



Guidelines for medication management in residential aged care facilities

Australian Pharmaceutical
Advisory Council

November 2002

3rd Edition



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Further copies of this publication can be obtained from the APAC Secretariat.

Postal address: MDP 38
GPO Box 9848
Canberra ACT 2601

Phone: (02) 6289 7753
Fax: (02) 6289 7746
email: apac@health.gov.au

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1 Introduction

It is well recognised that the older age groups are the largest users of medications. While making a significant contribution to the treatment and prevention of disease, increasing life expectancy and improving the quality of life, medicines do have the potential to cause harm. It has been shown that inappropriate or incorrect use of medications can have a negative impact on health outcomes. Proper medication management, or quality use of medicines, includes a consideration of the appropriateness of the medication prescribed, the correct dispensing and administration, and the provision of appropriate information. The quality use of medicines can have a positive impact on health outcomes and can contribute directly to an improvement in quality of life. Further, cost savings may result from an improved use of medicines.

Barriers to the quality use of medicines in residential aged care facilities include:

- ***Polypharmacy***—A significant proportion of elderly people suffer from more than one concurrent illness. Polypharmacy results from multiple diagnoses and leads to complex medication regimens. Because of the chronic nature of some of the conditions, treatment may be life long. The use of multiple medications increases the likelihood of adverse drug reactions or interactions.
- ***Excessive use of tranquillisers and psychotropic agents***—The prolonged use of medications such as benzodiazepines has been associated with tolerance and dependence. Further, when used alone or in conjunction with certain other medications, these agents cause an increase in the risk of falls and the subsequent sequelae. There is also evidence that in certain circumstances the use of psychotropic agents for behavioural control is inappropriate.
- ***Lack of medication review***—Residents of aged care facilities may be kept on medication long term without an appropriate review, or be prescribed new medications without reviewing the need for continuing existing medications.
- ***Administration of medication by untrained or unqualified staff***—This not only leads to the potential for error, but untrained staff may be unaware of potential side-effects or adverse reactions that may require medical intervention. While registered nurses are available to administer medication in some facilities, it is recognised that this is not a requirement in all settings. However, in cases where residents are unable to self-administer, registered nurses, in consultation with medical practitioners and pharmacists, are the most appropriate health professionals to administer medications.
- ***Lack of awareness of specific issues relating to medication use in the aged***—Age-related changes in the body can affect the pharmacokinetic and pharmacodynamic properties of some drugs necessitating an adjustment to the dosage or in some cases avoidance of some drugs. The application of this knowledge in devising an appropriate medication regimen is essential in order to ensure that potential adverse outcomes are prevented.

There is much literature to support the view that an improvement in the use of medication by the elderly, particularly by residents of aged care facilities, is essential and cost-effective. The benefits of an improved outcome through quality use of medicines in residential aged care facilities are so significant that the cost benefit has been clearly identified. Appropriate resources need to be made available to achieve these benefits .

It is not intended within the scope of this document to provide a comprehensive discussion of the available literature. There are, however, numerous reports which have recommended plans of action, many of which have been incorporated into these Guidelines, and these are included in the bibliography.

The Australian Pharmaceutical Advisory Council (APAC) is a representative forum bringing together key stakeholders from the medical, nursing and pharmacy professions, as well as industry, consumer and Government sectors, to advise the Minister for Health on pharmaceutical policy issues.

APAC has for some time been concerned about the problem of inappropriate medication management in residential aged care facilities, in particular an apparent lack of an integrated response to the recommendations contained in the reports referred to earlier and the need to place the recent Government initiatives into the context of the total health management plan for residents. Because of the multi-disciplinary representation on APAC, it felt it was the appropriate body to establish a working party to develop the *Guidelines for medication management in residential aged care facilities*.

Note to the third edition

The first two editions of APAC's *Integrated best practice model for medication management in residential aged care facilities* have raised awareness of quality use of medicines issues in residential facilities and how a multi-disciplinary approach can improve health outcomes.

The Commonwealth Government's quality assurance and accreditation framework for residential facilities has increased demand for an up-to-date resource in the area of medication management in these facilities.

The previous editions have now been reviewed to meet this need. This revised edition has been renamed as the ***Guidelines for medication management in residential aged care facilities***. It includes new recommendations relating to the use of medications.

Appendices have been added containing resources to assist facilities in implementing the recommendations including the *Nursing guidelines for the management of medicines in an aged care setting* as developed by the Australian Nursing Federation, the Royal College of Nursing Australia and Geriaction. This document was current at the time of publication and has been reproduced in this document with permission.

Appendices may be amended in the future and care must be taken to ensure that the latest versions are examined. Please refer to page 17 for further information on this issue.

At the time of publication, the profession specific guidelines produced by the Royal Australian College of General Practitioners (RACGP) were being reviewed, and therefore have not been included in the appendices. Further information may be obtained from the RACGP's website at www.racgp.org.au or by contacting the RACGP on (03) 9214 1414.

Dr John Aloizos
Chair
Australian Pharmaceutical Advisory Council
November 2002

2 Preamble

2.1 APAC Working Party on Medication Management in Residential Aged Care Facilities

The APAC Working Party on Medication Management in Residential Aged Care facilities, which was active in 2001, comprised representatives from the medical, nursing and pharmacy professions, consumers, the aged care industry and the Department of Health and Ageing.

The working party operated under the following terms of reference.

Terms of Reference for the APAC Working Party on Medication Management in Residential Aged Care Facilities

- 1. To identify and examine the currently existing data** on quality use of medicines in residential aged care facilities.
- 2. To examine those factors** which impact on the quality use of medicines and therefore on quality outcomes and the quality of life for residents of residential aged care facilities.
- 3. To consult** as appropriate.
- 4. To identify and examine developments in professional practice** by relevant organisations and health professional groups that relate to quality use of medicines and quality medication outcomes in nursing homes and hostels.
- 5. To develop recommendations to APAC** for improving quality use of medicines and quality medication outcomes for residents of residential aged care facilities.

In developing these Guidelines the working party was aware of a number of documents prepared by professional and consumer groups and sectors of the industry and Government and considered these in the context of the accreditation standards for high and low care residential aged care facilities (nursing homes and hostels). It is essential that the implementation of the principles encompassed within the model be acceptable to all the stakeholders involved and be implemented as a cooperative venture between all the stakeholders. The role of Medication Advisory Committees is central to achieving the outcomes of the Model, and their integration within the quality care framework of the institution is essential.

2.2 Purpose and scope of the Guidelines

The working party considered the ongoing changing nature of residential aged care facilities. Due to a trend to early hospital discharge, some facilities are now providing an amount of post-acute care that was formerly provided by hospitals. In addition, current policy and a shortage of residential care places leads to frail aged people remaining in their homes for longer than in the past. This has led, in many cases, to nursing homes moving towards becoming sub-acute care facilities, and hostels performing a role that was previously undertaken by nursing homes.

The provision of care in residential aged care facilities is supported by the Accreditation Standards, which relate to quality of care and quality of life for residents. The residential aged care program is administered under the *Aged Care Act 1997* and governs all aspects of the provision of residential care. To ensure that residents receive quality care the Federal Government has instituted a quality framework based on accreditation and certification with a focus on continuous improvement. The Aged Care Standards and Accreditation Agency is an independent body that manages the assessment and accreditation of facilities. The Accreditation Standards include outcomes related to medication and they also provide a structured approach to the management of quality in the assessment of facilities. Given the complexities surrounding medication management and as there is a multi-disciplinary involvement in achieving the optimal use of medicines, there was not only a need for profession-specific guidelines but also a need for an over-arching, integrated model in order to achieve defined outcomes and to avoid confusion, overlap or possible areas of inconsistency.

Hence the Guidelines take into account existing professional standards and relevant legislation, and makes recommendations with regard to policies and practices in individual facilities to ensure that all areas of medication management and decision making function together as a coordinated whole using a teamwork approach.

It has not been the intention of APAC to prescribe general professional standards, nor processes relating to those outcome standards concerned with medication management in residential aged care facilities. Rather, APAC's aim is to ensure that implementation of individual professional standards is encouraged in a multidisciplinary manner which will facilitate quality outcomes for residents. This will require a closer interaction between all stakeholders and the Guidelines recommend ways in which this will be achieved.

The Appendices contain resource material which facilities may find useful in assisting the implementation of the recommendations contained in these Guidelines. The Appendices prepared by professional associations may be changed from time to time and while they are current at the time of printing of this document, the latest version should always be consulted. The Appendices also contain the profession-specific best practice medication principles prepared and currently recognised by the medical, pharmacy and nursing professions. These principles taken in conjunction with the recommendations in the Guidelines facilitate greater interaction between the three health professions.

Distribution of the Guidelines in concert with the recommendations will emphasise to all professionals, their responsibilities in improving the quality use of medicines in residential aged care facilities. It is anticipated that protocols relating to specific activities will be developed by the professions, which can then be used as the basis for practice. This will further assist in optimising the quality use of medicines. It should be noted that the Guidelines were developed specifically for residential aged care facilities. Nevertheless, it is felt that the Guidelines are flexible enough to enable use by other residential care sectors since many of the principles are fundamental to all long-term residential care services.

2.3 Residents' and proprietors' rights and responsibilities

An integral part of best practice in medication management in residential aged care facilities is observing residents' rights. These rights and also resident responsibilities are outlined in the Charter of Residents' Rights and Responsibilities in Aged Care Services, in Schedule 1 of the Aged Care Principles made under the *Aged Care Act 1997*.

In relation to pharmaceuticals, residents have the right to give informed consent for any medical intervention, including medication. They also have the right to refuse a proposed medication and to be properly counselled on the potential outcomes of doing so. If a resident is not in a condition to give informed consent, this should be sought from a resident's representative who may be a resident's relative or carer.

New privacy law regulating the way private sector organisations handle personal information took effect on 21 December 2001. The provisions of the new law apply to all health service providers in the private sector, regardless of size. It gives individuals new privacy rights in relation to private information held about them by organisations. All persons involved in providing health services in residential aged care facilities should be aware of their responsibilities in this matter.

The issue of informed consent is described fully in the National Health and Medical Research Council report *General Guidelines for Medical Practitioners on Providing Information to Patients* (1993).

Residents should be made aware that they have the right to obtain pharmacy services from the pharmacy of their choice.

Residents also have the right to full and detailed information about the medications they are prescribed. This information is available through Consumer Medicine Information (CMI). CMI is accurate, up-to-date information in simple language for patients about the medicines they use. In residential aged care facilities, CMI should be provided to residents who are administering their own medications as an aid to counselling about their medicines. Where residents are not administering their own medications, CMI should be available to either residents or their carers. A folio of CMI for medications currently in use at the facility is considered to be a useful aid for staff and visiting medical practitioners.

Facilities must ensure that systems and processes are in place to minimise the risk of medication misadventure and contribute to the quality use of medications by all residents whether they are administering their own medications or not. These systems and processes must be part of the quality care framework existing in the facility.

The residential aged care facility is responsible for ensuring that there is provision for all medications to be securely stored in a manner which meets legislative and manufacturers' requirements, and protects the residents' safety and privacy and staff safety.

