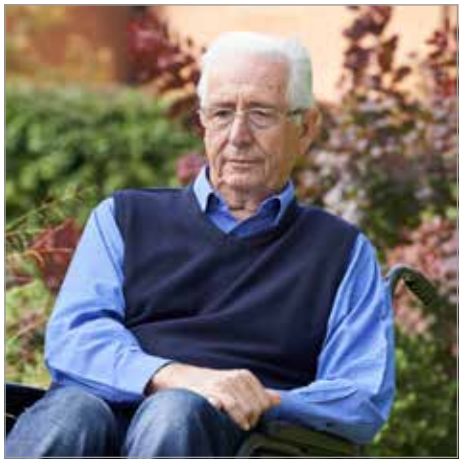
Sources of information

- There are several sources of information that advise or guide organisations and workers about a worker's authority to assist with medication administration. This means the scope or range of tasks that different workers are, and are not, permitted to undertake.

Key documents

- There are some key documents based on industry expertise, legislation and regulatory requirements, and influence the development of organisational policies, procedures and protocols.

APAC guidelines



The APAC Guidelines for medication management in residential aged care facilities can be downloaded from the Department of Health and Ageing website at: http://aspirelr.link/apac-medication-management. This document provides valuable information and recommendations about the role and authority of nursing staff, examples of key documentation and how medications should be administered, stored and disposed of.

The Australian Government Department of Health and Ageing advises that these guidelines assist the management team of residential aged care services to develop systems that support the quality use and administration of medicines. The guidelines outline strategies to ensure management, workers and health professionals all work together to ensure improved health outcomes for older people in care facilities.

State and territory health legislation, policies and guidelines

Legislation and regulations governing medication administration vary between states and territories. Medication administration must be undertaken by strictly complying with relevant state/territory legislation and industry guidelines, which include but are not limited to the *Aged Care Act 1997* (Cth) and Regulations, *Therapeutic Goods Act 1989* (Cth) and other legislation relevant to medications, drugs and poisons in the state/territory and/or the *Disability Services Act 1986* (Cth).

Employers should be aware of aged care workers' current skills and knowledge, and provide any necessary training to ensure duty-of-care responsibilities are met. Duty of care means making sure you provide appropriate care to meet the person's needs, treat them with respect and maintain a person's right to privacy.

What the Australian Government's Department of Health and Ageing advises

- Each state and territory has its own laws that determine where consumers can buy a particular drug or poison and how it is to be packaged and labelled.
- State and territory legislation regulates the administration of medication once it has been prescribed and dispensed for an individual.
- Service providers should consider legislation and guidelines when developing their own policies, guidelines, protocols and training for the administration of medicines.
- Service providers should have clear policies identifying circumstances when the service provider does not authorise staff to administer medication.
- Service providers should ensure that an up-to-date record of the consumer's medicine is kept on file, along with clear instructions about administration of medicine.
- Employees are not expected or required to perform tasks beyond their knowledge, skills, experience and training.
- Registered nurses are authorised (according to the relevant state or territory legislation and policies) to administer medicines. This task can be delegated under strict conditions.
- Each state and territory has its own laws that determine where consumers can buy a particular drug or poison and how it is to be packaged and labelled.
- State and territory legislation regulates the administration of medication once it has been prescribed and dispensed for an individual.

Organisational policies and procedures

It is imperative that an organisation's procedures and guidelines regarding medication administration reflect relevant legislation and the scope of job role and accountability for each level of worker, from health professionals to aged care workers.

The *APAC Guidelines for medication management in residential aged care facilities* includes a number of recommendations.

Points that recommendations may relate to:

- Medication advisory committees and medication review
- Standing orders
- Self-administration and dose administration aids
- Storage and disposal of medicines
- Complementary, alternative and self-selected medications
- Medication charts
- Administration of medications, nurse-initiated medication
- Alteration of oral formulations
- Information resources
- Emergency supplies of medications

Guidelines to provide advice

The guidelines include examples of key documents such as policies, medication charts, medication incident reports, assessments regarding their ability to self-administer medications, management audits and standard operating procedures for altering medication dose forms.

All care workers should be guided by their own organisation's policies and procedures for the administration of medicine.

Below are several other guidelines that provide advice to care workers undertaking medication administration.

ANMAC

Australian Nursing and Midwifery Accreditation Council (ANMAC) Guidelines on delegation and supervision for nurses and midwives are designed to assist nurses and midwives in Australia to make sound delegation and supervision decisions within nursing and midwifery contexts in a variety of healthcare settings.

You can access the guidelines at the organisation's website at: http://aspirelr.link/anmac

NMB

The Nursing and Midwifery Board of Australia delegates the administration of medication in aged care facilities and provides guidance to registered nurses in aged care regarding the delegation and supervision of medication administration.

You can access the guidelines at the organisation's website at: http://aspirelr.link/nursing-midwifery-board

RCNA and ANMF

Royal College of Nursing Australia (RCNA) and Australian Nursing and Midwifery Federation (ANMF) Joint position statement gives direction and guidance to registered and enrolled nurses.

It helps them clarify roles, responsibilities and accountabilities in their relationship with nursing assistants and workers when delegating aspects of nursing care or when providing nursing care to people. Assistants in nursing and other unlicensed workers (however titled) may also receive guidance and clarification from this position statement in their relationships with registered and enrolled nurses.

You can access the position statement at: http://aspirelr.link/anmf

Internal facility medication audits

It is the responsibility of individual service providers to ensure that an internal audit of the medication administration policy and procedures is conducted on a regular basis (at least annually).

An internal audit objective is to verify that each facility is conforming to the organisation's medication administration system and identifies positive activities and practices as well as highlighting areas for continuous improvement. It tests compliance with medication administration policies and procedures and provides opportunities for continuous improvement.

The internal auditor plans and conducts the audit and reports back to the service provider's management team, who then agrees to the most appropriate course of action and an action plan to address non-conformance.

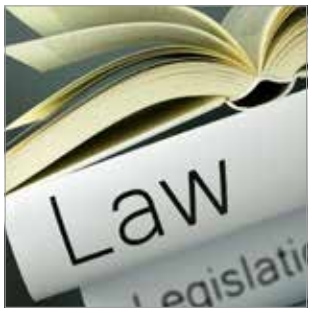
The results of the audit, including any anomalies or medication that has been identified for disposal, would be reported to the supervisor or coordinator at the facility.

A medication audit might involve checking that:

- all prescriptions are current
- the medical administration record (MAR) reconciles with medications in storage
- all stored medication is within the printed use-by date
- medication is contained within undamaged containers, is clearly labelled and stored correctly.

Legal requirements for practice parameters

Before administering medication, the care worker should give due consideration to the legal requirements for practice parameters, including the route of administration, the *Therapeutic Goods Act 1989* (Cth) and other legislation relevant to medications, drugs and poisons in the state/territory and poison Schedule 4 and Schedule 8 medications. The Poisons Standard is a Legislative Instrument for the purposes of the *Legislative Instruments Act 2003*.



Routes of administration

The term 'routes of administration' means the method, path or way a medication is introduced into the person's body so that it can produce a therapeutic action. Common routes of administration include a person's ears, eyes, nose, mouth, skin, rectum, vagina or by injection into a person's veins or muscles.

Appropriately trained and adequately supervised aged care workers are able to administer oral and topical pharmacy-dispensed or supplied medication as ordered by a medical practitioner or other authorised prescriber.

Due to the potential risk to person safety and the higher level of education required to ensure quality management of medications, workers are prohibited from administering medications or any other additives/substances by any other routes such as intravenous, intramuscular, subcutaneous, vaginal, rectal or enteral administration (percutaneous gastronomy as well as nastro-gastric), and administering stock/imprest medication.

Workers may:

- assist using a dose administration aid, in the administration of oral medications
- give eyedrops medication patches, topical creams, lotions, ointments, inhalers and nebulisers
- assist giving insulin using a dose administration aid to stable diabetics.

Schedules 4 and 8 medications

Legislation that regulates medicines and poisons in relation to Schedule 4 and Schedule 8 medications varies between Australian states and territories.

When administering medications, it is the responsibility of the individual care worker to ensure that she/he understands and complies with legislative requirements, policies and guidelines applicable to their state and territory and organisation's policies and procedures.

Drugs and poisons legislation

Administer medication according to your state/territory legislation. View relevant legislation below to find out what your legal obligations are when administering medication.

Relevant legislation
ACT
Medicines, Poisons and Therapeutic Goods Act 2008
You can read details of this legislation at: http://aspirelr.link/act-legislation
NSW
Poisons and Therapeutic Goods Act 1966
You can read details of this legislation at: http://aspirelr.link/nsw-legislation
NT
Medicines, Poisons and Therapeutic Good Act 2012
You can read details of this legislation at: http://aspirelr.link/dep-chief-minister-nt
QLD
Health (Drugs and Poisons) Regulations 1996
You can read details of this legislation at: http://aspirelr.link/qld-legislation
SA
Controlled Substances Act 1984
You can read details of this legislation at: http://aspirelr.link/sa-legislation
TAS
Poisons Act 1971
You can read details of this legislation at: http://aspirelr.link/tas-legislation
VIC
Drugs, Poisons and Controlled Substances Regulations 2006
You can read details of this legislation at: http://aspirelr.link/vic-legislation
WA
Poisons Act 1964
You can read details of this legislation at: http://aspirelr.link/wa-state-law

Disability services legislation

Your organisation's medication management protocols and training will be in line with your state or territory's drugs and poisons Act, and relevant community services legislation.

In most sectors, such as aged care, workers cannot administer medication without a nursing or medical qualification. In disability services, however, workers may be able to administer medication under supervision, and in line with specific procedures, provided that appropriate training has been supplied by the organisation, and the worker has a first-aid certificate.

The purpose of disability services legislation is to protect the safety and rights of those with disabilities. Relevant disability services legislation is outlined below. Check how your organisation's medication administering procedures comply with state/territory legislation.

Relevant legislation
ACT
Disability Services Act 1993
You can read details of this legislation at: http://aspirelr.link/act-legislation
NSW
NSW Disability Services Act 1993
You can read details of this legislation at: http://aspirelr.link/touching-base
NT
Disability Services Act
You can read details of this legislation at: http://aspirelr.link/nt-disability-services-act
QLD
Disability Services Act 2006
You can read details of this legislation at: http://aspirelr.link/community-services-qldgov
SA
Disability Services Act 1993
You can read details of this legislation at: http://aspirelr.link/sa-legislation
TAS
Disability Services Act 2011
You can read details of this legislation at: http://aspirelr.link/tas-legislation
VIC
Disability Act 2006
You can read details of this legislation at: http://aspirelr.link/dhhs-vic-disability
WA
Disability Services Act 1993
You can read details of this legislation at: http://aspirelr.link/wa-state-law

Aged Care Act

If you work in aged care, ensure that you are familiar with *Aged Care Act 1997* (Cth).

You can read details of this legislation at: http://aspirelr.link/legislation

Aged care legislation protects the rights and safety of older people. Aged care homes not complying with Aged Care legislation face substantial penalties including deregistration. When administering medication you must observe the person's confidentiality.

Ensure you:

- administer medication within your role and capabilities
- monitor and report all health changes immediately
- act within the interests of the people you care for at all times
- complete all medication-related documentation accurately and objectively.

Example

Confirm authority to proceed with delegation of medication administration

Jane has been told by the manager of the aged care facility that they are short staffed, and that she has arranged for her to be trained in the application of rectal suppositories for constipation. Jane indicates quietly and calmly to her manager that she is unable to undertake the task because she is not a registered nurse, and is therefore prohibited from administering medication via the rectum.

Practice task 7

1. Identify specific legislation, regulations, codes of practice, professional standards and workplace policies and procedures that you should follow when administering medication.

2. Who should you consult when confirming authority to proceed with medication administration, according to relevant legislation, standards and guidelines?

Click to complete Practice task 7

2B Clarify your own role and limitations in providing assistance with medication administration

According to the Australian Nursing and Midwifery Council, a delegation relationship exists when one member of the multidisciplinary healthcare team delegates aspects of consumer care, which they are competent to perform and which they would normally perform themselves, to another member of the healthcare team. This team member may be from a different discipline, or be a less-experienced member of the same discipline.

The administration of medications, including Schedule 4 or Schedule 8 medications, must be managed by a registered nurse. However, the registered nurse may delegate the medication administration tasks to appropriately trained and supervised workers if the workers accept the delegation. Delegation must be within the context of a care plan or other written instruction, and authority is specific to an individual within a specific care context and is not transferable.

The registered nurse is responsible for:

- ensuring that the aged care worker has been appropriately trained and assessed
- determining which care workers are competent to undertake delegated tasks
- providing guidance, assistance, support and clinically-focused supervision
- ensuring that the worker understands accountability and is willing to accept delegation
- evaluating the outcomes of medication administration tasks delegated to aged care workers
- assisting aged care workers to reflect on their own practice.

Principles and practices underpinning delegation and supervision, accountability and responsibility

Where delegation is provided verbally, it must be confirmed as soon as practicable: according to organisational procedures, in writing and incorporated in the care plan.

The registered nurse, either directly or indirectly, is responsible for instructing, advising and monitoring the care worker undertaking the medication administration task to ensure safe and effective performance in carrying out the duties of their position.

The supervision level, form and frequency must be established by the delegating health professional for all work delegated to another worker.

The frequency and form of supervision will be determined by factors such as the competency and task maturity of the person being supervised, and the need to review and assess conditions and progress in order to establish or alter treatment plans. The scope of supervision also involves correcting and developing non-clinical aspects of

work practice such as time management, organisational requirements, communication skills and other factors that support the effective provision of clinical care and working within a team.

Delegation instructions

Supervision may be conducted in person, in print through written notes or instructions or via electronic communication media such as emails, SMS and telephone or video conferencing, where necessary.

Delegation instructions must be in writing and include:

- the medication and its purpose
- the medication form and instructions such as 'enteric-coated – do not crush'
- dosage and related instructions
- route
- contraindications
- any other relevant instructions or information, especially information specific to the client.

Regulatory framework underpinning delegation and supervision, accountability and responsibility

Key regulations underpinning who you should report to and when, your accountability and your responsibility are below.

Key regulatory framework:

- *Aged Care Act 1997*
- National Standards for Disability Services
- Quality of Care Principles 2014
- State and territory drugs and poisons Act

Clarify your role and limitations

Acting outside of your role and limitations can put the person you support at risk. For instance, if you administer insulin and are not authorised to do so, you put the person at risk of infection, as well as possible contraindications related to the insulin itself. Consider the following when clarifying your role.

How to clarify your role and limitations
Consult your supervisor or registered nurse.
Consult organisation policies and procedures.
Consult industry standards and legislation.
Consult drugs and poisons legislation.
Consult your position description.

Example

Clarify your own role and limitations in providing assistance with medication administration

Around afternoon tea time, Annie notices that Mr Young has a tablet on his table. She politely inquires what the tablet is and is informed that Mr Young's brother gave him a packet of Ibuprofen tablets, which he recommended for pain relief. Annie indicates to Mr Young that Ibuprofen, although an over-the-counter medication, may interfere with his medication regime, and suggests that he shouldn't take the tablet before he seeks advice from his general practitioner. Mr Young waves his hand and says, 'Now you just go and get me a glass of water, please.' Annie politely but firmly indicates to Mr Young that she is not authorised to assist him to take medication outside of those tasks delegated to her by a registered nurse; however, she will contact the registered nurse immediately.

Practice task 8

1. What methods could you use to clarify your own role and limitations when providing assistance with medication?

2. Who could you phone or SMS when a person requires medication, but you are not authorised to administer it?

3. What type of instructions might you be given when administration delegation occurs?

Click to complete Practice task 8

2C Check all equipment, including dose administration aids

The Australian Government Department of Health and Ageing describes a dose administration aid (DAA) as 'a tamper-evident adherence device developed to assist medication management for a consumer by having medicines divided into individual doses and arranged according to the dose schedule throughout the day'. It can be either a unit-dose pack (one single type of medicine per compartment) or a multi-dose pack (different types of medicines per compartment).

DAAs are either packed by hand in the pharmacy or via an automated and computerised dose-packing system (ADPS), which automatically counts out tablets and/or capsules, packs them into 'pouch packs' and then labels the blister pack and generates accompanying documentation.

The report 'Interprofessional Health Education in Australia' defines medication compliance and/or adherence as 'the extent to which a person's behaviour (in terms of taking medications, following diets or executing lifestyle changes) coincides with medical or health advice'.

Compliance with prescribed drug regimes

Research into the field of compliance with prescribed drug regimes has identified that many people are non-compliant with their prescribed drug regimes for a variety of reasons, including impaired physical function (incapacity to open containers), forgetfulness, inability to read labels (prescribed dose, frequency/time of doses, instruction such as before/after eating, with food), confusion over a complex regime, multiple diseases requiring a person to take three or more medications, and individual beliefs, experiences and fears about a particular disease and its treatment.

Once care workers receive appropriate training and supervision, they may administer using the following methods.

Blister pack
Oral medication from a blister pack
'Box' medication
Oral medication from a 'box' medication compliance aid that has been filled by a pharmacist, doctor or registered nurse if the consumer is responsible for their own medication management, and where agreement has been reached between the consumer and service provider in accordance with relevant Australian, state or territory legislation.
Pharmacy container
Medication directly from the service user's labelled pharmacy container

Dose administration aids

Dispensed medicines should be retained in the original manufacturers' or other dispensed packaging unless a dose administration aid (DAA) can be used. Different types of DAAs include blister or bubble packs, compartmentalised boxes and compliance packs such as those provided by automated medication dispensing systems.

A care worker should only physically assist a consumer in using their DAA. If a worker has any concerns about a client's ability to manage their medicine, they should always discuss these concerns with their supervising RN or other health professional, who can then conduct an assessment and identify any potential benefit from the use of DAAs.

In the case of a person's own medication, an attendant care worker (who is not a registered nurse, medical practitioner, dentist or pharmacist) must adhere to the following guidelines.

Guidelines to follow in the case of a person's own medication

- Do NOT give an injection or fill a 'box' medication compliance aid.
- Provide assistance as necessary for the service user to take their own oral medication.
- Take precautions to ensure that the medication is current.
- Take precautions to ensure the dosage as stated on the pharmacy label is adhered to.
- Take precautions to ensure the label has the correct name for prescribed medication.

Dose administration types

Dose administration aids assist aged care workers to ensure people are compliant with their prescribed medication regime by improving compliance with medication regimes and decreasing the incidence of adverse events from medication mismanagement.

Single-dose packs or unit-dose packing is where a single type of medicine is packed in each compartment, blister or pouch pack.

Multi-dose packs or multi-dose packing is where different types of medicines can be packed per compartment, blister or pouch pack.

Blister packs

A blister pack is a disposable, multi-dose, individually prepared medication administration aid that sets out all the tablets/capsules that need to be taken at each particular time of the day, for each day of the week: 28 separate wells are divided into four rows of seven, and contain each dose that is to be taken on a particular

day (Monday–Sunday) at a particular time (breakfast, lunch, dinner and bedtime). This obviously makes it easier for individuals and/or workers to manage medication administration.

The pharmacist dispenses the medication prescribed by the person's doctor into a blister pack with up to seven tablets in each compartment. The pack is then securely sealed to protect the medication, and minimises the risk of spilling medication or taking the wrong medication at the wrong time in the wrong amount; therefore, minimising risks of over- or underdosing.

The blister packs provide a visual cue (labels for each day of the week and time of the day are provided), so the individual and aged care workers always know where the person is up to their medication regime. The visual cue also acts as a visible reminder to take medication.

Responsibilities of the pharmacist

The following information lists the responsibilities of the pharmacist in preparing and dispensing blister packs.

Pharmacist responsibilities for preparing and dispensing blister packs:

- Record on the blister pack the name of the person (so no confusion as to who the medication has been prescribed for).
- Record on the blister pack the names, description and quantities of the tablets that are sealed in the blister wells (providing an opportunity to pick up errors).
- Provide a signing sheet, used to document medication administration, to accompany the blister pack.

Check dose administration aids are tamper free before proceeding

It is very important that blister pack and other dose administration or administration equipment is tamper free and intact before administering medication. If the blister pack has been tampered with, or accidentally opened, there is a risk that the medication is compromised, and may not be as effective. Also, you cannot be sure the medication inside the pack is exactly as the prescribing doctor or pharmacist intended. If administration aids appear to be tampered with in any way, report to the registered nurse or supervisor, or the delegating health professional. You may need to dispose the pack and re-order new medication.

Gather the required equipment

Situational factors such as emergency situations, inadequate staffing levels and distractions are major causes of medication errors, with distractions being one of the most common causes attributed to errors in medication administration. With this in mind, it is important that workers are organised before starting a medication round.

Refer to the medication chart to identify and organise the equipment and PPE that you will need to carry out the medication tasks delegated to you. The following are examples of equipment that you may need for different activities or tasks.

Actions that require equipment

Measuring/calculating doses

Equipment required when measuring or calculating doses include:

- measuring cups
- a mortar and pestle
- tablet dividers
- measuring spoons
- containers for dirty spoons/dishes.

Administering medication

Equipment required when administering medication includes:

- medication charts/sheets
- nebulisers/spacers
- lubricant
- tumblers
- keys to medication trolley/medication cupboard
- oxygen cylinders and oxygen masks/nasal prongs
- preloaded dose administration aids for insulin
- water pitchers.

General tasks

PPE that you may need to gather and use include:

- aprons
- masks
- gloves
- safety glasses or protective eyewear.

Cleaning materials

Cleaning goods that you may use before, during and after medication tasks include:

- paper towels/tissues
- tea towels.

Example

Check that all equipment, including dose administration aids, are complete and ready for use

Aged care workers in an aged care facility dispense medications in a Webster-Pak® to residents. Shortly after administering medications to Ms B, staff realise that the Webster-Pak® belongs to another resident. The care coordinator contacts Ms B's general practitioner (GP) within 90 minutes of the error occurring. The GP advises that Ms B be monitored for headaches and dizziness, and have bed rest. A couple of hours later the paramedics are called because Ms B looks pale and feels weak. Ms B presents to hospital with bradycardia and hypotension. Three days later she dies in hospital.

An investigation finds that a workplace student was given the task of transferring resident photographs from the previous week's Webster-Paks® to the new week's Webster-Paks® and had not placed the correct photographs in the correct Webster-Paks®. The personal care attendant removed the pack from slot 23 in the medication trolley (Ms B was in room 23), checked the photograph but did not verify the name on the pack with Ms B, and administered the medications.

When the personal care attendant could not locate the pack for room 24 and found a second pack (identified as belonging to Ms B) attached to the pack in slot 22, she realised that Ms B was allocated the chart for the resident in room 24.

Coroner-identified issues included:

- failure of staff to check names against photographs
- a delay in contacting Ms B's GP
- failure by the GP to advise staff of the potential side effects of the medications or need for blood pressure checks
- a delay in medical assessment or referral to hospital.

Practice task 9

1. Why is it important to check administration and other aids before administering medication?

2. What should you check before administering medication?

3. What should you do if equipment looks like it has been tampered with?

Click to complete Practice task 9

2D Follow infection control procedures

Good personal hygiene and infection-control measures form the foundation for all aged care work practices and procedures. Infection control is based on a range of practices that start from identifying potential hazards in a health environment and, for each identified hazard, implementing risk management. It also involves a commitment from all workers to adhere to work practices that prevent the transmission of infection in care settings and contexts.

Older people are often more susceptible to infections because of existing illnesses, effects of their medication regimes or because they may have suppressed immune systems. All aged care workers must be vigilant about potential hazards in their workplace.

Personal hygiene procedures that aged care workers should implement:

- Have an annual flu vaccine.
- Observe hand hygiene practices before and after all significant patient contacts.
- Wear single-use gloves when appropriate.
- Avoid touching own face.
- Encourage use of respiratory hygiene and cough etiquette.

Standard and additional precautions for preventing spread of infection

Training should be provided to care workers on precautions to take when they are handling blood, body fluids, equipment, secretions and excretions.

Standard precautions include the use of gloves and other PPE, correct hand hygiene techniques and hand care, such as ensuring skin is intact and jewellery is removed.

Additional precautions are used in addition to standard precautions when there is a risk of contamination, such as the spread of infection due to airborne disease. Additional precautions may involve wearing a face mask to avoid contracting a respiratory illness.

Prevent contamination

Activities that can cause contamination include handling equipment/instruments soiled with blood or other body substances and coming into direct contact with body secretions or excretions. Infection is spread through airborne or droplet particles, which contain bacteria. Bacteria may be carried by faeces, saliva and other bodily fluids. If you come into contact with substances containing bacteria, it is important to follow infection control procedures before administering medication.

Prevention of contamination requires workers to:

- use personal protective equipment (PPE) such as gowns, aprons and gloves
- handle and dispose of sharps and other clinical waste appropriately
- thoroughly clean, disinfect and dry reusable equipment and instruments after use to remove any matter that may harbour infectious material.

Personal protective equipment

Protective clothing and equipment used by care workers will vary according to the nature of the medication task and the equipment used. When determining the most appropriate PPE, aged care workers should seek the advice of their supervising registered nurse, identify whether they are likely to come into contact with bodily substances such as vomit or diarrhoea, and stipulate the medication route.

Below is a list of appropriate PPE to use when administering medications.

Protective eye wear

- Protective eye wear and gloves, which should be worn by care workers cleaning medication equipment

Masks

- Masks are worn if there is a risk of airborne infection.

Gloves

- Gloves, which should be worn wherever there is a risk of care workers being exposed to blood or body substances; whenever medication is handled, and when making contact with the person's body, such as applying transdermal patches. Make sure hands are washed before and after use of gloves.

