Guiding principles for medication management in the community

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Royal Australasian College of Physicians

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Royal District Nursing Services

St Luke's Nursing Service

Introduction

Australia's **National Medicines Policy** aims to meet medication and related service needs, so that both optimal health outcomes and economic objectives are achieved.[1] The policy has four central objectives, including the quality use of medicines (QUM). QUM means selecting management options wisely, choosing suitable medicines if a medicine is considered necessary, and using those medicines safely and effectively.[2]

The term 'medicine' includes prescription and non-prescription medicines, including complementary health care products.[1]

The National Medicines Policy advocates a partnership approach to promoting its objectives, recognising that governments—Australian, state and territory—health educators, health practitioners, and other health care providers and suppliers, the medicines industry, health care consumers, and the media have accepted a shared responsibility in this endeavour.

While medicines make a significant contribution to the treatment and prevention of disease, increasing life expectancy and improving the quality of life, they also have the potential to cause harm. It has been shown that inappropriate or incorrect use of medicines can have an adverse effect on health. The quality use of medicines can have a positive impact on health and can improve quality of life.

1 Commonwealth Department of Health and Ageing (2000). *National Medicines Policy*.

2 Commonwealth Department of Health and Ageing (2002). *The National Strategy for Quality Use of Medicines*.

Background

The Australian Pharmaceutical Advisory Council (APAC) is a consultative forum that brings together key stakeholders from the medical, nursing and pharmacy professions, as well as industry, consumers and government, to advise the Australian Government Minister for Health and Ageing on medicines policy. APAC's mission is to develop, promote, influence and assist in the implementation of the National Medicines Policy in Australia, using a partnership approach to do so.

APAC has been addressing matters related to medication management for older people for some years. In 1997, APAC released guidelines for medication management in residential aged care facilities to address concerns in the residential aged care setting. The first two editions of APAC's *Integrated best practice model for medication management in residential aged care facilities* raised awareness about the quality use of medicines in residential aged care facilities and how a multi-disciplinary approach can improve health outcomes for residents. The 2002 review of these guidelines saw them renamed as *Guidelines for medication management in residential aged care facilities*.

After the third edition of the guidelines was disseminated in 2003, and in line with APAC's mission, APAC agreed that similar guidelines were needed for medication management in the community. It established the APAC Community Care Working Party to develop *Guiding principles for medication management in the community*. The working party included representatives from the medical, nursing and pharmacy professions, consumers, the Department of Health and Ageing, state governments, and the aged and community care industry.

Users of these Guiding principles for medication management in the community should be aware of the links with APAC's recently revised *Guiding principles to achieve continuity in medication management* and the *Guidelines for medication management in residential aged care facilities* and refer to them as needed.

Purpose and scope

Consistent with the approach of the National Medicines Policy, these guiding principles recognise that partnerships are important when support is being provided to consumers at home. They should include a range of health and community care providers.

The guiding principles aim to:

- promote the quality use of medicines and better medication management in the community
- assist service providers in developing or evaluating policies and procedures
- support those involved in assisting consumers

- support consumers in managing their medicine(s)
- guide health care professionals in developing and evaluating professional standards.

Health care professionals and care workers have a 'duty of care' to the people they support, care for, or advise. They must act reasonably to avoid foreseeable risk of injury, whether or not there are policies, guidelines or protocols relevant to the circumstances. When determining whether there has been a breach in duty of care, the standard of care that should have been provided will be considered.

Employers should be aware of their employees' levels of skill and knowledge, and provide the necessary training to ensure duty of care is met. They should not expect employees to perform tasks beyond their knowledge, skills, experience and training.

Employees should consider their own skills, experience, knowledge and limitations and inform employers if they do not understand or feel competent in performing any procedures.

Guiding principles for medication management in the community setting are essential, given the increasing numbers of people on complex medication regimens in their own homes. The guiding principles focus on older people as they are the greatest users of medicines, and more older people are living in the community.

These guiding principles are **intended only as a guiding document**. They are not prescriptive. The document sets out recommended parameters and procedures for medication management in the community. These guiding principles do not replace existing State or Commonwealth legislation. Service providers and health care professionals should refer to government, organisational and relevant health care professional policies on medication administration.

The guiding principles target paid health and community care service providers who support older people in managing their medicines in their home and in the community. They could also be used by other community-based services, such as those supporting people with disabilities or chronic disease.

The guiding principles could also be used by the following groups:

- consumer organisations
- service providers, including community care providers
- health care professionals
- professional organisations, including regulatory authorities
- educational organisations
- governments—Australian, state, territory and local
- consumers, carers and volunteers.

It is recommended that community-based services such as respite centres and transitional care facilities use APAC's *Guidelines for medication management in residential aged care facilities*.

These guiding principles may not be applicable in all rural and remote settings as they may not address the complexities in these settings. However, the guiding principles are broad and could help in establishing best-practice policies and procedures for medication management in these settings. Specific references have been made to Aboriginal and Torres Strait Islander health in some of the guiding principles. For example, Aboriginal Health Workers, Torres Strait Islander Health Workers and Aboriginal Medical Services are mentioned with respect to preparation of Dose Administration Aids (Guiding Principle 3), and Aboriginal Health Workers are recognised as having an important role in the administration of medicines (Guiding Principle 4).

When developing policies and procedures, service providers should consider the needs of people from Culturally and Linguistically Diverse (CALD) backgrounds.

Consent to medical treatment, decision-making and impaired capacity.

It is important that everyone involved in the health care of a person is aware of the relevant Australian, state or territory legislation and/or standards that deal with substitute decision making. Legislation on substitute decision making, for example, guardianship, provides the means to involve a substitute decision maker in personal and health care decisions made on behalf of consumers who do not have the capacity to make decisions for themselves.

Privacy principles

A consumer's privacy is protected by the professional, ethical and legal obligations of health care professionals. Everyone involved in the health care of another person should be aware of their responsibilities in relation to privacy rights of that person.

In accordance with relevant legislation, service providers should develop policies and procedures that address the principles of substitute decision-making and privacy principles.

Future directions

Systems are being developed to assist consumers and those involved in their health care.

Health*Connect* is an overarching national change management strategy to improve safety and quality in health care by establishing and maintaining a range of standardised electronic health information products and services for health care providers and consumers.[3]

The strategy is a partnership between the Australian, State and Territory Governments which aims to leverage e-health systems in different parts of the health sector through a common set of standards so that vital health information can be securely exchanged between health care providers such as doctors, specialists, pharmacists, pathologists and hospitals and so on.

Privacy, security, consent and timeliness of information flows to improve the delivery of health services to all Australians are the hallmarks of this strategy.

3 www.healthconnect.gov.au

Guiding Principles

Guiding Principle 1 – Information resources

All health care professionals and care workers should have access to current, accurate and balanced information about medicines. This will assist health care providers and care workers to provide consumers with appropriate information, including Consumer Medicine Information (CMI), and advice about medicine use, in a timely manner.

Guiding Principle 2 – Self-administration

Consumers should be encouraged to maintain their independence for as long as possible, including managing their own medicines in a safe and effective way.

Guiding Principle 3 – Dose Administration Aids

Dispensed medicines should be retained in the original manufacturers' or other dispensed packaging unless a Dose Administration Aid (DAA) could help to overcome specific problems that a consumer or care worker might face.

Guiding Principle 4 – Administration of medicines in the community

Health care professionals, care workers and service providers all play an important role in making sure that consumers who live at home receive suitable information and/or assistance so that they take their medicines correctly.

Guiding Principle 5 – Medication lists

Consumers should be supported in maintaining a current list of all their medicines. This list should be available and easily accessible to the consumer and all those involved in the consumer's care.

Guiding Principle 6 – Medication review

Consumers are encouraged to have their medicines reviewed by members of the health care team. These reviews should follow the relevant professional guidelines.

Guiding Principle 7 – Alteration of oral formulations

Some consumers might need to have oral formulations altered, for example, tablets broken or crushed to aid administration. However, some medicines cannot be altered and the consumer might need alternative formulations or different medicines instead. These consumers should be given the help they need to guarantee their medicines are managed safely and effectively.

Guiding Principle 8 – Storage of medicines

Consumers using medicines in the community should be encouraged to store their medicines in a manner that maintains the quality of the medicine and safeguards the consumer, their family and visitors in their home.

Guiding Principle 9 – Disposal of medicines

Consumers and/or their carers should be encouraged to return any unwanted, ceased or expired medicines to their local community pharmacy for safe disposal.

Guiding Principle 10 – Nurse-initiated non-prescription medicine

Service providers should develop policies and procedures about the safe practices related to nurse initiation of non-prescription medicines.

Guiding Principle 11 – Standing orders

The use of standing orders in the community for the administration of prescription medicines is generally discouraged. However, where standing orders are required in special circumstances, service providers should have policies and procedures in place for their use.

Guiding Principle 12 – Risk management in the administration and use of medicines in the community

Health care professionals, care workers, service providers, and consumers and/or carers should work together to manage risks and incidents associated with medicine use in the community.

Implementation Guide

This section provides some of the underlying rationale for the Guiding Principles as well as strategies for implementing them. It does not describe the resources needed to implement them. Each setting will be responsible for identifying and developing suitable resources, taking into account factors such as the needs of consumers and the size and the location of the service.

The Guiding Principles are worded so that they can be applied in a range of settings. It is expected that each setting will need to develop suitable strategies that reflect individual needs, resources and constraints. It is therefore possible that implementation plans will vary from setting to setting. Implementation strategies might also need to be placed in context, depending on the needs of individual consumers and the nature of the episode of care.

It should be noted that the Working Party intended that users of this document read the document as a whole, as some of the guiding principles contain information relevant to other guiding principles.

The documents referenced within these Guiding Principles are provided as references only and have not been endorsed by APAC (with the exception of those documents issued by APAC).

Guiding Principle 1 – Information resources

All health care professionals and care workers should have access to current, accurate and balanced information about medicines. This will assist health care providers and care workers to provide consumers with appropriate information, including Consumer Medicine Information (CMI), and advice about medicine use, in a timely manner.