3 RECOMMENDATIONS

Guidelines for Medication Management in Residential Aged Care Facilities

Recommendation 1

Medication Advisory Committees

Each residential aged care facility should establish, or have direct access to and utilise the services of, a Medication Advisory Committee to facilitate the quality use of medicines.

The Medication Advisory Committee (MAC) is an integral component of the continual quality improvement and safety framework for the quality use of medicines. Residential aged care facilities should have, or have access to and representation on, a MAC. The MAC should be part of a quality care framework that exists in the facility. It is acknowledged particularly in rural and remote areas that several facilities may establish a single regional MAC. Under these circumstances, appropriate communication, for example, telephone and/or video conferencing between facilities, should be available, to enable effective participation.

The MAC should include, as a minimum and where applicable, a representative(s) from each of the following groups:

- management;
- general practitioners;
- nurses;
- supplying pharmacist(s) and if different, the pharmacist conducting medication reviews; and
- resident advocate(s).

The health professions' representatives should be directly involved in the care of residents in the facility. In the case of GP representation the aged care facilities are encouraged to collaborate with their local Division of General Practice regarding the selection and support of GP representatives. If the need or opportunity arises, the MAC should also seek the advice of other health professionals (for example, geriatricians including psychogeriatricians or physiotherapists). Networking between MACs could be facilitated through the Divisions of General Practice or Directors of Nursing.

The MAC must ensure that the rights of residents relating to medication use, including those of privacy, are taken into account in any of its deliberations.

The MAC should have the ability to co-opt expertise or advice as required, which would assist in facilitating and encouraging a quality improvement program.

A reporting mechanism must enable agreed actions of the MAC to be discussed by the Board and/or management of the facility. The Board and/or Management should respond to the MAC in a timely fashion in respect of recommendations of the MAC, consistent with the requirements of a quality care framework.

The MAC should operate under terms of reference approved by the Board of the facility.

Appendix A: Medication Advisory Committees in residential aged care facilities (example of ‘Terms of Reference’ for a MAC included).

Appendix B: Medication Advisory Committee — example of a meeting agenda.

Appendix C: Example of a medication management/administration policy.

Appendix D: Pharmaceutical Society of Australia’s guidelines for the provision of pharmacy services to residential aged care facilities.

Recommendation 2

Medication charts

- (a) *All residents in residential aged care facilities, including respite residents, should have a chart for recording administered medicines (the medication chart). Residents who self-administer should have a list of their medications, which must be updated by the medical practitioner, pharmacist, resident or registered nurse whenever there is a change to the medication regimen. This could be in the form of a medication record card.*
- (b) *The medication chart should include sections for:*
 - *the complete name and date of birth of the resident. Residents with similar or the same names must have alerts written on their charts;*
 - *certification of administration of the medicine;*
 - *any allergies the resident has and previous recent adverse drug reactions;*
 - *indicating that a comprehensive review of the medication has occurred by both prescriber and pharmacist;*
 - *PRN (when required) medications, once only doses and emergency medications;*
 - *nurse-initiated medication;*
 - *resident initiated medications if appropriate, including complementary medicines;*
 - *indication of whether alternative methods of administering medications are appropriate, eg the need for crushing of medications;*
 - *the date of the next administration of infrequently administered medicines, even if the administration will not occur within the time period covered by the medication chart; and*
 - *any other issues necessary to comply with relevant Commonwealth and State/Territory legislation.*

(c) *The chart should be:*

- *accompanied by a recent photo of the resident, with the name and date of birth of the resident clearly printed on the back, for identification purposes; and*
- *rewritten by the prescriber at a time determined by the facility and the MAC.*

Electronic systems must also comply with the principles of this recommendation.

Any discrepancies or incidents related to medication charts should be written on an incident report and forwarded to the appropriately delegated person of the facility.

In order for the MAC to undertake the activities described in Appendix A, it is essential that adequate documentation relating to medications and their use be available. An up-to-date accurate record of the medication history of each resident is essential including those residents who are undertaking self-administration of their medication.

Although residents who are administering their own medication have a right to decide if their medication record will be made available to the facility, some form of record within the facility is strongly recommended, as the facility needs to be able to access data on the medication being taken by all residents. The use of medication charts in residential aged care facilities for residents who are self-administering will not always be applicable as some of these residents would visit their doctor at his/her surgery and collect their own medications. A medication record card would be a viable alternative provided that it is kept up-to-date. Staff of residential care facilities and the resident's general practitioner should take steps to counsel residents who are utilising this option about their responsibility in keeping an accurate record of their medications.

Recommendation 3

Medication review

Residents' medications should be reviewed by members of the health professional team. These reviews should be in accordance with the relevant professional guidelines. Confirmation that a review has occurred should be made on the medication chart and resident's record.

The regular review of medication is an essential component of good quality care, and must involve consultation with the resident where possible. In addition a comprehensive medication management review should be undertaken in accordance with the relevant professional guidelines. These reviews should involve collaboration between the medical practitioner, pharmacist, nursing staff, other health professionals, and the resident and/or carer. When required, the review team should include other health professionals such as speech pathologists and physiotherapists to provide expertise in specific situations.

The profession specific guidelines for pharmacists and nurses are at Appendices D, K and L.

Recommendation 4

Administration of medications

For residents who are not self-administering, medication administration should be undertaken by a registered nurse or authorised enrolled nurse. If a registered nurse or an authorised enrolled nurse is not available, it is recommended that the facility provide medications in dose administration aids. In all cases, medication should only be administered by qualified or suitably trained staff.*

The MAC should ensure the development and implementation of standard procedures regarding the administration of medications. The MAC should also make recommendations regarding ongoing training and support for staff participating in medication administration. Training programs for such purposes may be internal or external, and should include the identification and resolution of issues for an individual resident which promote optimal outcomes through the quality use of medicines.

Recommendation 5

Standing Orders

Standing Orders for the administration of a new medication in response to a resident's changed clinical state should not be used in residential aged care facilities.

In acknowledgment that there will be cases where an emergency supply of medicines will be necessary, in such cases such supply should be with the agreement of the MAC and in accordance with relevant State/Territory and Commonwealth legislation (refer to Recommendation 14).

Recommendation 6

Nurse-initiated medication

Nurse-initiated medication in residential aged care facilities should be:

- *from a defined list of drugs selected by and in accordance with protocols for each drug developed by the MAC. This list should be disseminated to attending GPs. Such protocols should include indication(s) for the drug dosage and contraindications;*
- *regularly reviewed for an individual resident; and*
- *in line with relevant State/Territory and Commonwealth legislation and guidelines.*

Nurse-initiated medication is the administration of non-prescription medication by a registered nurse when the need arises and with the prior agreement of the attending medical practitioner. The MAC should develop a list of nurse-initiated medications together with the recommended doses for use.

All nurse-initiated medication administered must be written on the medication chart. If the use of a nurse-initiated medication becomes routine the resident should be reviewed by the medical practitioner and if considered appropriate, a resident-specific supply arranged.

* In Victoria, registered and enrolled nurses are classified as registered nurses Division 1 and 2 respectively.

Recommendation 7

Self-administration

A resident may choose to administer their own medication where it has been formally assessed that medication administration can safely be carried out by that individual.

Assessment for self-administration

The MAC should develop a policy regarding the procedures to be used by health professionals for assessing competency of a resident to undertake self-administration of medication. The policy should indicate who will perform the assessments. Before a resident can begin to self-administer, an assessment needs to be carried out to evaluate his or her competency to do so. An example of an assessment form for this purpose is included at Appendix E. Following assessment and the decision to self-administer, regular monitoring for compliance with drug regimens, including the appropriate use of drug delivery systems should be undertaken as part of the care plan evaluation process. Reassessment should be undertaken on an as required basis if, for example, the doctor, facility staff or family of the resident notices a decrease in the resident's competency to self-administer. Dose Administration Aids should also be considered for use by self-administering residents.

Medication charts should indicate if a resident is self-administering. An up-to-date record of all medications the resident is taking should be available. This may be in the form of a medication record card.

Where residents have been formally assessed as being able to self-administer their medication, they should be encouraged to do so. This responsibility can be an important component in maintaining a level of independence in the resident. Residents may wish to self-administer some of their medications, for example, by self-administering oral medications, while injections are administered by an authorised health professional.

Where residents have been deemed to be competent to self-administer, they should then be informed in writing of their associated rights and responsibilities, including the requirement to:

- inform facility staff of any complementary or other self selected medications;
- keep the medication(s) secure and safe;
- inform facility staff of any difficulties that they may encounter while self-administering; and
- ensure that they have a sufficient supply of self-administered medications, by informing facility staff when their supply level is low.

Residents agreeing to self-administer may demonstrate consent by signing an appropriate form.

If the resident is assessed not to be competent to self-administer but wishes to do so, they may appeal via a complaints resolution mechanism available both within and external to the facility.

Recommendation 8

Alteration of oral formulations

Each facility should have procedures for the alteration of dosage forms necessary to facilitate administration to certain residents. The MAC should endorse such procedures.

The alteration of solid dosage forms by, for example, the crushing of tablets or opening of capsules, can make it easier to administer a medication to a resident with swallowing difficulties. Care needs to be taken to ensure that the process employed does not result in reduced effectiveness, a greater risk of toxicity, or an unacceptable presentation to residents in terms of taste or texture. Where medications are altered for administration, this should be recorded on the medication chart.

A list of medications, which must not be crushed or chewed, should be provided in a readily accessible location, (for example, attached to the medicine trolley or medication chart folder) for use by the person administering the resident's medications. This list should be updated regularly by the MAC and whenever a new product which requires specific instructions becomes available. The supplying pharmacy should provide relevant information on new products to the MAC in a timely manner. Continuous quality improvement processes should review whether such practices are effective.

Occupational health and safety issues regarding the administration of certain altered dose medications (eg, cytotoxic drugs) should be considered and included in policies and procedures of the facility.

An example of Guidelines and Standard Operating Procedures for Altering Medication Dose Forms is at Appendix F.

Recommendation 9

Dose Administration Aids

It is desirable that dispensed medication be retained in the original or dispensed packaging unless a Dose Administration Aid will, in the opinion of the health care professional, overcome a significant compliance problem which a resident or carer may face. That is, a DAA should only be used for the purpose of overcoming potential problems with compliance or confusion with medication.

Dose Administration Aids (DAAs) may consist of either 'blister' packaging systems or 'compartmentalised boxes'. Where blister packs are used as a medication administration aid, the pack must be packed and fully labelled by a pharmacist and the medications administered directly from the blister pack to the resident. In exceptional circumstances, and in accordance with relevant State and Territory legislation, if a pharmacist is not available to provide the service, then the service may be performed by a medical practitioner, a registered nurse or an authorised Aboriginal Health Worker.

If the medication order is altered by the prescriber, the blister pack(s) must be returned to the pharmacist for repackaging.

Where an item is packaged as an individual unit, the DAA must have a mechanism to indicate when the medication has been ceased or withheld.