Correct use of gloves

Gloves provide important protection from infections. Take care when using gloves to ensure that work effectively.

Consider the following when removing gloves.

What to do when removing gloves
Hold glove at bottom and pull over hand so it peels away inside out.
Do not touch skin with glove.
Use gloved hand to place removed glove in bin.
Use non-gloved hand to insert inside glove on other hand; peel off without touching the outside of the glove.
Throw used glove away, holding inside of the glove only.
Follow hand-washing procedures.

Work health and safety

You have a legal requirement to do all in your ability to maintain the safety of the workplace, for the people you support, yourself and other staff.

Follow these work health and safety (WHS) procedures when administering medication.

WHS procedures when administering medication
Wash hands correctly before administering or handling medication.
Discard out-dated medications according to organisational requirements.
Discard used sharps according to organisational requirements.
Always use PPE equipment when handing medications.
Disinfect and sterilise any surface or equipment used in preparation of medication.

Follow workplace procedures

Because some medications can be absorbed through the skin, aged care workers should never directly touch medications. The no-touch (aseptic) technique protects the safety of the aged care worker and prevents medication becoming contaminated.

Different personal hygiene procedures may be required for different activities or equipment being used during administration of medication, so it is important that workers understand and follow the procedures specific to that task. For example, the procedures that you should follow if you are administering medication with a spacer or nebuliser are outlined below.

Spacer

Provide each person that uses a metered dose inhaler (MDI) with their own spacer.

Wash the inhaler (before initial use and once every 2–4 weeks) in warm water and detergent and allow to air dry.

You may need to activate 3–5 doses of the puffer medication into the spacer after washing before using the device again – refer to your own organisation's procedures.

It is recommended that service agencies replace spacers every 12 months.

Nebuliser

Wash mouthpieces, face masks and nebuliser bowls in warm water after use. Allow to air dry then store in an airtight container.

Soak the mask, mouthpiece and bowl in disinfectant once a week.

It is recommended that nebuliser bowls are regularly replaced and pumps are serviced every 6–12 months.

Example

Follow infection control procedures to avoid spread of gastroenteritis

Joyce was sent to hospital in an ambulance with a high fever and diarrhoea. She was diagnosed with acute gastroenteritis. She was later diagnosed with toxic megacolon, which can occur in patients with rotavirus gastroenteritis. After receiving surgery, Joyce was transferred to a rehabilitation facility where she developed pneumonia and eventually died.

Three other residents at the residential aged care facility that developed diarrhoea have positive stool tests for rotavirus gastroenteritis and have received appropriate medical treatment. Four other asymptomatic residents have positive stool tests.

Viral gastroenteritis, a common cause of diarrhoea and vomiting, is highly infectious. It can be spread by person-to-person contact or by airborne spread. (When an infected person vomits, virus particles that pass into the air can infect nearby people.) It is usually spread due to poor hand-washing practices.

Practice task 10

1. Explain why using the correct hand-washing technique is important when administering medication.

2. Explain which PPE to use when administering oral medication.

3. Identify relevant WHS and standard precautions you should follow when ensuring a person takes their oral medication.

Click to complete Practice task 10

2E Confirm medication administration route and procedure

The medication chart and/or care plan will specify the route of administration. There are various routes to transfer the medication into the body depending on the form of medication (liquid, tablet, ointment, patch). An appropriately trained and supervised care worker is authorised to administer medications via the following routes.

Medication administration routes

1. **Orally**
   Swallowed by mouth
2. **Sublingually**
   Dissolved under the tongue
3. **Topically**
   Medications (including transdermal) that are applied to the surface of the skin (absorbed from a patch)
4. **Ocularly (eye)**
   Eyedrops instilled in the eye or ointments applied to the eye
5. **Aurally (ear)**
   Drops placed in the ear
6. **Intranasally**
   Placed in the nose/nostril
7. **Inhalant**
   Inhaled through nose or mouth: metered dose inhalers (MDIs) are often used

Restrictions

You may not be delegated to administer medication via certain routes. These methods of administration require specialised training and expertise to ensure the safety and comfort of the person.

For the safety of the person, and according to WHS procedures and legislation, duty of care, *Aged Care Act 1997*, *Disability Services Act 1986* and drugs and poisons legislation, you must follow administration requirements and use only the administration routes in which you have training and qualifications.

In most community services settings the person must prick their own finger when using a pen for subcutaneous injection, in accordance with standard safety procedures and legislation as puncturing the person's skin can put yourself or the person at risk of infection.

If you are unsure of the medication route at any point, always check with your supervisor. Never make assumptions or take risks about medication routes. You can place the person at risk of infection or injury, or impact the efficacy of the medication. If the medication needs to be administered using a route you are not eligible to use, consult your supervisor immediately.

In most cases, you may not administer medication via the following routes:

- Rectal: inserted in the rectum
- Vaginal: inserted in the vagina
- Intravenous (IV): injection into the vein
- Intramuscular (IM) : injection into the muscle
- Subcutaneous: injection under the skin; however, workers may be able to assist in giving insulin using a dose administration aid to stable diabetics

Consequences of incorrect administration

Always check and confirm route of administration, and your capabilities to assist the person. There are serious consequences for not administering medication correctly, and a number of these are discussed below.

Consequences of incorrect administration

Oral

If WHS procedures and contamination prevention procedures are not followed, oral medication can become contaminated, which may cause infection, or may inhibit efficacy of the drug.

The correct dose must be measured and administered. Under and overdosing can have serious consequences to the health of the person.

Sublingual

The person needs time to dissolve the medication under the tongue, and should not drink when medication is dissolving. Incorrectly handling sublingual medication can cause infection, or may affect the efficacy of the medication.

Topical (including transdermal)

Hands must always be clean and PPE worn when applying medication topically to prevent the spread of infection to the person, or from the person to others. Dispose of PPE after use. Under or overdosing on topical medication can affect the person's health.

Ocular

PPE must always be worn and hand-washing procedures following. The eye is a very sensitive site, and easily contracts bacteria and other molecules, which can lead to infection. The correct dose must be administered. Ensure medication is administered with enough light so the number of drops is visible.

Aural

PPE must always be worn and hand-washing procedures must be followed. The ear is also a very sensitive site, and easily contracts bacteria and other molecules, which can lead to infection.
The correct dose must be administered. Ensure medication is administered with enough light so the number of drops is visible.

Intranasal

Inhalants must be inserted very gently. Rough treatment can cause damage to the sensitive tissue in the nose. Ensure the dose is correct.

Insulin by subcutaneous injection

You may or may not be able to assist with subcutaneous injection using a pen. In most community services settings, the person must prick their own finger, in accordance with standard safety procedures and legislation. Puncturing the person's skin can put yourself or the person at risk of infection. Talk to your supervisor about your requirements.

Vaginal

Pessaries are used to prevent urinary incontinence, or can be used as birth control. Pessaries should only be inserted by a health professional, such as a midwife, nurse, physiotherapist or doctor. Incorrectly inserted pessaries can cause discomfort.

Rectal

In disability care services, you may be required to assist with inserting a suppository. Always use PPE and wash hands before and after administration to avoid the spread of contamination through bodily fluids. The person should be comfortably lying on the ground and, if possible, insert the suppository themselves.
If you insert it for them, you must ensure suppository is well-lubricated and you insert it gently so as not to rupture the delicate vessels in the rectal area.

Example

Confirm medication administration route and procedure

Remi, who has a complex medical history including epilepsy, is hospitalised for gastrointestinal complications. On Remi's admission to hospital, a blood test was taken to assess the levels of phenytoin in her system. The results showed that the levels were low and not therapeutic. The doctor ordered an extra dose that was written on the drug chart in the 'once only' medication section.

The nursing staff were given this information at handover and the additional dose of medication was given. Remi was monitored closely to observe any signs of fitting till the phenytoin levels were at the therapeutic level.

The phenytoin was ordered to be given to Remi orally and, as Remi had difficulty swallowing tablets, the medication was ordered from the pharmacy in a liquid preparation. Two nurses checked that the correct measure of Phenytoin liquid was given to Remi according to the drug chart. This was then fully documented on the medication chart and in Remi's case files.

The next blood test still showed the level was too low and the doctor decided to change the medication order to be given via intravenous route. This change was documented on the medication chart for the nursing staff. At the medical round the nursing staff confirmed the change in the route of administration of the medication with the doctor.

Practice task 11

1. Identify the correct procedure for administering three of the following routes of administration:
   - Insulin by sub-cutaneous injection using pre-loaded syringes or pens
   - Intranasal
   - Ocular
   - Oral
   - Rectal
   - Topical (including transdermal)
   - Vaginal

2. Explain the consequence if medication is incorrectly administered by each of the following routes:
   - Oral
   - Insulin by sub-cutaneous injection using pre-loaded syringes or pens
   - Topical

3. Identify procedures and legal requirements you should follow when determining medication administration routes.

Click to complete Practice task 11

2F Confirm purpose and function of prescribed medications

Once workers have been delegated a medication administration task, they are required to provide information, support and reassurance throughout the medication administration task. This should be undertaken in a manner that encourages a person's cooperation and active involvement, is appropriate to their needs, abilities and concerns, and fulfils duty-of-care requirements.

People may experience problematic side effects such as drug toxicity, so workers should familiarise themselves with the known therapeutic and non-therapeutic effects of medications they are administering.

Required knowledge of effects of medications being administered includes:

- the potential side effects of a drug and how long effects might last
- the rarer adverse reactions associated with taking the drug
- the expected therapeutic effect of the drug, including how soon a person might experience results.

Sources of information

Information about the medications should be clearly provided in the care plan, including the purpose and function of the medication and route of administration. Reference books provide information about specific medications, including the therapeutic effect, uses, side effects and special administration instructions. Each facility or program should have such a reference guide, such as the MIMS annual or drug reference guide for use by staff. These guides should be reviewed regularly to address factors such as changes in manufacturer's advice or instructions and/or medical research findings.

Other sources of information:

- Drug hotline/drug information line
- Health professionals
- Consumer medicine information leaflets
- Medication inserts provided by drug manufacturer and included within drug packaging

Key aspects of medication groups and categories and their general effect on body systems and major disorders

Medications are commonly grouped into categories. The Therapeutic Goods Administration (TGA) Australia classifies medicines as registered or listed. Registered means they are assessed by the TGA for quality, safety and efficacy. Listed means they are assessed for quality and safety by not efficacy.

Registered medications include all prescription medicines, most over-the-counter medicines and some complementary medicines. Listed medicines include some over-the-counter medicines and most complementary medicines.

Medicines are also classified according to the Poisons Standard (SUSMP). This will be discussed in more detail later.

All medicines, over-the-counter and prescribed, must be stored in a locked box or locked storage cabinet. When disposing of medication, return any unused medicine to the chemist for safe disposal.

Key aspects of microorganisms and the anti-infective and anti-bacterial medication used to treat infections caused by them

Antibiotics block vital processes in bacteria, killing the bacteria or stopping them from multiplying, so are used to assist a person's immune system to destroy bacteria or slow down bacterial growth. A side effect of this can be that 'good bacteria' levels are reduced as well. Treating doctors and health teams will seek to avoid a person developing thrush, an upset stomach as a result of reduced good bacteria. Here are some key aspects of medication.

Micro-organisms (anti-infectives and anti-bacterials)			
Disorders	Linked to	Medication category/group	Interactions
Diverticulitis	The dominant theory is that a low-fibre diet is the main cause of diverticular disease.	Antibiotics are used to clear up infection and inflammation, an attack of diverticulitis without complications.	
Infections	Condition caused by microorganisms, viruses, fungi or parasites.	▶ Antibiotics ▶ Antivirals – used to combat viral infections ▶ Vaccines – given to prevent a specific disease	Antibiotics must be taken for the prescribed period or microorganisms resistant to the antibiotic may continue growing and the infection could recur.
Pneumococcal disease		Antibiotics – serious forms of pneumococcal disease, such as bloodstream infections and pneumonia, often require hospitalisation and intravenous antibiotics. Vaccines are available to prevent pneumococcal disease.	
Shingles	Caused by the varicella-zoster virus – the same virus that causes chickenpox.	▶ Antiviral drugs ▶ Treatments for the painful after-effects of shingles (post herpetic neuralgia) include steroids, antidepressants, anticonvulsants and topical agents	

Key aspects of medications for the cardiovascular system

The cardiovascular system (or circulatory system) comprises the heart, the blood and the blood vessels. The purpose of the cardiovascular system is to transport oxygen, food and other necessary substances to cells and tissue in the body, remove waste products from cells, regulate body temperature and transport cells that defend against disease and infection.

Medication used to treat conditions of the cardiovascular system act on this system in a number of different ways. Here are some key aspects of medication.

Cardiovascular system medication			
Disorders	Linked to	Medication category/ group	Interactions
Atherosclerosis		Antihyperlipidemics – medications for treating atherosclerosis (hardening of the arteries)	
Coronary heart disease (heart attack, angina)	Atrial fibrillation (AF) is an arrhythma (irregular heart beat) that may be episodic (paroxysmal) or chronic. AF is associated with a five times increase in the risk of stroke.	Antianginals – act by increasing the amount of oxygen that reaches the heart muscle Antiarrhythmics – prevent or alleviate arrhythmias (when the heart does not beat rhythmically or smoothly) by altering nerve impulses in the heart Calcium channel blockers – used to prevent angina and arrhythmias, and lower blood pressure Cardiac glycosides – used to regulate irregular heart rhythm or to increase the volume of blood pumped by the heart in heart failure	The co-administration of digoxin and beta-blockers or calcium channel blockers, which also reduce heart rate, can cause serious slowing of the heart rate.
High blood pressure/ hypertension		Antihypertensives – treat high blood pressure or hypertension Beta blockers – slow the heart rate and lower blood pressure Diuretics – promote the loss of water and salt from the body; they also lower blood pressure	A major drawback of thiazide diuretics is that they often deplete the body of potassium, which should be compensated for with a potassium supplement.

Disorders	Linked to	Medication category/ group	Interactions
Stroke		▶ Anticoagulants – drugs that prevent blood clotting ▶ Vasodilators – used in the treatment of stroke and diseases characterised by poor blood circulation	Warfarin is used in the treatment of conditions such as stroke, heart disease and abnormal blood clotting. People who are taking warfarin must be careful to avoid using many other medications (including certain doses of aspirin) because the interaction of other medications with warfarin could cause internal bleeding.

Key aspects of medications for the nervous system

The nervous system controls and directs body function. The main parts of the nervous system are the:

- central nervous system – encased in bone in the brain and the spinal column
- peripheral nervous system – the nerves elsewhere in the body, including ganglia (collections of cells) and in major organs such as the skin, eyes and ears.

Here are some key aspects of medication.

Nervous system (central and peripheral nervous systems) medication			
Disorders	Linked to	Medication group/ category/ class	Interactions
Anxiety and panic disorders		Benzodiazepines are the most common class of drugs used to treat anxiety and panic disorders; others include: ▶ beta blockers ▶ tricyclic antidepressants ▶ monoamine oxidase inhibitors (MAOIs) ▶ selective serotonin reuptake inhibitors (SSRIs) ▶ serotonin-norepinephrine reuptake inhibitors (SNRIS) ▶ mild tranquilisers ▶ anticonvulsants.	Diazepam (valium) is used to treat short-term anxiety and agitation, muscle spasm, acute alcohol withdrawal. Sometimes used to treat seizures. May cause anaphylaxis if allergic. May cause drowsiness, muscle weakness and lack of coordination. Contraindications for use include pregnancy, breastfeeding and alcohol.

Disorders	Linked to	Medication group/ category/ class	Interactions
Dementia and Alzheimer's disease		AChE inhibitors are useful for mild to moderate Alzheimer's disease. Drugs within the class known as N-methyl-D-aspartate (NMDA) blockers are used for the treatment of moderate to severe Alzheimer's disease.	Once AChE inhibitors are started, they should be continued indefinitely; stopping the medication may cause an abrupt, and possibly severe, cognitive and behavioural decline that may not be resolved by restarting the AChE inhibitor. Certain drugs like cimetidine (Tagamet), ketoconazole (Nizoral), ritonavir (Norvir), paroxetine (Paxil), and erythromycin (E-Mycin) may increase AChE inhibitor toxicity. Certain drugs known as anticholinergics (antihistamines, bladder- control drugs) may decrease AChE inhibitors' effectiveness; AChE inhibitors (often used during surgery) may increase effects. NDMA blockers – drugs that alter urine acidity, like sodium bicarbonate or acetazolamide (Diamox), may cause memantine to accumulate in the body.
Depression		Antidepressants – used to treat depression, panic attacks and obsessive-compulsive disorder (OCD)	Antidepressants may produce serious side effects, and they can interact with other drugs; MAO inhibitors can also mix with certain foods, resulting in dangerous increases in blood pressure.
Epilepsy		Anticonvulsants – used to control seizures and other symptoms of epilepsy Antiepileptic drugs are medicines that reduce the frequency of epileptic seizures. Antiepileptic drugs include some drugs that have other uses as well (for example, barbiturates, benzodiazepines and phenytoin).	Epilim ® (valproate) is a prescription medication that treats epilepsy and bipolar disorder. Contraindications for use include hypersensitivity to valproate, pregnancy and diabetes.

Disorders	Linked to	Medication group/ category/ class	Interactions
Mental disorders		Antipsychotics – prescribed for patients who are suffering from certain types of mental disorders	Lithium is used to treat bipolar. Expected effects and potential reactions, including anaphylactic reactions, treats bipolar disorder, schizophrenia by affecting sodium flow to muscles and nerves, which reduces aggression. Contraindications for use: hyponetraemia, hypothyroidism, psoriasis, renal clearance, serotonin toxicity, kidney disease, heart disease and pregnancy.
Pain		Analgesics – pain-relieving drugs classified as narcotic or non-narcotic; there are many types of analgesics including: ▶ non-steroidal anti-inflammatory drugs (NSAIDs) ▶ corticosteroids ▶ opioids ▶ neurological analgesia ▶ anaesthetic nerve blockade.	
Parkinson's disease		Five classes of drugs are used to treat the motor symptoms of Parkinson's disease: ▶ Amantadine ▶ Anticolinergics ▶ MAO-B inhibitors ▶ COMT inhibitors ▶ Dopaminergic agents	

Key aspects of medications for the endocrine system

The endocrine system produces and secretes hormones that are distributed throughout the body. These hormones regulate growth, metabolism, heart rate, organ function, bone density and mood. Here are some key aspects of medication.

Endocrine system medication			
Disorders	Linked to	Medication group/ category/class	Interactions
Acromegaly	Caused as a result of excessive production of growth hormone (diabetes, hypertension and cardiac ailments are commonly associated with this endocrine system disorder).	Drugs may be used as the first line of treatment in older patients, or may be used to shrink the pituitary tumour prior to surgery. The following classes of medication may be used to treat acromegaly: ▶ Octreotide ▶ Bromocriptine ▶ Pegvisomant	
Addison's disease	Caused by inadequate production of cortisol.	Glucocorticoid replacement is essential for primary and secondary Addisonian patients, and must be taken for life.	
Cushing's disease	Caused due to excessive production of cortisol.	Non-surgical treatment involves glucocorticoid hormone therapy.	

Disorders	Linked to	Medication group/ category/class	Interactions
Diabetes		People with Type 1 diabetes must take insulin every day. Oral agents to treat diabetes include sulfonylureas, biguanides, thiazolidinediones, meglitinides, alpha-glucosidase inhibitors, DPP-4 inhibitors and combination agents.	Side effects of sulfonylureas include low blood sugars and weight gain. The most common side effect of biguanides is stomach upset, including nausea and diarrhea; biguanides should not be used in the presence of kidney disease and should be used with caution in residents at risk of dehydration. Adverse effects of thiazolidinediones (TZDs) are weight gain, oedema, anaemia and congestive heart failure. These drugs should not be used in residents with history of heart failure, and should be used with caution in those with known coronary artery disease (CAD).
Hypercalcemia	Caused when the level of calcium in the blood is too high.	Patients who are not treated surgically should be managed to ensure good hydration.	Avoid thiazide diuretics
Hypoparathyroidism	Caused by insufficient levels of calcium in the blood due to inadequate levels of the parathyroid hormone.	Oral calcium carbonate and vitamin D supplements are usually lifelong therapy.	A high-calcium, low-phosphorous diet is recommended.

Key aspects of medications for the respiratory system

The respiratory system is responsible for providing oxygen to the body, which is essential for survival and removing carbon dioxide from the body. Here are some key aspects of medication.

Respiratory system medication			
Disorders	Linked to	Medication group/ category/class	Interactions
Allergies		Antihistamines – counteract allergy symptoms such as sneezing, irritated eyes etc.	
Asthma		There are four major asthma drugs: bronchodilators, anti-inflammatory drugs, leukotriene blockers and anti-IgE medications.	The most common side effects of beta-agonists include anxiety, tremor, increased heart rate and mild reduction in potassium. Anticholinergics commonly cause problems such as blurred vision and dry mouth. Side effects of steroids in older people include confusion, agitation, elevations in blood sugars, increased risk of bone fractures and skin breakdown.
Chronic obstructive pulmonary disease (COPD) including emphysema and chronic bronchitis		There are two classes of medications commonly used to treat the symptoms associated with COPD: bronchodilators and steroids.	Inhaled steroids can cause oral thrush if oral hygiene is not performed regularly after use of these medications. Oral steroids have a variety of side effects, such as increased infection, skin breakdown, an increased risk of bone thinning, fluid retention, weight gain and mental status changes. Theophylline is associated with difficulty sleeping, stomach upset, heart rhythm abnormalities and seizures

Disorders	Linked to	Medication group/ category/class	Interactions
Coughs and colds		Antitussives – control coughs Expectorants – tailored for dry coughs, they are primarily used to increase the amount of mucus that is produced Decongestants – available as oral preparations, nosedrops and nasal sprays	Many prescription cough medications contain codeine. Decongestants can increase blood pressure, so they should be used cautiously by patients who have high blood pressure; nosedrops or sprays do not increase blood pressure as much as oral decongestants.
Influenza	People aged 65 years and older people who live in nursing homes and other long-term care facilities are considered at high-risk of contracting influenza, and at increased risk for serious flu complications.	The best way to prevent this illness is by getting a flu vaccination each autumn.	
Pneumonia		Treatment depends on the cause of pneumonia; bacterial pneumonia is treated with antibiotics. Vaccines to prevent certain types of pneumonia are available.	

Key aspects of medications for eyes, ears and throat

These organs are close to each other and conditions in one can affect the others; for example, viral illnesses. Here are some key aspects of medication.

Eyes, ears and throat medication			
Disorders	Linked to	Medication group/ category/class	Interactions
Dry eyes	Can be caused by environment, infection or as a side effect to some drugs.	The discomfort is usually relieved by artificial teardrops or by humidifying the air.	Side effect of drugs such as antihistamines and diuretics
Eye infection/ inflammation		Topical antibiotic medications are used to treat bacterial eye infections.	Long-term use of eyedrops that contain steroids or non- steroidal anti-inflammatory drugs (NSAIDs) – used to treat on infectious eye inflammations – can cause additional eye problems.
Glaucoma	Of special concern to people older than 40 years of age	Although it is sometimes treated surgically, the pressure in the eye can usually be reduced and blindness prevented through the use of eyedrops containing a beta-blocking drug.	Patients with a history of heart failure or asthma cannot use a beta blocker.
Tinnitus	Some of the drugs that cause tinnitus include: aminoglycoside antibiotics, cytotoxic drugs (used to treat cancer), loop diuretics (used to treat heart failure, high blood pressure and some kidney disorders).	Some of drugs that may be prescribed to reduce the sounds caused by this condition include Xanax (anti-depressant drug), antihistamines, heart medications or anticonvulsant medications.	Some anti-inflammatory drugs, antibiotics, sedatives, antidepressants and aspirin aggravate the symptoms of tinnitu; medications that may also worsen tinnitus include over-the-counter cold tablets and nasal sprays.
Uveitis	Can be caused by autoimmune diseases (arthritis, sarcoidosis, Reiter's syndrome, etc.) because they cause inflammation of the iris.	Most people with uveitis respond to steroid eyedrops; those with posterior uveitis often require local injections of corticosteroids or oral steroids; some people require additional immunosuppressive drugs.	

Key aspects of medications for the integumentary system

The integumentary system is made up of the skin, glands, hair and nails. This system plays a number of roles. The skin in particular acts as a barrier to protect the internal organs, helps make use of vitamin D, an essential vitamin that helps build and maintain bones, and allows us to sense heat, cold, sharp surfaces and other environmental factors that need to be reacted to.

Skin is the largest organ of the body and covers and protects the body. It contains sweat glands that help maintain body temperature, which is essential for survival. Skin regulates water leaving the body. Nerve endings in the skin are used for sensing pressure, pain, touch, temperature and help prevent injury.

Here are some key aspects of medication.

Integumentary system medication			
Disorders	Linked to	Medication group/ category/class	Interactions
Neoplastic disease (cancer) is a disease at the cell level of the body. It usually causes a lump or tumour. Neoplasms may be benign, pre-malignant or malignant. Benign neoplasms include uterine fibroids and skin moles.	The term tumour is synonymous with a neoplasm that has formed a lump; however, some neoplasms do not cause a lump.	Pharmacological treatment depends solely on the cause of neoplasms but usually includes surgery, radiation therapy and chemotherapy, depending upon the tumour stage and extent of regional spread. Chemotherapy halts cell division so it affects cancer cells, which divide rapidly.	
Eczema		Class I and II topical corticosteroids	
Psoriasis		▶ Tar preparations ▶ Vitamin D analogs ▶ Corticosteroid creams	
Xerosis	If scratched, xerosis can cause open areas that can lead to cellulitis or vascular ulcers.	▶ Oral antihistamines ▶ Topical anti-itch products	

Key aspects of medications for the immune system

The immune system protects the body from disease, illness and infection caused by pathogens including bacteria, viruses and parasites. Here are some key aspects of medication.