Health care professionals and/or care workers should establish the consumer's level of understanding of their medication including how to take it and what would happen if they don't. This should take into account the consumer's literacy and language skills, their cultural background and their medication regime. The following resources provide information about prescription and non-prescription medicines and complementary health care products. They are listed alphabetically within each section. Care workers and service providers who are supporting older people in the community and require further information about medicine(s) should consult the consumer's pharmacist and/or doctor.

1. Resources for consumers, care workers and service

The resources listed below are either available for downloading from the website provided, or information on how to obtain the resource is available at the website or telephone number provided.

Examples of available resources for consumers, care workers and service providers include:

Adverse Medicine Events Line

The Adverse Medicine Events Line allows consumers to report or receive advice on adverse medicine events.

Telephone 1300 134 237

Australian Council for Safety and Quality in Health Care - 10 Tips for safer health care

The **10 tips for Safer health care booklet** has been produced by the Safety and Quality Council to assist people to become more actively involved in their health care. It explains how and why things can go wrong, and how consumers can work in partnership with their health care professionals to get the best possible care. The booklet also:

- gives 10 tips for improving health care, which include questions consumers might like to ask their health care professional
- outlines what consumers can expect from their health care professional
- lists some sources of information for consumers to find out more about their condition and how to manage medicines
- explains what consumers can do if they have concerns about their health care.

www.safetyandquality.org/index.cfm?page=publications#10tips

Consumer Medicine Information (CMI)

CMI is designed to inform consumers about prescription and pharmacist-only medicines. CMI leaflets are brand specific and are produced by the pharmaceutical company that makes the particular medicine. They might be included in the medicine package, but can always be requested from the pharmacist or doctor. A CMI guide is available, which provides information about how CMI can be used by consumers and health care professionals to build better relationships to achieve the quality use of medicines. Refer to:

‹····www.nps.org.au····› or telephone 1300 888 763
‹····www.betterhealth.vic.gov.au····› (select 'library' then 'medicines guide')
‹····www.appco.com.au/appguide····›
‹····www.health.gov.au/internet/wcms/publishing.nsf/Content/nmp-consumers-cmi.html····›
‹····www.medicinesaustralia.com.au····›

Health*Insite*

Health*Insite* is an Australian Government initiative, funded by the Department of Health and Ageing. It aims to improve the health of Australians by providing easy access to quality information about human health. Go to:

www.healthinsite.gov.au

Medicines Line

Medicines Line gives consumers access to independent, accurate, up-to-date and specific information about medicines, provided by experienced medicines information specialists and clinical pharmacists.

Telephone 1300 888 763.

Medicines Talk

Medicines Talk is produced by consumers, for consumers, to encourage and promote quality use of medicines, especially among people who use multiple medicines. *Medicines Talk* can be downloaded in PDF format from the NPS web site:
‹····www.nps.org.au/site.php?content=/resources/content/cons_medtalk.html····›

Telephone (02) 8217 8700

Medimate

Medimate is a brochure produced by the National Prescribing Service (NPS) to help consumers find, understand and use information about medicines. *Medimate* encourages consumers to do this in partnership with their doctors, pharmacists, and other health care professionals. *Medimate* covers prescription medicines, non-prescription medicines and complementary health care products. It includes advice about keeping healthy with and without medicines, how to use medicines safely, and using multiple medicines safely. *Medimate* also includes a special medicines list in which consumers can list their medicines and keep notes.
Available at:

‹····www.nps.org.au····›, telephone (02) 8217 8700

Medimate is available in the following languages:

- Chinese
- Greek
- Italian
- Vietnamese
- English

Veterans' MATES

Veterans' MATES (Medicines Advice and Therapeutics Education Services) is a Department of Veterans' Affairs program designed to address medicines usage by veterans and war widows and to reduce medicines misadventure. The Department works closely with the University of South Australia, Quality Use of Medicines and Pharmacy Research Centre, which has formed a consortium with the National Prescribing Service, Drug and Therapeutics Information Service, Australian Medicines Handbook, University of Adelaide Department of General Practice and Public Health, and the Pharmacy Department of Daw Park Hospital, for delivery of the program.

Veterans' MATES uses prescription data to identify veterans who may be at risk of medication misadventure and provides information which may assist in improving their medication management. GPs are provided with feedback on their veteran patients and information detailing current clinical guidelines through mailout. The program also provides educational materials to veterans and their carers to assist in improving medication management at home.

Veterans' MATES will deliver ten modules targeting specific clinical and therapeutic topics over the next three years. The modules will include material for GPs, other health care professionals and veterans.

2. Selected additional resources for health care

Adverse Drug Reactions Advisory Committee (ADRAC)

The ADRAC encourages reporting of all suspected adverse reactions to medicines, including suspected reactions to new medicines, suspected interactions of medicines, and suspected reactions causing death, admission to hospital or prolongation of hospitalisation, increased investigations or treatment, or birth defects. The ADRAC produces the *Australian Adverse Drug Reactions Bulletin* six times a year. The bulletin lists current drugs of interest to ADRAC, and referenced information on drugs that are the subject of reports to ADRAC. Contact the ADRAC Secretariat:

Telephone 1800 044 114, email adrac@health.gov.au or refer to ‹····www.tga.gov.au/adr/index.htm····›

Australian Drug Information for the Health Care Professional (AusDI)

AusDI is a comprehensive, authoritative, unbiased source of drug and therapeutic information developed for Australian pharmacists, doctors, nurses and other health care professionals. It is a database of single and family generic drug information monographs, including the most commonly used complementary health care products. Information is available at:

‹····www.ausdi.com····›

Australian Medicines Handbook (AMH)

The AMH provides a source of readily accessible, concise, up to date independent drug information to facilitate effective, rational, safe and economical prescribing. Available at:

‹····www.amh.net.au····›, telephone (08) 8303 6977, email amh@amh.net.au

Australian Medicines Handbook (AMH) Drug Choice Companion: Aged Care

This contains independent drug information that promotes safe and rational use of medicines in older Australians. Available at:

‹····www.amh.net.au/dcc.html····›

Australian Pharmaceutical Formulary (APF)

The APF and Handbook (APF) is designed to assist pharmacists in providing pharmaceutical services that promote optimal health outcomes through the quality use of medicines. APF-19 provides core information on therapeutics and standards of practice. Available at:

‹····www.psa.org.au····›, telephone (02) 6283 4783

Australian Prescriber

Australian Prescriber is an independent publication providing readily accessible information about drugs and therapeutics. Available at:

‹····www.australianprescriber.com····›, telephone (02) 6282 6755,
email info@australianprescriber.com

Australian Prescription Products (APP) Guide

The *APP Guide* contains a comprehensive listing of prescription product information approved by the Therapeutic Goods Administration (TGA) and compiled specifically for pharmacists. Available at:

‹····www.appco.com.au/appguide····›

Central Australian Rural Practitioners Association (CARPA) Standard Treatment Manual

CARPA developed this manual as a guide to standard treatment for those working in remote and rural communities in Central and Northern Australia. Available at:

‹····www.carpa.org.au····›, telephone (08) 8950 4800

MIMS Annual

MIMS Annual is a comprehensive, up-to-date drug reference system. It is classified by therapeutic class, fully indexed, and contains complete, detailed, approved prescribing information for over 2000 prescription and non-prescription drugs. Available at:

‹···www.mims.com.au···›, telephone 1800 800 629

National Prescribing Services (NPS)

The NPS is a not-for-profit Australian organisation established to provide a source of evidence-based information about medicines. The NPS is independent of government and the pharmaceutical industry. Available at:

Contact the NPS: telephone (02) 8217 8700, email info@nps.org.au, facsimile (02) 8217 7578, or refer to ‹···www.nps.org.au···›

RADAR (Rational Assessment of Drugs and Research)

NPS RADAR provides timely, independent, evidence-based information on new drugs, research and PBS listings. It's published by the National Prescribing Service (NPS) for general practitioners, specialists, pharmacists, other health care professionals and consumers.

RADAR can be accessed over the internet, either by registering online to receive email alerts, or by simply logging on to the website. RADAR can also be accessed using one of the major prescribing software packages, or by emailing a request for a hard copy to:

info@nps.org.au or refer to ‹···www.npsradar.org.au···›

Schedule of Pharmaceutical Benefits

The Schedule of Pharmaceutical Benefits provides information about the arrangements for doctors and participating dental practitioners to prescribe pharmaceutical benefits, and the supply of pharmaceutical benefits by approved pharmacists, approved doctors and approved hospital authorities. Available at:

‹···www.health.gov.au/pbs/index.htm···›

The Primary Clinical Care Manual (PCCM) 3rd Edition 2003

The PCCM is a major clinical reference and policy document developed by Queensland Health and the Royal Flying Doctor Service (Queensland Section). The PCCM is intended for use by Aboriginal Health Workers and Torres Strait Islander Health Workers, registered nurses and medical practitioners engaged in collaborative practice in rural hospitals, isolated practice areas and sexual health programs throughout Queensland.

The PCCM can be obtained from the Team Leader, Workforce Improvement, North Queensland Workforce Unit, PO Box 902, Cairns Qld 4870.

Telephone (07) 4050 8923, fax (07) 4031 0133.

Translating and Interpreting Services (TIS)

The Australian Government, through the Department of Immigration and Multicultural and Indigenous Affairs, provides a Translating and Interpreting Services (TIS) for people who do not speak English and for English speakers needing to communicate with them.

TIS is Australia's only national service and is available to any person or organisation in Australia requiring interpreting services. TIS is available 24 hours a day, 7 days a week, and is accessible from anywhere in Australia for the cost of a local call.

Telephone 131 450

The Doctors Priority Line is a fee-free service for eligible doctors or specialists to help them communicate with patients who do not speak English. It provides a prompt telephone interpreting service for medical practitioners and their eligible patients, and is also available 24 hours a day, 7 days a week, anywhere in Australia for the cost of a local call.

Telephone 1300 131 450

Therapeutic Advice and Information (TAIS) Line

The National Prescribing Service provides a Therapeutic Advice and Information Service (TAIS) for health care professionals. For the cost of a local call, the TAIS provides immediate access to independent drug and therapeutics information.