Medications administered on an ‘as required’ basis should not be packaged in combination with other medications.

Residents who are self-administering using DAAs should be assessed to determine that they are able to safely self-administer medication (see Recommendation 7).

The DAA should have clearly visible the details of the person providing the medication(s) supplied in the DAA. The DAA must also be labelled with the name, strength and form of all medicines supplied in the DAA along with directions for the use of each medication. The date of filling should appear on the DAA. In addition any specific instructions relating to the use of the medicine, including cautionary advisory labels and information regarding alteration of the dosage form where appropriate must be included (see Recommendation 8).

The labelling should enable identification of individual medications. This is achieved by labelling with both brand and generic medicine names, and by reference to the colour, shape and size, as well as manufacturer’s marks that have been made on each product. Tablets and capsules, which cannot be identified and readily distinguished from each other, should not be placed in a DAA with other medication.

Cytotoxics should not be packed with other agents in DAAs. Labelling should:

- identify that the product is a cytotoxic agent;
- include appropriate handling procedures; and
- include directions for appropriate disposal methods as with for all other packaging for cytotoxic agents.

Some medication may not be suitable to be packed in a DAA due to instability when exposed to heat, air or moisture.

Medication should not be left in a sealed DAA for longer than 6 weeks unless the stability of individual medications indicates a lesser time.

No medication is to be packaged into a DAA unless it is listed on the resident’s current medication chart.

In those residential aged care facilities where state regulations require separate storage and accountability of the administration of Schedule 8 medicines, these medicines should not be packed in multi dose packs.

Where medication is ordered for a defined short course treatment, or in a complicated regimen, or where there is a need for specific requirements regarding timing of administration in regard to meals and other medications, such medicines must be in individual dose packs. Indications must be given on this packaging as to whether other medicines, which may be contained in other DAA packs, are to be administered to the resident.

All or part of a resident’s medication may be provided in a DAA. Nothing should be packed in a DAA that is not included on the formal record chart of that resident.

When filling is undertaken under the supervision of a pharmacist, the pharmacist must sign off that the correct medicine(s) have been packaged into the DAA.

Even when medicine is supplied in a DAA, medicine information by the provision of CMI should be available in accordance with professional guidelines.

It is recognised that there may be a need for the MAC to develop a policy for the administration of medications for residents for when the resident is off site, for example, day excursions, temporary home visits.

Recommendation 10

Information resources

The facility must have current resources on medicine information available for staff, residents/carers and visiting health professionals. These resources should be recommended by the MAC.

Examples of such resources are:

- *Australian Medicines Handbook* and related publications
- MIMS Annual or PP Guide
- Therapeutic Guidelines
- Consumer Medicine Information for medicines used by the residents
- Schedule of Pharmaceutical Benefits
- AusDI — Australian Drug Information for the Health Care Professional.

Recommendation 11

Storage of medicines

Secure storage for all medications, including self-administered medication should be provided by the residential aged care facility, and must be in accordance with State/Territory regulations. Storage issues must consider the safety of all residents, staff and visitors, and the recommended storage conditions for particular medicines, for example, those requiring refrigeration.

Recommendation 12

Disposal of medicines

The facility must have a mechanism in place for the disposal of returned, expired and unwanted medicines.

Recommendation 13

Complementary, alternative and self selected medications

A residential aged care facility should develop written policies, which are approved by the MAC, for the management of complementary, alternative and self-selected medications within the facility.

The resident/carer, as part of their responsibilities, should inform facility staff of all medications including complementary, alternate and self-selected medications being used by the resident. This should be annotated on the resident initiated section of the medication chart. An example of

a policy on complementary, alternative and self-selected medications is at Appendix G. The NSW Therapeutic Assessment Group has released a document via the NSW Health Department (circular 99/18) which may be useful to residential aged care facilities.

Recommendation 14

Emergency supplies of medications

There may be a requirement for emergency medications to be available within the facility. Any emergency supply of medications should be in accordance with State/Territory legislation and approved for this purpose by the MAC. The MAC should also determine the circumstances under which such medications may be used and any required documentation and stock control. The emergency supply should include only a minimal range of medications for emergency after hours use, and must not be used as an imprest system.

APPENDICES

- A Medication Advisory Committees in residential aged care facilities.
- B Medication Advisory Committee. Example of a meeting agenda.
- C Medication Management/Administration Policy. Lee Consulting Australia Pty Ltd (*example*).
- D Pharmaceutical Society of Australia *The Provision of Pharmacy Services to Residential Aged Care Facilities — Guidelines for Pharmacists*. November 2001.
- E Assessment of a resident's ability to self-administer (*example*).
- F 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.
- G Policy on the use of complementary medicines within an aged care facility (*example*).
- H Potential QUM indicators for Aged Care Residential Facilities.
- I Medication Charts — Management Audit. Lee Consulting Australia Pty Ltd (*example*).
- J Medication Incident Report (*example*).
- K Australian Nursing Federation, the Royal College of Nursing and Geriaction. *Nursing Guidelines for the Management of Medicines in an Aged Care Setting*.
- L Pharmaceutical Society of Australia. *Guidelines for pharmacists. Comprehensive medication review in residential aged care facilities*

Note: The appendices prepared by professional associations may be changed from time to time, and while they are current at the time of printing of this document, the latest version should always be consulted.

The latest version of the Pharmaceutical Society of Australia guidelines can be obtained from www.psa.org.au or contact (02) 6283 4777.

APPENDIX A

Medication Advisory Committees in residential aged care facilities

Role

Through a partnership approach, develop, promote, monitor and evaluate policies and activities to assist management, residents and staff achieve best possible health outcomes for all residents by ensuring quality use of medicines in residential aged care facilities.

Terms of Reference (example)

- 1 To advise on the implementation of national standards, guidelines and policies and relevant legislation on medication use in the residential aged care facility.
- 2 To develop policies and performance indicators on medication use, and evaluate their implementation. *(An example of potential QUM indicators for residential aged care facilities is at Appendix H. An example of a medication chart management audit is at Appendix I.)*
- 3 To assist in the development and evaluation of indicators for quality use of medicines as part of a quality assurance framework of the facility.
- 4 To make recommendations to the board or management of the facility on any matter relating to medication use with the view of optimising health outcomes through the quality use of medicines.

Activities

- (a) To develop mechanisms which allow for a review and evaluation of:
 - medication usage across the facility;
 - emergency medicine supply;
 - the use of ‘when required’ medication;
 - the outcome of medication review processes;
 - medication errors and incidents; and
 - adverse drug reaction reporting to the national reporting system via the established ‘blue card’ system of the Adverse Drug Reaction Advisory Committee (ADRAC)
(An example of a medication / drug incident report is at Appendix J.)

- (b) To monitor and make recommendations for the use of psychotropic agents for behavioural management.
- (c) To monitor and make recommendations for the appropriate pain management of residents.
- (d) To monitor and advise on the management of any other clinical problem involving medications as appropriate.
- (e) To advise on appropriate medicines education programs for staff of the facility.
- (f) To develop mechanisms for the provision of information about medicines to staff, residents/carers, including the availability of Consumer Medicine Information.
- (g) To promote in residents/carers the awareness of their rights and responsibilities with regard to their medication management.
- (h) To make recommendations on the medicine information/resources to be available at the facility.
- (i) To advise on the development of an information technology strategy relevant to medication management within the facility.
- (j) To review medication related incidents within the facility.
- (k) To review the processes for the timely, effective communication between the prescriber and the pharmacist for any change to the medication regimen, in accordance with legislative requirements.
- (l) To develop a policy for the administration of medicines for residents temporarily off site (eg, excursion, temporary home visit).
- (m) To audit/review the selection and performance of Dose Administration Aids (DAAs) on a regular basis, in line with quality improvement.
- (n) To prepare and maintain a list: of drug products which cannot be altered (eg, crushed or broken) prior to administration (refer Appendix F); of medications which can be initiated by nursing personnel; and, of medications which may be stored in the facility for emergency purposes.

APPENDIX B

Medication Advisory Committee

Example of a Meeting agenda

(Name of Facility)

Medication Advisory Committee

(Day, date and time of Meeting)

AGENDA

- 1 Present
- 2 Apologies
- 3 Confirmation of previous Minutes (date)
- 4 Action Arising and Ongoing
- 5 General Business
 - 5.1 Medication Charts, Storage and Management Audit
 - 5.2 Medication Drug Incident Reports
 - 5.3 Medication Chart Audits
 - 5.4 Medication Reviews by Pharmacy — internal/external
 - 5.5 Pain Assessments Review
 - 5.6 Pain Management Review
 - 5.7 Update on Palliative Care Programs
 - 5.8 Update on New Medication Surveys and Audits
 - 5.9 Analysis of Key Performance Indicators
 - 5.10 Trends Analysis Update
- 6 New Business
- 7 Close and Date for Next Meeting

APPENDIX C

Example of a Medication Management Administration Policy*

Some of the content of this policy document may not be relevant in all jurisdictions/facilities and therefore it should be used as an example only.

Preamble

- 1 The appropriate prescription of medication can treat disease and/or control symptoms and thereby improve health or comfort. The physiological effects of an ageing body limits kidney and liver function, hence the older person is more vulnerable to adverse events related to medication administration.
- 2 The inappropriate administration of medication can harm a resident. Staff are therefore to ensure the safe storage and accurate administration of any medications in accordance with State legislation/regulation requirements.
- 3 Polypharmacy may increase the risk of medication side effects for older person's and place an unnecessary financial burden upon them. Staff must ensure every effort is adopted to minimise polypharmacy.

Policy

Residents of XXXXXXXXXX will be administered all medications correctly, as prescribed, through practices approved by the Medication Advisory Committee.

Reference/s: Aged Care Accreditation Standard/s 2.4, 2.7; Legislation/Regulations — State Drugs and Poison's Acts as per individual State.

Procedures

Storage/Administration

- 1 Only medications ordered by the medical practitioner are to be given.
- 2 Medication orders are never to be transcribed by nursing staff onto medication charts.
- 3 Staff are to refer to the medication information resource if unsure of any details of the ordered medication.
- 4 No medicine is to be administered if a medication chart has expired or a medication is not prescribed. Registered Nurses must contact doctors to attend the aged care service (or a locum) to write up medication charts prior to the next scheduled administration of medication.
- 5 A registered nurse who is concerned that a resident may require a medication which has not been ordered is to contact the relevant doctor to examine the resident and determine the need for additional medication.

* Reproduced with the permission of Lee Consulting Australia Pty Ltd.

- 6 Three days prior to the expiry of a drug chart, Registered Nurses are expected to inform the doctor of the need to visit.
- 7 A registered nurse administering medications must use their professional judgement in determining the appropriateness or otherwise of any medication. They are to contact the doctor concerned if there is any query regarding the medication before it is administered.