Immune system medication			
Disorders	Linked to	Medication group/ category/class	Interactions
Compromised immune system	The development and function of T and B cells, the primary cells involved with immunity of T and B cells, declines with age; this means with advancing age the immune system begins to lose some of its functions and cannot respond as quickly or as efficiently; it becomes less effective at combating disease and fighting off infections. Consequently, infections present major clinical problems for older patients.	To minimise the risk of infection, individuals should keep vaccinations up to date (flu, hepatitis, tetanus, etc.). Nutrition also plays a factor in a healthy immune system; vitamins and other dietary supplements enhance the response of the immune system in both healthy and nutritionally deficient older adults.	
Rheumatoid arthritis		There are three general classes of drugs commonly used in the treatment of rheumatoid arthritis: non-steroidal anti-inflammatory agents (NSAIDs), corticosteroids, and disease-modifying anti-rheumatic drugs (DMARDs).	Adverse reactions seen with COX-2 inhibitors include GI upset, edema, ulcers, GI bleeds and liver failure. Steroids may cause an increased risk of infection, glaucoma, cataracts, hypokalemia, hyperglycemia, ulcers, hypernatremia or hypertension in older people.

Key aspects of medications for the musculo-skeletal system

The purpose of the musculoskeletal system is to assist movement of the body, protect the internal organs and tissue, give the body form and produce body heat. Here are sme key aspects of medication.

Musculo-skeletal system medication			
Disorders	Linked to	Medication group/ category/ class	Interactions
Arthritis		Classes of drugs used to relieve the symptoms of arthritis include: ▶ acetaminophen ▶ NSAIDs ▶ corticosteroids, which mimic certain hormones and reduce inflammation ▶ disease-modifying anti-rheumatic drugs ▶ biologic medicines made with organic molecules.	Potential side effects of NSAIDs include hypertension, peptic ulcer disease, GI bleeds and kidney damage.
Osteoporosis		Classes of drugs used to treat osteoporosis include: ▶ bisphosphonates ▶ vitamins (calcium with ▶ vitamin D) ▶ selective estrogen receptor modulators (SERMs) ▶ hormone treatment (calcitonin) ▶ oestrogen with hormone therapy.	Adverse effects of hormone therapy include increased risk of heart attack, stroke, blood clots and breast cancer. Adverse effects of the biphosphonates include nausea, abdominal pain, oesophageal inflammation or oesophageal ulcers. Common side effects, regardless of route administered, are nausea and flushing; those using the nasal spray may develop nasal irritations, a runny nose or nosebleeds.

Key aspects of medications for the urinary/renal system

The functions of the urinary system are to manage the fluid of the body, essential for the workings of all cells and body systems. The urinary system processes and expels waste fluids and toxins from the body, helps to maintain blood pressure, levels of chemicals in the blood and blood volume. Here are some key aspects to medication. Here are some key aspects of medication.

Urinary/renal system medication			
Disorders	Linked to	Medication group/ category/class	Interactions
Incontinence	Increased incidence of kidney problems occurs because renal function declines substantially with age; urination becomes more frequent while daily fluid requirements increase; the muscles that help regulate the release of urine become weaker, which leads to problems with incontinence and often involves slow leakage of urine in women.	Medications specifically for urge incontinence belong to the class known as anticholinergics.	Medications that may contribute to incontinence include: diuretics, sedatives and tranquilizers, antihistamines, antidepressants, phenothiazines, disopyramides, opiates, antispasmodics, drugs that treat Parkinson's disease, high blood pressure drugs, cold capsules, decongestants, heart and blood pressure medications.
Urinary retention	Males may develop urinary retention due to chronic inflammation of the prostate gland. The enlarged prostate may also cause obstruction and increased pressure in the ureters and kidneys; if untreated, this may lead to permanent or irreversible kidney damage.		The drugs that may cause urinary retention include: ▶ antihistamines to treat allergies ▶ anticholinergics/ antispasmodics to treat stomach cramps, muscle spasms and urinary incontinence ▶ tricyclic antidepressants to treat anxiety and depression.

Key aspects of medications for the gastrointestinal system

The gastrointestinal system processes food, helps to distribute nutrients throughout the body and excretes waste products. Here are some aspects of medication.

Gastrointestinal system medication			
Disorders	Linked to	Medication group/ category/ class	Interactions
Dysphagia	Linked to: ▶ history of a stroke ▶ Parkinson's disease ▶ multiple sclerosis ▶ cancer ▶ previous radiation treatment ▶ scarring from previous surgeries ▶ oesophageal sphincter disorders ▶ diverticula ▶ xerostomia.	Pharmacological treatment depends solely on the cause of dysphagia and may include nifedipine (a calcium- channel blocker).	Dysphagia
Kidney dysfunction	Another disorder that may result from gradual kidney dysfunction is anemia Certain types of medications hasten the normal decline in kidney function; these include non-steroidal anti-inflammatory drugs (NSAID); some anti-hypertensive drugs; and some diabetic medications.	Agents used in the treatment of renal failure include Dopamine, Furosemide, Mannito and Thiazide.	Kidney dysfunction

Key aspects of medications for the genitourinary system

The genitourinary system is the organ system of the reproductive organs and the urinary system. These are grouped together due to their proximity to each other. Here are some key aspects of medication.

Genitourinary system medication			
Disorders	Linked to	Medication group/category/class	Interactions
Prostate disorders	After age 50, prostate disorders are among the most common of men's health complaints; 80 per cent of all prostate cancer diagnoses, for instance, are made after age 65, and by age 70, 90 per cent of all men display at least some symptoms of an enlarged prostate.	Two medications commonly used to treat enlarged prostate are alpha-blockers and finasteride. Alpha-blockers relaxes the muscles in the bladder neck and prostate, which relieves the symptoms of BPH (benign prostatic hyperplasia, also known as enlarged prostate). Bicalutamide, in combination with hormone treatment, is used to treat prostate cancer that has spread to other areas of the body. Macrolide antibiotics and quinolone antibiotics stop the growth of bacteria. Most types of prostate cancer need the male hormone testosterone to grow and spread; anti-androgens (anti-testosterone) slow the growth and spread of prostate cancer by blocking the effects of testosterone, a natural hormone that helps prostate cancer to grow and spread.	

Key medication categories

These medications have been grouped according to the categorisation used in the *Australian Medicines Handbook.*

Key medication categories	
Allergy and anaphylaxis ▶ Treats: Allergy ▶ Examples include: adrenaline (anaphylaxis), cyclizine (sedating antihistamine)	Eye drugs ▶ Treats: eye infections and glaucomas ▶ Examples include: antibacterials (eye) and beta-blockers (eye)
Anaesthetics ▶ Treats: local and general anaesthesia ▶ Examples include: IV general anaesthetics such as ketamine and inhaled anaesthetics such as nitrous oxide	Gastrointestinal drugs ▶ Treats: reflux, nausea, diarrhoea and constipation ▶ Examples include: antacids, laxatives, and corticosteroids
Analgesics ▶ Treats: pain, acute pain and chronic pain ▶ Examples include: asprin, paracetamol and codeine	Genitourinary drugs ▶ Treats: urinary incontinence, kidney stones and erectile dysfunction ▶ Examples include: anticholinergerics and Phosphodiesterase 5 inhibitors (genitourinary)
Antidotes and antivenoms ▶ Treats: antivenoms in snakebites and gastrointestinal contamination ▶ Examples include: antidotes such as atropine and antivenoms such as black snake antivenom	Immunomodulators ▶ Treats: antineoplastics and immunosuppression ▶ Examples include: cytotoxic antineoplastics and calcineurin inhibitors
Anti-infectives ▶ Treats: hepatitis, HIV infection and worm infections ▶ Examples include: antibacterials such as aminoglycosides and antivirals such as HCV-protease inhibitors	Neurological drugs ▶ Treats: epilepsy, migraine, Parkinson's disease, Alzheimer's disease and multiple sclerosis ▶ Examples include: antiepileptics such as epilim and donepezil (Alzheimer's disease)
Blood and electrolytes ▶ Treats: venous thromboembolism, ischaemic stroke and coronary symptoms ▶ Examples include: anticoagulants such as heparins and antiplatelet drugs	Obstetrics and gynaecological drugs ▶ Treats: contraception, menopause, endometriosis, and pre-eclampsia ▶ Examples include: progestogens (contraceptive) and hormone replacement therapy
Cardiovascular drugs ▶ Treats: heart failure, angina and hypertension ▶ Examples include: aldosterone antagonists and nitrates	Psychotropic drugs ▶ Treats: major depression, anxiety, insomnia, bipolar and alcohol withdrawal ▶ Examples include: antidepressants such as SSRIs and antipsychotics such as lithium

Key medication categories	
Dermatological drugs ▶ Treats: eczema and acne ▶ Examples include: corticosteroids and immunosupressants	Respiratory drugs ▶ Treats: asthma, cough and chronic obstructive pulmonary disease ▶ Examples include: Ventolin, a brocholdilator, other anticholinergics
Ear, nose and throat drugs ▶ Treats: otitis media and tinnitus ▶ Examples include: antibaceterials (ear) and antiseptics	Rheumatological drugs ▶ Treats: rheumatoid arthritis, gout and osteoporosis ▶ Examples include: TFN-alpha antagonists and allopurinol
Endocrine drugs ▶ Treats: type 2 diabetes and osteoporosis ▶ Examples include: insulins and testosterone	Vaccines ▶ Treats: immunisation ▶ Examples include: cholera vaccine, polio vaccine and influenza vaccine

Example

Confirm purpose and function of prescribed medications

Jack is concerned about the medication that he has been handed: 'I don't usually take orange tablets'. Maureen, the worker does not proceed with the medication administration. She consults the MIMS annual, verifies that Jack's suspicions are correct, and then reports her findings immediately to her supervising registered nurse. Her supervisor advises her that it is because Ben has switched to the generic brand of the drug. The registered nurse and Maureen then explain the situation to Jack, and remind him about the discussion he recently had with his doctor about using the generic brand. To reassure Jack, the registered nurse reads out the side effects and the purpose of the medication.

Practice task 12

1. Complete this table with examples of medication related to each body system, the effect the medication has on the body, and the medication group it belongs to.

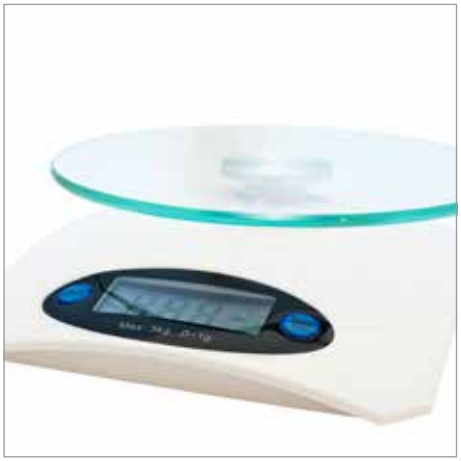
Body system	Medication	General effect on body system	Medication group
Central nervous system			
Musculo-skeletal system			
Peripheral nervous system			
Endocrine system			
Cardiovascular system			
Respiratory system			
Gastrointestinal system			
Renal/urinary system			
Reproductive systems			
Immune system			
Integumentary system			
Eye, ear and special senses			
Micro-organisms			
Neoplastic disease			

2. Identify key aspects of the following medication groups:
   - Anaphylaxis medication
   - Anaesthetics
   - Analgesics
   - Antidepressants

3. State the purpose and expected contraindications of the following:
   - aspirin
   - Epilim®
   - Lithium

Click to complete Practice task 12

2G Accurately calculate medication dosages according to authorised documented request



While it is the responsibility of a registered nurse to calculate and measure doses accurately, workers have a duty of care to check the dose before administering the medication. All calculations and measurements must be 100 per cent accurate and in strict accordance with the written delegation and/or prescription. Incorrect dosages put the person at risk. You should also have the skills and knowledge to identify any errors or discrepancies in medication doses and therefore reduce the risk of over- or underdosing people you support.

Commonly used units of measure:

- Mass in kilograms (kg) grams (g) and milligrams (mg)
- Volume in litres (L) and millilitres (ml)

Formulate to calculate number/fraction of tablets

The standard formulae to calculate the number or fraction of tablets to be administered to equate the required dose is explained below. The formula requires that both the required dose and the stock dose are expressed in the same units. Therefore, if the required dose was stated in grams and the stock dose was in milligrams, you would need to convert the required dose to milligrams first.

Required dose (RD)

Stock dose (SD) = Number of tablets to be administered

For example, the resident's doctor has prescribed 500 mg of Keflex® every six hours. The Keflex® in stock contains 250 mg capsules; therefore:

500 mg (RD)

250 mg (SD) = Two capsules every six hours

Medication mixtures and solutions

Some medication solutions can be mixed prior to taking them to the person. Others must be administered immediately after mixing, so they need to be prepared within close proximity to the person, such as at their bedside. Make sure that you refer to the instructions, medications chart or care plan in order to prepare the mixture or solution accurately.

Below are examples of calculations for substances that require mixing.

Example 1

Calculations for a substance that can be mixed prior to administration

The resident's doctor has ordered that 250 ml of a mixed Gastrolyte® solution be given hourly. The directions indicate that 6.5 g of the preparation should be mixed with 250 ml of previously boiled and cooled water. The Gastrolyte® in stock contains 26 g sachets. To work out how much water is needed, the care worker uses the following calculation:

Divide the sachet 26 g x the dose (6.5) = 4, multiplied by the water (250 ml) = 1 litre presented to the person at any one time in a 250 ml glass/cup.

Example 2

Calculations for a substance that must be administered as soon as it is mixed

The resident's doctor has prescribed 3 g of Cystadane®, a granular powder, to be diluted in 120–180 ml of water, juice or milk, and administered orally. The stock indicates that the scoop provided is equal to 1 g of the drug and that once it is mixed it is to be taken immediately. The aged care worker in this example would do the following as part of the preparation task:

- Measure out 3 scoops of Cystadane® into a medicine cup.
- Pour the 120–180 ml of water, juice or milk into a paper cup.

Because this medication needs to be taken immediately after it is mixed, the aged care worker would reconstitute the medication within close proximity to the patient.

Equipment for measuring solutions

Liquid medication or solutions can be administered using a graduated medicine cup, or spoon and/or an oral syringe/dispenser. Each of these items is described below.

Medicine cup or spoon

- Pour the prescribed dose of liquid medication into the graduated medicine cup or spoon while holding the measuring device at eye level with finger placed at the correct line/dose level. Good hygiene practices include:
  - placing bottle caps inside up on counter, thereby preventing the cap from becoming contaminated
  - adopting a no-touch technique by not touching the inside of the cap or the neck of the bottle
  - pouring from the side of the bottle that is not labelled to prevent drips damaging the label/directions (for example, label facing up).

Oral syringes and dispensers

- Oral syringes/dispensers increase the accuracy of liquid medication dosages and are easy to use. They also allow the care worker to:
  - quickly check the dose amount against the medication chart, thereby ensuring the right person is being given the right dose
  - administer the dose into the side of the person's mouth, thereby minimising gagging, choking and spillage
  - administer the dose in small, controlled increments.
- Oral syringes/dispensers, while similar in appearance to injectable syringes, have specially designed hubs that do not easily or securely connect to standard IV lines or accommodate a needle attachment. The use of injectable syringes for dispensing and/or administering oral medications presents an unacceptable risk. This could be interpreted as a breach of duty of care, given that a duty of care is an obligation to take reasonable steps to avoid causing loss or injury to a person. All medical equipment should only be used for the specific purpose it was designed for.

Example

Accurately calculate medication dosages according to authorised documented request

Cory notices that Miriam's MAR indicates that her doctor has prescribed one 500 mg Valpro® tablet twice daily. However, Miriam's blister pack indicates that the contents of the Webster-Pak® include one 200 mg Valpro® twice daily – both of which are round, enteric-coated purple tablets. Cory identifies this anomaly and seeks clarification and advice from her supervising nurse. The supervising nurse tells him to administer the dose, but that she will investigate the situation with the pharmacy concerned and, if necessary, Miriam's general practitioner.

Practice task 13

1. Why is accuracy important when calculating medication dosages?

2. How can you ensure 100% accuracy?

3. Brian's doctors have prescribed him 1000 mg of Panadol every six hours. The Panadol in stock contains 500 mg capsules. How many tablets will Brian need to take?

Click to complete Practice task 13

2H Prepare medications according to your delegated role and in line with legal and environmental guidelines

Legal guidelines include those set out by aged care services legislation, disability services legislation and drugs and poisons Acts. Environmental guidelines include *Hazardous Waste (Regulation of Exports and Imports) Act 1989* that determine how medication and packaging should be disposed of after use.

You need to understand and follow different procedures depending on their instructions, the specific care needs of people you support, and the form and administration route of different medications.

Preparing medications may include:

- dispensing tablets from dose administration aids into a medicine cup
- measuring liquid medications into a measuring cup or spoon
- dissolving powder in water
- placing medication in a nebuliser or spacer
- using a lubricant as part of the medication administration procedure.

Procedures for preparing medications

General procedures used to prepare medications are outlined below. However, preparing for medication administration may also include discussing procedures with the person, encouraging their participation, adjusting their posture and positioning, seeking assistance from other staff and providing privacy.

If you are unable to carry out any of general procedures used to prepare medications listed below, seek advice and direction from your supervisor immediately.

General procedures for preparing medications
▶ Observing routine hand hygiene such as washing hands using the appropriate method
▶ Obtaining medication administration records, medication and equipment needed to complete your designated medication round
▶ Checking that the medication is not ‘out of date’
▶ Checking all sections of the medication chart for routes of administration, side effects and health implications and person’s current health status, etc.
▶ Checking that the medication within the dose administration aid correlates with the medication administration record and/or care plan
▶ Checking that all dose administration aids have a current photo of the person attached

Example

Prepare medications according to delegated role and in line with legal and environmental guidelines

Sue is an experienced care worker. At the start of each shift, she ensures she has enough time allocated to check that all medication records and medication doses are correct. She is particularly mindful of checking for omissions, dose calculations, drug compatibilities and allergy-related errors before she commences her medication round.

Practice task 14

1. Which legal guidelines should you comply with when preparing medications?

2. List three general things you need to do when preparing medications.

3. What might you do when preparing to administer tablets?

Click to complete Practice task 14

Summary

1. Medication administration must be strictly in accordance with relevant state/territory legislation and industry guidelines.
2. It is imperative that an organisation's procedures and guidelines in relation to medication administration reflect relevant legislation and the scope of role and accountability for workers.
3. A registered nurse may delegate the medication administration tasks to appropriately trained and supervised aged care workers if the workers accept the delegation.
4. A dose administration aid (DAA) is a tamper-evident, adherence device that divides medication into individual doses that are arranged according to the dose schedule throughout the day.
5. You must understand how to operate equipment used in the medication administration procedure properly and safely.
6. Good personal hygiene and infection-control measures form the foundation for all care work practices and procedures.
7. Duty of care or the law of negligence refers to the legal obligation upon all healthcare workers to provide an appropriate standard of care in a variety of residential and community settings.
8. The medication chart will specify the route of administration. You are only authorised to administer medications via certain routes.
9. You should familiarise yourself with the known therapeutic and non-therapeutic effects of medications you are administering.
10. While it is the responsibility of a registered nurse to calculate and measure doses accurately, you have a duty of care to check the dose before administering the medication.

Learning checkpoint 2
Prepare for medication administration

This learning checkpoint allows you to review your skills and knowledge in preparing for medication administration.

Part A

1. Explain how legislation such as disability services Acts, the Aged Care Act and drugs and poisons Acts is relevant to your work as you prepare to administer medication.

2. What are the principles, practices and regulatory framework underpinning delegation and supervision, accountability and responsibility when administering prescribed medication to a person?

3. Provide two examples of medication equipment, including dose administration aids, and explain how to check if equipment is complete, ready for use, up to date and tamper-free before proceeding.

4. Explain the consequences of incorrect use of two of the following administration routes for different medications:
   - Aural
   - Insulin by sub-cutaneous injection using pre-loaded syringes or pens
   - Intranasal
   - Ocular
   - Oral
   - Rectal
   - Topical (including transdermal)
   - Vaginal

5. Explain infection control procedures for any two forms of medication administration.

6. Choose one of the body systems, identify one relevant medication and explain its general effect on the body system and major disorders.

Part B

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

Case study

Jade works in an aged care residence. One of the people she supports, Mr Dodge, has been prescribed antidepressants, which are used to treat depression. Mr Dodge has a history of high blood pressure, and Jade is concerned about how the medication will affect his overall health.

1. Describe some of the characteristics of antidepressants, including treatment, expected effects, contraindications, consequences of incorrect use, storage and disposal requirements.

2. Mr Dodge has been prescribed 100mg of MAO tablet twice a day. Each tablet contains 50mg. How many tablets does Mr Dodge need to get his prescribed dosage?

3. Explain how Jade should prepare medication according to her delegated role and in line with legal and environmental guidelines.

4. Identify four sources of information that a healthcare worker should use to confirm the purpose and function of medication.

Topic 3

In this topic you will learn how to:

3A **Greet and identify the person and prepare for medication administration**

3B **Check the person's medication according to organisational guidelines and the delegation from the health professional**

3C **Accurately explain the administration procedure**

3D **Check for physical or behavioural changes**

Identify and prepare the person for administration of medication

Once you have made all the necessary preparations to help administer medication, you need to prepare the person. This may involve checking you have the right client, making sure they are physically comfortable, providing privacy and showing the client what they have to do.

Being able to correctly identify the person underpins a care worker's ability to administer the right medication to the right patient, in the right dosage at the right time.

In all instances, you should ask the person what they need and explain to them what you are going to do so they are prepared. You also need to know what to do if you identify a change in a behaviour or condition that could indicate they are having an adverse reaction to the medication.

3A Greet and identify the person and prepare for medication administration

Providing a person with the wrong medication or someone else's medication is a serious breach of your duty of care.

A person may be identified incorrectly because of communication difficulties, impaired cognition, memory loss and language barriers; while not a frequent occurrence; people may even have the same name. For these reasons, you should always identify the person prior to administering medication and never administer medication if there is any doubt about the identity of the person.

Below are some processes you should follow to check the person's identity; you will often use more than one of these to confirm their identity.

Ask the person to identify themselves

Give the person the opportunity to identify themselves after you introduce yourself. Be careful during this process. Although you might think that people can identify themselves, they could be confused, they might have a hearing impairment or they may be unable to understand English. These people may respond with an inappropriate answer when asked to identify themselves. For example, if you say, 'Are you Mr Caulfield?', the person might nod to agree or just say yes. He may not have heard you or he might have dementia and is not able to identify himself. He may have said yes because he thought that's what you wanted him to say.

Check the person's hearing aid is turned on.

Ask for the person's name; for example:

'Hello, my name is Cathy; and you are?' (Do not ask, 'Are you Mrs Jones?' as they may say yes just to please you.)

Recognise

If you are familiar with the person, then you will know their name, who they are and their particular circumstances. When you see them, you will be able to confirm that they are the person you are to assist with medication.

Look at a photograph

There should be a current photograph on the medication chart or care plan. There might also be a photograph on the dose administration aid. Check that the photograph matches the person you are speaking with. If you are in doubt because the person has lost considerable weight since the photo, check with your supervisor or someone who knows the client. People with memory loss may wear an identity bracelet.

Look at the person's details

Make sure the person's name and date of birth are the same as the name and date of birth on the medication chart and the medicine container. It's your job to make sure you have the correct person; cross-check with the photograph. Ask them, 'What is your name and date of birth?' Then confirm that the answer corresponds with the medication administration chart, as well as your visual check against the photo identification included in the chart.

Confirm the identity with another staff member

You may need a nurse or other staff member to confirm that the person you see is the correct one, and they have been assessed as being able to take their medication. Another staff member may introduce the person to you or point the person out to you.

Check whether person is self-administering or not

Some people may have been formally assessed as being competent to self-administer their medication. Check the medication charts to see if a person is self-administering. Check also whether the person is self-administering some or all of their medications; for example, self-administering oral medications, but requiring assistance from an authorised health professional to administer eyedrops.

If a person is self-administering, identification may be more difficult as you may not have their care plan and photograph with you. Before you proceed, you must make sure they identify themselves to your satisfaction. You might look around the room for a photograph or letters addressed to them, or ask them specific questions.

Greet and prepare person

It is industry best practice to actively involve and empower people in the medication management process, particularly if the person is self-administering their medications. Workers need to have the interpersonal and communication skills to reassure the person, share information in a clear and professional manner, and also build trust and rapport with that person.

A care worker's job is to provide the necessary support to residents while respecting the wishes and rights of each resident. It is important that people in your care are always treated with dignity, compassion and respect, and this is often demonstrated in the way you communicate with people.

Use effective communication

When you first greet the person, smile and make eye contact (where appropriate). A friendly and welcoming manner will help relax them.

Introduce yourself by name and show them your identification badge. Never assume the person knows who you are. They may have more than one support worker who looks after them.

Tell the person why you are there and what you intend to do. If they don't know what to expect, they might feel scared or vulnerable and object to any form of assistance. They may even refuse to take their medication because they do not trust you or do not understand what is going on. Building trust is an important part of the relationship between a support worker and a person, especially when dealing with medication. If the person trusts you, you can allay their fears; they will have confidence in you and rely on you to act in their best interests.