Telephone 1300 138 677, email tais@nps.org.au, web site ‹···www.nps.org.au···›

Therapeutic Guidelines

Therapeutic Guidelines are disease-oriented guidelines for prescribing. They provide clear, practical and succinct recommendations for therapy, derived from the best available scientific evidence. Available at:

Telephone 1800 061 260, email sales@tg.com.au, web site ‹···www.tg.com.au···›

3. Other useful web sites

Pharmacist-relevant sites (for links to medicine information resources). Go to:

‹···www.auspharmacist.net.au···›

Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP)

The SUSDP and its amendments contain the decisions of the National Drugs and Poisons Schedule Committee regarding the classification of drugs and poisons into schedules for inclusion in the relevant legislation of the states and territories. Refer to:

‹···www.tga.health.gov.au/ndpsc/susdp.htm···›

State and territory drugs and poisons legislation

Following is a list of the title and website address for primary legislation dealing with drugs, poisons and medication administration for each state and territory. Please note that all the legislation below can also be found at the Australasian Legal Information Institute website at ‹···www.austlii.edu.au···›

Queensland	*Health (Drugs and Poisons) Regulation 1996*, available at ‹···www.legislation.qld.gov.au···›
Victoria	*Drugs, Poisons and Controlled Substances Regulations 1995*, available at ‹···www.dms.dpc.vic.gov.au···›

Western Australia	*Poisons Regulations 1965*, available at ‹···www.slp.wa.gov.au···›
New South Wales	*Poisons and Therapeutic Goods Regulation 2002*, available at ‹···www.health.nsw.gov.au/public-health/psb···›
South Australia	*Controlled Substances (Poisons) Regulation 1996*, available at ‹···www.parliament.sa.gov.au···›
Tasmania	*Poisons Regulation 2002*, available at ‹···www.thelaw.tas.gov.au···›
Northern Territory	*Poisons and Dangerous Drugs Act 1983*, available at ‹···www.health.nt.gov.au···›
Australian Capital Territory	*The Drugs of Dependence Act 1989*, available at ‹···www.legislation.act.gov.au···›

Therapeutic Goods Administration (TGA)

The TGA is a unit of the Australian Government Department of Health and Ageing. The TGA carries out a range of assessment and monitoring activities to make sure that therapeutic goods available in Australia are of an acceptable standard, with the aim of ensuring that the Australian community has access, within a reasonable time, to therapeutic advances. Refer to:

‹···www.tga.gov.au···›

Take care when sourcing information from the Internet. Health care professionals and care workers are responsible for accessing and providing accurate, up-to-date, independent information from an objective source, for example, Health*Insite*, or the National Prescribing Service. Information sourced from the Internet should not be used as a substitute for medical or professional health care advice and should not be used to diagnose, treat, cure or prevent any disease. Before relying on information found on websites listed in this document, users should carefully evaluate its accuracy, currency, completeness and relevance for their purposes, and should obtain any appropriate professional advice relevant to their particular circumstances. APAC can not assume any liability for the content of Web sites listed in this document.

Guiding Principle 2 – Self-administration

Consumers should be encouraged to maintain their independence for as long as possible, including managing their own medicines in a safe and effective way.

Consumers should be encouraged to self-administer their medicines (including prescription and non-prescription medicines and complementary health care products). It is important that all health care professionals and care workers respect the need for consumers to maintain their independence with the administration of their medicines. Consumers might want to administer only some of their medicines (for example, consumers could take oral medicines, but might require an authorised health care professional to administer injections). Health care professionals and care workers should support consumers in their choice of self-administering their medicines.

As a team approach to addressing issues regarding self-administration of medicines is an advantage to the consumer, health care professionals and care workers should communicate with each other and the consumer/carer. To enhance the quality use of medicines, if consumers use more than one prescriber and dispenser, they should share information about their medicines with the other prescribers and dispensers.

Health care professionals and care workers should encourage consumers to talk to their prescribers and pharmacists about all of their current medicines. In particular, prescribers should talk to consumers about the safe and effective use of all their medicines, including prescription and non-prescription medicines, and complementary health care products, and the potential interactions between these.

If there is doubt that a consumer is able to safely administer and store their medicines *(refer to Guiding Principle 8 – Storage of medicines)*, a health care professional, in consultation with those involved in the consumer's care, should conduct a formal assessment (for example, Home Medicine Review (HMR), Enhanced Primary Care (EPC) Care Plan and or Case Conference or other self-administration assessment tools). Should a care worker or carer find that a consumer is having difficulty in administering their medicines, the care worker should alert their supervisor to the need for a formal assessment by a health care professional. Carers should be encouraged to discuss the problem with the care worker who can discuss this with their supervisor.

All support strategies should be trialled with consumers, carers and/or care workers before a health care professional is engaged to manage medicines. Strategies might include the provision of Dose Administration Aids (DAAs) or engaging a nurse or care worker to help with aspects of administering medicines *(refer to Guiding Principle 4 – Administration of medicines in the community)*. Any strategies in use should be documented in the consumer's record. Provision of Consumer Medicine Information (CMI) and organising a HMR might help a consumer to administer medicines safely and in a way that suits their needs *(refer to Guiding Principle 6 – Medication Review)*.

The situation should be reassessed as necessary, for example, when the consumer, carer, or those involved in the consumer's care (such as nurses and care workers) notice that the consumer's ability to manage their own medicines has lessened. If the assessment is that the consumer is unable to continue administering their own

medicines, for example, due to physical or cognitive impairment, a strategy for future medication management should be discussed with the consumer and/or carer, nurse, doctor, pharmacist or care worker as necessary, and agreed upon by the consumer.

Attention should be paid to a consumer who is returning home from hospital and who might need extra support to administer their medicines for a time *(see APAC's Guiding principles to achieve continuity in medication management)*.

Documentation on self-administration should show whether a consumer is administering their own medicines, any potential problems, and any strategies in place to make sure the consumer is administering and storing medicines safely and in compliance with the instructions. Information regarding possible adverse health outcomes that could be caused by a potential medicines interaction, or possible adverse effects, should be made available and/or discussed with the consumer and documented.

Provided that the chosen method is safe, nurses, Aboriginal Health Workers and Torres Strait Islander Health Workers or care workers should support the consumer's chosen method of self-administration and to remain independent. Such a method might include the use of a dose-administration aid *(refer to Guiding Principle 3 – Dose Administration Aids)*. The health care professional should continue to provide information to the consumer about their medicine management.

Health care professionals are responsible for discussing with the consumer any other options for administering medicines (such as pump delivery systems, patches or inhalation devices) that can help a consumer to self-administer medicine or ensure that a carer is able to administer medicines at home. The nurse and/or Aboriginal Health Workers / Torres Strait Islander Health Worker and/or doctor and/or pharmacist are to give the consumer and/or their carer information to ensure that they understand how to use such administration systems properly.

Where possible, in situations where palliative care or complex pain management is required and a syringe driver device or other system cannot relieve 'break-through pain', it might be necessary for an authorised health care professional to prepare a syringe (for either break-through medicines or reloading a syringe driver) for a consumer or their carer to administer when the nurse is not available. The regulations and legislation that apply to the preparation and labelling of syringes and the possession of Schedule 8 substances differ between jurisdictions.

Service providers should have clear policies and procedures for these circumstances, including who is authorised to prepare syringes, documentation, and storage and infection control. Where a nurse prepares a syringe for a consumer or carer to use, as per the prescriber's orders, a detailed label should be placed on the syringe. The label should be fixed to the immediate container and state the:

- consumer's name
- date and time of preparation
- indications for use
- consumer's date of birth and Unit Record Number (if applicable)

- name of medicine and where necessary dilution fluid/diluent
- dose of medicine (total amount of drug being delivered, for example, in mg) and, if applicable, total volume of solution (containing the dose) being delivered (mL).
- total volume of solution being delivered (in mL), as applicable
- start and finish time of infusion, as applicable
- "discard by" date and time

The label should also include provision for the nurse's signature, name and designation, and any appropriate warnings, such as **KEEP OUT OF REACH OF CHILDREN**.

It is recommended that service providers use pre-printed labels to meet these requirements and to ensure legibility.

The relevant health care professional should provide clear instructions to the consumer and/or carer in accordance with the prescription. Reviews of medication management should continue in order to streamline medication management for consumers and carers in their home.

Where a consumer has ordered an overseas medicine to be self-administered and used for their personal use, and the medicine is not registered in Australia, the nurse, carer or care worker should follow the service provider's policies and procedures on managing overseas medicine, or contact the pharmacist or a medicine information service for relevant information, including monitoring for possible signs of side effects. In such cases, the consumer should be encouraged to consult their relevant health care professionals.

If a consumer or their carer is unsure about the administration of any medicines, the consumer's doctor, pharmacist or nurse should use resources such as CMI to explain the medicine's purpose, use and administration. Care workers should refer consumers to their doctor, pharmacist or nurse for advice on questions about medicines *(refer to Guiding Principle 4 – Administration of medicines in the community)*.

Guiding Principle 3 – Dose Administration Aids

Dispensed medicines should be retained in the original manufacturers' or other dispensed packaging unless a Dose Administration Aid (DAA) could help to overcome specific problems that a consumer or care worker might face.

A DAA is a device or packaging system for organising doses of medicines according to the time of administration. Different types of DAAs include blister or bubble packs, compartmentalised boxes, and compliance packs such as those provided by automated medication dispensing systems. A DAA is a tool to be used in a coordinated approach to medication management.

There are safety limitations to the use of DAAs. They might be difficult to label with medicine information or cautionary labels unless they have been specifically designed for such labelling, and they might not be tamper-evident. DAAs might not be suitable for all consumers and their use should be considered carefully. Some consumers might find it difficult to use a DAA, for example, a person with rheumatoid arthritis or other physical disability. The cost of a DAA might also make it an unsuitable aid for some consumers. It is important that consumers or their carers are supported in making informed decisions about the aid that most suits their needs.

The legislation and service provider policies applying to DAAs will differ between states and territories.

Assessment

Assessments to identify consumers that may potentially benefit from the use of DAAs could be conducted by a health care professional upon the request of the consumer or a carer or another health care professional. Carers, families, care workers, community pharmacists, community nurses, doctors and other health care professionals all share a role in identifying any concerns about a consumer's ability to manage their medicine.