Medication Management/Administration Policy

- 8 If there is an emergency and a phone order is required, two nursing personnel must listen to the order and record these details in the 'once only' administration section on the medication chart for the relevant doctor to sign as soon as possible. If more than one dose is to be administered, each dose is to be written separately. The medical practitioner is asked to visit within two days to review the medication and sign ALL phone orders.
- 9 In this organisation, phone orders are only valid for 48 hours. The medical practitioner is required to re-write the order if continuous administration is required beyond 48 hours.
- 10 Medication orders must be legible, signed and dated in the medical practitioner's handwriting in black or blue ink. Doctors must rewrite an order if they are not clear, or be phoned to clarify the order if to be administered immediately. The phone order procedure as outlined above is then to be followed.
- 11 Medications must be stored in individual resident containers in a locked storage facility, ie, trolley, cupboard.
- 12 All medications must be clearly labelled with a resident's name. Any items which are not named must be disposed of. No medication is to be shared between residents.
- 13 Medication trolleys must never be left unattended when unlocked.
- 14 The medication fridge must be locked at all times and is only to contain medication. The fridge can only be opened when a nurse attends to a matter related to the medications within it, either to remove a medication, check or add a medication.
- 15 In the nursing home, only Registered Nurses are to administer medications.
- 16 Medications are not to be left beside bedsides; administering staff must remain with the resident until the medication is seen to be swallowed.
- 17 Medications are not to be placed in meals or any other food/beverage item for others to administer.
- 18 If a resident is cognitively able to administer their own medications, and wishes to do so, they are to be supported by staff to do this. A medical practitioner and/or Registered Nurse must document their assessment which determines the resident is capable of undertaking this responsibility. A resident's ability to undertake this task safely is to be assessed daily.
19. Residents who wish to administer their own medications are to be informed of their responsibility to ensure all medications are locked securely when unattended, to maintain an accurate record of the details of medications they are taking and provide such record to the DON or Care Manager, to inform staff if they require any further assistance.

- 20 Staff are to explain to resident's that in an emergency, or as part of their care planning, other health professionals will need to know what medications they are on, to plan appropriate therapeutic strategies, hence changes to the medication record must be communicated to staff.
- 21 Administering staff are to either observe the resident self administering their medication, or if the resident prefers, to ask if the medication has been taken. Following appropriate verification that administration has occurred, SA (self administered) is to be recorded on the medication chart.
- 22 Medications may only be placed in food/beverage items such as yoghurt, fruit puree or jam, if the placement of the medication in the food or drink is not contra-indicated and administering staff witness the taking of all medications.
- 23 Medications must be signed by administering staff immediately after administration, not before.
- 24 If the resident is unable to swallow tablets, a liquid or other alternative must be obtained by contacting the doctor and the pharmacist to determine the most appropriate type.
- 25 If a suitable liquid alternative is unavailable the doctor and pharmacist are to determine the suitability of the medication for crushing. Medical practitioners are to ensure details of altered dose forms are clearly documented on medication charts.
- 26 Staff are to refer to the 'Guidelines and Standard Operating Procedures for altering Medication Dose Forms' (Appendix F) as necessary, to determine special considerations regarding the crushing of medicines.
- 27 If a medication is not given, this must be documented on the medication chart with the relevant reason noted. The doctor is to be contacted for further orders.
- 28 Eye drops and ointments should be discarded one month after opening; the date the bottle was opened must be recorded on the bottle. Anginine expires ninety days after opening; the date of opening must be noted on the bottle. Insulin expires after opening; the date the bottle was opened must be noted on the container. Other medications may denature after opening, guidelines by the pharmacist are to be followed as provided.

(NB: Expiry dates vary for insulin eg, cartridges 21 days, vials 30 days at room temperature, vials in use for up to three months when kept under refrigeration.)
- 29 Enteric coated and sustained release medicines are never to be crushed.
- 30 Controlled drugs (Schedule 8 medicines) must be securely stored as per each state's regulations.
- 31 Schedule 8 medicines must be checked out, administered and signed for by two registered nurses. Controlled drugs, which are securely stored but not in use, must be returned to the pharmacist as soon as possible for appropriate disposal.
- 32 All controlled drugs present within the home must be checked at the beginning and end of each shift by two registered nurses and relevant details recorded in the controlled drugs register.
33. Injectable medicines must be checked by two registered nurses before administration.

Medication charts

- 1 Any discrepancies or incidents related to medication administration and orders are to be written on an incident report and forwarded to the Director of Nursing.
- 2 Identification photographs must accompany medication charts with the name of the resident and the date the photograph was taken, printed clearly on the back.
- 3 Residents with similar or same names must have brightly coloured alert stickers present on their charts.
- 4 Medication orders are only to be recorded on medication charts.
- 5 The following details must be written on all medication charts:
 - complete name of resident
 - date of birth of resident
 - allergies marked yes or no and details
 - a doctor's signature for every medication ordered
 - every order dated by the medical practitioner
 - all routes of administration
 - legible medication names
 - identifiable doctor signatures
 - correct frequency identified from the doctor's orders
 - correct dosages for the medication ordered
 - registered nurses signature following administration
 - relevant months and years
 - the date of the next administration of infrequent medicines (eg, medicines given 2-3 monthly), even if the administration does not occur within the time span covered by that chart
 - if alternative methods of administering medications are necessary, eg, 'crush medications able to be crushed'
 - p.r.n. medication orders
 - medication phone orders
 - date/s of reviews by the accredited pharmacist and medical practitioner
 - details of resident self-administered medications.

Medication Advisory Committee

- 1 The Medication Advisory Committee (MAC) shall conduct meetings every 2 months.
- 2 The members, activities, role and terms of reference of the committee shall be documented and determined by the committee and senior management or the Board of Management.
- 3 Activities of the MAC shall be included in the organisation's Quality Program and reporting systems.

APPENDIX D

Pharmaceutical Society of Australia.
*The Provision of Pharmacy Services to
Residential Aged Care Facilities —
Guidelines for Pharmacists.*
November 2001.



The Provision of Pharmacy Services to Residential Aged Care Facilities

These Guidelines have been developed by the Pharmaceutical Society of Australia for use by pharmacists providing pharmacy services to residential aged care facilities and other related facilities. They are designed to assist pharmacists to exercise their professional judgement in specific presenting circumstances and to promote a consistently high quality of service.

It should be noted that other pharmacy-related initiatives within the aged care sector (eg. medication management review in residential aged care facilities funded under the Third Community Pharmacy Agreement) are currently under review. Pharmacists will be advised of developments and new documents through the Australian Pharmacist and PSA State Branch newsletters.

A. INTRODUCTION

Australia's National Medicines Policy¹ recognises that each partner within the health care sector has a responsibility to participate in a cooperative endeavour to deliver better health outcomes. In a residential aged care facility (RACF) or related facility, the residents are reliant upon the total contribution of many health care professionals.

The provision of pharmacy services to RACFs is recognised as a key contribution to achieving quality use of medicines by all residents with the assistance of all members of the health care team within the RACF.

B. RESIDENTS' RIGHTS

The right of individual residents to obtain pharmacy services from any pharmacist of their choosing is acknowledged. However, in the absence of any declared intention by the resident, the management of the RACF may arrange for an appropriate pharmacy service to be provided.

C. PRIVACY AND CONFIDENTIALITY

Pharmacists should safeguard the resident's privacy and confidentiality at all times, particularly in relation to information acquired in the course of providing pharmacy services.

Pharmacists should refer to the new privacy guidelines² as well as any State/Territory privacy legislation or health privacy frameworks.

D. SERVICE CONTRACT

Pharmacists involved in providing pharmacy services to RACFs should work closely with the administration, medical and nursing staff, and the residents.

A sample contract between the RACF and the supply pharmacist is provided at Appendix A. It should be tailored to meet the agreed needs of the RACF. The RACF may also independently contract with a pharmacist accredited by an approved body to conduct medication reviews, in addition to the pharmacist who supplies the medicines and devices. Where the supply pharmacist and the pharmacist conducting medication reviews are two different people, it is strongly encouraged that good communication links are established between the two individuals so that both understand the total service being provided to the RACF as well as their respective roles and responsibilities.

Pharmacists providing medication review services contract to supply these to the PSA guidelines *Comprehensive Medication Reviews in Residential Aged Care Facilities* (see section 8, under part F of this document).

Upon termination of a service contract, the pharmacist will provide to the incoming pharmacy service provider, details about residents (who have consented to the transfer of information) in relation to:

- their medication histories, for a period of six months prior to the cessation of the contract, if available and practicable; and

¹ Australian Pharmaceutical Advisory Council. National Medicines Policy 2000. Commonwealth Department of Health and Aged Care, 1999.

² Pharmaceutical Society of Australia. Professional Practice and the Privacy Act. Canberra: PSA; 2001 Nov.



- records, as may be necessary for the incoming pharmacist to continue to provide an effective clinical pharmacy service (ie. without significant disruptions).

E. COMMUNICATION AND ADMINISTRATION ISSUES

In order to enhance interprofessional collaboration, and for pharmacy services to be delivered in a manner which is acceptable to all participants and beneficial to residents, pharmacists must develop and maintain good communication channels with the staff and residents of the RACF and other health professionals. Pharmacists and other health professionals recognise that individually and jointly, they have a responsibility to assist residents to achieve quality use of their medications. Expanded and enhanced communication between health professionals is vital in this regard. Pharmacists must also uphold the reputation of the profession at all times by embracing the principles of the Code of Professional Conduct.³

In addition to a firm agreement and understanding of the service being provided to the RACF, timely reporting and follow-up are also essential elements of good practice and satisfactory service. It is recommended that the pharmacist:

- raises any significant concerns (requiring immediate action) to the relevant personnel or health professional;
- appropriately documents all interventions;
- consults the appropriate RACF staff and/or health professional for any proposed changes;
- follows up on any interventions and documents outcome; and
- reports to the appropriate personnel on a regular basis, as agreed.

It is important that the pharmacist is aware of any general policies (eg. fire and emergency protocols) of the RACF.

F. PHARMACY SERVICES

The provision of pharmacy services to RACFs includes:

- the dispensing, supply and distribution of medicines;
- provision of medication management services;
- provision of information and advice about drugs, with the primary objective being the promotion of quality use of medicines; and

³ Pharmaceutical Society of Australia. Code of Professional Conduct. In: Australian Pharmaceutical Formulary and Handbook. 18th ed. Canberra: PSA 2002.

- provision of pharmaceutical care, which involves pharmacists responding to residents' medication-related needs to help them achieve desired health outcomes.

The service should be delivered to the relevant professional standard.⁴

1. Pharmaceutical supplies⁵

(a) Ordering

The RACF is responsible for coordinating and communicating pharmaceutical requirements to the pharmacy. The pharmacist may be consulted on related issues to facilitate and advise on developing an efficient service, however, this should clearly be negotiated according to the needs of the RACF and agreed service details should be included in the service contract.⁶

(b) Dispensing

For new residents, the pharmacist should check and record the medications brought into the RACF to ensure consistency with currently prescribed medication, as soon as practicable after admission. Resident medication records should be initiated and maintained for all residents.

As with the dispensing of all prescriptions, the pharmacist will maintain a record as required by law, of all medications supplied to each resident, and should check these regularly for possible drug interactions, changes in dosage and anomalies such as oversupply, undersupply or inappropriate medication.