You might mention the name of a family member or another person in care. This makes them feel comfortable.

Always give people enough time to respond to any questions you need to ask.

Focus on their communication strengths and capabilities so they feel confident. Make sure they use their augmentative communication devices.

Prepare the person

People need to be physically, emotionally and intellectually able to take their medication. You need to make sure the environment is comfortable for the person before they take their medication. Important skills for workers involved in direct care include the ability to help the client relax or overcome their fear, and how to help the person if they are in pain.

Apart from greeting and communicating with the person in an appropriate manner, listed below are other preparation considerations for medication administration.

Preparation for medication administration

- Discuss procedures with person and ensure they are clear about the purpose, method of administration and what the procedure may involve.
- Encourage person participation by focusing on their strengths and abilities.
- Adjust posture and positioning so that the person feels involved and able to receive the medication when they feel comfortable.
- Seek assistance from other staff if necessary to reassure the person or help them feel more comfortable.
- Provide privacy; all people have a right to dignity and privacy, and this includes when they are being administered medications.
- Become familiar with the treatment area and the treatment regime.

Example

Greet and identify person and prepare for medication administration

A care worker approaches a resident and asks him to tell her his name. The request does not appear to register with the resident. The care worker rephrases the question: 'My name is Jill. Could you please tell me your name'? She waits for a response that is not forthcoming. She does not feel confident that the resident's appearance matches that of the photo on the MAR, so she seeks the advice of another colleague, who confirms that the resident is definitely Mr James. Jill was right to be cautious, as identifying a person incorrectly could have dangerous consequences.

Practice task 15

1. When preparing to administer medication, what do you need to remember when greeting a person?

2. You are unsure that the person you are meant to be administering medication to is the person you are currently talking to. The person in the chart is B. Brown, and the label on the person's bed says the bed belongs to B. Brown. What should you do?

3. What ways could use make the person feel empowered and comfortable when preparing to administer medication?

Click to complete Practice task 15

3B Check the person's medication according to organisational guidelines and the delegation from the health professional

A care worker who is organised and checks documentation and resources is less likely to make medication errors. Before you pack the medication cart or begin the medication round, check that all medication is free from contamination of other medications, spills, water and other foreign matter, and check all dose administration aids for evidence of tampering or damage.

Before you take the medication from the medication cart, check that the medication, dose, time, route and identity all correlates with the documentation. Triple-check this information before, during and after administration. Triple-checking ensures that you will administer the right dose of the right medication via the right route at the right time to the right person.

Any discrepancies in medications and/or instructions – such as the wrong number of tablets, or that the appearance of the tablets does not correlate with the medication administration record (MAR) description – should be reported to the care worker's supervisor or coordinator immediately. Seek advice from your supervisor about whether the person can wait for replacement medication and/or what other action needs to be taken.

Follow instructions

Care workers must ensure all work is carried out in accordance with instructions from their supervisor and/or health professional. This means that care workers must undertake medication administration tasks in accordance with the specific delegation, and in compliance with organisational policies and procedures.

They must also follow principles of best practice relating to:

- strictly following medication labels and/or instructions
- observing all work health and safety precautions and/or procedures, such as wearing gloves, disposing of clinical waste correctly
- applying standard and additional precautions in infection control, including correct hand-washing techniques
- managing and reporting contingencies as they arise
- correctly documenting the medication administered.

Duty of care legislation

Duty of care or the law of negligence refers to the legal obligation upon all healthcare workers to provide an appropriate standard of care in a variety of residential and community settings.

The Australian Government Department of Health and Ageing states that all aged care staff have a duty of care to the residents. This means that they must provide for the protection, care and general safety and quality of life of the residents living in the facility. In addition, all employees have a general duty of care towards others to ensure their actions or inactions do not put others' safety or health at risk.

While the various Australian laws of negligence are similar, there are some differences between each state's and territory's laws.

Australian laws of negligence:

- *Civil Law (Wrongs) Act 2002* (ACT)
- *Civil Liability Act 2003* (Qld)
- *Civil Liability Act 1936* (SA)
- *Civil Liability Act 2002* (Tas.)
- *Wrongs Act 1958* (Vic.)
- *Civil Liability Act 2002* (WA)

Duty of care responsibilities

Generally speaking, a duty of care is a duty to take reasonable steps to avoid causing loss or injury to a person. Obviously, service agencies owe a duty of care to anyone who is likely to be affected by the agencies' activities, including clients or the families and carers.

Workers have a duty of care to:

- be aware of their responsibilities in relation to 'duty of care'
- work at all times with, and within the limitations of, all applicable legislation and guidelines
- follow a person's care plan closely
- adhere to the service agency's policies, procedures and expected standard of work
- be aware of the limitations of their role (only do the tasks that they are trained to do and that are part of their job description)
- only provide information or advice to a person within their job role boundaries and competence (for example, not provide medical advice)
- be aware of their responsibilities in relation to 'duty of care'.

Example

Check person's medication according to organisational guidelines and the delegation from the health professional

Alison is told by the coordinator that she needs to relieve Bob, another care worker. Bob is just about to administer medication to two clients who share a room, Mrs Brady and Mrs Bradshaw.

As Bob hands Alison the medication cup, Bob asks Alison if she wants to check the medication chart and the dose administration aid that it was dispensed from. Alison thinks she recognises Mrs Brady, so says no and prepares to administer the medication.

Bob just happens to be walking back in for his jacket and sees that Alison is about to give the medication to Mrs Brady, when it was meant for Mrs Bradshaw.

Practice task 16

1. What should you be checking when checking medication?

2. What is the name of your duty of care state or territory legislation?

3. How can you ensure that you practise duty of care when preparing to administer medication?

Click to complete Practice task 16

3C Accurately explain the administration procedure to the person

It is important to let the person know how the medication will be administered before they take it. People you support may not understand, or they may be overwhelmed by the information provided by health professionals. It is often the role of the support worker to explain these details in plain language to make sure these instructions are understood and followed.

Communication skills are very important. Always be calm, patient and friendly, with a professional approach. Remember to speak clearly. Make and keep eye contact. Position your body to speak at the level of the person. For example, bend down to speak to someone who is sitting in a chair. Find ways to communicate if the person has a hearing impairment or does not understand English well. For example, if they have trouble understanding English, you may have to draw pictures or have instructions translated to assist them. Be prepared to explain things more than once. Show the person that you are happy to do this.

Information to provide

It is important to remember that a person has the right to choose whether or not they take their medication. The more you can do to reassure them and let them know about the procedure, the more likely they are to cooperate.

Providing information to clients about their medication
▶ Confirm the time for the medication.
▶ Explain the route.
▶ Show the amount of medication they will take.
▶ Explain what may have to be done to the medication, such as shaking the bottle well, taking it with water.
▶ Explain any conditions that apply, such as, 'Don't go out in the sun after taking the medication; the medication may cause drowsiness'.
▶ Explain preparation procedures such as crunching the tablet, dividing the tablet, taking the medication with food.
▶ Show the person how to take the medication.

Further assistance

Whenever possible, the following actions are required in order to provide appropriate assistance.

Actions to provide appropriate assistance:

- Respect the person's personal space – if you don't have to stand over them, don't.
- Assist the person to complete the task independently using simple step-by-step instructions and allowing them to become familiar with the task.
- Speak in a reassuring voice to the person throughout the procedure and explain what is being done in simple but respectful language.
- Don't assume that you need to do all the administration tasks just because it may be done quicker.
- Provide support and assistance as required; for example, apply a nebuliser face mask.
- Be organised and complete the task in a calm and efficient manner.
- Make sure that your facial expressions and tone of voice are consistent with your message.

Support people with special needs

Some people will have special care needs such as an intellectual or physical disability, or they may have dementia.

Below are some strategies that may help you to inform the client if they have special care needs.

Attention

Get the person's attention first.

Noise and distractions

Minimise distractions and noise; you might need to turn off the radio or television, shut the door or move them to quieter surroundings.

Greet the person

Make sure you have the person's attention and then address him/her by name, identifying yourself by name and job role.

Explain

Explain slowly, distinctly and in a reassuring tone what the medication administration task involves, such as swallowing tablets or having drops put into their eyes.

Encourage

Encourage the person to be independent wherever possible; for example, by asking them to place the tablets in their mouth and then drink some water/juice.

Example

Accurately explain the administration procedure to the person

'Good morning, Mrs Lilly. How are you today? My name is Mandy and I'm a care worker here at Shady Oaks. The nurse has asked me to give you your medication today. There are three tablets that you need to swallow; these will help with your arthritis. If you don't mind sitting down in the chair for me, I'll pour you a glass of water to help you swallow the tablets.'

Practice task 17

1. What details do you need to explain to the person when preparing to administer medication?

2. Why is it important to explain the procedure to the person?

3. Why is accuracy important when explaining the procedure?

Click to complete Practice task 17

3D Check the person for any physical or behavioural changes

While it is unrealistic to assume that care workers can know all the common and/or potential side effects and drug interactions that can happen, they must be able to check a person for physical or behavioural changes, and report such changes to the supervising registered nurse or medical practitioner before proceeding with administration of medication.

There are a number of references and information sources that care workers can use to identify the purpose and function of prescribed medications for administration. For example, Consumer Medication Information leaflets contained within drug packaging include warnings such as telling your doctor immediately if you notice symptoms such as swelling of the face, severe upper stomach pain (often with nausea and vomiting and/or loss of appetite), vomiting and feeling generally unwell with tiredness, and weakness.

The first three points in this list are typical allergic reactions to a drug, but the fourth point could be dismissed as typical symptoms of old age or disability. The person's wellbeing often relies on the care worker's ability to observe and report changes in their health status. Before you administer medications, observe the person carefully.

Symptoms to determine a person's health status

- Appears to be experiencing side effects
- Feels generally unwell
- Feels weaker or more tired than normal
- Exhibits behaviours that are different to their normal behaviour

Physical or behavioural changes

Physical or behavioural changes observed in the person's condition that must be immediately reported to a supervisor or health professional may include, but are not limited to, the examples listed here.

Physical changes

- Changes to airway; choking; slowed, fast or absent breathing; colour changes or circulation, including unexpected drowsiness and absence of pulse
- Rash
- Inflammation or redness
- Swelling
- Headache
- Skin tone
- Feelings of dizziness
- Slurring of speech
- Nausea and vomiting
- Blurred vision
- Anything that appears abnormal about the person
- Others as advised by a doctor or health professional

Behavioural changes	
▶ Confusion	▶ Paranoia
▶ Agitation	▶ Depression
▶ Anxiousness	▶ Suicidal thoughts

Report behavioural changes

The care worker has a duty of care to report changes in the person's health status to their supervising registered nurse and/or the person's health professional/s. Triple-check that the medication, time and person correlated with the documentation before you take the medication from the medication cart; before you give the medication to the older person; after you have given the medication to the person.

Careful completion of the medication administration records guarantees clear communication between members of the person's healthcare team. Make sure that you, in accordance with your organisation's procedures, complete all documentation so that it provides an accurate and up-to-date record of the status and care of each person.

If you have any doubts at any point in the medication administration process, don't administer the medication. However, because of the important role that medication plays in maintaining a person's overall standard and quality of life, and the importance of giving medication at the right time, you must contact your supervising registered nurse immediately.

Most drug reactions occur within one hour; however, delayed reactions can develop up to two weeks after taking medication.

Example

Check the person for any physical or behavioural changes and report these to supervisor

Loren slipped and fell backwards two days ago. She hit her head quite hard but did not require hospitalisation. It is time to give her afternoon medication but David finds it difficult to wake her. David shakes her gently and persuades her to take the medication. Half an hour later, another care worker, Chris, finds Loren unresponsive.

In this example, David should have noted the physical and behavioural changes in Loren and reported these changes to his supervisor.

Practice task 18

1. Describe three behavioural changes you should be aware of when administering medication.

2. Describe three physical changes you should be aware of when administering medication.

3. When you observe a physical or behavioural change, who should you report to and how?

Click to complete Practice task 18

Summary

1. Check that you are giving the right medication to the right person before you administer the medication.
2. Ask the person their name and date of birth. Do not ask questions like, 'Are you Mr Smith?' If possible, verify the person's identity by checking a current photo in their medication chart, or confirm the person's identity with nursing/care staff if you are unsure.
3. Medication errors in relation to mistaken identity can be caused by communication difficulties, memory loss, impaired cognition, language barriers or the person having the same or a similar name to another person.
4. Before you pack the medication cart or begin the medication round, check the dose administration aids for any evidence of tampering to ensure that medication is free from contamination.
5. Triple-check that the medication, time and person correlates with the documentation before you take the medication from the medication cart; before you give the medication to an older person; and after you have given the medication to a person.
6. Speak in a reassuring voice to the person throughout the medication administration task and explain what is being done in simple but respectful language. Monitor the tone and level of your voice, making sure that your facial expressions and tone are consistent with your message.
7. Care workers have a duty of care to report changes in the person's health status to their supervising registered nurse and/or the health professional/s.
8. If you have any doubts at any point in the medication administration process, do not administer the medication.

Learning checkpoint 3
Identify and prepare the person for administration of medication

This learning checkpoint allows you to review your skills and knowledge in identifying and preparing the person for administration of medication

Part A

1. Give three examples of your duty-of-care responsibilities when identifying and preparing a person for administration.

2. Explain why greeting a person before medication administration is important.

3. Explain three ways you can identify a person before administering medication.

4. Explain three ways you can prepare a person to take their medication.

5. Identify legislation you should comply with when checking medication before administration.

Part B

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

Case study

Jason works for a community-based aged care service. He supports Lydia, who has rheumatoid arthritis. Jason is preparing to administer medication for the first time. Lydia has aspirin tablets, which are non-steroidal anti-inflammatory agents (NSAIDs) used to reduce inflammation and pain by thinning blood. She has 400 mg orally every four hours, as needed. The delegating health professional is the doctor, who prescribes the aspirin, and the registered nurse who provides the delegation instructions to the support worker.

1. What should Jason check with the delegating health professional before administering medication?

2. Write what Jason might explain to Lydia before administering medication.

3. Provide three examples of physical issues that Jason may observe prior to administering medication.

4. Provide three examples of behavioural issues Jason may observe prior to administering medication.

Topic 4

In this topic you will learn how to:

- **4A** Administer medications as delegated within your role responsibility
- **4B** Administer medications correctly according to defined legislation, organisational procedures, professional standards and instructions
- **4C** Oversee and observe the person when taking medication
- **4D** Dispose of all used and unused medication and containers according to organisational procedures
- **4E** Identify signs that when-necessary medications may be required, then inform
- **4F** Record administration of medications according to organisational policy
- **4G** Provide accurate information on medication administration

Administer medications within legal parameters

Appropriately trained and assessed care workers distribute and administer medications prescribed on a daily basis. These medications are prescribed by health professionals and dispensed by a pharmacist in dose administration aids, all within an organisation under supervision and in accordance with legislation and industry guidelines.

4A Administer medications as delegated within your role responsibility

The registered nurse should only delegate medication administration tasks to care workers who have been appropriately trained and assessed, and who accept the delegation within the context of a person's care plan or the organisation's written instructions. Medication administration tasks delegated to a care worker may include medications prescribed for a person by a doctor or health professional and dispensed by a pharmacist in dose administration aids or p.r.n. medications as prescribed (and identified in medication chart/sheet and/or care plan) according to relevant legislation, organisational guidelines and delegations.

You must have a clear understanding of their role, accountability and responsibilities, follow organisational policies and procedures, and always ask your supervisor if you are unsure of what to do.

It is important that you check all details to avoid medication errors, as a mistake with medication can have serious consequences. Never make a decision about the person's medication, offer medical advice or change the medication, even if the person asks you to. It is outside your level of authority to give an injection, unless you have a preloaded syringe, or to carry out any invasive procedures. It is a breach of duty of care of the delegating professional to fail to provide accurate instructions and a breach of duty of care if you do not follow instructions.

It is not your responsibility to force a person to take their medication.

Example

Administer medications as delegated within your role responsibility

Medication errors can occur at all stages in the medication process, from prescription by physicians to delivery of medication to the patient by nurses, and at any site in the health system.

According to information based on a systematic review of research published by Blackwell Publishing Asia in 2006 and conducted by the Australian Centre for Evidence Based Aged Care:

- Older Australians have higher rates of medication incidents due to higher levels of medication intake.
- It has been estimated in the community setting that up to 400,000 adverse drug events may be managed in general practices each year in Australia.
- The cost of medication errors has been estimated at over $350 million annually in Australia.

Practice task 19

1. Why should you only administer medications within your role?

2. How can you be sure that you are administering medications within your role?

3. How can you prevent medication errors from occurring?

Click to complete Practice task 19

4B Administer medications correctly according to defined legislation, organisational procedures, professional standards and instructions

Medication assists in the treatment and prevention of disease, increases life expectancy and improves the quality of life for people; however, medicines do have the potential to cause harm if they are not administered according to the care plan, medication administration records, delegation instructions and the five rights (5Rs), which are listed below with the addition of another four rights.

The 'rights'	Explanation
The right person	Check that you are assisting the right person by looking at the photo by the DAA; you can also confirm their name by asking them or by looking at their identification bracelet.
The right medication	Check that you are assisting with the correct medication. Read the labels on bottles, and ensure that the name of the medication matches that on the order.
The right time	Check that the medication is being administered at the correct time. The time will be clearly written on the medication chart and DAA. Some medications have side effects like sleepiness or dizziness, which means they may only be given at night. Other medications must be taken before or with food. When a person is self-administering, they may need to be reminded and prompted. Encourage them to develop a routine and to use lists
The right route	Check that the medication is being administered via the correct route; for example, orally (via the mouth), sublingually (under the tongue), nasally (into the nose), ocularly (into the eyes), topically (onto the skin), rectally (into the anus), vaginally (into the vagina). The medication chart or label will explain how the medication is to be administered. Sometimes, the instructions will be in an abbreviated form that your supervisor may need to explain to you.
The right dose	Where there is a dosage documented (e.g., for powders, inhalants, creams, etc.), check that you are assisting with the correct dosage. Drugs will only be effective if the correct dosage is given. If, for some reason, you find it hard to read the medication chart, do not proceed. Contact your supervisor, the doctor or the pharmacist. If you are helping to pour a liquid, use a measuring cup with clear indications on the sides, and measure the dose in millilitres (unless an alternative measurement is specified).

The additional 4 rights are listed below:

The right of the client to refuse	The client/patient has the right to say they do not want to take their medications. This is their right, but you must document it and notify your supervisor/the nurse in charge as per the policy and procedures related to assisting with medications.
The right of the client/patient to know what the drug is for	The client/patient has the right to understand what they are being given. If you do not know what is being administered, tell them you will find out from your supervisor/the nurse in charge. Otherwise, have somebody more knowledgeable come and explain.
The right documentation	You must document that you have assisted with medication on the medication administration record/chart, and (as per policies and procedures) on the support/support plan and/or progress notes.
The right drug preparation	You must be sure that the medication is administered after being prepared the correct way. For instance, some pills have an enteric coating on them that ensures a slow release of the drug. These cannot be crushed or cut.

Administer medication in accordance with prescriber form and instructions

Prescribed and over-the-counter medications are supplied with prescription instructions, which relate to dosage and frequency. They will also advise which administration route to use; orally, via the rectum, intravenously, topically etc.

You have a duty of care to follow instructions exactly as they are worded. Not following prescriber form and instructions puts the person at risk of harm; for example, the dosage may be too high, or there may be a build-up of toxicity.

Administer medication in accordance with legislation, organisational procedures and professional standards

Your organisation's medication management policy and procedures will detail how to administer medication correctly. It is important to follow these principles and instructions, as they are based on legal requirements.

Legally, you have a responsibility to provide duty of care to people you support, which includes managing and administering medication correctly. Relevant legislation includes aged care services, disability services, drugs and poisons and negligence legislation.

Professional standards are provided for all community services settings. By following organisational procedures, you inherently follow standards, such as the Aged Care Quality Standards. You have an obligation to both your organisation and the people you support to follow instructions exactly.

Handle, administer and store different forms of medication

The different forms of medication will impact and influence how you prepare for administration, use equipment and infection control techniques, record information, follow procedures and assist people.

Standard information about equipment, instructions and procedures are listed here for administering medications.

Standard information about equipment, instructions and procedures
▶ In solid form, such as tablets and capsules, orally disintegrating tablets (wafers) or sublingual tablets
▶ In liquid form (or powder in solution)
▶ For topical application, including ointments, lotions and transdermal patches
▶ For application to the person's eyes, ears and nose
▶ Via spacers or nebulisers
▶ In solid form, such as tablets and capsules, orally disintegrating tablets (wafers) or sublingual tablets
▶ As an appliance, such as a pessary

Administer medication in solid form

Medications may be administered in the form of solid tablets, capsules, sublingual tablets that are placed under the tongue to dissolve, or as wafers that are tablets that disintegrate in the mouth; for example, clonazepam in the form of a klonopin wafer.

Administer tablets and capsules

Here is a description of the equipment, preparation, procedures and assistance requirements for administering medications as either tablets or capsules.

Equipment

- Medicine cup
- Tumblers
- Tweezers
- Water pitcher
- Gloves
- Paper towel/tissues
- Lubricant, if required

Preparation

- Wash and dry hands thoroughly.
- Remove the blister pack/sachet from the medication cart.
- Check the blister pack/sachet for the person's name and photo.
- Take the blister pack/sachet to the person.
- Check that medication, time and person correlate with documentation (ensure that medicine, strength, dose and time are correct for that person).
- Check the blister pack/sachet for the correct day and time.

Procedures

- Pour the contents of the correct blister/sachet into a medication cup – remember to use the no-touch technique, or use tweezers if necessary.
- Check the blister/sachet is empty – that is, you have removed all tablets/capsules.
- Check, once more, that you are administering the medication to the right person.
- Hand the medication/s to the person along with a glass of water or juice.
- Remain with the person until you are certain that s/he has swallowed all the tablets/capsules.

Administer

- Check that the person has swallowed all the medications.
- Use lubricants or artificial saliva products if necessary to help the person swallow.
- If you are delegated and/or requested to do so, check the person's mouth to verify that the person has swallowed all the medication completely.
- Sign in the 'given by' space on the person's medication sheet immediately after the medication is given.
- Return blister packs/sachets and medication documentation to the medication cart.

Some medication cannot be altered

Although some medicines may be crushed and mixed with food and drink to aid administration, this practice must be the last resort and is not suitable for some medications. For example, some tablets have an enteric coating that allows them to pass through parts of the digestive tract, and controls the location in the digestive system where they can be absorbed.

Furthermore, opening capsules or crushing tablets before administration may render the drug's use to be unlicensed, and prescribers and administrators of the drugs may be liable if the drugs have been altered by crushing. The act of crushing may alter the therapeutic benefit of the drug being administered.

Medication must be checked by the person's health professionals (doctor and pharmacist) before care workers crush medication. Specific directions on how the drug is to be administered must be included on the person's MAR and documented in the care plan, such as 'swallow whole with fluid after food or can be mixed with food or drink'.

Altering solid medication dosage forms (oral medications) such as crushing tablets or opening capsules can change the formulation. The following outlines some effects of crushing tablets or opening capsules, and provides examples.

The effect of altering solid medication	Example of change
▶ Changes the absorption characteristics of the medication	▶ Crushing OxyContin® could result in rapid release and drug toxicity
▶ Changes the stability of the medication	▶ Crushing Verapamil SR tablets will increase hypotension, bradycardia
▶ Changes the efficacy of the medication	▶ Crushing Mesalazine will decrease its effect
▶ Irritates the client's oesophagus and/or stomach	▶ When crushing bisphosphonates, precautionary measures must be taken
▶ Changes the side-effect profile	▶ Crushing Mesalazine will increase the risk of kidney damage

Procedures for altering dosage preparation

Residential aged care facilities have a duty of care to ensure staff follow procedures for the alteration of dosage forms necessary to facilitate administration to certain clients according to information resources such as the MIMS annual.

Care workers must follow the procedures below for the alteration of dosage forms.

Follow health professional advice

- Only alter a medicine on the advice of a person's health professional, who provides adequate instruction to the care worker in relation to altering the dosage's form.

Double-check the dose instructions

- Double-check the dose administration aid or medicine container for any instructions about altering the oral formulation (for example, 'do not crush or chew') before they crush medication – often a list of medications that must not be crushed or chewed is provided by the pharmacist to the RAC facility.

Be aware of potential risks

- Be aware of potential risks to the safety of themselves and others nearby during the crushing task (minimise dust, use dedicated cytotoxic-only equipment, etc.).

Procedures for altering dosage forms

After tablets have been crushed, the resultant powder may be unpalatable; hence the relatively common practice of transferring the powder to a small cup and mixing it with a strongly flavoured carrier substance such as jam, honey, thickened liquid, custard or orange juice to improve the ease of swallowing.

Although this common practice seems sensible enough, there is a possibility that crushed drugs may interact with foodstuffs. Food can affect the action of medications, and the properties of these carriers can interfere with medication absorption.

Results from studies conducted by the University of Queensland, School of Pharmacy into the impact of additional carriers (jam, honey, orange juice, yoghurt, etc.) have shown that the addition of jam and thickened fluids (particularly) to crushed tablets can potentially delay the release of medication in the stomach, while honey appeared to be less of an issue.