Consumers who are using DAAs should be monitored in the same way as all other consumers to make sure that they continue to administer medicines safely *(refer to Guiding Principle 2 – Self-administration)*.

Preparation

DAAs should be packed and fully labelled either by a pharmacist or under the supervision of a pharmacist, in accordance with professional guidelines.[4] The pharmacist should sign off that the correct medicine(s) have been packed into the DAA, in accordance with professional standards and guidelines.[5] In some states and

[4] Pharmaceutical Society of Australia (1999) *Dose Administration Aid Guidelines*. July 1999. www.psa.org.au/media/ACF9EF4.pdf

[5] Pharmaceutical Society of Australia (2002) *Dose Administration Aid Standards*. Version 2.

territories, a health care professional other than a pharmacist, that is, a registered nurse or Aboriginal Health Worker or Torres Strait Islander Health Worker, might fill a DAA. Nurses and Aboriginal Health Workers and Torres Strait Islander Health Workers should refer to relevant legislation, guidelines and service provider policies for when this may occur.

Only solid oral medicines can be packaged in a DAA.

The following should not be placed in a DAA with other medicines:

- medicines administered on an 'as required' basis
- solid dose cytotoxic preparations
- medicines unsuited to this form of storage due to their instability if exposed to heat, light, air or moisture, for example, effervescent, dispersible, buccal and sublingual tablets, and significantly hygroscopic (moisture absorbing) preparations
- medicines that might be affected when the backing of a DAA is heat-sealed, for example, soft gel caps.

If the pharmacist is not packing the DAA, information about medicines that might be unstable in a packaging system should be sought from a pharmacist, medicine information service or product information before the system is packed.

A consumer might want to have complementary health care products and non-prescription medicines included in the DAA. The pharmacist should check for potential interactions and other considerations and with the consumer's consent, inform the prescriber.

The DAA should be returned to the pharmacist for repackaging if there are any changes to the consumer's medicines. It is the responsibility of the prescriber to notify the pharmacist, carer, health care professional and/or care worker of any changes, with informed consent from the consumer and/or carer *(refer to Guiding Principle 5 – Medication lists)*.

Procedures

The pharmacist should verify a medication order with the prescriber where necessary. Communication protocols should be set up between the prescriber, the pharmacist, carer and care worker or nominated responsible person.

Pharmacists should keep a master copy of each consumer's medication profile and should only make changes according to written or direct communication from the prescriber. These communications should be recorded and stored according to professional guidelines.

Labelling

The DAA should be clearly labelled with:

- details of the person packing the medicine(s) in the DAA
- the name, strength and form of all medicines supplied in the DAA, to enable identification of individual medicines
- directions for the use of each medicine
- date of filling
- date and day of week the medicine is to be administered
- any specific instructions about the use of the medicine, including cautionary and advisory labels, including **KEEP OUT OF REACH OF CHILDREN**, and information about alteration of the dosage form where appropriate *(refer to Guiding Principle 5 – Medication lists)*
- any other details as required by relevant Australian, state and territory legislation
- an indication in a prominent position that other medicines are contained in another DAA pack/s and are to be administered (e.g. 1 of 2 DAAs) as applicable.

The print font used should be of a size and type easily readable by the consumer.

Labelling should include both the brand and the active ingredient names, reference to the colour, shape and size of the medicines, as well as manufacturer's marks that have been made on each product.

All or part of a consumer's medication regimen might be provided in a DAA. Where medicines are ordered for a defined short-course treatment, or in a complicated regimen, or where there are specific requirements regarding timing of administration in relation to meals and other medicines, such medicines should be in their original container or unit dose packs. Prompts should be given on DAA labels that the consumer is taking other medicines.

Role of care workers

A care worker should only physically assist a consumer in using their DAA 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.

The care worker might remove medicines from a DAA or prompt a consumer to remove and take the medicine. Care workers should have competency-based training in accordance with organisational policy and Australian, state or territory legislation. Care workers should monitor medication management by consumers and be guided by their organisations' medication management policies and procedures if there are any suspected adverse medicine events.

Provisions for registered nurses

Preparation

All efforts should be made to have a DAA packed by a pharmacist. A registered nurse should only pack or re-pack a DAA if a pharmacist is unable to do so, if a consumer will self-administer medicines, and if the consumer's health and welfare is at risk if the registered nurse does not do so. This practice should be restricted to 'special circumstances' and should comply with relevant Australian, state or territory legislation, as some states restrict the re-filling of DAAs by registered nurses, as well as being in accordance with organisational policy. Before packing a DAA, the nurse should liaise with the doctor and dispensing pharmacist to obtain all relevant information.

A carer or another nurse cannot administer medicines contained in a DAA that has been packed by a registered nurse.

A registered nurse packing a DAA should document this activity in the consumer's clinical record or notes. Labelling of the DAA by the registered nurse should also be in accordance with organisational policy.

Administration

It is preferred that a registered nurse administer medicine from the container in which the medicine was originally dispensed, however, if a consumer has been supplied with a DAA (which has not be packed by a registered nurse), a registered nurse should only administer these medicines if they have a prescriber's order and the medicines can be clearly identified from labels that state the name, colour, shape and details of manufacturers' marks. A registered nurse cannot administer medicines that are not clearly identifiable.

Quality assurance

Safety and quality

The DAA should contain features that will show if the container has been tampered with before the medicine has been administered, depending on the individual requirements of the consumer receiving the medicines. If a care worker is to help a consumer use their DAA and it is evident that the DAA has been tampered with, it should be returned to the pharmacist for repacking.

In the event of a dosage or medicine change where the consumer is self administering medicine from a DAA, the DAA should be returned immediately to the pharmacy or Aboriginal Medical Service for re-packing and re-delivery. The registered nurse, care worker or community care provider should liaise with the consumer about returning the DAA to the pharmacy and arrange alternate supply where necessary.

Quality assurance activities should be implemented to make sure packing processes are audited regularly.

Consumer Medicine Information (CMI)

Even when medicine is supplied in a DAA, CMI should be provided, in accordance with professional guidelines.

Guiding Principle 4 – Administration of medicines in the community

Health care professionals, care workers and service providers all play an important role in making sure that consumers who live at home receive suitable information and/or assistance so that they take their medicines correctly.

Communication and coordination between health care professionals, care workers and service providers providing care for a consumer living in the community are essential elements for safe and effective medicines administration. This becomes particularly important when a consumer is unable to take responsibility for their own medicines and /or their carer needs help in managing and/or administering the consumer's medicines.

Many consumers may have a family member or other person involved in their day to day care. Carers should be involved in medication administration and /or management as appropriate in individual circumstances, for example, care of children.

State and Territory legislation varies in the extent to which it regulates the administration of medication once it has been prescribed and dispensed for an individual. However, legislation regulating professional groups (such as Nurses Acts) and the guidelines for government funded programs (such as HACC program) may set out rules controlling the circumstances in which different groups of professionals and other care workers may administer medicines.

For the majority of people living at home with functional disabilities arising from frailty or other causes, their doctor is their health care manager and the main provider of health care services. Where they are unable to manage their own medicines due to physical or cognitive limitations, decisions need to be made about the most suitable worker or person such as a family member to assist them.

Pharmacists can assist by dispensing medicines with labelling and packaging that facilitates their use by persons with functional disabilities (for example, alternative closures to child resistant closures, larger print on labels, labels in another language in addition to English).

The role of service providers

All relevant legislation and guidelines should be taken into account by service providers in determining their own policies, guidelines, protocols and training for the administration of medicines to people living in the community, including the recording of information relating to the administration of medicines, for example, medication charts. Service providers should have policies that identify those circumstances when the service provider does not authorise staff to administer.

Service providers should ensure that an up-to-date record of the consumer's medicine is kept on the consumer's file. There should be clear instructions on a consumer's care plan about what steps the care worker will take to support a consumer and/or their

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

Employers should be aware of their employees' levels of skill and knowledge, and provide the necessary training to ensure duty of care is met. They should not expect or require employees to perform tasks beyond their knowledge, skills, experience and training.

Administration of medicines by nurses

Nurses are authorised to administer medicines according to the relevant state or territory legislation, and policies. Service providers should have policies that identify those medicines the service provider does not authorise staff to administer.

Delegation of the administration of medicines by registered nurses should be in accordance with policies and guidelines of relevant nurse regulatory authorities and state or territory legislation and regulations.[6]

As part of their role, registered nurses are required to understand the therapeutic action of medicines, including the reason for their use and the effects of use. Registered nurses use clinical judgement to assess if medicines should be administered or withheld in view of a consumer's clinical status. If a dose is not taken for other than predetermined or prescribed reasons, such as refusal, the registered nurse must consult the prescriber. Registered nurses also have a role in educating carers about the safe and appropriate administration of medicines.

In addition, registered nurses need to use the following professional standards to assist in administering medication: the right medicine must be administered to the right person in the right dose at the right time via the right route. All medication administration should be documented.[7]

Registered and authorised enrolled nurses can administer medicines only when an authorised prescriber has prescribed the medicine. Australian, state and territory legislation, together with organisational policies, define some medicines as potential nurse-initiated medicines. These medicines can be administered by a registered nurse without authorisation by an authorised prescriber. They include some Schedule 2 and 3 medicines *(refer to Guiding Principle 10 – Nurse-initiated non-prescription medicine)*.

6 The practice of registered and enrolled nurses is bound by Nurses Acts in each state and territory and nurse regulatory authorities set up pursuant to those Acts and regulations.

7 Forrester K and Griffiths D (2001) *Essentials of law for health care professionals*. Harcourt, Australia p.328.

Administration of medicines by Aboriginal Health Workers

Aboriginal Health Workers play a unique and pivotal role in the health care of Aboriginal people in the community. They are recognised as an integral part of the primary health care provider team.

Some states and territories have made legislative provision for Aboriginal Health Workers to administer some medicines such as immunisations and antibiotics. To be able to administer medicines, Aboriginal Health Workers must be authorised to do so according to legislative provisions and service provider policies and guidelines.[8]

Role of care workers in supporting the administration of medicine

Care workers should refer to organisational policies on the administration of medication.