⁴ Pharmaceutical Society of Australia. Professional Practice Standards. Pharmacy Services to Residential Care Facilities. In: Australian Pharmaceutical Formulary and Handbook. 18th ed. Canberra: PSA 2002.

⁵ Pharmacists may wish to refer to the SHPA guidelines on drug distribution (The Society of Hospital Pharmacists of Australia. SHPA Drug Distribution Guidelines. In: Johnstone JM, Viénet MD, eds. Practice Standards and Definitions. Melbourne: SHPA; 1996.). While the guidelines refer to drug distribution to hospital inpatients only, the general principles are relevant.

⁶ Pharmacists may need to consider and/or be aware of the following issues.

- Resident medication records must be initiated and maintained for all residents who have agreed to receive pharmaceutical services from your pharmacy. The RACF will advise the pharmacist when new residents are admitted and any change in status of all residents.
- A medical practitioner's prescription is the usual form of requisition for an individual resident's medication.
- Development of a suitable imprint system.
- Development of an indexed file system for the storage of current prescriptions and repeat forms.



For further details, pharmacists should refer to the professional guidelines.⁷

Medication should be dispensed in the manufacturer's original container or other individual container, or in a dose administration aid (DAA), as appropriate and in consultation with the staff of the RACF.

(c) Delivery

The pharmacist should provide a regular delivery service (including an emergency service and an after-hours service) sufficient to cover the requirements of the RACF, as agreed and stated in the contract.

The pharmacist should also visit the RACF regularly at a frequency⁸ determined by a consideration of the needs of the residents. Agreed details should be clearly outlined in the contract.

(d) Storage

The pharmacist should advise on appropriate storage conditions for all pharmaceuticals kept at the RACF.⁹

Where notification has been received from the RACF of the departure of a resident, the pharmacist, within 24 hours, must follow appropriate procedures in relation to the resident's medication.¹⁰

⁷ Pharmaceutical Society of Australia. Dispensing Practice Guidelines. In: Australian Pharmaceutical Formulary and Handbook. 18th ed. Canberra: PSA 2002.

⁸ Fortnightly visits should be considered a minimum unless other arrangements are made in consultation and agreement with the RACF.

⁹ Pharmacists may need to consider the following issues, as relevant.

- Safe and appropriate storage of medicines in original containers or repackaged into alternative containers, or dispensed in dose administration aids (DAAs) such as unit dose, multi-dose or 7-day packs.
- Medicines that should not be repackaged into (and therefore should not be stored in) DAAs.
- Storage of 'prn' medications.
- The use of medication trolleys.
- Security issues eg. to prevent unauthorised access.

¹⁰ The appropriate course of action may be:

- where the resident will be returning to the RACF, any remaining medication will be stored in the usual manner;
- all medicines (including any reserve stock) is returned to the resident where transfer from the RACF is permanent; or
- if the resident is deceased, all medication should be stored in a sealed package in a secure place until a death certificate is issued, and then sent for destruction using an approved service.

(e) Disposal

The pharmacist may need to provide advice to the RACF on appropriate disposal methods for various types of medicines.

2. Resident counselling

An understanding of the prescribed drug regimen by the responsible person is a vital requirement for safe and effective therapy. The pharmacist therefore, has a responsibility to ensure that residents and/or staff are provided with sufficient information and counselling for them to comply with the prescribed regimens and to use the medication safely and effectively.

The pharmacist should provide counselling to residents, or if that is not appropriate, to the appropriate staff at the RACF, to encourage compliance with prescribed regimens and the safe and effective use of medications. This may include the use of Consumer Medicine Information and other devices or materials where appropriate.

All counselling should be conducted according to the relevant professional standards.¹¹

3. Adverse drug reaction reporting

Pharmacists have a duty of care to all residents and to the public to report suspected adverse drug reactions, wherever possible. Pharmacists should take reasonable steps to confer with the medical practitioner about any suspected reactions and, where appropriate, lodge a report with the Adverse Drug Reactions Advisory Committee. Details should be entered in the resident's records.

4. Participation in committees of the RACF

Pharmacists are encouraged to participate in various activities within the RACF including bodies such as the Medication Advisory Committee (MAC), quality care committee or infection control committee.

MACs are a vital element of any RACF particularly in relation to communication issues and in adopting and progressing quality use of medicines initiatives.¹²

¹¹ Pharmaceutical Society of Australia. Professional Practice Standards. Patient Counselling. In: Australian Pharmaceutical Formulary and Handbook. 18th ed. Canberra: PSA 2002.

Pharmaceutical Society of Australia. Standards for the Provision of Pharmacist Only and Pharmacy Medicines in Community Pharmacy. In: Australian Pharmaceutical Formulary and Handbook. 18th ed. Canberra: PSA 2002.

¹² The new edition of the *Integrated Best Practice Model for Medication Management in Residential Aged Care Facilities* publication will contain revised recommendations regarding MACs as well as clarification of the general role and terms of reference of MACs.



Pharmacists may have the opportunity to be involved in the development of pharmaceutical (and other related) policies at the RACF which may include issues such as: drug storage, distribution, documentation, imprest stocks, and frequency of ordering.

5. Supply of dose administration aids

Dose administration aids are compartmentalised boxes or blister-pack type devices used to aid the administration of solid, oral medications. They should be seen as a tool to be used in a coordinated plan for medication management if the advantages of maximising compliance and accurate selection outweigh the problems inherent in their use.

The successful use of dose administration aids by a resident will depend on the resident's physical and cognitive abilities as well as the environment or RACF setting.

Pharmacists should refer to the relevant professional guidelines and standards.¹³

6. Review of medication charts in RACF

The pharmacist conducting a medication chart review will aim to ensure the resident is receiving the appropriate drug, dosage form, dose, timing of dosage and duration of therapy. This will help optimise the resident's drug therapy and minimise medication-related problems.

For further details, pharmacists should refer to the professional guidelines.¹⁴

7. Therapeutic drug monitoring

Therapeutic drug monitoring may be used to optimise a resident's drug therapy where there is a known relationship between the concentration of drugs in the body fluids and therapeutic effect.¹⁵ The pharmacist

¹³ Pharmaceutical Society of Australia. Dose Administration Aids Guidelines. In: Pharmacy Practice Handbook, pp. 96–100. Canberra: PSA; 2000 Oct.

Pharmaceutical Society of Australia. Professional Practice Standards. Dose Administration Aids. In: Australian Pharmaceutical Formulary and Handbook. 18th ed. Canberra: PSA 2002.

¹⁴ The Society of Hospital Pharmacists of Australia. SHPA Standards of Practice for Clinical Pharmacy. In: Johnstone JM, Viénet MD, eds. Practice Standards and Definitions. Melbourne: SHPA; 1996.

¹⁵ Pharmaceutical Society of Australia. Guidelines for Pharmacists – Comprehensive Medication Review in Residential Aged Care Facilities. In: Australian Pharmaceutical Formulary and Handbook. 18th ed. Canberra: PSA 2002.

Pharmaceutical Society of Australia. Professional Practice Standards. Comprehensive Medication Review. In: Australian Pharmaceutical Formulary and Handbook. 18th ed. Canberra: PSA 2002.

should be alert to the need for drug therapy monitoring, recommend monitoring where appropriate, be available to interpret the results and provide recommendations for alterations in therapy.

There are a number of specific indications for monitoring the concentrations of drugs in body fluids, including:¹⁴

- suspected toxicity due to a drug and/or metabolite;
- a sub-therapeutic response to drug therapy;
- the assessment of potential drug interactions;
- the assessment of therapy where the resident is clinically unstable;
- the assessment of therapy following initiation or change to the regimen;
- previous adverse drug reaction or toxicity; or
- the evaluation of resident compliance.

8. Comprehensive medication reviews

In a comprehensive medication review (CMR; also referred to as a residential medication management review or RMMR), the accredited (review) pharmacist works in cooperation with the resident's medical practitioner(s) and the supply pharmacist to source, collate and evaluate medication-related information with a view to identifying, preventing and solving medication-related problems.

The main aims of a CMR are to:

- contribute to optimising the therapeutic effectiveness and management of the resident's medication regimen;
- facilitate a cooperative working relationship between pharmacists and other members of the health care team in order to benefit the health and well being of residents; and
- provide a medication information resource for residents and health professionals involved.

Pharmacists must conduct CMRs according to the relevant professional guidelines and standards.¹⁵

9. Education of RACF staff

Pharmacists have a role in providing an education program to the staff of the RACF in accordance with their needs which should be discussed with the management. This may include articles, updates or newsletters on new medicines and devices, continuing



education on drug-related topics, cost-effective use of medicines, or on other services which may be provided by the pharmacist. The facility's needs may also be guided or determined by the MAC.

Pharmacists should clearly negotiate details of the service to be provided, including the type and frequency of the service and the appropriate fee, and the agreed terms should be included in the contract with the RACF.

10. Drug information services

Pharmacists should provide written and/or verbal information or advice about medications and related issues in response to a request from the RACF staff, residents or other health professionals. This is separate to the counselling that would normally be provided to residents and carers.

Pharmacists are expected to maintain contemporary knowledge as well as clinical and drug information skills, and to have access to a reasonable range of library references and evidence-based resources.¹⁶

Queries should be prioritised by the pharmacist, wherever possible, and records of queries and consultations should be maintained. When resident-specific drug information is provided, the pharmacist should consider whether there is also a need to provide monitoring and follow-up.

11. Assistance with RACF accreditation processes

The assistance of pharmacists may be sought by the RACF management to meet components of the Residential Care Standards issued by the Aged Care Standards and Accreditation Agency, in particular, standard 2.7 *Medication Management*.¹⁷ Pharmacists

¹⁶ Pharmacists should have access to a number of resources to assist in the provision of this service. For information on therapeutic drugs, health professionals can access the National Prescribing Service Therapeutic Advice and Information Service (NPS TAIS) on 1300 138 677.

While the SHPA guidelines (The Society of Hospital Pharmacists of Australia. SHPA Standards of Practice for Drug Information Services. In: Johnstone JM, Viénet MD, eds. Practice Standards and Definitions. Melbourne: SHPA; 1998.) are much more comprehensive than what is intended here, they will provide a good overview of the key elements of a rigorous service.

¹⁷ This standard outlines the following.

Expected outcome

Resident's medication is managed safely and correctly.

Criteria

Policies and practices provide:

- safe administration and storage of medicines;
- that incident reporting mechanisms are present, functional and acted upon;
- that orders are written legibly and are available to administering staff; and
- that residents' medication is regularly reviewed by appropriate health professionals.

should negotiate with the RACF the details and level of involvement (and the appropriate fee). Agreed terms should be clearly outlined in the written contract.

12. Drug usage evaluation activities

Drug usage evaluation may be defined as a systematic review of all aspects of drug use with the specific objectives of ensuring the quality use of medicines, improving patient care and cost effective drug use.¹⁸

Activities may include:¹⁹

- establishment of guidelines based on current literature;
- evaluating drug use against criteria;
- advising on drug policy including drug availability;
- use and restrictions; and
- education programs.