General precautions of altering medication dosage:

- Mixing the medication with a small amount of food – do not provide over a number of meals
- Making sure that 'no dairy' and 'empty stomach' medication warnings are complied with
- Administering the crushed medication as soon as possible to reduce interactions and risk of medication incidents
- Not mixing crushed medications into a meal because if they fail to finish the meal they will have failed to take the administered dose
- Not mixing crushed medications into a meal because children or animals could ingest the uneaten portion of food
- Not mixing crushed medications into a meal because the bitterness of the medication may mean that the person refuses to eat
- Making sure that both the mortar and pestle are washed with soap and water, sanitised and dried after each use
- Making sure that the container and spoon used to mix the food and medication together are washed thoroughly with soap and water as soon as possible.
- Mixing the medication with a small amount of food – do not provide over a number of meals
- Making sure that 'no dairy' and 'empty stomach' medication warnings are complied with

Safety considerations

Never assume that a medication intended to be taken by mouth can be safely crushed or given through a feeding tube. Administering medications that are crushed can reduce the effectiveness of the medication or increase the risk of drug toxicity. Specific directions on how the drug is to be administered, including crushing and mixing with food, must be included on the person's MAR and documented in the care plan by the client's health professional.

Cytotoxics such as azathioprine, methotrexate and teratogenic products can be dispersed into the air if crushed (aerolisation of particles), and may then be inhaled or come into contact with the healthcare worker. Care workers must be familiar with policies and procedures on handling and crushing allergenic, cytotoxic or carcinogenic medications. For example, some medications should only be crushed by a pharmacist under controlled conditions, or the care worker should wear gloves and a face mask when crushing medications.

Administer sublingual medication

Sublingual medications are medications that are placed under the tongue. Always administer the sublingual tablet last if several medications are being administered.

Below is a description of the preparation, person-assistance, recording and storage requirements for administering medications as sublingual tablets.

Preparation

- Wash and dry hands thoroughly.
- Remove the blister pack/sachet from the medication cart.
- Check the blister pack/sachet for the name and photo.
- Take the blister pack/sachet to person.
- Check that medication, time and client correlate with documentation (ensure that medicine, strength, dose and time are correct).
- Pour the contents of the correct blister/sachet into a medication cup – remember to use the no-touch technique – or use tweezers if necessary.
- Check that the blister/sachet is empty – that is, you have removed all tablets/capsules.
- Check, once more, that you are administering the medication to the right person.

Assist person and record

- Assist the person to take medication:
  - Ask the person to put the tablet under the tongue (front section of the mouth).
  - Explain to the person that the tablet must be entirely dissolved before swallowing.
- Record medication administration and store medication:
  - Sign in the 'given by' space on the medication sheet immediately after the medication is given.
  - Return blister packs/sachets and medication documentation to the medication cart.

Administer medication in liquid form

Below is a description of the equipment, preparation, procedures, client assistance and recording requirements for administering medication in liquid form.

Administering liquid medication

Equipment

- Medicine cup
- Paper towels/tissues
- Tumbler
- Water pitcher

Preparation

- Wash and dry hands thoroughly.
- Check the bottle/medicine cup for the person's name and photo.
- Take the bottle/medicine cup to the client.
- Check that medication, time and person correlate with documentation (ensure that medicine, strength, dose and time are correct for that person).
- Follow label directions (shake bottle to mix ingredients, etc.).
- Remove the lid from the bottle – place the outside of the lid on a table/bench to avoid contamination of the inside of the lid.
- Pour from the bottle holding the graduated medicine cup at eye level with a finger marking the dosage line.

Procedure

- Hand the medication to the client along with a glass of water or juice.
- Clean the neck of the bottle with a disposable towel.
- Firmly replace the lid and then return the bottle to the medication cart.
- Wash and dry hands thoroughly.

Assist the person to take medication

- Check that the person has swallowed all the medication.

Record administration

- Sign in the 'given by' space on the client's medication sheet immediately after the medication is given.
- Return medication documentation to the medication cart.

Administer medication topically

Topical medications are applied to the skin and include creams, ointments, balms, lotions, liniments and transdermal patches. There is also a range of other topical medication such as liniments and aerosols. Refer to the MAR, the delegation instructions and the directions for application before applying any topical medication.

Below is a description of the equipment, preparation, procedures, and recording requirements for administering medications as creams, ointments and lotions.

Administering topical medication

Equipment

- Gloves
- Sterile applicator or tongue blade
- Paper towel/tissues

Preparation

- Wash and dry hands thoroughly.
- Remove medication from the medication cart.
- Check the medication for the person's name and photo.
- Take medication to the person.

Procedure

- Wear gloves to apply medication to the person's skin.
- Use an applicator or tongue blade to remove ointments from a jar/container.
- Do not allow top of tube to come into contact with the skin of the carer or person.
- Follow directions for application of the medication.
- Clean the neck of the tube, jar or container with a disposable cloth and replace the lid.
- Dispose of any dressings, applicators or tongue blade according to organisation guidelines/procedures.
- Remove gloves and dispose of them according to organisation guidelines/procedures.
- Wash and dry hands thoroughly.

Record administration

- Sign in the 'given by' space on the client's medication sheet immediately after the medication is given.
- Return the sheet to the medication cart.

Administer medication using transdermal patches

Transdermal patches are medicated adhesive patches that deliver a drug at a predetermined continuous and controlled rate (controlled release) through the skin into the bloodstream. They are prescribed for people with chronic conditions, including dementia, pain and heart disease. Transdermal patches are particularly useful for people who have swallowing difficulties.

Transdermal patches are commonly used in RAC facilities for pain relief, angina, dementia and Parkinson's disease.

Below is a description of the equipment, preparation, procedures, and recording requirements for administering medications as transdermal patches.

Equipment

- Gloves
- Soap and water
- Towel

Preparation

- Wash and dry hands thoroughly.
- Wear gloves before applying or removing transdermal patches.
- Remove medication from the medication cart.
- Check the medication for the person's name and photo.
- Take medication to the person.
- Check that medication, time and person correlate with documentation (ensure that medicine, strength, dose and time are correct for that person).

Procedure

- Remove the old patch, if necessary: fold the old patch so that the adhesive side of the patch sticks onto itself; then wrap and dispose of the patch in a contaminated-waste container.
- Vary the site of application to minimise the likelihood of skin irritation.
- Apply to clean, dry areas of the skin – gently wash old and new site with soap and water and then dry thoroughly.
- Peel backing off the patch – avoid contact with the adhesive, remembering that this adhesive contains medication.
- Press patch firmly onto skin.
- Check patch is firmly adhered.
- Remove gloves and dispose of them according to organisation guidelines/ procedures.
- Wash and dry hands thoroughly.

Record administration

- Sign in the 'given by' space on the person's medication sheet immediately after the medication is given (ensure the site of the application is included in the MAR).
- Return the sheet to the medication cart.

Administer eye drops or ointments to eyes

Below is a description of the equipment, preparation, procedures, client assistance and recording requirements for administering medications as eye drops or ointments.

Equipment

- Gloves
- Sterile gauze and/or cotton balls
- Paper towels/tissues

Preparation

- Wash and dry hands thoroughly.
- Remove medication from the medication cart.
- Check the medication for the person's name and photo.
- Take medication to the person.
- Check that medication, time and client correlate with documentation (ensure that medicine, strength, dose and time are correct for that person).
- Double-check that the medication is labelled for use ocularly (via the eye) and the eye that needs to be treated is clearly and accurately identified.

Procedure

- Wear gloves before applying eyedrops/ointments.
- Discuss the procedure with the person.
- Request that the person sits down with their head tilted back or lies down with their head tilted back.
- Cleanse the eye with warm (not hot) water or saline solution on a disposable sterile cotton ball, gently wiping from the inside of eye to the outside.
- Use different cotton balls or sterile gauze for each eye.
- Remove the cover of the container, placing the lid open side up to prevent contamination from the work surface.
- Ask the person to look up at the ceiling, towards the top of their head.
- Follow instructions for administering eyedrops/ointments.
- Clean the neck of the tube or bottle's dropper tip with sterile gauze.
- Firmly replace the lid and then return tube or bottle to the medication cart.
- Dispose of any waste according to organisation guidelines/procedures.
- Wash and dry hands thoroughly.

Assist person with medication

- Ask the person to close their eyes.
- Ask the person to place a finger in the corner of the eye and gently hold for 2–3 minutes to give the medication time to absorb – gently remind the client not to squeeze shut, blink or rub their eye.
- Provide the client with a clean tissue to wipe away any excess drops – use a fresh tissue for each eye.

Record administration

- Sign in the 'given by' space on the person's medication sheet immediately after the medication is given.
- Return the sheet to the medication cart.

Administer nose drops or sprays to nose

Below is a description of the equipment, preparation, procedures, recording requirements and infection control for administering medications as nose drops/sprays.

Administering nose drops and sprays

Equipment

- Gloves
- Sterile gauze and/or cotton balls
- Paper towels/tissues

Preparation

- Wash and dry hands thoroughly.
- Remove medication from the medication cart.
- Check the medication for the person's name and photo.
- Take medication to the person.
- Check that medication, time and person correlate with documentation (ensure that medicine, strength, dose and time are correct for that person).
- Double-check that the medication is labelled for use aurally (via the ear) and the ear that needs to be treated is clearly and accurately identified.

Procedure

- Wear gloves before applying nose drops/sprays.
- Ask the person to lie down with their neck extended back over a pillow.
- Avoid touching the dropper to the nose.
- Place the nose dropper just inside the nostril.
- Instil the correct number of drops.
- Instruct the person to remain with their head back for a short time to allow the medication to reach the nasal cavity.

Assist person with medication

- If possible, ask the person to administer the spray; otherwise ask the person to sniff when you say three (count from one to three) and squeeze the spray on that count.
- Gently place a finger against the person's nose to close the nostril while spray is being applied to the opposite nostril.

Infection control

- Clean the top of the nasal spray or dropper bottle with sterile gauze before replacing the cap.
- Firmly replace the lid and return the bottle to the medication cart.
- Dispose of any waste according to organisational guidelines/ procedures.
- Remove gloves and dispose of them according to organisational guidelines/procedures.
- Wash and dry hands thoroughly.

Administer medication using a spacer

Spacers act as a holding chamber for medication for a few seconds between activating a metered dose inhaler (MDI); therefore, they help improve delivery of inhaled medications into the lower airways, rather than into the throat.

Older adults benefit from the use of spacers because they require less coordination than using an inhaler alone (the person does not have to coordinate pressing the inhaler and breathing at exactly the same time) and because they reduce the residual medication in the mouth of inhaled steroids that may lead to oral candidiasis (thrush).

People using a quick-relief inhaler should wait for about a minute between puffs; people using controller medicine do not need to wait between puffs.

Below is a description of the equipment, preparation, procedures, client assistance and recording requirements for administering medications using spacers.

Equipment

- Gloves
- Spacer
- Tumbler
- Water pitcher

Preparation

- Wash and dry hands thoroughly.
- Remove medication from the medication cart.
- Check the medication for the person's name and photo.
- Take medication to the person.
- Check that medication, time and person correlate with documentation (ensure that medicine, strength, dose and time are correct for that person).

Procedure

- Wear gloves before attaching the spacer to the metered dose inhaler (MDI).
- Shake the MDI well.
- Remove the end cap from the mouthpiece of the MDI.
- Attach the spacer to the mouthpiece of the MDI.
- Hold the MDI upright in front of the mouth.
- Ask the person to completely exhale, with inhaler in place, before clamping their lips around the mouthpiece of the MDI.
- Press down firmly on the top of the canister to release one 'puff' of medicine.
- Firmly replace the lid and return the MDI to its storage place or medication cart.
- Dispose of any waste (for example, empty canisters) according to organisational guidelines/procedures.
- Remove gloves and dispose of them according to organisational guidelines/procedures.
- Wash and dry hands thoroughly.

Assist person with medication

- Ask the person to inhale slowly, and continue to breathe in slowly and as deeply as they can manage through the spacer.
- Ask the person to hold their breath as long as they can.
- Encourage the person to exhale slowly.
- Refer to client's MDA for dose requirements (two puffs of medicine every time it is used); repeat steps as necessary.
- Request that the person rinses their mouth out or cleans their teeth following inhalation of steroids to further reduce the risk of oral candidiasis (thrush).

Record administration

- Sign in the 'given by' space on the person's medication sheet immediately after the medication is given.
- Return the sheet to the medication cart.

Infection control

- Dispose of any waste according to organisational guidelines/procedures.
- Remove gloves and dispose of them according to organisational guidelines/procedures.
- Wash and dry hands thoroughly.

Administer medication using a nebuliser

A nebuliser is a mechanical appliance used to administer a therapeutic dose of the drug as an aerosol in the form of a fine mist (vapour), which the client inhales via a mask or mouthpiece. Nebulisers are primarily used for those with asthma, but also for those with chronic obstructive pulmonary disease (COPD).

Medication may be pre-measured dosages, pre-diluted dosages or measured using a dropper and then diluted in the ordered amount of saline.

Use a face mask if ipratropium bromide (particularly when mixed with salbutamol) is used, to avoid the mixture coming into contact with the client's eyes, as there is a potential risk of glaucoma. You may also need to provide the client with protective eye wear – refer to organisational guidelines and/or delegation instructions.

Advise the client to rinse their mouth out and/or clean their teeth after nebulisation to prevent oral candidiasis (thrush).

Below is a description of the equipment, preparation, procedures, client assistance and recording requirements for administering medications using nebulisers.

Administering medications using nebulisers

Equipment

- Gloves
- Spacer
- Paper towels/tissues

Preparation

- Wash and dry hands thoroughly.
- Remove medication from the medication cart.
- Check the medication for the person's name and photo.
- Take medication to the person.
- Check that medication, time and person correlate with documentation (ensure that medicine, strength, dose and time are correct for that person).
- Place the nebuliser's compressor on a hard surface close to the person (not on the floor) so that it operates smoothly.

Procedure

- Wear gloves before attaching the tubing to the oxygen nipple and base of the nebuliser.
- Connect the mask to the top of the nebuliser.
- Turn on oxygen flow (for example, 8 litres per minute) and check that it is working properly (mist coming out of the face mask).
- Undo the top of the nebuliser and add solution to be nebulised in accordance with the person's MAR via the nebuliser chamber, taking careful note of the strength of the solution and the length of time over which the medication is to be administered.
- Clean or dispose of the nebuliser mask as per organisational guidelines.
- Return nebuliser to its storage place.
- Remove gloves and dispose of them according to organisation guidelines/procedures.
- Wash and dry hands thoroughly.

Assist person with medication

- Discuss the procedure with the person.
- Assist the client to sit in a comfortable upright position.
- Apply the face mask to the person.
- Advise the person to breathe normally through the mouth to achieve optimal therapeutic effect from the medication.
- Switch off the compressor once the nebulisation is complete.
- Advise the person to rinse their mouth out and/or clean their teeth after nebulisation to prevent oral candidiasis (thrush).

Record administration

- Sign in the 'given by' space on the person's medication sheet immediately after the medication is given.
- Return the sheet to the medication cart.

Infection control

- Dispose of any waste according to organisational guidelines/ procedures.
- Remove gloves and dispose of them according to organisational guidelines/procedures.
- Wash and dry hands thoroughly.

Administer suppositories

You may or may not be regulated to assist with administering suppositories. Suppositories are used to loosen stool in the case of constipation. Generally, a qualified nurse or medical practitioner will insert suppository. However, in some settings, such as disability care services, the worker will be required to assist the person insert a suppository.

Equipment and preparation

Equipment:

- Gloves
- Suppository
- Paper towels/tissues

Preparation:

- Wash and dry hands thoroughly.
- Remove medication from the medication cart.
- Check the medication for the person's name and photo.
- Take medication to the person.
- Check that medication, time and person correlate with documentation (ensure that medicine, strength, dose and time are correct for that person).
- If the suppository is soft, harden under running cool water before removing wrapper.

Procedure

- Wear gloves and remove wrapper.
- Lubricate suppository tip with water-soluble lubricant.
- Person will lie on their side with lower leg straightened and upper leg bent towards stomach.
- Gently lift upper buttock check to expose rectal area.
- Insert suppository pointed end first until it passes muscle sphincter.
- Hold buttocks together for a few seconds.
- Person should lie down for about five minutes.
- Discard used materials and remove gloves.
- Wash and dry hands thoroughly.

Record administration and control infection

Record administration:

- Sign in the 'given by' space on the person's medication sheet immediately after the medication is given.
- Return the sheet to the medication cart.

Infection control:

- Dispose of any waste according to organisational guidelines/procedures.
- Remove gloves and dispose of them according to organisational guidelines/procedures.
- Wash and dry hands thoroughly.

Administer insulin via a preloaded dose administration aid

Insulin, a hormone made in the pancreas, regulates a person's blood glucose levels. Community services workers with medication and organisation training are only authorised to administer insulin by subcutaneous injection using preloaded syringes or pens.

Here is a description of the equipment, preparation, procedures, client assistance and recording requirements for administering insulin via a preloaded dose administration aid.

Equipment

- Gloves
- Preloaded administration aid for insulin

Preparation

- Wash and dry hands thoroughly.
- Remove medication from the medication cart.
- Check the medication for the client's name and photo.
- Take medication to the client.
- Check that medication, time and client correlate with documentation (ensure that medicine, strength, dose and time are correct for that client).
- Check the expiry date – it is imperative to write the date on the insulin cartridge once it is opened. Do not use if 30 days have passed since opening.
- Wear gloves.
- Conduct blood glucose level (bgl) monitoring before administering insulin by subcutaneous injection: seek advice and assessment of the client from a health professional when results are outside the acceptable and safe range of results for that specific client.
- Check that you have the correct insulin pen (long-acting or short-acting).
- Insulin, contained in a cartridge, is placed in the pen – check there is enough insulin remaining in the pen for the current injection.
- It is advisable to use a new needle for each injection; however, when using short-acting (clear) insulin, the needle may be used for the day.
- Check the appearance of the insulin. Short-acting insulin must look clear like water. Long-acting insulin must be mixed well by inverting (tipping backwards and forwards) the pen 10–20 times – long-acting insulin must look milky or cloudy after gentle mixing. Do not shake, as shaking will damage the insulin. However, dispose of the insulin cartridge if there is any sediment, flakes or debris in cloudy insulin, which won't dissolve after mixing.

Procedure

- Please note that the pen injection technique requires careful education and training; the following is provided as a guide only.
- Dial up a 2–4 unit dose and, holding the pen vertically, inject into the air to expel air bubbles – this is called priming the pen.
- Check that drops of insulin (without air bubbles) are coming from the needle – if necessary, repeat the priming procedure.
- Select the injection site – use the fatty layer under the skin on the abdomen – but change the site regularly to avoid fatty lumps forming under the skin.
- To avoid the risk of administering insulin intramuscularly, take a pinch of skin, at least (but preferably thicker than) the depth of the needle, with the index finger and thumb at the injection site.
- Insert the needle straight into the pinched-up skin to its full depth; then push the pen button slowly all the way down. Injections should be the full length of the needle. You might, if the person has very little body weight, have to inject at an angle to avoid the injection going too deeply.
- Let go of the skin, leaving the needle in for 5 to 10 seconds.
- Gradually pull out the needle.
- Remove the needle from the pen after injection.
- Place used syringes and pen needles in an approved sharps container.
- Remove gloves and dispose of them according to organisation guidelines/procedures.
- Wash and dry hands thoroughly.
- Insulin needles must be changed after every injection when using cloudy insulin, but can be used for the day when using clear insulin.

Record medication administration

- Sign in the ‘given by’ space on the client’s medication sheet immediately after the medication is given.
- Return medication documentation to the medication cart.

Administer pessaries

A pessary is a device inserted into the vagina, which is used to provide structural support to aid urinary incontinence. It is similar in shape to a diaphragm. The pessary can be fitted temporarily or permanently. Pessaries should be changed every six months. It must be fitted by a doctor, physiotherapist, nurse or midwife.

Preparation

- Wash and dry hands thoroughly.
- Remove the blister pack/sachet from the medication cart.
- Check the blister pack/sachet for the name and photo.
- Take the blister pack/sachet to the person.
- Check that medication, time and client correlate with documentation (ensure that medicine, strength, dose and time are correct).
- Pour the contents of the correct blister/sachet into a medication cup – remember to use the no-touch technique – or use tweezers if necessary.
- Check the blister/sachet is empty – that is, you have removed all tablets/capsules.
- Check, once more, that you are administering the medication to the right person.

Assist the person to use a pessary

- You will not insert the pessary for the person, but with clean hands, you may provide the device in a sterile container that the nurse can insert for the person.
- Explain the possible side effects of using a pessary, and record whether the person reports any discomfort or discoloured discharge.

Record medication administration and store medication

- Sign in the 'given by' space on the medication sheet immediately after the medication is given.

Assist the person to take medication

It may be outside a care worker's scope of practice and responsibility to administer vaginal/rectal suppositories, or administer subcutaneous injections. However, workers may assist in giving insulin using a dose administration aid to stable diabetics. Check with your supervisor to ensure you are acting within your role.

Be aware that a person has specific needs when assisting the person to take medication. In order to safely and effectively assist medication, care workers may need to perform the following steps.

Allow for adjustment

Adjust the posture and position of the person – 'Do you need me to help you sit up Edith? It makes it a little easier for you to swallow your medication.'

Provide privacy

A person has the right to confidentiality, privacy and dignity; they may not want other residents to know what their disease/disorder is, or to discuss their concerns in front of others.

Example

Administer medications correctly according to defined legislation, organisational procedures, professional standards and instructions

Jasmin, in accordance with her orders, has a fentanyl 50 mg patch applied every 48–72 hours. Not understanding how the patch works, Jasmin's carer helps her to place a patch on her buttock – the site of her pain. When Jasmin retires to bed, she places a heating pad on her lower back and buttock area, which is her usual practice. Two days later she is found dead in her bed with only three of the five patches left in the original box. It is suspected that Jasmin had not been warned to avoid applying heat over the patch, which increases the rate of drug absorption.

Practice task 20

1. How can you correctly administer ointment for a person topically, in accordance with rights of medication, legislation, procedures and standards?

2. How can you correctly administer liquid medication, in accordance with rights of medication, legislation, procedures and standards?

3. How can you correctly administer sublingual medication, in accordance with rights of medication, legislation, procedures and standards?

4. When would you assist with administration of medication rather than administer medication?

5. Explain why medication may need to be checked by the person's medical professional.

6. What should you consider when assisting a person to take medication with their food?

7. How might crushing tablets change the effectiveness of the medication?

Click to complete Practice task 20

4C Oversee and observe the person when taking medication

One of the most important roles carried out by care workers is to supervise and observe the person taking their medication to confirm ingestion or completion. Some people may not like taking their medication because they find it uncomfortable or unpleasant. Care workers may encounter problems administering medications to people experiencing difficulty in swallowing their medication – a condition known as dysphagia. This situation can result in the person not fully ingesting and/or taking their complete dose.

Supervision and assistance does not mean forcing the person to take the medication. You do, however, need to make reasonable efforts to assist the person, particularly where they might have trouble swallowing, if they are confused, or where it is known that the person does not like taking medication, but knows they must take it. Whatever the situation and whatever strategy you use, supervision can help to ensure that the correct amount has been successfully taken.

Prepare the person

The care worker can take steps to increase the likelihood that people will take medication. Keep the following in mind.

How to prepare a person before they take medication:

- Explain the process for taking medication and why it is important. This may improve understanding and cooperation.
- A person is more likely to cooperate when they feel they are in control of the situation and have a say in their own healthcare management.
- Offer adequate fluids. Extra water might be needed to swallow large tablets.
- Provide help when needed or asked and within authorised procedures, such as offering one tablet at a time.
- If taste is an issue, offer them something they like to eat or drink immediately after they have taken all the medication (if authorised by the doctor).
- Administer the medication with food if they dislike the taste of the tablet (if authorised by the doctor).
- Ensure you maintain and observe a person's dignity when taking medication.

Confirm and record

Never assume the person has successfully taken their medication. Do not walk away before you are sure they have finished the medication in whatever form it comes in. By observing closely you will not have to rely on asking the person if they have completed administering medication – a question that some people do not like to be asked.

If there is still doubt, it may be appropriate, depending on the situation, to respectfully ask the person to open their mouth to check medication has been swallowed. Ask the person to lift tongue. When you are confident the person has swallowed or ingested the medication, make a record in their medication records.

Confirmation will involve different actions depending on the form of medication.

The care worker may need to confirm that:

- all the recommended medicine in the box or sachet has been used
- all the drops have been taken
- the correct amount of lotion has been applied
- the patch is securely in place.

Example

Oversee and observe the person when taking medication

Mrs. Kokodis does not like the taste of her tablets. After she has taken them, she sometimes hides them in her mouth and then spits them out once she is alone. She gets very upset if people ask to check her mouth. Marco is sensitive about staying with her until he is sure the tablets have been swallowed so he sits with Mrs. Kokodis and talks to her about his day. Once he thinks she has swallowed the tablets, he asks her a few questions and listens to her speaking clearly so that he can be sure her mouth is clear.

Practice task 21

1. Why is it important to supervise a person after you have given them their medication?

2. How can you help a person to swallow their tablets if they don't like the taste?

Click to complete Practice task 21

4D Dispose of all used and unused medication and containers according to organisational procedures

It is the responsibility of the aged care service and its staff to familiarise themselves with their particular state or territory's legislation and/or regulations in relation to disposing of clinical and related waste.

For example, the New South Wales Government Department of Environment, Climate Change & Water (DECCW) advises that the definition of 'clinical and related waste' under the *Protection of the Environment Operations Act 1997* (NSW) and the Protection of the Environment Operations (Waste) Regulation 2014 includes clinical waste; cytotoxic waste; pharmaceutical, drug or medicine waste; and sharps waste.