Most states and territories have legislation that provides for some care workers to administer medicines, for example, disability workers in Tasmania. A trained and competent care worker can therefore help when a consumer or their carer requires physical assistance to administer the consumer's medicines *(refer to Guiding Principle 3 – Dose Administration Aids)*.

Care workers in some jurisdictions are generally able to help consumers who are responsible for managing their own medicines, by unscrewing bottle lids, removing tablets from dose administration aids. It is important that all care workers are educated and competent to assist the consumer with medication management. Some care workers have completed a vocational education course, such as an Australian Qualifications Framework Certificate III in community services or its equivalent. There is a unit of competency that prepares community care workers to physically assist consumers in the community with their medicines.[9]

Care workers should only provide services that are consistent with their level of training and competence. The delivery of care will depend on the consumer and their health care needs. Care workers are not authorised to make any decisions about whether the medicine should be administered and should seek assistance from their supervisor if they have any concerns about medication management.

Where a consumer runs out of their current supply of medicine, care workers should seek the advice and/or assistance of the consumer's doctor, pharmacist, registered nurse, or the usual source of supply, for example, Aboriginal Medical Service, as dictated by the particular circumstances.

8 See, for example, the Northern Territory *Poisons and Dangerous Drugs Act 1983*

9 See ‹····www.cshta.com.au····›

Guiding Principle 5 – Medication lists

Consumers should be supported in maintaining a current list of all their medicines. This list should be available and easily accessible to the consumer and all those involved in the consumer's care.

All consumers are encouraged to keep a list of all of their current medicines, including prescription and non-prescription medicines, and complementary health care products. Health care professionals, care workers and carers should actively encourage this practice regardless of whether medicines are being self-administered or administered with assistance. This list should be updated by the consumer and/or carer, with assistance from a health care professional if required. Consumers might choose the prescriber-generated list or alternate forms such as *Medimate*[10] or Medilist[11].

At a minimum, the medication list should include:

- The consumer's complete name, address and date of birth.
- The name and contact details of the consumer's doctor/prescriber and pharmacy.
- Details of all medicines the consumer is currently taking, including brand name and active ingredient, strength and form, dose, frequency, route, duration and indication.
- Any allergies and previous adverse drug reactions that the consumer has experienced.
- Details of any vaccinations the consumer has received.

The health care professional, care worker or carer should confirm with the consumer that they understand any changes to their medication regimen (including brand substitution) and the need to update the medication list accordingly.

The medication list should indicate whether the consumer is receiving assistance with the administration of any of their medicines *(refer to Guiding Principle 4 – Administration of medicines in the community)*.

The medication list should be kept with the consumer's medicines and be accessible at all times to the person responsible for administration of these medicines. It should be available to all involved in the consumer's care so that it can be easily produced for reference by other health care professionals or health services, for example, in an emergency.

Informed consent to share information on the consumer's medication list with others involved in the consumer's care, for example health care professionals and providers,

[10] ‹····www.nps.org.au····›

[11] Available from most pharmacies

should be obtained from the consumer. It is recommended that the consent be obtained in writing and include the following information about the consumer:

- full name
- date of birth
- what the consumer is consenting to, for example, sharing of information on the consumer's medication list with other services.

The consent should be signed and dated by the consumer or the carer and a witness. The consumer should be given a copy of the signed consent.

If a medication management review is conducted and there are changes to the medication regimen, the medication list should be updated accordingly *(refer to Guiding Principle 6 – Medication review)*.

When a consumer returns home from hospital, an outpatient appointment or another health care facility, the consumer and/or carer, the health care professional or care worker should compare details of the medication list with the medication details provided by the hospital or facility, and update the list accordingly. If there are any changes to the previous medication regimen, the community pharmacist and doctor or authorised prescriber should be contacted for further instructions before medication is administered by the consumer or the health care professional, care worker or carer. (Further information is available in *APAC's Guiding principles to achieve continuity in medication management*).

Guiding Principle 6 – Medication review

Consumers are encouraged to have their medicines reviewed by members of the health care team. These reviews should follow the relevant professional guidelines.

As part of good quality care, it is essential that all medicines be reviewed regularly. A comprehensive medication management review should be undertaken in accordance with the relevant professional guidelines.[12] Reviews should involve collaboration between the consumer and/or carer and appropriate members of the health care team, for example, doctor, pharmacist, nurse, other health care professionals, Aboriginal Health Workers and Torres Strait Islander Health Workers and care workers.

Home Medicines Review (HMR), (also known as Domiciliary Medication Management Review), is a service to consumers living at home and is a formalised medication review carried out within an agreed process. The goal of HMR is to maximise an individual consumer's benefit from their medication regimen, and prevent medicine-related problems. HMR is based on a team approach that involves the consumer's general practitioner and preferred community pharmacy, and other relevant members of the health care team such as nurses, Aboriginal Health Workers, Torres Strait Islander Health Workers or care workers. It uses the specific knowledge and expertise of each of the health care professionals involved. When a consumer's general practitioner believes that the consumer would benefit from HMR, the general practitioner can arrange the review with the consumer's consent. A consumer's general practitioner can also arrange a HMR following a request from a pharmacist, nurse, Aboriginal Health Worker, Torres Strait Islander Health Workers, consumer and/or carer, or other health care professional. It is preferable to conduct the HMR in the consumer's home.

During the HMR, an accredited pharmacist will comprehensively review the consumer's medication regimen (including prescription and non-prescription medicines and complementary health care products). The pharmacist will discuss with the consumer how the consumer takes his or her medicines and any difficulties or uncertainties about them. The pharmacist will then talk to the general practitioner about the results of the home visit, and the general practitioner and the consumer and/or carer will then agree to a Medication Management Plan. The consumer and/or carer, and the general practitioner, are central to the development and implementation of this plan.

It is recommended that service providers have access to the Medication Management Plan and identify any need for further support. As these plans are the property of the consumer, the health care professional or care worker should request access to the document so that they are aware of the results of the review.

12 *PSA Guidelines for Pharmacists—Domiciliary Medication Management Review* ‹····www.psa.org.au/media/DMMR_endorsed_Decoo.doc····›

Following are the eligibility criteria for such a review as agreed by the Australian Government Department of Health and Ageing[13]:

The review can be offered to any (consumer) for whom the GP feels it is clinically necessary to ensure quality use of medicines or address (consumers) needs. Some examples of risk factors known to predispose people to medication-related problems include:

- *currently taking 5 or more regular medications*
- *taking more than 12 doses of medication/day*
- *significant changes made to the medication regimen in the last 3 months*
- *Medication with a narrow therapeutic index or medications requiring therapeutic monitoring*
- *symptoms suggestive of an adverse drug reaction*
- *sub-therapeutic response to treatment with medicines*
- *suspected non-compliance or inability to manage medication related therapeutic devices*
- *(consumers) having difficulty managing their own medicines because of literacy or language difficulties, dexterity problems or impaired sight, confusion/dementia or other cognitive difficulties.*
- *(consumers) attending a number of different doctors, both general practitioners and specialists*
- *recent discharge from a facility/hospital (in the last 4 weeks)*

It is recognised that there might be additional risk factors that should be considered, including:

- health conditions or lifestyle practices that significantly affect pharmacodynamics and pharmacokinetics (e.g. alcohol, tobacco, illicit drugs or restricted diets)
- the use of non-prescription medicines and/or complementary health care products with other medicines or treatment.

A consumer brochure has been developed to provide consumers with practical information about the Home Medicines Review Medicare item and how a consumer might benefit from this service. *Home Medicines Review—helping to manage your medicines at home* is available at ‹···www.health.gov.au/epc/pdf/homereview.pdf···›. It has been translated into many languages, available at ‹···www.health.gov.au/epc/transl.htm···›.

[13] ‹···www.health.gov.au/epc/answers.htm···›

Other resources for medication review include:

- The National Prescribing Service (NPS) guidelines for medication review, which primarily target general practitioners, but are applicable to a wider audience. Available at www.nps.org.au
- Medimate, published by the NPS to assist consumers in managing their medicines. Available at www.nps.org.au
- The Society of Hospital Pharmacists of Australia (SHPA) Standards of Practice for Clinical Pharmacy August 2004. J Pharm Pract Res 2005; 35 (2): 122-46
- The Pharmaceutical Society of Australia (PSA) book entitled Medication review: a process guide for pharmacists. Available at www.psa.org.au
- The Australian Government has provided material on Home Medicines Review at www.medicareaustralia.gov.au/providers/incentives_allowances/pharmacy_agreement/about_hmr.htm and www.health.gov.au/epc/dmmr.htm
- Information on Home Medicines Review can also be obtained from the Australian Association of Consultant Pharmacy at www.aacp.com.au

Guiding Principle 7 – Alteration of oral formulations

Some consumers might need to have oral formulations altered, for example, tablets broken or crushed, to aid administration. However, some medicines cannot be altered and the consumer might need alternative formulations or different medicines instead. These consumers should be given the help they need to guarantee their medicines are managed safely and effectively.

Wherever possible, alteration of formulations should be avoided. However, where alteration may be required, advice from a pharmacist should be sought before any formulation alteration is considered. There are references under the further reading resources list on this issue that readers may find useful.

Altering solid dosage forms by means such as crushing tablets or opening capsules can make it easier to administer a medicine to a consumer who has difficulty in swallowing. As some consumers will not report difficulties in swallowing, all consumers should be given advice about all medicines that should not be altered. It would be useful if health care professionals and care workers routinely asked consumers whether they have any difficulties swallowing medicines, and respond to any reported or noted difficulties, especially if there is advice that the medicine should not be altered.

When a consumer finds it difficult to swallow, the consumer and/or carer who helps to administer the consumer's medicines should be given information about altering oral formulations at the time of prescribing and dispensing. For example, the information could be in the form of verbal instruction, Consumer Medicine Information, and/or labelling the medicine container.

Service providers should provide their staff with access to current information about alteration of oral formulations, including the organisation's policies and procedures and medicine information resources such as the *Australian Medicines Handbook*, AusDI, APF-19 or *MIMS Annual*.