For further information, pharmacists should refer to the relevant guidelines and standards.^{18–20}

¹⁸ Development of Drug Usage Evaluation in Hospital Practice in Australia and New Zealand. Based on the paper prepared by the Drug Usage Evaluation (DUE) Network of the Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists (ASCEPT), 1998.

¹⁹ The Society of Hospital Pharmacists of Australia. Australian Drug Usage Evaluation Starter Kit. Melbourne: SHPA; 1998.

²⁰ The Society of Hospital Pharmacists of Australia. SHPA Standards of Practice for Drug Usage Evaluation in Australian Hospitals. In: Johnstone JM, Viénet MD, eds. Practice Standards and Definitions. Melbourne: SHPA; 1996.



13. Quality assurance and continuous quality improvement activities²¹

Pharmacists should regularly assess the service they provide through a quality assurance program. This is done through periodic evaluation of various components of the service to ensure that all processes and systems are working effectively.

The outcomes of evaluations should then be analysed. If it shows that there are faults in the system or that agreed targets are not being met, the pharmacist should draw up a timetable of required corrective actions. This constitutes the continuous quality improvement element.

Continuous quality improvement is not only an effective means of improving the service provided to the RACF but is also the key to achieving efficiency and productivity gains. The goal of all review processes is to identify opportunities for improvement. Hence it is important that results of review processes are carefully evaluated and the findings used to inform service improvements.

For example, regular audits of service records can identify compliance rates with required documentation which, in turn, can indicate where documentation systems can be simplified. Surveys of RACF staff, residents and other health professionals can indicate their degree of satisfaction with the service as well as eliciting suggestions for change so that it more effectively meets their needs.

²¹ The Society of Hospital Pharmacists of Australia. SHPA Guidelines for Quality Assurance of Clinical Pharmacy Services. In: Johnstone JM, Viénet MD, eds. Practice Standards and Definitions. Melbourne: SHPA; 1996.

The Society of Hospital Pharmacists of Australia. SHPA Guidelines for Hospital Pharmacy Quality Assurance Programs. In: Johnstone JM, Viénet MD, eds. Practice Standards and Definitions. Melbourne: SHPA; 1996.

The Australian Council on Healthcare Standards. Standards for the ACHS Evaluation and Quality Improvement Program (EQuIP). Sydney: ACHS (forthcoming publication).

The Pharmacy Guild of Australia. Ongoing Compliance with Standards. In: Quality Care Pharmacy Program, Pharmacy Standards. QCP-1. Canberra: PGA; 2001 Jul.

Sample Pharmaceutical Services Contract

This agreement, made and entered into this day the of, 20..... by and between
(Day)
(Month)
(Year)

..... hereinafter referred to as “the Pharmacy”.
(Name of the pharmacy)

Now therefore the parties hereto in consideration of the mutual promises herein contained and other good and valuable considerations, do hereby agree as follows.



The Pharmacy will provide the following as part of the pharmacy service:

(Tick services to be provided) Services (Insert other services not listed) Where relevant, the agreed details of the service to be provided, including the type and frequency of the service and the appropriate fee, should be clearly outlined here.

- Participate in drug administration rounds and assist with drug administration techniques and issues
- Assist with drug storage inspections
- Supply unit dosage delivery systems or dose administration aids
- Facilitate quality use of medicines eg. through participation in a Medication Advisory Committee, provision of QUM information, facilitation of QUM activities
- Provide drug information to staff, residents and other health professionals
- Provide professional education for nursing staff
- Facilitate multidisciplinary professional development activities
- Assist with development and periodic revisions of policies and procedures related to eg. pharmaceutical issues, medication issues, wound management, infection control
- Assist the Facility with accreditation processes
- Participate in drug usage evaluation and related activities
- Participate in quality assurance and quality improvement activities
-
-
-
-

The Pharmacy shall invoice the Facility on a monthly basis for all goods sold to the Facility's residents. The invoice will itemise:

- Prescription medicines
- Over-the-counter medicines
- Therapeutic devices and compliance aids
- Dressings
- Patient comfort items
-
-
-



3. The Facility's responsibilities

The Facility shall provide timely access to information and resources that may be necessary for the pharmacist to fulfil the required service.

The Facility shall provide adequate, secure and acceptable space for medication storage and the storage of medication trolleys.

The Facility shall provide at a minimum the following items (obtained on a rental or purchase basis from the Pharmacy):

<i>Quantity</i>	<i>Item</i>	<i>Manufacturer / Brand</i>
	medication trolleys	
	unit dose blister cards	
	bins for blister cards	

The Facility shall pay the Pharmacy in full within days of the date appearing on the invoice provided by the Pharmacy.

4. Independent service

In the performance of the service herein contemplated, the Pharmacy is providing an independent service with the authority to control and direct the performance of the details necessary to provide this service. The Facility is interested primarily in the results obtained. However, the services provided herein must meet the approval of the Facility and shall be subject to the Facility's general right of inspection to secure satisfactory results.

5. Indemnification

During the term of this agreement employees of the Facility may be supervised and directed by the Pharmacy's representative. These employees shall still be considered employees of the Facility irrespective of the control exercised by the Pharmacy's representative. The Facility shall remain responsible for any and all liability, loss, damage or expense by reason of any act or omission of any such employee. The Facility also agrees to indemnify the Pharmacy for any and all liability, loss, damage or expense incurred as a result of such an employee's acts or omissions.

6. Assignment

This agreement shall not be assigned by either party without prior written consent of the other party.

7. Termination

Either party hereto may suspend this agreement at any time for causes beyond the control of such party by giving days notice of such suspension and the reason for the same.

Payment to be made and services to be rendered hereunder shall be made and rendered to the date of such suspension and shall thenceforth cease until the period of such suspension has ended. Nothing herein contained shall prevent the Facility in the event the Pharmacy suspending the operation of this agreement, from securing the services herein contemplated from such other source as it so desires during the period of such a suspension.



8. Notice

All notices given or so sent hereunder shall be sent by Australia Post, addressed to the respective party at the address set forth on the signature page hereof, or to such other addresses that the parties shall designate in writing from time to time.

9. Choice of law

This agreement shall be governed by the laws of and the invalidity
(State/Territory)

of any of this agreement shall not affect the validity or invalidity of any other portion of this agreement.

10. Modifications

This agreement shall not be modified or amended except by written documents executed by both parties to this agreement, and such modification shall be attached hereto.

11. Legal costs

In the event of any litigation to enforce or defend rights under this agreement, the prevailing party shall be entitled to reasonable legal costs in addition to all other relief.

12. Complete agreement

This agreement supersedes all previous agreements, oral or written, between the parties. It embodies the complete agreement between the parties. It shall be binding upon the respective assignees and successors in interest.

In witness whereof, the parties hereto have caused this agreement to be executed by their duly authorised officers the day and year first above written.

.....
(Pharmacy name)	(Facility name)
.....
.....
.....
(Pharmacy address)	(Facility address)
.....
(Name and title)	(Name and title)
.....
(Signature)	(Signature)
Pharmacy representative	Facility representative

APPENDIX E

Example of assessment of a resident's ability to self-administer

..... (INSERT FACILITY NAME)

Name of resident

Clinical Record Number

NOTE: In assessing the ability of the resident to safely and effectively administer some or all of his/her medications, consideration of the risk/benefit to the resident of self-administration must be considered. The provision of appropriate information eg CMI or information on the correct method of administration may significantly enhance a person's understanding of the purpose of their medications, identification of side effects, storage requirements and of other issues relevant to assisting the resident to self-administer medications. As such, a negative response to any of the questions of this assessment form does not necessarily preclude a resident from self administration, rather it may indicate the need for the implementation of strategies to facilitate the ability of the resident to self medicate safely and effectively. The Facility has a duty of care to minimise the risk of adverse outcomes by unsafe or ineffective self-administration.

THESE QUESTIONS SHOULD BE ANSWERED IN THE CONTEXT OF SELF ADMINISTRATION OF MEDICATION

- | | | |
|---|------------------------------|-----------------------------|
| 1. Does the resident wish to self medicate? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. Was the resident self medicating at home? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 3. Was the resident using a dose administration aid at home? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 4. Is the resident oriented in time and place? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 5. Does the resident have a history of alcohol or drug abuse? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 6. Does the resident have any cognitive disabilities? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 7. Does the resident have gross/fine motor skills' deficit? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 8. Is the resident able to communicate effectively? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 9. Does the resident have a visual impairment? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

10. Can the resident open the following:

- | | | |
|---|------------------------------|-----------------------------|
| • Bottles with normal lids | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| • Bottles with child resistant closures | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| • Foil packets | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| • Boxes | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| • Dose administration aids | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

11. Can the resident unlock and open the drawer in which their medications would be stored? ☐ Yes ☐ No

12. Can the resident read the labels on their medications? ☐ Yes ☐ No

13. Does the resident understand what the medication(s) is for? ☐ Yes ☐ No

14. Does the resident know what to do if they:

- | | | |
|---------------------|------------------------------|-----------------------------|
| • Miss a dose | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| • Take a wrong dose | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

15. Can the resident identify the medication? ☐ Yes ☐ No

16. Can the resident prepare the correct amount of medication?
(eg expel enough ointment from tube to be applied to affected area) ☐ Yes ☐ No

17. Can the resident administer eye drops/ointments? ☐ Yes ☐ No

18. Can the resident administer ear drops? ☐ Yes ☐ No

It may be necessary to assess the resident's use/delivery of other medications (eg per vagina or per rectum, patches, inhalers etc). Please document the resident's ability to self-administer any other medications prescribed that have not been covered.

Comments:.....
.....
.....
.....

Are there any strategies which may assist the resident to self-administer ☐ Yes ☐ No
 If Yes, list these strategies.....

Is the resident capable of self-administering any of their medications? ☐ Yes ☐ No
 If Yes, list the medications which the resident may self-administer

.....

Initial assessment date: .../.../....

.....
 Name of authorised person

.....
 Signature

Is the resident capable of self-administering medications? ☐ Yes ☐ No

Review date: .../.../....

.....
 Name of authorised person

.....
 Signature

A resident's ability to self-administer medications should be reviewed at regular intervals (eg every 3-6 months) or if a change in the resident's medical condition, hospitalisation or changes in medication occurs or if the medication regimen becomes more complicated.

APPENDIX F

Guidelines and Standard Operating Procedures for Altering Medication Dose Forms

A Resource for Staff in Residential Aged Care Facilities

Index

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This document contains guidance for staff in residential aged care facilities about the issue of altering the form of the medication they administer to residents. The enclosed Guidelines and Standard Operating Procedures have been developed through the Alteration of Medication Dose Forms Project through the University of South Australia. They are considered to represent best practice in this area.