Disposal from a person's home

The National Return and Disposal of Unwanted Medicines Program, funded by the Australian Government, uses the national community pharmacy network to collect expired and unwanted medicines from consumers for disposal, at no cost to the person.

Disposal of medicines should only occur with the consumer's permission and/or their carer who, following the death of a person, should be encouraged to return all the deceased person's medications to a community pharmacy for safe disposal.

Care workers who work with people in their own home should, in accordance with the service provider's policies and procedures, discuss the following issues with the person.

Discussion issues about medical waste

Provide access to disposal unit
Appropriate access and use of a sharps container if the person does not currently have access to a sharps container that adheres to Australian standards.

Provide disposal details
Disposal of expired and unwanted medicines via the national community pharmacy network.

Disposal from a residential facility

Biohazardous waste includes clinical, cytotoxic and pharmaceutical wastes, or other non-general waste produced at RAC facilities. Apart from environmental concerns, this type of waste could potentially lead to the spread of infectious disease or result in people, particularly children, or pets ingesting potentially harmful medication.

Clinical waste, including sharps, are sterilised, chemically treated and/or incinerated by a waste removal contractor before being disposed of at registered landfill sites.

Unused or out-of-date medication should be returned to the pharmacy for safe disposal.

Care service providers have a duty of care to:

- have policies and procedures in place about the safe disposal of medicines and related equipment, such as sharp objects and cytotoxic products
- have a documented agreement with a licensed waste removal contractor who disposes of the waste in accordance with state/territory regulations.

Safe disposal of insulin syringes and pen needles

Sharps are objects that can easily pierce or penetrate the skin. According to the Victorian Government's Better Health Channel at http://aspirelr.link/better-health, a needlestick injury, where the skin is accidentally punctured by a used needle, places the person that is 'stuck' at a risk of bloodborne diseases such as HIV and Hepatitis B and C.

Safe disposal of sharps in a sharps container that complies with Australian standards is the most significant way of reducing needlestick injuries. Make sure you place used insulin syringes and pen needles in an approved sharps container.

Safe disposal of transdermal patches

When disposing of transdermal patches it is important to dispose of them appropriately as there is often a considerable quantity of active drug left in the patch after the duration of their use. Refer to your relevant state or territory government guidelines for the disposal of transdermal drug of dependence delivery systems.

According to the South Australian Government Health Department's Drugs of Dependence Unit Guideline at http://aspirelr.link/drugs-of-dependence-sa for the disposal of transdermal drug of dependence delivery systems, the minimum standards of practice for the appropriate disposal of these patches are outlined below.

Standards of practice for disposal
The disposal process, including the removal of the TDS from the person, is witnessed.
The patches are folded onto themselves (adhesive sides facing each other).
The patches are placed in a sharps medical-waste disposal container.
The disposal process is recorded in the drug of dependence register, and countersigned by the witness.
The disposal process, including the removal of the TDS from the person, is witnessed.

Example

Dispose of all used and unused medication, containers, according to organisational procedures

The Australian Government's *Department of Health and Ageing Guiding principles for medication management in residential aged care facilities* (2012) reflects the objectives of the National Medicines Policy by stating the following:

Guiding Principle 12 – Disposal of medicines

Medicines that are unwanted, have been ceased or have expired should be disposed of in a way that is safe and reflects contemporary best practice. Medicines disposal should not result in accidental poisoning, accidental or intentional misuse or contamination of the environment.

This document can be accessed at: http://aspirelr.link/apac-medication-management

Practice task 22

1. Explain the procedures for disposing of sharps.

2. Explain the procedures for disposing of transdermal patches.

3. Explain the procedures for disposing of outdated medication.

Click to complete Practice task 22

4E Identify signs that when-necessary medications may be required, then inform

The acronym p.r.n. stands for 'pro re nata', which in Latin means 'as needed' or 'when necessary'. In health and community services, a p.r.n. medication is any medication that is meant to be taken when required as prescribed for an individual by their doctor.

Care workers can administer p.r.n. medications as prescribed to the person and identified in the medication chart/sheet and/or care plan according to relevant legislation, organisational guidelines and delegations.

A health professional must provide written directions for the care worker, including the expected signs and symptoms that indicate the need for p.r.n. medication (the written directions must eliminate the need for health assessment by the care worker of such factors).

In the event of a person being given a p.r.n., complete and sign the p.r.n. medication sheet contained within the person's MAR.

Written directions must indicate:

- the signs and symptoms under which the medication can be given, such as behavioural or physical indications of need
- the medication frequency and dosage – the circumstances under which a further dose can be administered and/or safe intervals between doses
- the action to take prior to medication administration – call supervisor
- the signs and symptoms that indicate the person's doctor must be notified
- the action to take if medication is administered and symptoms are not relieved.

Report signs that p.r.n. medications are required

There are numerous reasons why p.r.n. medications are required. These will be specific to the person. Diazepan, for example, is sometimes used to calm a person who is highly agitated or aggressive. Aspirin or paracetamol may be used to address pain. Symptoms may be physical or behavioural. Physical indications include a rash, high fever, increased blood pressure, decreased blood pressure or allergic symptoms. Behavioural indications may include agitation, confusion, aggression, distress, depression, suicidal thoughts or anxiousness.

Example

Identify signs that when-necessary medications may be required, then inform

Sally, the nurse on duty, finds Mrs Smith crying in her room. Mrs Smith is an 83-year-old resident who has a long history of arthritis. Mrs Smith has been taking prescribed medications for this condition for a number of years. Over the last two weeks, Mrs Smith has complained of discomfort that was relieved by other pain relief measures such as hot packs and gentle massage.

Today Mrs Smith is very distressed and none of the other pain relief techniques have given comfort. Sally reviews the medication chart and notes that all prescribed medication had been given but that there is also an order for Panadol as a p.r.n. medication. Sally gives the Panadol and completes the documentation on the medication chart and in the patient file. Sally also rings the doctor and relays the information that Mrs Smith is experiencing an exacerbation of pain. Mrs Smith's medical practitioner agrees to come in later in the morning to assess Mrs Smith and alter the pain medication regime.

Practice task 23

1. What is when-necessary medication?

2. How do you know when to administer when-necessary medication?

3. When must you inform the delegating health professional if when-necessary medication is administered?

Click to complete Practice task 23

4F Record administration of medications according to organisational policy

Medical administration records (MARs) chart all formally documented medication administration procedures within the care facility. It is important that MARs are clear, accurate and up to date. Documentation ensures the correct medication is given at the right time to the right person. MARs should match with the medication and the person.

When preparing and/or reviewing the person's care plan and prescribing medication, the person's doctor or other health professional may also include specific advice about monitoring the beneficial and adverse effects of treatment.

A health professional may include information such as that provided in the examples below.

Warfarin

- Therapeutic benefit: Used to prevent arterial thrombosis and/or strokes
- Assess for bleeding risk. Conduct INR (a test of blood clotting) for older people on warfarin to ensure an adequate/safe dose is taken.

Statins

- Therapeutic benefit: Reduce cholesterol levels
- Assess the effectiveness by checking cholesterol levels.

Digoxin: Serum concentration

- Therapeutic benefit: Used to treat congestive heart failure and to slow the heart rate in patients with abnormal heart rhythms
- Assess the effectiveness and appropriateness of dose by checking serum levels.

Bisphosphonates

- Therapeutic benefit: Prevent the loss of bone mass; to treat osteoporosis and similar diseases
- Assess the effectiveness of bisphosphonate therapy by measuring bone density.

Medication charts

Medication charts are paper or electronic forms of communication used to ensure the person's medication is correctly administered. The chart is intended to minimise the administrative responsibilities of people prescribing, administering and assisting with medication.

Information about standardised national medication charts such as the National Residential Medication Chart can be found at the website of Australian Commission at: http://aspirelr.link/national-residential-medication-chart

Contents of MAR charts

The medication chart should include the following information.

Information found in medical administration charts
▶ The person's full name and date of birth
▶ Any known allergies or medication reactions
▶ Medication orders including name of the medicine, strength, dose, dose frequency, quantity, specific administration instructions and signature of prescriber
▶ All prescribed medicines that are externally applied such as patches and ointments
▶ A signing record to indicate medication was administered
▶ Clear directions for as required (p.r.n.) administration or as directed (u.d.) – with as much information as possible about the dose, frequency of administration and indicators for use
▶ Specific directions on how the medication is to be administered and any instructions on altering solid medication dosage forms such as crushing instructions
▶ For infrequently administered medicines, the date of the next administration should be included on the MAR
▶ Date of last medication review, including the person who conducted the review and any tests associated with medication use; for example, International Normalised Ratio (INR) to be conducted every four weeks to assess effects of warfarin

Requirements of MAR charts

RAC medication charts should be accompanied by a current photo of the person with name and date of birth of the person and the date the photo was taken on the back – it is advisable to update photos every six months.

Medical administration record (MAR) charts must be current and accurately reflect the items that are being prescribed and administered. Most MAR charts also include the name and address of the supplying pharmacy. Often the pharmacy provides MAR charts to RAC facilities, along with clear instructions on how these documents are designed to be used to record medication.

The MAR is also used to record:

- once-only doses of medications given in the event of an emergency
- medication that was nurse-initiated
- complementary and/or OTC medications that are also included in the care plan.

Example

Check MAR charts according to organisational policy

Rupert's physician has recently authorised for his medicine formulation to be changed from a tablet to a liquid version. Unfortunately, the old form was not removed from the pharmacy-dispensed MAR chart. The care worker noticed that Rupert was about to be given the same drug in two different forms at the same time. She immediately referred the matter to her supervisor who confirmed that Rupert should discontinue taking the tablet form and only take the liquid form of the drug.

Practice task 24

1. Explain the use of medication charts, and outline procedures for their use.

2. What types of details might the delegating health professional include on the MAR or medication chart?

3. What are important inclusions in the MAR?

Click to complete Practice task 24

4G Provide accurate information on medication administration

Care workers play an integral role in assisting people to gather, read and understand their medications, but they can only give information within their job role and scope of knowledge. If a person has questions about their medication that the worker cannot answer accurately, the worker must contact their supervisor for advice and support.

Ensuring the person is well-informed increases their ability to participate in their own medication management.

Most people need to understand the following when taking medication:

- Their basic problem/s; for example, they have had a stroke
- How to take medicine to manage their disease; for example, warfarin is an anticoagulant (blood thinner) used to prevent clots and reduce the chance of having a stroke; and Norvasc is an antihypertensive used to lower blood pressure
- Possible and expected drug side effects; for example, people must monitor their stool colour and tell their doctor if stools become black or tarry, or if you feel dizzy or light-headed

Complete reports and records accurately

It is important that information on the MAR chart is current and relevant to the person. The picture must be signed and dated on the back, and replaced every six months for currency.

In order to improve care, it is important to record all medication errors and near misses, so that management can examine the reports to identify the types of errors that have occurred and the circumstances that led to them. Management will also identify whether any particular circumstances that contributed to the error or event can be modified in order to prevent the situation recurring.

When recording details on the medication chart, remember the following:

- Always ensure the medication name and dosage given is 100% accurate.
- Include any relevant details, such as person's willingness or unwillingness to take medication.
- Ensure the person's photo is current, and matches the identity of the person.
- Triple-check spelling and medication details.
- Sign and date all inclusions.
- Use objective and clear language when reporting
- On paper forms, ensure handwriting is legible.

Potential impacts of errors and reason for errors

Careful completion of the medication administration records guarantees clear communication between members of the person's healthcare team. Make sure that, in accordance with your organisation's procedures, care workers complete all documentation so it provides an accurate and up-to-date record of the status and care of each person.

Errors include incorrect spelling of medication, incorrect dosage, incorrect spelling of the person's name and incorrect date and time of previous administration.

The impact of the error may be that the person does not receive the medication they require. There may be adverse or complicated effects if the medication contraindicates with another medication, or existing condition. Adverse effects or complications put the person in serious risk of further illness or even death.

Reasons for errors are below.

Reasons for errors in documentation
▶ Difficulties with language
▶ Rushed or time poor
▶ Miscommunication between staff
▶ Medication administration incorrectly observed or completed
▶ Poor organisational policies and procedures communication
▶ Lack of training
▶ Lack of supervision

Example

Provide and follow accurate information on medication administration

Errors in administration of medication have been found to involve a failure to follow medication information provided. A case study published in the Australian and NZ Journal of Public Health called 'Therapeutic errors involving adults in the community setting: nature, causes and outcomes' analysed therapeutic errors involving adults who reported to the Victorian Poisons Information Centre from January 2006 to March 2007. The study involved 97 nursing home residents and over 600 people living at home. It found that medication errors in aged care homes were principally caused by staffing issues such as carelessness, distraction, staff not following standard procedures or being unfamiliar with the person. Taking the wrong medication or medication prescribed for someone else were also more common occurrences in aged care homes, whereas errors in the person's home were more likely to involve incorrect dosages.

Strategies to address these issues include implementing staff workshops and training courses, or distributing public information packs about checking dosages.

Practice task 25

1. What are the potential impacts of errors when recording medications?

2. What are potential reasons for errors when recording medications?

Click to complete Practice task 25

Summary

1. Care workers have a duty of care to implement all checks to ensure that the right medication is given at the right time, to the right person, in the right amount, via the right route and in the right form.
2. Medication administration tasks delegated to an aged care worker may include medications prescribed for a person by a doctor or health professional and dispensed by a pharmacist in dose administration aids, or p.r.n. medications as prescribed (and identified in a medication chart/sheet and/or care plan) according to relevant legislation, organisational guidelines and delegations.
3. Care workers must accurately prepare and administer medications according to their delegation and in line with the health professional's written instructions.
4. Care workers may encounter problems administering medications to people experiencing increasing difficulty in swallowing their medication. This can result in the person not fully ingesting and/or taking their complete dose. Workers must be able to determine which medications can be crushed and mixed with food and drink to aid administration, although this practice must be the last resort.
5. The Department of Health and Ageing's *Guiding principles for medication management in residential aged care facilities* (2012); in particular, Principle 12 – Disposal of medicines, provides guidance in relation to the disposal of clinical and related waste as well as excellent advice and guidance for workers about disposing of medications and equipment.
6. It is the responsibility of the aged care service and its staff to familiarise themselves with their particular state or territory's legislation and/or regulations.
7. Care workers have a responsibility to provide information to people about medication administration, including possible side effects.
8. The person's doctor or other health professional must provide written directions for the care worker about the expected signs and symptoms that indicate the need for p.r.n. medication to be administered.

Learning checkpoint 4
Administer medications within legal parameters

This learning checkpoint allows you to review your skills and knowledge in administering medications within legal parameters.

Part A

1. Focus on one form of medication, such as tablets, capsules, powders or drops, and explain how the medication should be handled and administered.

2. Explain how you would calculate medications with 100 per cent accuracy and use the rights of medication and standard precautions to administer medication, using one of the following routes or methods:
   - Oral
   - Sublingual/buccal
   - Dry powder inhalers
   - Metered dose/spacer inhalers
   - Nebulisers
   - Topical medications
   - Suppositories
   - Sub-cutaneous injection using pre-loaded syringes or pens

3. Give examples of the 'rights of medication', specific requirements from the form prescribed, defined legislation, organisational procedures, professional standards and prescriber's written instructions you need to comply with when administering medication correctly.

4. Explain documentation requirements and purpose of medication administration using medication charts, and discuss impact of documentation errors and potential errors.

5. Provide two examples of indications that may suggest when-necessary medication is required.

6. Describe safe disposal of transdermal patches.

Part B

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

Case study

Reiner is assisting Donald to administer a suppository to address constipation. Reiner is not permitted to administer the medication himself, but can provide support.

1. Explain what Reiner needs to understand about the administration process, and how to respond appropriately to orders and instructions for medication.

2. Explain how Reiner can assist Donald to administer medication.

3. What should Reiner explain to the person before Donald administers the medication?

Topic 5

In this topic you will learn how to:

- **5A** **Identify possible acute and delayed adverse reactions to medications and respond**
- **5B** **Implement an emergency response for identified acute and delayed adverse reactions**
- **5C** **Record and report response to emergency strategies**
- **5D** **Identify signs of pain and report to the health professional**
- **5E** **Observe and record response to pain-relieving medication and report**

Monitor the person's response to administered medication

The use of medication can have benefits and the potential for harm, with all medicine providing a certain level of risk of side effects and adverse reactions, which can range from inconvenient – such as a dry mouth – to fatal. Care workers need to closely monitor clients for possible (predicted) effects and/or unexpected (allergic/adverse) effects of any treatment.

The World Health Organization indicates that harmful, unintended reactions to medicines that occur at doses usually used for treatment are called adverse drug reactions (ADRs). Information sharing about adverse effects strengthens drug safety, and can translate into timely policy decisions that safeguard patient safety when problems do occur.

5A Identify possible acute and delayed adverse reactions to medications and respond

Monitoring the effects of some medication is as simple as asking the following questions of the client, their family and carers, colleagues, nurses or other health professionals:

- Is the drug having the desired effect? For example, anti-nausea medication should reduce nausea; pain-relief medication should relieve pain.
- Is the person experiencing adverse effects? Are these effects included in the consumer medicine information, medical references or the MIMS annual?
- Is the outcome what was hoped for? Is it the best possible outcome?

Adverse effects

The person's doctor and other health professionals will have considered the potential adverse effects and drug interactions at the time of prescribing specific medications, including adverse drug effects on organs of the body.

They will have included relevant clinical signs and pathology tests, which need to be reported back so that the physician can consider the impact of the adverse effects.

The physician will:

- weigh up adverse effects against benefits and the availability of alternative medication
- consider whether any additional medication is required to minimise the adverse effect
- adjust the dose
- order that the person stop taking the medication.

Adverse effects on organs of the body

ADRs are one of the leading causes of morbidity and mortality in health care.

To avoid an ADR, prescribing doctors are mindful of the effects of drug toxicity on the organs of the body. Their prescriptions take account of the fact that, as people get older, their ability to metabolise and clear drugs from their bodies is reduced.

Here are some body organs and examples of medications that may have a potentially adverse effect.

Heart

Medication and potential ADR:

Anthracyclines, a drug used in chemotherapy, can damage heart muscle.

Lungs

Medication and potential ADR:

Many medications are known to have the potential to cause lung disease; for example, antibiotics and Amiodarone, a heart medicine.

Brain, kidneys

Medication and potential ADR:

The use of NSAIDs have been linked to an increased risk of hypertension and stroke due to their effect on the kidneys.

Kidneys

Medication and potential ADR:

Vancomycin, an antibiotic, when used in high doses, can lead to kidney damage.

Stomach

Medication and potential ADR:

Regular use of Aspirin may lead to intestinal damage.

Possible delayed and acute reactions

Sometimes the unwanted effects are predictable (known side effects or adverse effects), and some are unexpected and unpredictable. A predictable, positive effect means the drug works as it was intended and produces a therapeutic effect. Side effects or adverse drug reactions are unintended secondary side effects that might or might not be harmful to the person.

Reactions to medication may be acute, in that they are evident immediately, or may be delayed.

It is important to closely monitor the person to identify signs of an adverse reaction.

Below is a list of possible adverse reactions, and possible indications of an adverse reaction to medication.

Possible acute adverse reactions

- Anaphylactic or allergic reactions to particular medication
- Decongestants can increase blood pressure, so they should be used cautiously by patients who have high blood pressure
- Oral steroids have a variety of side effects, such as increased infection
- The most common side effects of beta-agonists include anxiety, tremor, increased heart rate and mild reduction in potassium
- Anticholinergics commonly cause problems such as blurred vision and dry mouth
- Side effects of steroids in older people include confusion and agitation
- The most common side effect of biguanides is stomach upset, including nausea and diarrhoea
- In extreme cases, death.

Possible delayed adverse reactions

- Adverse reactions seen with COX-2 inhibitors include GI upset, edema, ulcers, GI bleeds and liver failure when treating rheumatoid arthritis
- Potential side effects of NSAIDs include hypertension, peptic ulcer disease, GI bleeds and kidney damage when treating arthritis
- Antihistamines used to treat allergies may cause urinary retention.
- Some anti-inflammatory drugs, antibiotics, sedatives, antidepressants and aspirin aggravate the symptoms of tinnitus
- Dry eyes may be a side-effect of drugs such as antihistamines and diuretics
- Long-term use of eye drops that contain steroids or non- steroidal anti-inflammatory drugs (NSAIDs) – used to treat on infectious eye inflammations – can cause additional eye problems

Possible indications

- Physical changes such as rashes, vomiting, fainting or blurred vision
- Anaphylactic or allergic reactions
- Behavioural changes such as confusion, irritability, agitation or lethargy

Allergic reactions

Allergic reactions can range from mild to anaphylactic. The onset of symptoms will vary widely because of individual differences between people, but will generally happen within seconds or minutes of exposure to the allergen.

Always check the person's medication chart, as this will include details of any known or suspected allergies, drug intolerances and/or recent adverse drug reactions.

The following table outlines the range and severity of the allergic reaction and effects.

Mild reactions

Mild short-term reactions include:

- rashes
- inflammation or redness
- itching of the skin (pruritus)
- wheezing
- nausea and vomiting.

Less common

Rarer, more-serious reactions include:

- headache or migraines
- change in skin tone or sweating
- blurred vision
- feelings of dizziness or faintness
- changes in behaviour and emotional state such as confusion, anxiety or depression
- changes to airways such as choking, and changes to breathing
- changes to circulation, including racing heart, drowsiness, colour change, absence of pulse
- slurring of speech
- severe itching or swelling
- severe nausea, diarrhoea or constipation.

Anaphylaxis

An adverse reaction may progress to life-threatening anaphylaxis. Symptoms of anaphylactic shock, a life-threatening event, include:

- hives (urticaria)
- angioedema – acute swelling of the body commonly affecting the face and airways that often disfigures the person
- respiratory system manifestations such as extreme difficulty breathing
- gastrointestinal manifestations such as nausea, vomiting, diarrhoea and abdominal pain
- cardiovascular manifestations such as dizziness, syncope, hypotension.

Severe reactions

- Toxic epidermal necrolysis (large areas of peeling skin)
- Stevens-Johnson Syndrome (often starts with flu-like symptoms, followed by a painful rash that spreads and blisters; eventually the top layer of a person's skin dies and peels).

Allergies and drug intolerances

The onset of symptoms varies widely but generally happens within seconds or minutes of exposure.

The person's medication chart will include details of any allergies, drug intolerances and/or recent adverse drug reactions. However, be aware that an adverse drug reaction (ADR) or adverse drug event (ADE) can occur in aged care settings from errors in medication allergy documentation. Always ask the person about allergies to medications. For example, 'Mrs Wong, have you had penicillin before? Did you experience an allergic reaction?'

Listen carefully and respectfully to the person's own concerns about their medication regime and answer questions within your own ability and delegation. If appropriate, double-check the medication order; then indicate to the person that you will bring their concerns to the attention of your supervisor and/or their health professional.

It is important to bring some situations to the attention of your supervisor.

Let your supervisor know if the person:

- questions whether they should be taking the medication
- is finding the side effects too troublesome
- is concerned that they are not feeling any better.

Example

Identify and respond to adverse reactions

Mr Williams has been complaining for four days of a mild fever, general malaise and sore throat for which he was prescribed tetracycline. Mr Williams indicates today that he is finding it difficult to swallow (dysphagia) and painful to urinate (dysuria). The care worker reports the change in Mr Williams's health status to her supervisor who, knowing that tetracycline has been implicated in Stevens-Johnson Syndrome, contacts Mr Williams's doctor. The doctor orders that the medication be stopped immediately.

Practice task 26

1. List three indications of mild allergic reactions.

2. List three indications of an anaphylactic response.

3. How should you respond if you notice a person has an anaphylactic response?

Click to complete Practice task 26

5B Implement an emergency response for identified acute and delayed adverse reactions

Each care worker must be familiar with the facility's standard medical emergency procedures and their role in medical emergencies such as respiratory arrest with choking, stroke or heart attack, a person who has collapsed onto the floor, an unconscious person, or a person experiencing seizures or convulsions.

A prompt response is invaluable in an emergency and the treatment goal is to relieve symptoms and prevent a severe reaction.

Treatment may include antihistamines to relieve mild allergy symptoms such as a rash, hives and itching; using a rescue inhaler, such as Albuterol, to reduce asthma-like symptoms (moderate wheezing or cough); corticosteroids to reduce swelling and inflammation of the person's airways; an injection of epinephrine to treat severe allergic reactions (anaphylaxis) – this can prevent the person from going into shock and alleviate symptoms; the service may have preloaded devices for auto-injecting adult doses of adrenaline, which a registered nurse would administer.

Below are some medical emergency situations with suggested procedures and roles for dealing with each emergency.

Respiratory distress and arrest

If trained and certified to do so, immediately begin rescue breathing and cardiopulmonary resuscitation (CPR) if someone has stopped breathing.

The supervisor, coordinator or on-call health professional must be notified if:

- a person is gasping for air or having difficulty breathing normally such as breathing faster or slower than usual, unusually deep or shallow breathing, or unusual noises (wheezing, gurgling)
- a person's skin is unusually moist, clammy or flushed, or pale or bluish
- a person is experiencing feelings of dizziness or light-headedness, chest pain, or a sense of tingling in their hands or feet.

Seizures or convulsions

If you encounter someone experiencing seizures or convulsions, you should comply with the following procedure:

1. Stay calm.
2. Time the seizure from the beginning until it has ended.
3. Let the seizure take its course.
4. Protect the person from further injury by placing something soft under the head and loosening tight clothing around the neck.
5. Gently roll the person on their side as soon as possible and push the angle of the jaw forwards, to allow saliva or other fluids to drain away, and keep the airway clear.
6. Call for medical assistance.
7. Comfort and reassure the person, as it may take some time for them to become re-orientated once they regain consciousness.
8. Remain with the person until they recover – anything from 5–20 minutes or even longer.