Care workers should not alter a medicine without instruction from a prescriber or other relevant health care professional. They should check the dose administration aid or medicine container for any instructions about altering the oral formulation (e.g. 'do not crush or chew') before helping the consumer. Care workers who are asked to alter oral formulations against the advice of pharmacists or organisations should refer the matter to their supervisor. Care workers should be guided by their organisation's policies and procedures on medication management.

Medication management reviews, including Home Medicines Reviews (HMRs), are an excellent means of identifying consumers who are having difficulties in swallowing, as the consumer is interviewed about the medicines that they are taking and how they are taking them. Perceived or actual swallowing difficulties might trigger such a review. Information about any difficulties, such as swallowing, that might result in consumers altering oral formulations should be sought, with the consumer's permission, from those helping them to manage their medicines, for example, carers, health care

professionals, and care workers. Consumers experiencing increasing difficulty in swallowing might require further assessment by the doctor and this would be included in the pharmacist's recommendations *(refer to Guiding Principle 6 – Medication review)*.

HMRs provide an opportunity to assess the needs of consumers who might be altering formulations in spite of advice from the pharmacist. Where consumers are altering formulations, the pharmacist might need to consult the prescriber (in the case of HMR, a doctor) about a change in formulation or the use of another medicine.

This advice also applies to non-oral formulations such as topical patches.

Guiding Principle 8 – Storage of medicines

Consumers using medicines in the community should be encouraged to store their medicines in a manner that maintains the quality of the medicine and safeguards the consumer, their family and visitors in their home.

Health care professionals and care workers should advise consumers that it is important to store medicines properly and in accordance with any instructions on the medicine label.

Generally, medicines should be stored in their original container in a cool, dry and secure place. The stability/effectiveness of some medicines depends on storing them at the correct temperature, for example, those medicines requiring refrigeration.

Consumers who need help in managing their medicines might also need help in storing them safely, for example, away from children and people who might be unable to read or understand labels.

When a consumer needs to take their medicines out of the home, the health care professional should give them information about suitable storage and transport of their medicines, for example, medicines that are normally stored in the fridge can be put in a small insulated lunchbox. The health care professional should advise the consumer to keep medicines in their original packaging and to observe the directions on the label for safe storage. Care workers should seek further advice from a community nurse, pharmacist or a consumer's doctor if they have concerns about transporting a consumer's medicine.

Where there is a major risk of medicine misuse, such as accidental overdose by consumers who are diagnosed with confusion or dementia, the service provider (in conjunction with other family members if appropriate/available) might need to take a lead role in making sure that the medicines are appropriately secured. In such cases, medicines should be stored out of the consumer's reach and sight, while still being accessible to those assisting in medication management. For example, medicines could be stored in a locked box in the top of the pantry or kitchen cupboard.

Particular care must be taken to ensure that sharp objects such as syringes are stored safely.

There is an increasing trend for consumers to have cytotoxic therapy in their own homes. In such cases, the health care professional is responsible for making sure that the consumer, carers or other care workers are provided with the necessary information to ensure the health and safety of everyone in the consumer's home. Such information should reflect Australian Government, state and territory legislation and include home storage of medicines and management of cytotoxic waste, including secure storage of cytotoxic waste and precautions when transporting waste containers.[14]

[14] Reference may be made to jurisdictional work cover and occupational health and safety documents.

Guiding Principle 9 – Disposal of medicines

Consumers and/or their carers should be encouraged to return any unwanted, ceased or expired medicines to their local community pharmacy for safe disposal.

To avoid accidental poisoning, medicine misuse and toxic releases into the environment, the safe disposal of unwanted and expired medicines is a priority of the Australian Government.

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.[15] This program allows consumers to return their unwanted medicines to a community pharmacy for disposal, at no cost. The medicines are destroyed in an environmentally-friendly way using high-temperature incineration. This disposal method avoids the significant environmental health hazard posed by inappropriate disposal through the sewerage system and landfill.

It is important that sharp objects such as needles are not collected under this program, due to the danger of needle stick injuries to workers. Service providers should have policies and procedures in place about the safe disposal of medicines and related equipment, such as sharp objects and cytotoxic products. If a consumer does not have access to and / or dispose of sharps in an appropriate container, the care worker or health care professional should discuss access and use of an appropriate container in accordance with the service provider's policies and procedures.

Where a Home Medicines Review is being conducted for a consumer, disposal of expired and unwanted medicines should occur with the consumer's permission.

If care workers or health care professionals identify the need for disposal of medicines, this should only occur once consent has been obtained from the consumer and/or their carer.

Following the death of a consumer, the carer or their family should be encouraged to return all of the deceased consumer's medicines to their community pharmacy for safe disposal.

[15] www.returnmed.com.au

Guiding Principle 10 – Nurse-initiated non-prescription medicine

Service providers should develop policies and procedures about the safe practices related to nurse initiation of non-prescription medicines.

Consumers and/or their carers occasionally ask nurses or care workers about minor conditions that could result in the use of commonly used non-prescription medicines.

As nurses require appropriate authorisation from service providers to administer non-prescription medicines, service providers should consider whether there is a need for the administration of commonly used non-prescription medicines by nurses within their service. Not all service providers will approve nurse-initiated non-prescription medicines. Care workers should refer such inquiries to their supervisor.

Where service providers do approve nurse-initiated non-prescription medicines, they should develop policies and procedures to assist nurses in safely initiating these medicines. These should include a list of medicines for treating minor conditions that nurses can initiate for consumers in their home. These medicines will be administered in consultation with the consumer and/or carer.

This list must comply with Australian, state and territory legislation and guidelines and be developed in consultation with doctors and pharmacists. This consultation can occur via clinical governance committees, Divisions of General Practice, or individual doctors and pharmacists. The list should provide information about each medicine, including indications for use, dosage ranges, precautions and contra-indications. The list of nurse-initiated medicines should be reviewed regularly.

When considering initiating a medicine for a consumer the nurse should consider any known allergies or previous adverse medicine events / adverse drug reactions experienced by the consumer. All adverse medicine events / adverse drug reactions should be reported in accordance with the service provider's policy *(refer to Guiding Principle 12 – Risk management in the administration and use of medicines in the community)*. The policy should also specify that any doses of nurse-initiated medicine administered to a consumer should be recorded in a document that is accessible to other health care professionals and care workers.

Service providers should distribute the list to all authorised prescribers who refer consumers to the nursing service. If the use of a nurse-initiated medicine becomes routine, the authorised prescriber should review the consumer's use of this medicine.

Guiding Principle 11 – Standing orders

The use of standing orders in the community for the administration of prescription medicines is generally discouraged. However, where standing orders are required in special circumstances, service providers should have policies and procedures in place for their use.

Standing orders provide a legal written instruction for the administration of medicines by an authorised person in situations where a prompt response using a standard procedure will improve consumer care and where a medicine is part of this procedure. A standing order is NOT a 'when required prescription' (PRN) for an individual consumer.

Where standing orders are required, for example in rural and remote areas and some immunisation programs, service providers should develop policies and procedures describing the development, authorisation, use and routine monitoring of the standing order. They must be in accordance with Australian, state and territory legislation and policy, and promote the quality use of medicines.

The decision to use a standing order is a clinical judgement and should be applied following an individual assessment in specific circumstances for an individual consumer.

All standing orders should be linked to a service provider's policies and procedures that are relevant to standing orders. All protocols for the use of standing orders should require that the order:

- is condition specific;
- is supported by or linked to appropriate clinical assessments;
- is clearly written, with the name of the medicine, dosage, route and frequency;
- identifies precisely which patients are to receive the medication;
- clearly states under which circumstances those patients are to be given the medicine, and conditions which are to preclude its administration;
- notes any special observations or care which may be required prior to, or subsequent to the administration;
- is not only signed, but the name of the authorised prescriber is legible;
- is clearly dated;
- is time limited and subject to regular review, that is, the service provider has set a period for review of this type of order where there is no legal time limit;
- is current (within that date);
- identifies who, either by name or by qualification (e.g. RNs), may administer the medicine;
- is supported by appropriate education or training for authorised persons using them.

Guiding Principle 12 – Risk management in the administration and use of medicines in the community

Health care professionals, care workers, service providers, and consumers and/or carers should work together to manage risks and incidents associated with medicine use in the community.

Consumers have the right to be protected against products, production processes and services that are hazardous to health or life.[16]

Service providers are responsible for having systems in place that meet legislative responsibilities and result in a safe system for medication management in the community. These systems are covered in the previous sections of this document.

This guiding principle provides advice on systems that can reduce or eliminate the risk of medication errors and incidents. It focuses on the processes that should be in place when a medication incident occurs or where a medication incident has been averted (referred to as a 'near miss'), and on risk management systems to minimise the likelihood of medication errors and prevent their reoccurrence.

Medication errors and other medication incidents can occur at numerous points, from the prescription or selection of a medicine to its ingestion. There are formal and informal safety and quality checks at many points along this path, for example, the prescriber using electronic prescribing information, the pharmacist dispensing the prescription, the consumer reading the Consumer Medicine Information, and the health care professional administering the medicine.

All staff are responsible for their own actions and should report any medication incidents or near misses as outlined in their organisational policy and professional codes of conduct. Responding to medication incidents and near misses should be included in a medication incident management policy that outlines the steps to be taken following a medication incident or near miss.

Risk assessment

Risk assessment should take place at regular intervals, when a change in process is implemented, and when an adverse incident or near miss occurs.

Risks associated with medicines should be managed within a continuous, quality improvement (CQI) framework.[17] A CQI program is consumer-focused, active, peer-based, and provides feedback about quality of care and services, as well as appropriate

[16] The Consumers' Health Forum of Australia's *Charter of Health Consumer Rights* ‹····www.chf.org.au/public_resources/consumer_rights.asp····›

[17] CQI is generally used to describe the process of systematically reviewing and improving existing operational systems and processes.

changes in practice resulting in maintaining and improving quality of care. Principles that underpin a CQI approach include:

- improvement oriented towards meeting the needs of consumers and communities
- decisions to improve systems and processes driven by analyses and data
- a multidisciplinary team approach to problem solving and quality improvement.