THE LISTS OF DRUGS AND DRUG PRODUCTS MENTIONED IN THIS APPENDIX ARE NOT COMPREHENSIVE AND UP-TO-DATE LISTS OF PRODUCTS SHOULD BE PREPARED BY THE MEDICATION ADVISORY COMMITTEE AT REGULAR INTERVALS FOR USE WITHIN THE FACILITY (refer Appendix A)

Document prepared March 2002

ALTERING MEDICATIONS

1. GUIDELINES FOR STAFF

Many aged care residents have difficulty swallowing capsules and tablets. Altering solid dosage forms e.g., crushing tablets or opening capsules can make it easier to administer a medication to a resident with swallowing difficulties, but care needs to be taken to ensure that the process employed does not result in reduced medication effectiveness, a greater risk of toxicity, or an unacceptable presentation to residents in terms of taste or texture.

These guidelines are a step-by-step approach to resident assessment and provide information that will assist staff in deciding on those medications that can be altered and those that cannot. For those that can be altered, the guidelines advise on suitable methods for both altering and administering medications to residents. No guidelines can ever cover all eventualities nor can or should they replace sound clinical judgement. However for many situations, adherence to the following six-step process will help ensure that residents do receive the desired therapeutic response from their medications.

In accordance with the principles of good clinical practice it is imperative that the key elements of the processes of both resident assessment and medication alteration, if required, are documented in a resident's records.

A. Assessment of swallowing ability

There may be a number of reasons why medication dose forms may be altered including:

- A physical inability to swallow any whole foods
- A psychological inability to swallow medication
- A refusal to take medication due to a deteriorating cognitive state

Any of these reasons can lead to nursing staff and the person's GP (and sometimes the resident themselves or their family) to make the decision to crush medication for easy administration.

Careful attention should always be paid to assessing a resident's swallowing ability. For some, an inability to swallow solid medications may be a transient or episodic disability and, when clinical circumstances change, renewed attempts to encourage taking unaltered dosage forms should be made.

Some residents' ability to swallow may vary during the day so that when clinically acceptable, changing to alternative dosing times may reduce the need for product alteration.

There are complex issues involved in a resident refusing to take medication. These issues are best dealt with on an individual basis with the GP/prescriber and possibly the family of the resident.

B. Review of medication management and regimen

Difficulties experienced in swallowing medications always provides a stimulus for a review of the resident's medication list with a view to changing to different formulations of the same medication, changing to another medication or stopping medications that are no longer necessary. It should also be recognised that refusal to take medication is a right, but has to be balanced against the ability of the person to make this as a rational choice. Staff must be alert to any difficulties that residents may experience in taking their medications and where there are

problems, prescriber, pharmacist and registered nurse should be encouraged to review the management of the resident's medication.

C. Which formulations should not be crushed?

Table 1 lists medications that should not be altered in any way and those that may be altered to make administration easier providing that certain precautions are observed. The reasons for not altering, or doing so with some provisos, are divided into six categories and examples are provided for each category in the legend to the table. The categories are:

1. Altered absorption characteristics
2. Medication stability
3. Local irritant effect
4. Failure to reach the site of action
5. Occupational health and safety
6. Unacceptable/undisguisable taste

Because new products are always being introduced onto the market, no product list as contained in Table 1 will ever be all-inclusive. If in doubt always check with a pharmacist

Of particular concern are controlled/sustained release medications (Category 1). Many medications are formulated to release drug in a controlled manner over a defined dosing period, usually 12 or 24 hours. Crushing these formulations will compromise the release characteristics and may result in an unintended large bolus dose with unwanted or exaggerated therapeutic effect e.g., hypotension and bradycardia with sustained release verapamil (Isoptin SR®). Always check product labels. Wording such as "controlled release" (CR), "sustained release" (SR), "modified release" (MR) "controlled delivery" (CD), "enteric coated" (EC), imply sustained or modified release characteristics. For these products wording such as "swallow whole, do not break, chew or crush" will often be used on labels or under dosing guidelines in common reference texts - e.g., MIMS. Please note that although sustained release products cannot be crushed, some can be halved e.g. Theodur and Imdur, but check with your pharmacist first.

Opening capsules containing medication formulated into small pellets where the release properties are built into the pellet and not the capsule casing, e.g., morphine sulphate (Kapanol® capsules) and theophylline (Austyn® capsules) is a convenient way of making these products easier to swallow but remember not to crush the pellets.

Differentiate between those oral preparations that need to be swallowed and those that need to be retained in the mouth for optimal effect (e.g., sublingual glyceryl trinitrate tablets (Anginine®) and lozenges (Fungilin®)). Residents who are cognitively intact but unable to swallow may be able to manage the latter groups of products.

In many cases, alternative preparations of the required medication may be available. While it may be necessary to administer a non sustained release preparation more often (e.g., plain verapamil tablets are usually given three times a day as opposed to once daily administration for the SR preparation), these preparations can usually be crushed and may be cheaper. If a liquid formulation of the required medication is available, be aware that a dose given as a liquid will be absorbed more quickly than the same dose given as a modified release solid preparation. Smaller doses of the liquid formulation given more frequently may be required.

D. Suitable techniques for crushing*Equipment for Crushing*

There is a variety of suitable equipment that can be used for crushing medication. There are 3 principles to follow when deciding which equipment to use.

1. Equipment that permits essentially complete and reproducible recovery of powdered material should be used
2. Equipment shared among residents should be washed and dried after use for each resident
3. For cytotoxic medications a dedicated set of equipment must be used for each resident

It is preferable to have separate equipment for residents who are having their medication crushed. However using shared equipment is acceptable, but it is essential to clean equipment after use for each resident essential. A clean damp cloth followed by a dry cloth, is sufficient for cleaning. Make sure the pestle is also cleaned this way each time.

Crushing Method

Crushing more than one tablet together can make it easier to both crush and retrieve mixed medications from the mortar. In most cases the potential for chemical interaction between medications that are crushed and mixed together is not great, but the possibility that an interaction might take place does reinforce the need to give medications to a resident as soon as practically possible after crushing and/or mixing together.

When tablets and capsules are to be given together, crush the tablets first. Then open the capsule and add the powder or pellets contained therein to the crushed tablets. This will avoid crushing sustained release or enteric-coated pellets.

Special Considerations

There are some medications that should not be given together because one medication will cause reduced absorption of the other e.g., calcium reducing the absorption of ciprofloxacin. Irrespective of whether dose form alteration is required or not, those medications listed in Table 2, unless exempted, should be given at least two hours apart from tablets containing iron and/or calcium, antacids, milk and dairy products.

Whatever method is used, be consistent so as to avoid significant alterations in the amount of medication given to a resident on a day-to-day basis.

E. Administration to the resident

Wherever possible residents should be upright, or as close as practically possible to upright, when taking oral medications. This is generally not a problem as most medication is administered at meal times. However the final drug round in the evening may prove to be more difficult. It may be better to make sure the final drug round is conducted prior to residents being placed in the final position for sleep.

Mixing with a small amount of food that the resident likes e.g., jams, fruit purees, yoghurt (see Table 2 for products where yoghurt should not be used) is sensible as it disguises unpleasant taste and aids in compliance. Ensure that crushed tablets or capsule contents are given to the resident as soon as practically possible after altering and mixing with any food or liquid, as this will minimise both the risk of medication degradation and inadvertent administration to the wrong resident.

Avoid sprinkling crushed tablets or contents of capsules onto meals where portions of the meal may be left uneaten.

Always ensure that any solid medications whether altered or not, are given with sufficient water or other suitable liquid to minimise the risk of oesophageal irritation.

F. Monitoring and assessment

Good clinical practice dictates that monitoring and assessing therapeutic response is required whenever medications are administered. This is especially important when alteration of a dosage form is required. Lack of expected effect and/or untoward effects may be indicative of altered medication absorption as a result of product alteration, and should trigger a review of practice.

WHAT HAPPENS WHEN TABLETS AND CAPSULES ARE CRUSHED?

Table 1 lists tablets and capsules that should not be crushed (categories 1,2,4); those that may be altered if clinically indicated (3,6) and if certain precautions related to occupational health and safety are adhered to (5). The categories are described below and relate to the numbers in Table 1.

1. Altered absorption characteristics

Crushing tablets will alter absorption characteristics e.g., sustained release verapamil resulting in an increased risk of hypotension and bradycardia. Products containing encapsulated sustained release pellets are not included in this table because the pellets may be removed from the capsule providing they are not crushed.

2. Medication stability

Nifedipine (Adalat®) is extremely susceptible to light and even brief exposure to room light will result in medication degradation. Omeprazole is degraded by exposure to acid and whilst the tablets (Losec® and Acimax®) may be allowed to disperse in yoghurt or orange juice, crushing the tablet will expose the medication to acid in the stomach resulting in a loss of activity before the medication reaches its site of absorption in the upper small intestine.

3. Local irritant effect

Some medications are an irritant to the oesophagus and/or stomach (upper GI tract). Aspirin is an example of a medication that does cause local irritation to the upper GI tract, and enteric coated (Cartia®) and delayed release (Astrix 100®) preparations are designed to minimise this problem. Clinical circumstances may dictate that products that are an irritant to the upper GI tract may need to be crushed because the benefit from medication administration outweighs the risk of irritation or damage. In the event that potentially irritant medications do need to be crushed or given as a powder, then medication administration should be accompanied by sufficient liquid to ensure that no medication residue is left in contact with the oesophagus. However in practice, there are

usually alternative preparations of the same product or alternative medications available, and this is a situation that may often be resolved by a review, by pharmacist and/or doctor, of the resident's medication regimen.

4. Failure to reach site of action

Products that fall into this category are formulated to release medication at a defined site in the gastrointestinal tract. Mesalazine (Mesasal[®]) is formulated as resin coated tablet designed to dissolve and release medication in the lower small intestine, where it exerts a local anti-inflammatory effect. Crushing the tablet will result in premature absorption with a resultant loss of effectiveness and increased risk of kidney damage.

5. Occupational health & safety

Medications in this category are predominantly cytotoxic medications. However it should be recognised that clinical indications for their use extend beyond the treatment of malignancy. For example, cyclophosphamide (Cycloblastin[®]) and methotrexate (Ledertrexate[®]) are used to treat some inflammatory disorders.

Powdered medication should not come in contact with skin or be handled in a fashion that allows it to be inhaled by staff or residents. In practice this means that tablets can be crushed using a mortar and pestle enclosed in a transparent plastic bag by an operator wearing mask and gloves. The powdered medication (whilst still contained within the bag) can then be transferred to a measure or other device that can be covered, prior to transfer and administration to the resident. Opened capsules can be handled in the same manner. A dedicated set of equipment must be used (see above) and the process should take place in an area away from other staff and residents.

Isotretinoin (Roaccutane[®]) is a teratogen and chlorpromazine (Largactil[®]) can cause a contact dermatitis.

6. Unacceptable/undisguisable taste

Quinine (Quinate[®]) is an example of a medication that has an exceptionally bitter taste and the tablet is coated to disguise the taste from the resident. Crushing will not alter effectiveness but it may compromise compliance.