Unconscious

If someone loses consciousness, you should respond in the following manner:

1. Look for a response – gently shake the person and ask them if they can hear you: 'Edith, it's Crystal, what happened?'
2. If there is no response, send somebody else to call for help.
3. Check the person's airway by tilting their head back, opening their mouth and looking inside. If fluid and foreign matter is present, gently roll the person onto their side and remove any foreign matter (false teeth, vomit, food).
4. Look, listen and feel for signs of breathing. If the person is breathing, place them in the recovery position. If the person is not breathing, commence rescue breathing and CPR if trained and certified to do so.

Anaphylaxis

If someone has an anaphylactic reaction:

1. Stay calm.
2. Call ambulance.
3. Use an intramuscular injection of adrenalin.
4. Refer person to a doctor for ongoing treatment and management.

Emergency guidelines

Each care worker must be familiar with the service's standard medical emergency procedures and their role in specific medical emergencies. There are also some general guidelines that all care workers must understand and follow in an emergency situation.

General emergency guidelines for all care workers

- Stay calm.
- Raise the alarm by reporting the situation to the supervising health professional, or call for an ambulance if necessary.
- Provide basic life support if trained and certified to do so (if they hold a current first-aid certificate).
- Know your limits – do not do more than you are able or qualified to.
- Know where to find emergency supplies and emergency contact information.

Example

Implement an emergency response for identified acute and delayed adverse reactions

Belinda is recovering from bronchitis and has been taking antibiotics for this. She begins complaining of a headache and feeling more tired than usual. She is also becoming increasingly restless and confused. The care worker reports the change in Belinda's condition and is instructed to closely monitor her. Later that day, Belinda has a seizure. Appropriate first-aid measures are applied and an ambulance is called. Belinda loses consciousness and the paramedics intubate her and provide mechanical ventilation. She is then treated for an adverse drug reaction.

This example illustrates the importance of being vigilant for adverse drug reactions; while the symptoms may initially be mild, they can eventually cause a dangerous reaction.

Practice task 27

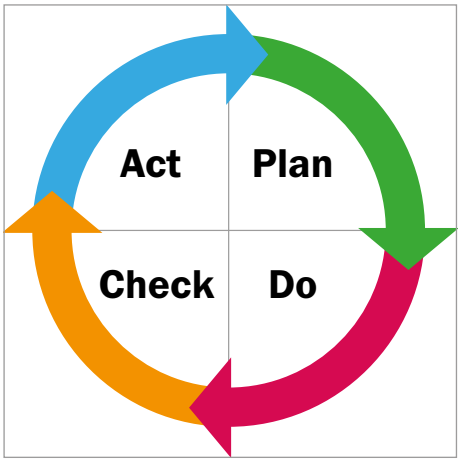
1. A person has a seizure after taking medication. What should you do?

2. A person becomes unconscious. What should you do?

3. A person develops a mild rash in response to taking medication. What should you do?

Click to complete Practice task 27

5C Record and report response to emergency strategies



The accurate recording and passing on of information is vital to any effective incident control. Care workers have a duty of care to record and report responses to strategies that have been implemented to deal with respiratory emergencies, adverse drug reactions, seizures, convulsions, or when a person collapses or becomes unconscious.

Incident reports are an important part of a quality improvement program. By recording what happened and how staff, people you support and others respond to the emergency, an organisation can identify whether their strategies are effective and what might be done to improve them. For example, was the response prompt? Were the procedures followed correctly, such as remaining with the client, checking their condition and sending for help immediately? Did people respond within their level of authority?

An analysis of incident reports can also help identify trends and provide justification for changes in policies and/or procedures to prevent future harm to the client involved and other clients. Adverse drug event reports may be used as a reference by medical professionals to prevent a recurrence of the problem. They can also be used at an organisational level to identify issues associated with the administration of medication.

Record details of emergency

All workers should be familiar with the documents they are expected to complete to report incidents or emergencies, such as an incident report form, adverse drug events report, medication charts and progress/care notes; they must know where to access them and the conventions for completion, such as reporting only the facts, being concise and disseminating the information promptly, so health professionals and others can follow up the situation and refine response strategies.

Accurately record any adverse medication events in the MAR, so that the person's healthcare team knows about any drug allergies that the person has.

Accurate records of an incident or emergency will include:

- writing a concise but complete description of the reaction
- including the date of onset and any medicine/s administered before the onset of the reaction
- listing details of any medication administration task delegated to the worker to treat the reaction
- stating the overall outcome.

Type of information to record

Care workers should take reasonable steps to confer with the person's health professionals about any suspect reactions and, where appropriate, lodge a report with relevant bodies, such as an Adverse Drug Reactions Advisory Committee. All details should be entered in the person's records.

Below is a list of the type of information an RAC facility may record in relation to responses to emergency strategies.

Information to record relating to responses to emergency strategies
▶ Response time
▶ Availability and function of emergency equipment/supplies
▶ Quality of care at service
▶ Referral of residents to hospital emergency (appropriateness of response)
▶ Comments by the first responder (Who? What? Why? How?)
▶ All aspects of restraint and its administration
▶ Consolidated records of all incidents involving allegations or suspicions of reportable assaults
▶ Falls and fall-related fractures

Report information

If the emergency incident resulted in minor health changes, the observations should be provided to a registered nurse, who should report the relevant information to the physician. The physician will then evaluate this information and recommend a course of action. It is important that the information provided is accurate, comprehensive and clear.

All care workers should report emergencies and major or serious health changes to their supervisor immediately. In some circumstances, workers will also be required to contact emergency services such as an ambulance to attend the scene. In these situations, a registered nurse should also immediately contact the on-call health professional by phone with observations and any other relevant information at hand.

Reporting ensures the person receives the best treatment possible in a timely manner, and all relevant staff are provided with information, which is then carefully recorded. This process encourages an open, honest and professional method of dealing with emergency situations and provides an opportunity for continuous improvement.

Example

Record and report response to emergency strategies

Shady Oaks, an aged care home, records all medical incidents. Reports on medical incidents are required to document the following.

Information required in reports on medical incidents
All the factors or events leading up to the incident
Exactly what happened – the environment, people present, what actions were taken
Hazards and risks present in the environment
The effect of the incident on the person (and their family)
The severity of the effect (life-threatening illness/injury, permanent impairment, condition necessitating medical or surgical intervention)
The person recording the incident
How the incident was dealt with
The result of investigations into the incident
Recommendations to improve future emergency responses
Any need for training of staff or changes to work setting

Practice task 28

1. What reasons do you need to report an incident or medical emergency?

2. Think of four things to record if a person has an anaphylactic response to medication.

3. What are three important things to remember when recording an incident?

Click to complete Practice task 28

5D Identify signs of pain and report to the health professional

The Australian Pain Society (APS) document *Pain in residential aged care facilities: management strategies*, presents suggestions that can assist in effectively identifying and assessing the pain that older people may experience. This includes managing pain by using a combination of pharmacological and non-pharmacological treatment options, and also by examining issues of quality management and organisational structure related to pain management.

According to the APS, research shows that unrecognised and untreated pain is widespread among aged care residents. Furthermore, because many older people have impaired cognition, more than 40 per cent of the Australian nursing home population (high-level residential care) is unable to even report their levels of pain. Failure to appropriately manage chronic pain decreases the quality of life of older people and may result in severe consequences.

According to the Aged Care Crisis team, a consumer-based organisation, formal pain assessments that evaluate pain intensity, quality, location and duration should be routine. However, formal pain assessments may not be sufficient for those with speech, hearing or cognitive deficits, or for those people who are fearful of reporting pain.

Chronic pain may result in severe consequences such as:

- an increased risk of falls
- depression and anxiety
- impaired mobility
- impaired physical function
- increased confusion
- sleep disturbance.

Nonverbal signs of pain

It is important that workers are mindful, observant and vigilant for signs that the person is experiencing pain if they are to provide high-quality care and work in a way that benefits the wellbeing of people they support. Workers also have a duty of care to report their observations of physical and behavioural signs of pain to their supervisor, so that the person can have their care needs met.

Nonverbal signs of pain include:

- agitation
- anxiety and fear
- depression and altered moods
- guarding
- moaning and groaning
- unusual silence
- anger
- clutching at the painful area
- facial grimacing
- restlessness
- sighing
- withdrawal.

Report signs of pain

If a person present with acute or chronic pain, you must notify the delegating health professional, or the person's doctor immediately. Pain may be due to toxicity, which is the build-up of the drug substance in the body, or an adverse reaction to the medication. The pain may have serious consequences for the person.

Follow first-aid if the situation is of a high risk. If the person's needs aren't urgent, follow organisational procedures for notifying the health professional. This may be by phone, or in person. You may need to include a written report, which details your specific observations, such as the duration and intensity of pain.

Example

Identify signs of pain and report to the health professional

Grant is 70 years old and a retired farmer who is experiencing worsening back pain. For the past two years he has used paracetamol and Ibuprofen to effectively control his non-specific back pain. He reports the increasing pain is causing him to stay awake at night and is making simple daily tasks, such as cleaning and walking to the nearby shops, difficult. Grant's care worker provides him with a copy of a pain diary, and suggests that he takes the pain diary to his next doctor's appointment. She shows him how to fill it out and asks him to take particular care recording what activities or times of day are associated with his pain; to record when he takes his pain medication; and what relief he gets from that medication.

Grant's doctor uses this pain diary to help assess Grant's pain, identify patterns and evaluate how well his current pain medications are working. He prescribes a different non-steroidal anti-inflammatory drug (NSAID) and refers Grant to a physiotherapist to strengthen particular muscles and ease the pain.

Practice task 29

1. What are three nonverbal signs someone might be in pain?

2. What are three consequences of chronic pain?

3. Why do you need to report signs of pain?

Click to complete Practice task 29

5E Observe and record response to pain-relieving medication and report

Care workers must record complete, concise and essential information, in an appropriate manner, related to a person's pain and the response to pain relief.

Observing the person, interviewing them about their pain using questioning and active listening, and seeking clarification should provide the care worker with valuable information about the pain. Recording the person's responses will assist their health professionals (doctor, chiropractor, physiotherapist, osteopathic physician, etc.) to assess their pain, identify patterns and evaluate how well medications or other treatments are working.

Record details on the person's MAR and complete an incident report if necessary, particularly if an emergency response is required.

If the person can talk about their pain, ask the following questions and record their responses.

Questions to ask a person about their pain

- Where does the person feel pain?
- What is the intensity of the pain?
- Have frequent are your episodes of pain? If you do not know, record each episode so that the frequency can be identified.
- How long does the pain last before it subsides?
- What were you doing at the time of the onset of pain (activities, time of day)?
- Was pain medication administered?
- Did you enjoy pain relief from the medication and how long did the relief last?

Example

Observe and record response to pain-relieving medication and report

Albert has an intellectual disability and uses a respite service on weekends. He complains that he can't sleep because of burning pain in his legs and feet that keeps him awake at night. Albert's medical chart indicates that he is allowed to be given paracetamol on a p.r.n. basis. The care worker records in Albert's MAR state that he is given paracetamol at night to relieve pain.

At Albert's medical review three months later, his doctor diagnoses diabetic neuropathy. Albert's history includes hypertension and diabetes.

Practice task 30

1. A person has told you they have a severe pain in the arm, where they recently received an injection. What questions could you ask?

2. Where should you record this information?

3. Practise recording the information in the example.

Click to complete Practice task 30

Summary

1. Due to a lack of information and/or understanding, people may take extra medications in an effort to relieve pain or in the belief that symptoms will disappear more quickly, or they may self-medicate to alleviate other symptoms. Care workers need to carefully monitor people and contribute to providing medication information to clients and carers.
2. Care workers need to quickly and confidently identify and respond to adverse reactions to medications that may or may not be harmful to the person.
3. Observations related to incidents resulting in minor health changes should be provided to a registered nurse, who should then provide the relevant information to the person's physician.
4. A registered nurse should immediately contact the on-call health professional or emergency medical services by phone with observations and any other relevant information for major/serious health changes.
5. It is important to accurately record adverse medication events in the MAR so that the person's healthcare team knows about any drug allergies that the person has.
6. Formal pain assessments that evaluate pain intensity, quality, location and duration should be routine in aged care settings. However, formal pain assessments may not be sufficient for those with speech, hearing or cognitive deficits, or for those people who are fearful of reporting pain.
7. Care workers must record complete, concise and essential information related to a person's pain and response to pain relief.

Learning checkpoint 5
Monitor the person's response to administered medication

This learning checkpoint allows you to review your skills and knowledge in monitoring thre person's response to administered medication.

Part A

1. Provide three examples of possible acute adverse reactions to medication, and how you should respond.

2. Provide three examples of possible delayed adverse reactions to medication, and how you should respond.

3. Explain how you would identify an anaphylactic reaction.

4. Outline the emergency response if you identify an anaphylactic reaction.

5. Explain what toxicity is, and how it may cause an adverse effect.

Part B

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

Case study

Jill takes bisphosphonates to treat her osteoporosis. Jill has been complaining of abdominal pain. She clutches her stomach, and groans intermittently. Jill's care worker, Audrey, is concerned that Jill is having an adverse reaction to her medication. When she calls her supervisor, the registered nurse, she is told that stomach cramps may be a side effect of bisphosphonates, and may indicate oesophageal ulcers.

1. Record and report Audrey's possible response to this situation.

2. What should Audrey be aware of when making her report?

Topic 6

In this topic you will learn how to:

6A **Report medication refusal or incomplete ingestion to the supervising health professional**

6B **Clearly identify contaminated or out-of-date medication and implement safe disposal**

6C **Observe and record changes in the person's condition and report them**

6D **Record and report any inconsistencies**

Handle medication contingencies

Safe and effective medication administration requires care workers to store medication in optimal conditions so the efficacy of the medication is not compromised, and to ensure that the right medication is given to the right person, at the right time, in the right dose, via the right route.

Unfortunately, mistakes will happen with administration of medications, so all care workers and the residential aged care facility must be prepared to handle issues and contingencies involving medication errors or incidents. Contingency planning is important to ensure that the RAC facility has a plan it can follow to minimise the effect of medication errors, protect the health and safety of people you support and continuously improve on procedures.

6A Report medication refusal or incomplete ingestion to the supervising health professional

Issues that may negatively impact medication administration include a person's refusal to take the medication, or incomplete ingestion of medication due to difficulties in swallowing whole or divided tablets; or ejection of the medication due to coughing or vomiting. These issues are discussed in more detail here.

A person may refuse to take the prescribed medication for the following reasons.

It is against their wishes

- A person does not want to take the medication and refuses even if the medication is mixed with food or drink.
- Care workers should discuss the purpose of the medication with the person to ensure they understand what the treatment is for and the benefits they will receive.
- If a person is actively refusing to take treatment rather than having difficulty complying with treatment, the care worker should report the matter to the person's health professional/s. They will undertake an assessment to determine whether this is the case and investigate the person's reasons, rather than just finding it difficult/unpleasant to comply, and then discuss the options.

Difficulty swallowing

- A person may find medication difficult to swallow because of the size of the tablet, an unpalatable liquid, or because they generally find it difficult to swallow anything. Their prime concern is the difficulty ingesting the treatment rather than the treatment itself; they are just finding it difficult/unpleasant to comply with their treatment regime.
- A person with a capacity to consent is likely to agree to discussing this type of situation with their doctor, and may agree to receive medication in food or drink or another form.

They do not understand

- A person does not ingest the medication because of mental impairment as they are not able to understand the consequences of refusal.
- A judgment about the importance of the treatment to the person's quality of life and options for increasing medication compliance needs to be discussed with the person's health professional/s.

Right of refusal

All individuals have the right to refuse medication, but if a person does not take the drug as directed by their doctor, they are at risk of health decline.

Your role is to:

- make a reasonable attempt to determine why the person is refusing to take the medication by gently persuading a person
- wait a little while before trying again, particularly if the person is confused or anxious
- obtain advice from a doctor or supervising registered nurse to determine whether a delay in administering the medication may cause adverse reactions
- record the refusal in the medication administration records, care plan or other documentation
- follow service procedures such as informing the person's GP and completing a medication incident form
- alert other care workers to the situation as necessary and monitor the person for changes in health status.

Incomplete ingestion

If the person coughs or vomits soon after taking their medication and ejects some or all of their medications, remain calm, reassure the person and make them comfortable. Clean up any vomit and safely dispose of the medication while wearing gloves. You should then determine, as far as practicable, why the person would/could not take their medicine (as they were unwell, had difficulty swallowing and so on), contact their supervising registered nurse to determine whether the medication should be re-administered, and follow agency procedures such as informing the person's GP and completing a medication incident form.

Example

Report medication refusal or incomplete ingestion to the supervising health professional

Carrie has recently started taking prednisone. Her usually docile behaviour is erratic and she is becoming increasingly irritable because she can't sleep. She has decided it is the prednisone that is causing her not to sleep and she refuses to take it: 'I am not taking that new big white tablet, it stops me from sleeping'. Her care worker says that she will look up her chart and seek advice.

The care worker identifies that the doctor has prescribed prednisone as treatment for Carrie's arthritis and that one of the short-term side effects of prednisone is insomnia. She asks a colleague what she should do and is told, 'If it is only for arthritis, the only person she is going to hurt is herself – let her suffer for a day or so and she will find out why she should take it'. On this advice, she records in the chart that Carrie has refused the medication, and she returns to her busy medication round.

The next day, the supervising nurse calls the care worker into her office and asks her why she didn't follow protocol and procedures in relation to medication refusals. The care worker is reminded that she should have sought advice from the pharmacist, Carrie's doctor or the nurse herself. Stopping prednisone treatment abruptly can cause serious illness.

Practice task 31

1. What are two reasons for medication refusal?

2. What are two reasons for incomplete ingestion of medication?

3. How should you report medication refusal or incomplete ingestion according to organisational procedures?

Click to complete Practice task 31

6B Clearly identify contaminated or out-of-date medication and implement safe disposal

Adopting a no-touch technique during medication preparation and administration reduces the risk of people being exposed to contaminated medication. In general, this means avoiding touching the inside of medication bottles or caps, or having these coming into contact with non-sterile work surfaces; touching key parts of medication administration equipment such as the tip of a needle or the surface of a sterile dressing for a wound; and using sterile tweezers or tipping the contents of blister packs into sterile medication cups.

Care workers should examine all medications for evidence of contamination such as sediment or foreign particles. Other indications of contamination include tampered blister packs, or opened medicine bottles. Those that show evidence of contamination must not be used.

Listed below are other practices that can prevent contamination of medication.

Practices to prevent medication contamination
Allocate topical preparations to one individual only and, if possible, securely store the topical preparation near the person.
Avoid cross-infection via eye drops by using separate eye drops for each eye, and indicating on the bottle the date the bottle was opened.
Access creams and ointments stored in bottles with disposable spatulas.

Out-of-date medication

Drugs have a shelf life that is preserved when proper light, temperature and moisture are provided. Once a medication date ends, the expired medication may not work as well as intended, and it may cause harmful effects if ingested.

Safely dispose of out-of-date medication according to your organisation's procedures. These include returning out-of-date medication to the pharmacy, and disposing of syringes in allocated sharps containers.

The following information provided by the USA's Food and Drug Administration (FDA) outlines issues associated with storage of medication and potential issues associated with using out-of-date medication.

Storage and shelf life

- Factors that shorten the lifespan of a drug include moisture, increased temperature and, for some drugs, light; therefore, it is important to store medications in accordance with the manufacturer's recommendations/ instructions.

Loss of potency

- Some medication loses potency fairly quickly and therefore is not as effective past the expiry date (phenobarbital, dilantin [epilepsy treatment], theophylline [asthma treatment], eye drops, eardrops, etc.).

Toxicity

- Some medications can cause toxicity when they age beyond their expiration date, such as tetracycline.

Rancidity

- Oil-based vitamins such as vitamin E or omega-3 are highly toxic if allowed to become rancid.

Implement procedures to dispose of contaminated or out-of-date medication

It is the responsibility of the service and its staff to familiarise themselves with their particular state or territory's legislation and/or regulations in relation to clinical and related waste, including disposal of all used and unused medication.

Generally, expired, damaged and contaminated medication must not be stored on-site or in a person's room. It must be returned to the pharmacy for correct disposal.

Example

Clearly identify contaminated or out-of-date medication and implement safe disposal

According to Pfizer, Xalatan® eye drops are used to lower raised pressure in the eye and to treat glaucoma. The consumer medicine information recommends that:

- the date when the eye drops are opened is written directly onto the bottle
- a new bottle is opened every four weeks because the preservative within the eye drop, which helps prevent germs from growing in the solution for the first four weeks after opening, is likely to become contaminated, and the likelihood of causing an eye infection increases
- care must be taken not to touch the dropper tip against the person's eye, eyelid or anything else, as this may cause the eye drops to become contaminated and cause an eye infection.

A study conducted to estimate the frequency of contamination of topical anti-glaucoma medications identified 28 per cent of the medication bottles tested were contaminated by common bacteria known to cause eye infections with the bottle tip more frequently contaminated than the drops.

Practice task 32

1. List three reasons why medication may become contaminated.

2. How can you identify if medication is contaminated?

Click to complete Practice task 32

6C Observe and record changes in the person's condition and report them

As previously discussed, before and after medication is administered it is important to observe people carefully. Does the person look like they may be experiencing side effects such as loss of balance, change in skin tone or slurred speech, feeling generally unwell, looking confused, feeling more tired or weaker than usual, or behaving differently to usual?

It is your duty of care to promptly report changes in the person's health status to their supervising registered nurse and/or the person's health professionals. Record the changes you have observed in the progress/care notes so there is a formal account of your observations.

There are many physical or behavioural changes observed in the person's condition that must be immediately reported to a supervisor or health professional.

Some of these changes are listed here.

Physical changes

- Changes to airway: choking; slowed, fast or absent breathing; colour changes or circulation, including unexpected drowsiness; or absence of pulse
- Rash
- Inflammation or redness
- Swelling
- Headache
- Skin tone
- Feelings of dizziness
- Slurring of speech
- Nausea and vomiting
- Blurred vision
- Anything that appears abnormal about the person
- Others as advised by a doctor or health professional

Behavioural changes

- Confused
- Agitated
- Anxious
- Paranoid
- Depressed
- Suicidal

Record and report changes

Record changes in the person's medication administration documentation, such as their medication chart. Be explicit in your observations – use concrete terms and be objective. For example: 'Mr Rasood developed a mild rash on his right forearm five minutes after ingesting warfarin.' Spell the name of the medication correctly, and accurately detail where and how the person reacts to the medication.

Report changes to the appropriate person. In the first instance, it is the delegating health professional, such as the RN and your supervisor. Call or SMS the person immediately. If the response is acute, you may need to call an ambulance.

You may also need to report to the person's health professional involved in the prescription. Clearly detail the circumstances surrounding the medication, such as what the person ate beforehand, the time of day the medication was administered, and the dosage. It is also important to report any other medication that was taken around the same time, as the change may be a result of a drug-to-drug interaction. Depending on the urgency of the person's reaction, ensure that you phone, email or write a letter to the health professional.

Example

Observe and record changes in the person's condition and report them

Yin is refusing her medication because she feels she has felt worse since taking the nebuliser treatment.

Knowing that bacteria can contaminate medications and equipment, and cause severe pneumonia in immune-suppressed and vulnerable individuals, Gerry, Yin's care worker, seeks the advice of his supervising nurse. The nurse then speaks to Yin's doctor, who organises for Yin to be tested. The supervising nurse also holds an 'infection control' meeting with all care workers, emphasising the importance of following infection control procedures in relation to nebulisers.

Practice task 33

1. Name three physical indications that a person may not be responding well to medication.

2. Name three behavioural indications that a person may not be responding well to medication.

3. Who should you report to if changes are observed, and how?

Click to complete Practice task 33

6D Record and report any inconsistencies

Before administering medication, care workers must check dose administration aids for evidence of tampering, check that medication is free from contamination, and that the medication, time, route, dose and personal information correlates with the documentation.

Do not administer the medication if a person questions it, says it is the wrong medication or says they are allergic to the medicine. Likewise, do not administer medication if there are any inconsistencies between the MAR, DAA or delegation and/or instruction, such as the wrong number of tablets, or the look of the tablet does not correlate with MAR description.

Medication errors and near misses

A medication error is any mistake related to medication administration, such as the wrong medication, the wrong time, the wrong route, the wrong dose or the wrong person. Sometimes medication errors can occur because the medication was administered in the wrong form; for example, enteric-coated tablets have been crushed and negatively affected the therapeutic effect of the medication.

A near miss is an event that almost happens but is averted before the mistake occurs, such as almost giving someone the wrong medication because their name is similar to another person. It is important to document all near miss incidents, as these can influence policy and procedure reviews and development; for example, if the same near miss occurs regularly, this represents a high risk that an incident will occur in the future. It is a clear indicator that prevention strategies and procedures need to be developed to avoid such near misses in the future.

Here are some common errors that can occur during medication administration.

Australian Nursing Federation common medication errors

- Incorrect dose given.
- Medication given to the wrong person.
- Medication given at the wrong time.
- Medication given via the wrong route.
- The wrong medication given to a person.
- A person missed their medication.
- A blister pack (DAA) was incorrectly filled.

Medication incidents

The Western Australian Government's Department of Health defines a medication incident as any event where the expected course of events in the management or administration of medications is not followed.

You must have the skills, knowledge and a vigilant attitude to identify and report all the errors, near misses and medication incidents listed. Failure to do so may mean you breach your duty-of-care obligations, and may face serious penalties, including dismissal and possible criminal charges.