Health care professionals and care workers use CQI processes to measure and compare their performance against professional standards.

Continuous quality improvement tools

Service providers should use or develop quality improvement tools which health care professionals and care workers should be familiar with and use. Various tools are used in the CQI process. These might include improvement forms, continuous improvement plans, incident forms, cause and effect diagrams, Pareto charts and run charts. Root Cause Analysis (RCA) is another risk management tool that is used when investigating a medication incident or near miss. Additional information on RCA is available from the Australian Council for Safety and Quality in Health Care (ACSQHC).[18]

Managing incidents and near misses is outlined in the ACSQHC's national standard on open disclosure. While the standard is primarily designed for use in public and private hospitals, it can be modified for use by community health care providers. The preface notes that the standard 'aims to provide guidance on minimising the risk of recurrence of an adverse event through the use of information to generate systems improvement and promotion of a culture that focuses on health care safety'.[19]

Reporting mechanisms

A medication incident reporting document starts an investigation process and provides information on possible trends in relation to adverse incidents or near misses. This documentation system can be part of a comprehensive incident reporting system. Alternatively, a generic medication incident reporting tool can be modified for use. This document should include the consumer identifying information, the person reporting the incident, details of the actual incident, who was notified of the incident, and the outcome of the investigation, including the name of the investigator (refer to APAC's *Guiding principles to achieve continuity in medication management*).

It is recommended that service providers collect and analyse the medication incident data relating to their own organisations. Organisations should also use systems that provide a benchmark for measuring their performance, that is, an incident reporting system such as the Australian Incident Monitoring System (AIMS) or Incident Reporting to Improve Systems (IRIS).[20]

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[18] ACSQHC (Australian Council for Safety and Quality in Health Care) (2003) *Patient safety: towards sustainable improvement. Fourth report to Australian Health Ministers' Conference, 31 July 2003*. At ‹···www.safetyandquality.org···›

[19] ACSQHC (2003) *Open Disclosure Standard: A national standard for open communication in public and private hospitals, following an adverse event in healthcare, July 2003*. At ‹···www.safetyandquality.org···›

[20] ‹···www.apsf.net.au/products.html···›

The Adverse Medicine Events (AME) line, an initiative of the ACSQHC, has been established as an interactive service through which consumers can report adverse events associated with medicines or seek information about them.[21] The phone-in service is available for consumers who suspect they have experienced an adverse medicine event. Consumers can telephone 1300 134 237 between 9am and 6pm (AEST), Monday to Friday.

Consumers can report any reaction serious enough to have caused them concern, made them reluctant to continue using medication, or caused them to seek additional help, including admission to hospital. Errors with medicines can also be reported, whether or not they resulted in injury. The AME service sends reports of suspected adverse events to the Adverse Drug Reactions Advisory Committee (ADRAC).[22]

The Adverse Drug Reactions Unit of the Therapeutic Goods Administration receives reports of suspected adverse reactions to prescription medicines, vaccines, non-prescription medicines and complementary health care products. All reports are reviewed by professional staff. Those reports involving serious reactions or recently marketed drugs are reviewed by the ADRAC.

[21] www.safetyandquality.org/index.cfm?page=ACTION#consumer

[22] www.tga.gov.au/adr/index.htm

GLOSSARY

Aboriginal Health Worker and Torres Strait Islander Health Worker	A person who has completed the nationally accredited Certificate 3 in Aboriginal Health Work.
Accredited pharmacist	A registered pharmacist who has undertaken specialised training and credentialing to conduct medication reviews.
Active ingredient	The therapeutically active component in a medicine's final formulation that is responsible for its physiological or pharmacological action.
Administration	The process of giving a dose of medicine to a consumer or a consumer taking a medicine.
Adverse drug reaction	A response to a drug or medicine which is noxious and unintended, and which occurs at doses normally used in humans for the prophylaxis, diagnosis, or therapy of disease, or for the modification of physiological function (ACSQHC 2002).
Adverse *medicine* event	A particular type of adverse *medicine* event where a drug or medication is implicated as a causal factor in the adverse event. This encompasses both harm that results from the intrinsic nature of the medicine (an adverse drug reaction) as well as harm that results from medication errors or system failures associated with the manufacture, distribution or use of medicines (ACSQHC).
Buccal tablets	Tablets that are taken by allowing them to dissolve in the mouth cavity beside the cheek.
Care plan	A plan outlining the needs and support to support a consumer in the community.

Care worker	Paid workers supporting people to live the community. Examples include Aboriginal Health Workers and Torres Strait Islander Health Workers, assistants in nursing, personal care assistants, community support workers, HACC (Home and Community Care) Workers.
Carer	Carers are usually family members who provide support to children or adults who have a disability, mental illness, chronic condition or who are frail or aged. Carers can be parents, partners, brothers, sisters, friends or children.
Collaboration	In the context of medication management, collaboration is a process whereby consumers and health care providers share their expertise and take responsibility for decision making. Accomplishing collaboration requires that individuals understand and appreciate what it is they, and others, want to contribute to the 'whole'.
Community	A specific group of people, often living in a defined geographical area, who share a common culture, values and norms and who are arranged in a social structure according to relationships the community has developed over a period of time. The term "community" encompasses worksites, schools and health care sites.
Community care provider	Provider of a health and community care service in the community.
Complementary health care products	Includes vitamins, mineral, herbal, aromatherapy and homoeopathic products, also known as 'traditional' or 'alternative' medicines.

Compliance

A quantitative measure of how closely a consumer follows the intentions and recommendations of a prescribed course of treatment, regardless of their personal beliefs and capabilities. Failure to comply generally has a negative connotation despite the fact that deliberate non-compliance might be a positive expression of the consumer taking control of his/her own actions.

Concordance

Concordance is an agreement reached between a patient and a health care professional that fully respects the beliefs and wishes of the patient in determining whether, when and how medicines are to be taken. This includes consideration of timing, dosage and consumer memory and dexterity.

Consultation

Consultation occurs when people seek information or advice and take into consideration the feelings and interests of all of the members of the medication management team.

Consumers

People who use or are potential users of health services, including their family and carers (DH&AC 1998). Might include patients, clients and carers. (Lynne 2003, p9)

Consumer Medicine Information (CMI)

Brand-specific leaflets produced by a pharmaceutical company in accordance with the Therapeutic Goods Regulations to inform consumers about prescription and pharmacist-only medicines. Available from a variety of sources, for example, enclosed within the medication package, supplied by a pharmacist as a leaflet or computer printout, provided by a doctor, nurse or hospital, or available from the pharmaceutical manufacturer.

Cytotoxic

Toxic to cells, cell-toxic, cell killing. Any agent or process that kills cells. Chemotherapy and radiotherapy are forms of cytotoxic therapy. (Webster's Medical Dictionary)

Dispensing	The (1) assessment of the medicine prescribed in the context of the patient's other medication, medical history and the results of relevant clinical investigations available to the pharmacist; (2) selection and supply of the correct medicines; (3) appropriate labelling and recording; and (4) counselling of the patient on the medicine(s).
Doctor	A registered medical practitioner, such as a general practitioner, medical specialist, consultant medical practitioner or hospital medical officer.
Domiciliary Medication Management Review	See Home Medicines Review.
Dose Administration Aids (DAA)	A device or packaging system where doses of one or more solid oral dosage forms of medicines can be organised according to the time of administration.
Enrolled nurse	A person who is enrolled and registered to practise by an Australian nurse regulatory authority. In Victoria this refers to a registered nurse (Division 2).
Formulation	The form in which a medicine is presented e.g. tablet, capsule, lozenge, syrup, mixture.
Generic medicine	A generic medicine is defined in the Therapeutic Goods Regulations as a medicine that, in comparison to a registered medicine: (a) has the same quantitative composition of therapeutically active substances, being substances of similar quality to those used in the registered medicine; (b) has the same pharmaceutical form; (c) is bioequivalent; (d) has the same safety and efficacy properties.
Health care professionals	Persons who have professional qualifications in all health care settings, e.g. doctors, pharmacists, nurses, occupational therapists, dieticians.

Home Medicines Review (HMR)

A service to consumers living at home in the community. The goal is to maximise an individual consumer's benefit from their medication regimen. The reviews involve a team approach including the general practitioner, the consumer's preferred community pharmacy and an accredited pharmacist, with the consumer as the focus. A HMR might also involve other relevant members of the health care team, such as nurses in community practice or carers. The review allows the patient the opportunity to have a pharmacist, in collaboration with their general practitioner, comprehensively review their medication regimen in a home visit and to be central in the development and implementation of an agreed medication management plan.

Hygroscopic

Denoting a substance capable of readily absorbing and retaining moisture. (Stedman's Medical Dictionary)

Medication

A drug or medicine. (Webster's Medical Dictionary)

Medication chart

Used by medical practitioners to record medication and treatment orders, and by nursing staff to record and monitor the administration of such medications and treatment. Medication charts need to satisfy state or territory regulations and other requirements of the Poisons Acts in each jurisdiction.

Medication error

An error can be defined as failure in the (drug) treatment process that leads to, or has the potential to lead to, harm to the (consumer) and includes an act of omission or commission. Errors rarely occur as the result of the actions of a single individual. They are usually the result of a series of system failures. (ACSQHC 2002)

Medication incident

An incident associated with medication. (ACSQHC 2002)

Medication Management Plan

Written medication management plan as part of a Home Medicines Review (HMR).

The medication management plan should:

- take account of the needs outlined in the pharmacist HMR report
- map the proposed management and expected outcomes of the consumer's medication regimen
- specify who is responsible for any further actions and future follow up and/or monitoring, the timeframe in which these should be completed, and the expected outcomes for the consumer
- identify any other relevant members of the health care team whose involvement is necessary to the implementation of the plan, including any role expected of the consumer's carer.

Medication list

A list of all medicines currently used by a consumer, including prescription, non-prescription (over-the-counter), and complementary.

Medication review

A structured, critical examination of a consumer's medicines with the objective of reaching an agreement with the consumer about treatment, optimising the impact of medicines, minimising the number of medication-related problems and reducing waste.

Medicine

A substance given with the intention of preventing, diagnosing, curing, controlling or alleviating disease or otherwise enhancing the physical or mental welfare of people. Includes prescription and non-prescription medicines, including complementary health care products, irrespective of the administered route.

Non-prescription medicine

Medicine available without prescription. Examples are cough mixtures, simple analgesics and antacids. Some can be sold only by pharmacists or sold in a pharmacy, others can be sold through non-pharmacy outlets.

Nurse

See enrolled nurse / registered nurse.

Nurse practitioner

A registered nurse educated to function autonomously and collaboratively in an advanced and extended clinical role. The nurse practitioner role includes assessment and management of clients using nursing knowledge and skills and may include, but is no limited to, the direct referral of patients to other healthcare professionals, prescribing medications, and ordering diagnostic investigations. The nurse practitioner role is grounded in the nursing profession's values, knowledge, theories and practice and provides innovative and flexible healthcare delivery that complements other health care providers. The scope of practice of the nurse practitioner is determined by the context in which the nurse practitioner is authorised to practice.

Partnership

Refers to a relationship where there is a sharing of expertise and responsibility among doctors, nurses, pharmacists, care workers and consumers for a person's wellbeing. It requires consultation between individuals and collaborative decision-making.

Performance indicators

Provide a set of criteria for monitoring the implementation, effect and outcomes of the medication management continuum.

Pharmacist

A registered pharmacist practising in a variety of settings including community, hospital, facilities, etc.

Pharmacodynamics

The study of uptake, movement, binding, and interactions of pharmacologically active molecules at their tissue sites of actions. (Stedman's Medical Dictionary)

Pharmacokinetics	The study of the movement of drugs within biologic systems, as affected by absorption, distribution, metabolism and excretion; particularly the rates of such movements. (Stedman's Medical Dictionary)
Prescriber	A health care professional who is authorised by legislation to issue a prescription for the supply of medicines. Usually refers to a medical practitioner (doctor) but might include a nurse practitioner, dentist or optometrist.
Registered nurse	A person who is registered and licensed to practice by an Australian nurse regulatory authority. In Victoria this refers to a registered nurse (Division 1).
Root Cause Analysis	A systematic process whereby the factors that contributed to an incident are identified.
Service provider	Provider of a health and/or community care service in a community setting.
Standard of care	The law requires professionals to take all reasonable care in carrying out their work and to ensure that appropriate standards of care are met. The appropriate standard of care is assessed on what action a reasonable person would take in a particular situation.
Sublingual tablets	Tablets that are taken by allowing them to dissolve under the tongue.
Substitute decision maker	Someone a person chooses to make personal or lifestyle decisions, including health care decisions, when they are a no longer capable of doing so. The appointing person usually chooses the types of decisions or functions they want the substitute decision maker to make. This process differs in detail across the different State and Territory jurisdictions.

FURTHER READING AND RESOURCES

The documents referenced within these Guiding Principles are provided as references only and have not been endorsed by APAC, with the exception of those documents issued by APAC. Please note that any questions about a document should be directed to the relevant organisation or author.

Australian Nursing Federation (ANF) (2002) *Nursing guidelines for the management of medicines in an aged care setting*. Copies are available for purchase from the ANF, at ‹····www.anf.org.au····› or telephone (03) 9639 5211

Australian Standard. *Introducing the Tools for Continuous Quality Improvement*. Available for purchase from ‹····www.standards.com.au····›

Couzos S and Murray R (2003) *Aboriginal primary health care: an evidence-based approach, 2nd Edition*, Oxford Press, Melbourne

Department of Health, Western Australia (2004) *Home and Community Care (HACC) program: medication project update August 2004*, available at ‹····www.health.wa.gov.au/hacc/HACC-Medication.html····›

Fugh-Berman A (2000) Herb-drug interactions, *Lancet* 355: 134–138

Guidelines and standard operating procedures for altering medication dose forms. Extract from the final report: *Exploring alteration of medication dose forms in residential aged care facilities*, University of South Australia, March 2001. Funded by the Department of Health and Ageing under the Quality Use of Medicines Evaluation Program. Project abstract available at ‹····www.qummap.health.gov.au/plist.asp?project=903····›

McCabe B, Frankel EH and Wolfe JJ (2003) *Handbook of food-drug interactions*, CRC Press, Boca Raton, Fla.

Pharmaceutical Society of Australia (2004) *Modification of oral formulations. Australian pharmaceutical formulary and handbook, 19th Edition (APF19)*. Available from PSA National Product Sales, telephone (02) 6283 4783, or at ‹····www.psa.org.au/media?APF19ORDERFORM.pdf····›

Pharmaceutical Society of Australia (2000) *Pharmacy practice standards. Dose administration aids guidelines*. Available at ‹····www.psa.org.au/media/ACF9EF4.pdf····›

Stockley IH (2002,) *Stockley's drug interactions: a source book of interactions, their mechanisms, clinical importance and management*, Pharmaceutical Press (Great Britain) London: Pharmaceutical Press.

Sykes JB (Ed.) (1976). The concise Oxford Dictionary (sixth edition) Oxford University Press, Oxford.

The Royal Australian College of General Practitioners. *Enhanced Primary Care*. ‹···www.enhancedprimarycare.org.au/background.asp···›

Therapeutic Goods Administration, *Medicines coming into Australia—importing medicines for your own use*. ‹···www.tga.gov.au/import/index.htm#personal···›

Vincent M (2004) *Do not Crush!!*, Available for purchase from Wollongong Hospital Pharmacy, Illawarra Health, telephone (02) 4222 5349

Williamson EM (2003) *Drug Interactions Between Herbal and Prescription Medicines*. Drug Safety, 2003, vol. 26, no. 15, pp. 1075-1092(18), ‹···www.ingentaconnect.com/content/adis/dsf/2003/00000026/00000015/art00002···›

STATE AND TERRITORY CONTACTS FOR REGULATORY AND POLICY ADVICE

NEW SOUTH WALES

Duty Pharmaceutical Adviser
Pharmaceutical Services Branch
Department of Health
PO Box 103
GLADESVILLE NSW 1675
Telephone: (02) 9879 3214
Fax: (02) 9859 5165
Website: www.health.nsw.gov.au/public-health/psb

QUEENSLAND

Medicine policy issues
Director
Medicines and Pharmacy Services Unit
Queensland Health Building
GPO Box 48
BRISBANE Qld 4001
Telephone: (07) 3234 1167
Fax: (07) 3234 0773

Legislation issues
Principal Advisor Drugs, Poisons and Therapeutic Goods
Environmental Health Unit
Queensland Health Building
GPO Box 48
BRISBANE Qld 4001
Telephone: (07) 3234 0960
Fax: (07) 3234 1480
Website: www.health.qld.gov.au

Health information and documentation of relevance to consumers, industry and health care professionals in Queensland:

Website: www.health.qld.gov.au/healthyliving

VICTORIA

Duty Officer
Drugs and Poisons Unit
Department of Human Services
GPO Box 1670N
MELBOURNE Vic 3001
Telephone: 1300 364 545
Fax: 1300 360 830
Website: www.health.vic.gov.au

SOUTH AUSTRALIA

Drug Policies and Programs Branch
Department of Health
PO Box 6
RUNDLE MALL SA 5000
Telephone: (08) 8274 3432
Fax: (08) 8274 3440
Website: www.health.sa.gov.au

WESTERN AUSTRALIA

Pharmaceutical Services
Department of Health
PO Box 8172
PERTH BC WA 6849
Telephone: (08) 9388 4980
Fax: (08) 9388 4988
Website: www.health.wa.gov.au

TASMANIA

Pharmaceutical Services
Department of Health and Human Services
GPO Box 125B
HOBART Tas 7001
Telephone: (03) 6233 2064
Fax: (03) 6233 3904
Website: www.dhhs.tas.gov.au/publichealth/pharmaceuticals

AUSTRALIAN CAPITAL TERRITORY

Pharmaceutical Services
ACT Health
Locked Bag 5
WESTON CREEK ACT 2611
Telephone: (02) 6205 0996, (02) 6205 0998
Fax: (02) 6205 0997
Website: www.health.act.gov.au

NORTHERN TERRITORY

Poisons Control
Department of Health and Community Services
PO Box 40596
CASUARINA NT 0811
Telephone: (08) 8922 7341
Fax: (08) 8922 7200
Website: www.health.nt.gov.au

BIBLIOGRAPHY

Australian Council for Safety and Quality in Health Care (ACSQHC) (2002) *2nd National Report on Patient Safety. Improving Medication Safety*

Australian Pharmaceutical Advisory Council (APAC) (2002) *Guidelines for medication management in residential aged care facilities. 3rd Edition*. Canberra. Commonwealth of Australia

Beattie J (2003) *Addressing inappropriate polypharmacy in residential aged care: An action research study*. Unpublished doctoral thesis, La Trobe University, Bundoora, Victoria, Australia

Beattie J, Cheek J and Gibson T (1996) *The politics of collaboration as viewed through the lens of a collaborative nursing research project*. Journal of Advanced Nursing, 24, 682–687

Commonwealth Department of Health and Aged Care (CDHAC) (2001) *The Documentation and Accountability Manual*. Canberra. Commonwealth Department of Health and Aged Care

Commonwealth of Australia (2003) *Manual of Indicators to measure the Quality Use of Medicines component of Australia's National Medicines Policy. 2nd Edition*. Canberra. Commonwealth Department of Health and Ageing

Department of Health and Aged Care (DH&AC) (1998) *Consumer focus collaboration: strategic plan*. Canberra. Department of Health and Aged Care

Gardner G, Carryer J, Dunn SV and Gardner A (2004). *Report to Australian Nursing Council, Nurse Practitioner Standards Project*. Canberra. Australian Nursing Council

Lynne T (Ed.) (2003) *Queensland Health medication management manual*. Brisbane. Queensland Health

PHARM Consumer Sub-Committee (2000) *Using Consumer Medicine Information (CMI)*. Canberra: Commonwealth Department of Health and Aged Care

Sykes JB (Ed.) (1976) *The concise Oxford dictionary (Sixth ed.)*. Oxford: Oxford University Press

Wallace M (2001) *Healthcare and the law 3rd edition*. Sydney: Law Books Co