Some other examples of medication incidents include:

- spilt, dropped or contaminated medicine
- out-of-date medicine
- missing medicine
- lack of documentation such as assessments, medication orders, medication plans, medication record sheets
- medication given without instruction from the doctor or request from the person
- breaches of the agency policy and guidelines
- refusal to take medication
- incorrect storage of medications
- incorrect supply of medications from the pharmacy.

Record and report

Careful completion of the medication administration records guarantees clear communication between members of the person's healthcare team. Make sure that, in accordance with your organisation's procedures, care workers complete all documentation so it provides an accurate and up-to-date record of the status and care of each person.

In order to improve care, it is important to record all medication errors and near misses, so that management can examine the reports to identify the types of errors that have occurred and the circumstances that led to them. Management will also identify whether any particular circumstances that contributed to the error or event can be modified in order to prevent the situation from recurring.

Document inconsistencies

In the event of an incident in the management and/or administration of medication, address any inconsistencies by remaining calm and reassuring the person, informing the supervisor that a mistake has occurred, clearly describing the nature of the incident on the medication record, observing the person for changes in behaviour or health status that may occur as a result of the incident, and reporting these to the coordinator/supervisor, completing and submitting a medication incident report, and closely monitoring for adverse reactions in progress notes and/or care plans.

In the event of wrong medication being given or received, a doctor, pharmacist or emergency personnel/services should be informed and consulted. An ambulance should be called if the person is in distress or showing signs of being unwell, or on the instructions of the doctor, pharmacist or other health professional.

After the incident, care workers should contribute to an investigation of the incident with emphasis on the associated process and to the development of an action plan to prevent recurrence of the incident. Follow this process when inconsistencies occur.

Process for documenting inconsistencies
Remain calm and reassure the person.
Inform the supervisor about the mistake, and describe the nature of the incident clearly.
Document the details of the incident on the MAR.
Closely observe and monitor the person for changes in behaviour or physical condition.
Report all changes to the supervisor and record on the MAR.

Example

Record and report any inconsistencies

Rebecca has just started work with the local community support services. One of the people to whom she provides support requires Rebecca to administer medications from a Webster pack. After the weekend, Rebecca visits Mr Adams who is a 74-year-old man who suffers from glaucoma and bad Rheumatoid arthritis. This means he is unable to see clearly and cannot use his fingers for fine motor activities. When Rebecca takes out the Webster Pack, she finds that the previous worker has given the medications that were scheduled for the morning. Rebecca notifies her supervisor who calls the doctor.

Rebecca is required to complete an incident report regarding this medication error.

Practice task 34

1. Provide three examples of medication inconsistencies or incidents you may identify.

2. What should you do if you identify inconsistencies or incidents?

3. List three reasons for reporting inconsistencies.

Click to complete Practice task 34

Summary

1. People who do not take their medications as directed by their health professional are at risk of a decline in their health and wellbeing, and risk serious consequences.
2. Care workers have a duty of care to follow agency procedures, such as informing the person's GP and completing a medication incident form whenever a person, for whatever reason, fails to take their medication or takes an incomplete dose.
3. Adopting a no-touch technique during medication preparation and administration reduces the risk of people being exposed to contaminated medication.
4. Drugs have a shelf life that is preserved when environmental factors such as proper light, temperature and moisture are provided. Once a medication date ends, the expired medication may not work as well as intended, and it may cause harmful effects if ingested.
5. It is the responsibility of the aged care service and staff to familiarise themselves with their particular state or territory's legislation and/or regulations in relation to clinical and related waste, including disposal of all used and unused medication.
6. Care workers have a responsibility to observe people carefully before and after medication is administered, and report changes in health status to a supervisor or health professional in accordance with organisational guidelines and procedures.
7. A medication error is any mistake related to medication administration, such as the wrong medication, the wrong time, the wrong route, the wrong dose or the wrong person. Medication errors may also involve administering medication in the wrong form; for example, crushing tablets that must not be altered.
8. A near miss is an event that almost happened but was averted before the mistake occurred, such as almost giving someone the wrong medication because their name is similar to another person's.
9. In order to improve the care, it is important to record all medication errors, near misses and medication inconsistencies so that management can examine the reports to identify the types of errors that have occurred and the circumstances that led to them. This data will help develop strategies to reduce the risk of medication errors occurring in the future.

Learning checkpoint 6
Handle medication contingencies

This learning checkpoint allows you to review your skills and knowledge in handling medication contingencies.

Part A

1. Give two reasons why a person may refuse medication.

2. Should you allow a person to refuse to take their medication? Explain your answer.

3. A person has spat out their oral medication into a cup. How would you report the incomplete ingestion to the supervising health professional according to your organisation's procedures and protocols?

4. What are three indications that a medication may be contaminated or out of date?

5. Explain what you should do if you notice that a blister pack has been opened before use.

Part B

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

Case study

José is receiving penicillin to treat a bacterial infection in his throat. When Harry retrieves the blister pack, and checks doses against José's medication chart, he realises that Monday and Tuesday's medication have already been administered, even though it is only Monday. Harry is worried that José's antibiotic course may have been incorrectly administered. There is no communication to suggest why medication was given early. Additionally, José has been complaining of nausea. Harry is unsure if this is related to the penicillin or not.

1. How should Harry respond when José tells him he feels nauseous?

2. Write a report as Harry should write it, reporting the inconsistency in the medication.

3. What might be the consequences of this inconsistency?

Topic 7

In this topic you will learn how to:

7A **Manage medication equipment and used containers according to infection control guidelines**

7B **Complete arrangements and procedures to replenish dose administration aids and supplies**

7C **Store medication charts, care plans and treatment sheets**

7D **Complete medication storage procedures**

Complete medication distribution and administration

Medication distribution and administration is a complex subject, with many considerations made by a team of health professionals. This process ensures that all medications – prescribed, purchased over the counter and/or complementary medications – are safely administered.

Policies and procedures in relation to medication distribution and administration will vary between service providers and state and territory legislation and regulations. It is therefore important for care workers to acquaint themselves with their organisation's policies and procedures as a matter of responsibility in relation to the administration and distribution of medication.

7A Manage medication equipment and used containers according to infection control guidelines

All equipment used when you administer medication must be kept clean and free from bacteria and viruses to prevent infection. Key items to manage are medication trolleys and new and used containers.

Medication trolleys are used to store medication for a number of people, the containers used in administering the medication, medical records, disposable gloves and rubbish bins for disposing of waste material.

Managing a trolley involves ensuring it is stocked with the correct medication and medical records, and checking that these are stored in the trolley's locked compartment; placing used containers in the rubbish bin attached to the trolley; and cleaning the trolley according to industry and the organisation's infection-control guidelines.

When medication is delivered from the pharmacy, check that dose administration aids (DAAs) are complete, free of contamination and/or tampering and in accordance with medication orders, then store the medication in the appropriate medication trolleys or storage areas along with the medication profile forms. You cannot check that the actual medication is correct; you can only check that the information on the DAA pack is there. A registered nurse must check the information against the medication chart.

Manage trolleys

Because it is used to administer medication for more than one person, a medication trolley has the potential to cause cross-infection if not managed properly. All areas of the trolley must be regularly cleaned and kept neat and tidy. Wear disposable gloves when cleaning up any spills with a cloth and wiping the tray. Germs have the potential to stay hidden for a long time and can even become more active and efficient over time. Regularly empty the waste containers attached to the trolley and dispose of the waste in the appropriate bins. At the end of the day, the trolley should be cleaned with a sanitising liquid.

Most workplaces have a maintenance and cleaning schedule to ensure equipment gets cleaned properly on a regular and scheduled basis. Make sure you understand where the schedule is kept, the information it contains and what your responsibilities are.

Guidelines for trolley management and cleaning:

- Always be aware of your environment when using a trolley and look out for hazards such as water on floors, slippery steps or stairs.
- Use clean equipment for each medication application.

- Clean equipment with hot, soapy water and a sterilising agent before and after it has been used. This should kill any germs on the equipment.
- If cleaning can't be done, use disposable items such as disposable cups, spoons, tumblers and paper towels.
- Wash all equipment after use, including bottles and tubes used to hold medication, liquids and creams.
- Recap eye drops and ear drops immediately after use and store correctly on the trolley.
- Handle and clean contaminated linen and/or clothing.
- Dispose of contaminated-waste products according to work health and safety guidelines.

WHS considerations

Managing trolleys should also extend to their maintenance to ensure the worker does not have to push a trolley with poorly maintained wheels. Always inform your supervisor or the appropriate person if you notice anything wrong with a trolley. It is important to consider other work health and safety (WHS) aspects connected with using a trolley that may put an aged care worker at risk.

Manage containers

To prevent the spread of infection, you need to make sure that all equipment used in administering medication is kept free of infection. Some equipment will be used again, while some will be used only once and then disposed of. Comply with relevant WHS policies to ensure you follow safe practice.

Containers used to administer medication must be stored appropriately on the trolley and then disposed of after use. They include medication cups, tumblers/drinking glasses, teaspoons, measuring cups, water jug, mortar and pestle, tablet divider and pill cutter.

The following is a list of things to keep in mind.

Cleaning equipment

- Equipment such as medication cups, tumblers and teaspoons should be used for one person only and must be washed at the end of the round in hot soapy water, preferably in a dishwasher to ensure the water temperature is high enough to kill germs.

Medication residue

- If medication residue is present on equipment, it should be wiped off with a paper towel prior to washing. The paper towel should then be disposed of in the clinical waste bin.

Cross contamination

- The mortar and pestle and tablet cutter must be cleaned properly between different people and different medications to remove any medication residue that can cause contamination and harmful drug interaction.

Personal medication apparatus

- Equipment such as nebulisers should be used only for the same person. A nebuliser must be cleaned between procedures and disposed of when the treatment is completed.

Manage disposal of all used medication containers

Consider all possible sources of infection to identify potential hazards when managing sharps such as needles, syringes, scalpels, needles and blades. Make sure that you place them in the sharps container or waste disposal bin on the trolley after use.

Dispose of sharps such as razor blades and broken glass immediately. Don't recap a used needle; for example, from a glucometer, but dispose of it appropriately.

Pre- and post-infection control procedures should be followed by care workers when preparing and administering different forms of medications.

In order to protect the safety of staff, visitors and people you support, medication trolleys must never be left unattended when unlocked.

Protocols to follow when disposing of used medication:

- Containers with medication residue should be discarded in clinical waste bins. Organisations are obliged to provide these and should have a contract for their safe removal.
- Some dose administration aids are suitable for multiple uses and should be returned to the pharmacist when empty.
- Containers that have the person's details printed on them should be sent back to the pharmacist or shredded on-site to protect people's privacy.
- All used medicine bottles, tubes and other containers should be washed and then placed into a regular rubbish bin.
- In a community setting, a person has the right to decide whether they want to place medication containers in the ordinary garbage bin.
- People living in the community should also decide whether they want to remove the medication container label prior to disposal.
- Never throw away out-of-date medicines in the rubbish. They must be returned to the pharmacy.

Example

Manage medication equipment and used containers according to infection control guidelines

The jury found that the failure of a care worker to secure a medication trolley containing antidepressants contributed to the death of Ms Willis, who died after drinking 500 ml of dothiepin that she stole from an unsecured medication trolley at Shady Oaks. The visitor was struggling with heroin addiction and went through the unlocked trolley, which had been left unattended in the facility.

Practice task 35

1. List three storage requirements for medication.

2. List three disposal requirements for medication.

3. Explain how to effectively manage containers according to infection control.

Click to complete Practice task 35

7B Complete arrangements and procedures to replenish dose administration aids and supplies

People should be able to receive their medication when they need it. Medication should not be interrupted because stock is not available or medication is not dispensed on time.

The importance of taking prescribed medication regularly and on schedule cannot be over stressed. For example, missing a scheduled dose of a drug prescribed to control epilepsy can precipitate a seizure. Therefore, it is important to monitor supplies of drugs and vaccines and ensure they are reordered before they run out. Medication should be received as soon as prescribed. There must be a system for prompt dispensing, delivery and administration of medication and you must follow it.

Maintaining supplies means that you need to check the following procedures.

Delivering the prescription

- Ensure that scripts are sent to the pharmacist as soon as possible so that the medication can be dispensed and the treatment started.

Dispensing medication

- Timely dispensing requires a system to be in place between the doctor, the pharmacist and the person to ensure that the pharmacist has a current script at all times.

Checking the medication

- Check that the name of the person and their date of birth is clearly printed on the label of packaging and DAA; the information about the content of the DAA is included; the number of tablets corresponds with the numbers of drugs printed on the outside of the blister packet/sachet; and the containers are sealed and there are no signs of tampering.

Dealing with expired or contaminated medication

- Notify the doctor and pharmacist if medication currently in use expires; return expired and contaminated medication to the pharmacy and arrange replacements.

Checking supplies

- Ensure that supplies such as gloves and disposable medication cups that are used as part of your overall infection-control strategy are reordered before they run out.

Medication audits

It is common practice to organise for a monthly audit of medication to coincide with the preparation of the next month's DAAs.

At the conclusion of the audit, all anomalies and medication identified for disposal should be reported immediately to the coordinator and/or pharmacist.

The audit will verify that all:

- prescriptions are current; for example, all medications reconcile with the person's MAR
- stored medications, including topical medications, have not expired
- medications are intact and free from damage and/or contamination
- medication is stored according to manufacturer's and/or pharmacist's instructions.

Reorder and end-of-shift handover

There are a number of ways that staff can replenish dose administration aids and supplies. Staff can remove the adhesive label or reorder card from the container and attach it to a reorder pad. They can check that sachet-packed medications or DAAs that are automatically resupplied each week are in accordance with each person's current medication record. Reordering may also involve sending order forms to the pharmacy.

It is usually the responsibility of the coordinator and/or registered nurse to ensure that prescriptions are filled and repeat prescriptions available so that continuity of care is maintained for each and every person.

Below is a list of duties that care workers should follow to manage medication operations.

Medication management duties for care workers after their shift
▶ Ensure that all medication has been administered during the shift and that any extra or left-over medications are accounted for.
▶ Document on the medication chart/signing sheet along with the relevant reason (refused, person in hospital, etc.).
▶ Complete and submit a medication incident report to the supervisor and/or pharmacist if required.
▶ Store missed medication in a properly labelled container within the medication cupboard/cabinet until it can be returned to the pharmacy.
▶ Notify the supervisor or pharmacy via an electronic or faxed order sheet prior to the weekly delivery when a refill p.r.n. DAA is needed.
▶ Notify the supervisor or pharmacy if medications are close to expiry dates (including opened ear drops or eye drops that are due for replacement).
▶ Inform the next shift via the communication book or diary of any changes to a person's medication made by a doctor.
▶ Inform the next shift via the communication book or diary of medications have been checked and accounted for.
▶ Follow up with the pharmacy that they have received an appropriately completed and signed form from the doctor for medication changes.

Example

Complete arrangements and procedures to replenish dose administration aids and supplies

At Sunnyvale Pines Aged Care Facility, medications are packaged by the pharmacy in DAAs. The care worker who usually completes medication administration is away on medical leave for 10 days. On her return to work, as she is completing the monthly medication audit, she discovers extra medications in the form of partially filled blister-pack cards. The reasons why the specific doses of medications were not administered cannot be immediately determined.

Further investigation identifies that a care worker did not fully understand her responsibilities in relation to recording refused medications, and a remedial training session about this procedure is conducted.

Practice task 36

1. What is one important reason for checking the supply of medication?

2. What procedures should be followed when replenishing dose and administration aids?

3. What are the reasons for conducting a medication audit?

Click to complete Practice task 36

7C Store medication charts, care plans and treatment sheets

Protecting the privacy and confidentiality of people with care needs is a high priority in aged care settings. Documentation about a person's medication (in their care plan, medication chart, treatment sheets or other documents) contains their name, date of birth, diagnosis and details of current treatment, and must be kept in a safe and secure place at all times.

Legislation on privacy is clear and exact; legal action may be taken if these guidelines are not followed. Registered aged care facilities must abide by the Australian Privacy Principles (APPs). There are 13 APPs that apply to the collection, use and storage of people's information.

Service providers are bound by legislation or Acts specific to their state and/or territory that contain a similar set of principles, such as the:

- *Health Records and Information Privacy Act 2002* (NSW)
- *Health Records Act 2001* (Vic.)
- *Health Records (Privacy And Access) Act 1997* (ACT).

Organisational procedures for storing charts

Make sure you understand and follow your organisation's policies and procedures for storing medication charts, which may include those outlined here.

Storing charts, care plans and treatment sheets
Medication trolley Documents should be locked in a compartment of the medication trolley, as you may need to move away from the trolley for a short period while you are assisting a person.
Treatment rooms Records kept in treatment rooms should be stored in a lockable cupboard, which should remain locked when not in use.
The person's room Some people keep their medication in their room. Their medication chart may be kept with the medication. It is your responsibility to make sure the chart is not left where an unauthorised person can access it.
Central filing system Documents kept in a central filing system should be locked, and keys should only be available to authorised staff.

Information security

Legislation protecting the privacy of individuals and the confidentiality of their information requires that care workers protect the privacy of each person's medical chart/record. This protection is also necessary for people with care needs to feel that they can trust an organisation and its staff.

Care workers have a duty of care obligation to:

- recognise that the primary purpose of collecting, storing and using information related to people is to ensure their efficient care and treatment
- transfer personal health information contained in medical charts in a secure and appropriate manner
- understand and follow the system in place to keep and retrieve archived records
- take all reasonable measures to protect personal information from improper use and, where necessary, unauthorised access or accidental loss.

Example

Store medication charts, care plans and treatment sheets

Jessica is an enrolled (Div 2) nurse in an aged care home. While caring for Mrs Leopold, she accesses Mrs Leopold's care plan. She also updates Mrs Leopold's progress notes and makes sure these records are not visible when Mrs Leopold's family members visit. She returns the records to the communication hub of the facility after she has finished doing this.

Care staff are provided with a handover sheet at the beginning of every shift. It contains medical and personal information about each resident. Jessica ensures that the handover sheet is shredded at the end of the day. Care staff must not take this information home with them.

Practice task 37

1. What legislation requires you to store a person's medication documentation appropriately?

2. How can you protect privacy when storing information in a treatment room?

3. How can you protect privacy when storing information on a medical trolley?

Click to complete Practice task 37

7D Complete medication storage procedures

A crucial part of health care is to make sure all medication stored on the premises is stored safely, securely and correctly. There are strict laws about who has access to drugs and how they must be stored to ensure everyone's safety. Drug and poisons legislation varies between states and territories, so make sure you are familiar with the legislation in your state or territory. You also need to be familiar with the manufacturer's guidelines for storing medication and the procedures your workplace has in place for locking and storing medications.

Confirm your responsibilities within your job role. In order to protect the safety of staff, visitors and people you support, medications (including self-administered medication) must be locked and stored in accordance with state/territory regulations, the manufacturer's and pharmacist's recommendations and/or instructions and organisational policy and procedure.

Care workers should be vigilant about storing all prescribed and over-the-counter medication according to organisational procedures.

Storage procedures

Correct storage means the medication is managed according to legislation, secure at all times so only authorised people have access to it, and stored at the correct temperature so it does not get damaged.

Procedures may vary across facilities but a standard procedure usually involves the following.

Security

- Securely storing all medications, including topical medications, in a locked cupboard/medication trolley in accordance with the state/territory legislation and regulations relating to drugs, poisons and controlled substances.

Storage requirements

- Storing medications according to the manufacturer's and pharmacist's recommendations and/or instructions, such as storing medication in a cool place out of direct sunlight or, in order to maintain their potency, within a refrigerator.

Labelling

- Ensuring that all medication is clearly labelled with the person's name.

Managed by person

- Providing safe and secure storage of medications that are managed by people you support.

Refrigeration

- Placing any medication delivered, which requires refrigeration in the refrigerator immediately; the temperature control of the refrigerator should be checked on a regular basis with a thermometer.

Store medication securely

Medication must be stored according to legislation. This means it is stored in a safe, locked area that only authorised people have access to. Most organisations have a key register that records the number of the key and who is responsible for it. This is usually the registered nurse or senior staff member on duty. If another person needs access, then the authorised person does the unlocking so that the key doesn't leave their possession. It should not be possible for visitors, children, pets, other people or unauthorised staff to access the storage area. In the home, medication should be kept out of reach of other people.

Self-administered medications must be stored securely, such as in a locked bedside cabinet in order to protect the safety of staff, visitors and others who use the service.

Specific guidelines are prescribed for the management and storage of controlled drugs such as Schedule 8 drugs. Controlled drugs must be kept in an approved container as specified in the drugs and poisons regulations for different states and territories. There must be a register of all controlled drugs stored on-site, which records when these drugs are taken, similar to the following example.

Date of entry	01/12/2016
Name of medication	Valium
Amount stored	12 x 5 mg tablets
Amount used	1 x 5 mg
Purpose	As prescribed for Mr Ng
Amount remaining	11 x 5 mg
Signed	*Tim Brent*
Checked and witnessed	*Mae Li*

Other storage requirements

There is a range of other storage requirements for medications. Below are details of some of these requirements as set out by manufacturers' guidelines, packaging requirements and best practice for events such as travelling, death and unused medication.

Following manufacturers' guidelines for storage

Most medication has specific guidelines provided by the manufacturer in relation to correct and safe storage. In general, no medication should be stored in direct sunlight. Most medication can be damaged by heat or damp. For this reason, medication should never be stored in a bathroom cupboard. Some medication is required to be kept in a fridge between 1°C and 8°C or in an area below 25°C. If medication is not stored under these conditions, it can result in chemical changes, which reduce the medication's effectiveness.

When in doubt, you should seek the advice of a registered nurse, doctor or pharmacist.

Storing medication containers

Medication must be stored in its original container. Medication from different containers should never be mixed, as this can result in contamination and drug interaction. Medication should only be packed and dispensed by a registered pharmacist, who should clearly label containers and dose administration aids.

Storing expired, damaged and contaminated medication

Expired, damaged and contaminated medication should not be stored on-site or in a person's room. It must be returned to the pharmacy for correct disposal.

Dealing with deceased person's medication

When a person living in care dies, their medication must be packed in a sealed container and kept until a death certificate is issued. The medication can then be sent to the pharmacist to be disposed of correctly.

Storing medication for travelling

A support worker may be involved in storing a person's medication if the person is travelling; for example, when they go on a holiday or transfer to another organisation. When this happens, their medication should be packed and sent with them. If they are going on holiday, you should take extra care to ensure the person and/or relatives understand how to correctly use and store medication. Medication that must be kept in a fridge should be transported in a cooler bag with ice.

Example

Complete medication storage procedures

The Victorian Department of Health has developed the Drugs, Poisons and Controlled Substances Regulations 2006 that specify the storage and recording requirements for Schedule 4, Schedule 8 and Schedule 9 medicines. These regulations apply to all approved providers of aged care services where there is a person receiving high-level residential care and the person has been supplied with those medicines on prescription.

Regulations specify that aged care homes must do the following:

- Store Schedule 4 medications in a lockable storage facility.
- Store Schedule 8 and 9 medicines in a lockable room or a lockable storage facility that is firmly affixed to the floor or wall.
- Ensure that all Schedule 4, 8 and 9 medications are locked away except for when they need to be administered.

Practice task 38

1. Provide an example of legislation you should comply with when storing medication.

2. According to Victorian regulations, where should you store Schedule 4 drugs?

3. According to Victorian regulations, where should you store Schedule 8 drugs?

Click to complete Practice task 38

Summary

1. Well-maintained medical equipment is an essential part of care. All trolleys, equipment and medication must be cleaned, sanitised and stored correctly to prevent damage and misuse, and to maintain a clean, hygienic environment at all times to prevent infection from spreading. Follow industry health regulations and the organisation's infection-control guidelines.
2. In order to protect the safety of staff, visitors and people you support, medication trolleys must never be left unattended when unlocked.
3. People should be able to receive their medication when they need it. Medication should not be interrupted because stock is not available or medication is not dispensed on time. Workers need to check medication supplies and identify when medication is out of date or contaminated.
4. Always ensure that supplies such as gloves and disposable medication cups that are used as part of your overall infection-control strategy are reordered before they run out.
5. Care workers have a duty of care to protect the privacy of each person's medical chart/record by taking all reasonable measures to protect personal information from improper use, unauthorised access or accidental loss.
6. Medication charts and other documentation should be stored, so they can be accessed easily by authorised personnel but cannot be accessed by unauthorised personnel.
7. Medications (including self-administered medication) must be locked and stored in accordance with state/territory regulations, manufacturers' and/or the pharmacist's recommendations and the organisation's policy and procedures.
8. Controlled drugs must be kept in a container as specified by law and a register developed to control access.

Learning checkpoint 7
Complete medication distribution and administration

This learning checkpoint allows you to review your skills and knowledge in completing medication distribution and administration.

Part A

1. List three responsibilities you have when managing medication equipment.

2. List three responsibilities you have when managing used containers, according to infection control guidelines.

3. What are the requirements when keeping medication on the trolley?

4. What should you do if you notice that medication and equipment supply is low?

Part B

Read the scenario, then answer the questions that follow.

Scenario

Your supervisor has asked you to complete an audit of medication, MAR and medication supplies and equipment currently stored by your organisation.

1. Explain where and how medication charts, care plans and treatment sheets, according to the organisation's procedures, might be stored.

2. What are two examples of legislation you should follow when storing medication charts?

3. What are three possible considerations to bear in mind when checking how medication is stored?

4. How should Schedule 8 drugs be stored?