TABLE 1: What happens when tablets and capsules are crushed?**Category**

Generic name (Trade)	
Antihistamines	
Dexchlorpheniramine (Polaramine Repetabs),	1
Pheniramine (Avil Retard)	1
Dexchlorpheniramine/pseudoephedrine (Demazin Day Night relief)	1
Analgesics	
Morphine sulphate (MS Contin)	1
Oxycodone (Oxycontin)	1
Antibiotics	
Cefaclor (Ceclor CG, Keflor CD)	1
Amoxycillin & Clavulanic acid (Augmentin Duo, Calmoxyl Duo)	1 & 2
Doxycycline (Doryx, Doxsig, Doxy-50, Doxy-100, Doxyhexal, Doxylin, Vibramycin, Vibratabs)	3
Erythromycin (EES, E-Mycin, Eryhexal, Erythrocin, EMU V, Eryc)	1
Nitrofurantoin (Furadantin, Macrochantin)	3
Cardiovascular medications	
Isosorbide mononitrate (Imdur, Duride, Imtrate, Mondur)	1
Indapamide 1.5mg (Natriliq SR)	1
Felodipine (Agon SR, Felodur SR, Plendil ER)	1
Nifedipine (Asalat, Adalat Oros, Nifecard, Nifehexal, Nyefax, SBPA Nifedipine)	2
Nimodipine (Nimotop)	2
Verapamil (Cordilox SR, Isoptin SR, Anpec SR, Veracaps SR)	1
Quinidine (Kinidin Durules)	1
Aspirin enteric coated (Cartia, Astrix 100)	3
Glyceryl trinitrate sub lingual (Anginine)	1
Dipyridamole SR (Asasantin SR, Persantin SR)	1
Haematinics	
Iron containing products (Ferrogradumet, Fergon, FGF, Ferritard, Fefol)	3
Gastrointestinal	
Olsalazine (Dipentum), mesalazine (Mesasal), sulphasalazine (Salazopyrin)	4
omeprazole (Losec, Acimax), lansoprazole (Zoton), pantoprazole (SOMAC)	2
Pancreatic supplements	
Pancrease, Cotazym, Creon	4
Immune modulators	
Cyclosporin (Neoral)	6
Oral cytotoxic agents	5
altretamine (Hexalen), cyclophosphamide (Cycloblastin) levamisole (Ergamisol), etoposide (Vepesid), hydroxyurea (Hydrea), idarubicin (Zavedos), methotrexate (Lederthrexate, Methoblastin), chlorambucil (Leukeran), busulphan (Myleran), mercaptopurine (Purinethol), melphalan (Alkeran), capecitabine (Xeloda), temozolomide (Temodal)	
Anti Parkinson's Disease	
Levodopa controlled release (Sinement CR, Madopar HBS))	1
Psychoactive medications	
Chlorpromazine	5
Respiratory	
Theophylline controlled release (Nuelin SR, Theodur)	1
Endocrinology	
Alendronate (Fosamax)	3
Anti-inflammatory agents	
Sustained release naproxen (Naprosyn SR, Proxen SR)	1
Diclofenac enteric coated (Arthrotec, Diclohexal, Dinac, Fenac, Voltaren)	3
Electrolyte	
Sustained release potassium chloride (K-SR, Slow K)	3
Miscellaneous	
Isotretinoin (Roaccutane)	3 & 5
Phenytoin (Dilantin)	1
Quinine sulphate (Quinate, Quinocet, Quinsul)	6
Quinine Bisulphate (Biquinate, Myoquin, Quinbisul)	6

Legend

- | | | | |
|----|------------------------------------|----|----------------------------------|
| 1. | Altered absorption characteristics | 2. | Medication instability |
| 3. | Local irritant effect | 4. | Failure to reach site of action |
| 5. | Occupation health and safety | 6. | Unacceptable/undisguisable taste |

COMBINING ALTERED MEDICATION

Table 2 lists medications that should **not be taken within two hours** of antacids, iron or calcium supplements or any dairy products (* and > indicate exceptions).

If listed medications need to be crushed or altered prior to administration they must not be crushed together with tablets containing antacids.

Iron and calcium may be crushed if needed and given together with those marked >. Table 1 indicates that iron tablets when crushed are irritant to the GI mucosa and in practice liquid and injectable forms of iron are available.

Dairy products may be used to facilitate administration for those marked *. Table 1 indicates that doxycycline is an irritant to the oesophagus and for many infections alternative antibiotics are available.

TABLE 2

Alendronate (Fosamax)
Calcitriol (Calcijex, Rocaltrol, Sitriol)
Ciprofloxacin (Ciproxin)
Doxycycline * (Doryx, Doxsig, Doxy, Doxyhexal, Doxylin, Virbramycin, Vibra-Tabs)
Etidronate (in Didrocal, Didronel)
Itraconazole > (Sporanox)
Ketoconazole > (Nizoral)
Minocycline * (Akamin, Minomycin)
Norfloxacin > (Insensye, Noroxin)
Ofloxacin > (Oflocet)
Tetracycline (Achromycin, Helidac, Mystecclin)

* Can be taken with milk

> Can be taken with calcium and iron supplements

2. PROCESSES SURROUNDING THE ALTERATION OF MEDICATION DOSE FORMS

Standard Operating Procedures

These Standard Operating Procedures (SOPs) provide a three-step approach to the processes surrounding the alteration of solid oral medication dose forms (tablets and capsules) for residents with swallowing difficulties. The present SOP should be read and used in conjunction with the ‘SOP for the Administration of Altered Medication Dose Forms to Residents’ and the more expansive guideline document ‘Altering Medications – Guidelines for Staff’.

1: Assessment of ability of resident to swallow solid medications

- 1.1 On admission to the facility, assess the resident’s swallowing ability. This may involve assessment by the Doctor and Registered Nurse and/or consultation by a Speech Pathologist.
- 1.2 Document the key elements of the process and the outcome of the assessment in the resident’s records.
- 1.3 Reassess swallowing ability at times of regular medication reviews (see Section 2 below) or more frequently if it is suspected there has been a change in the ability to swallow medications.

For greater detail concerning the assessment, refer to the document ‘Altering Medications – Guidelines for Staff’.

2: Review of medication management and regimen, and assessment of the appropriateness of altering solid oral medications

- 2.1 All residents should have their medication regimen reviewed by the Doctor, Pharmacist and Registered Nurse upon admission to the facility and on a regular basis as appropriate. For greater detail concerning the conduct of the medication management review, refer to the document ‘Altering Medications – Guidelines for Staff’ and the Australian Pharmaceutical Advisory Council [APAC] Guidelines. See also Medication Management Review Overview (Section 4).
- 2.2 A newly observed difficulty in swallowing medications provides a stimulus for an extra-ordinary review of management of the resident’s medication regimen.
- 2.3 As part of the medication review for residents with swallowing difficulties, it is important to consider whether there are any solid medications in the regimen that should not be altered (see Section C and Table 1 in the document ‘Altering Medications – Guidelines for Staff’).
- 2.4 Any changes in the medication regimen (including decisions to alter solid medications) arising from a medication management review should be documented in the resident’s records and on the medication sheet.

- 2.5 The Doctor, Pharmacist and Registered Nurse should sign the appropriate documentation once a medication management review has been completed.
- 2.6 Where it is necessary to commence a solid oral medication between times of medication management reviews in a resident with swallowing difficulties, the details of the new drug order will be sent by fax (or communicated in another appropriate manner) to the Pharmacist who will provide advice in writing on the appropriateness of alteration of the formulation. This information will be recorded in the resident's record and on the medication sheet.

3: On-going Monitoring and Assessment

3.1 Clinical/Resident Monitoring

Good clinical practice dictates that monitoring and assessing clinical response is required whenever medications are administered to individual residents. This is especially important when alteration of a dosage form is required.

Regular medication management reviews for each resident should include a review of both the need for and process of alteration of medication dose forms.

3.2 Policy Monitoring

The Facility's Medication Advisory Committee should regularly review and evaluate:

- the Facility's medication review procedures
- the information provided within the Facility on those solid oral formulations that should not be altered
- processes surrounding the alteration of solid oral medication dose forms
- the procedures for alteration of solid oral medications and their administration to residents
- the soundness of communication among health professionals (Doctor, Pharmacist, Registered Nurse, etc.) that is essential for the delivery of quality care to residents

With each regular review of these procedures, the Medication Advisory Committee will record that these tasks have been undertaken.

3. ADMINISTRATION OF ALTERED MEDICATION DOSE FORMS TO RESIDENTS

Standard Operating Procedures

This document provides a standard operating procedure (SOP) for the alteration and administration of solid oral medication dose forms (tablets and capsules) for residents who have difficulties taking solid dose form medications. The present SOP should be read and used in conjunction with the ‘SOP for Processes Surrounding Alteration of Medication Dose Forms’ and the more expansive guideline document ‘Altering Medications – Guidelines for Staff’.

Where it has been determined and recorded in the resident’s record and medication sheet that a formulation can be safely altered for administration to a resident (see ‘SOP for Processes Surrounding Alteration of Medication Dose Forms’), it is important that appropriate and standard techniques are used for the alteration and administration processes. This SOP refers to appropriate techniques for alteration and administration.

1: Suitable techniques for crushing

- 1.1 Use suitable equipment and techniques (see the document ‘Altering Medications – Guidelines for Staff’).
- 1.2 In most cases multiple tablets may be crushed together. However, there are some exceptions (see Table 2 of the document ‘Altering Medications – Guidelines for Staff’).
- 1.3 When tablets and capsules are to be given together, crush the tablets first. Then open the capsule and add the powder or pellets contained therein to the crushed tablets. **DO NOT CRUSH THE CAPSULE CONTENTS.** (See the document ‘Altering Medications – Guidelines for Staff’).
- 1.4 For cytotoxic drugs, a dedicated set of equipment must be used for each resident and special procedures adopted to minimise occupational exposure (see notes to Table 1 of the document ‘Altering Medications – Guidelines for Staff’).
- 1.5 Use correct ergonomic techniques when crushing medication by, for example, positioning the mortar and pestle on a waist-high bench or table so that a healthy and comfortable working posture is maintained.

2: Administration to the resident

- 2.1 Ensure that crushed tablets or capsule contents are given to the resident as soon as practically possible after altering and mixing with a small amount of food or liquid (see Section E of the document ‘Altering Medications – Guidelines for Staff’). **NEVER LEAVE MEDICATION UNATTENDED.**
- 2.2 Some medications should not be mixed together and/or taken with milk or other dairy products (see Table 2 of the document ‘Altering Medications – Guidelines for Staff’).

- 2.3 Avoid sprinkling crushed tablets or contents of capsules onto meals where portions of the meal may be left uneaten.
- 2.4 Wherever possible residents should be upright, or as close as practically possible to upright, when taking oral medications.
- 2.5 Always ensure that any solid medications whether altered or not, are given with sufficient water or other suitable liquid to minimise the risk of oesophageal irritation.
- 2.6 Ensure that the alteration of the medication is recorded on the resident's medication sheet.
- 2.7 Clear and concise instructions about the alteration of particular medications for individual residents should be clearly displayed on the resident's medication sheet and/or the medication container.

Suggested Methods

- Incorporated into the format of the existing medication chart (in a prominent position).
- A coloured adhesive sticker can be attached to either (or both) the front of the medication sheet and/or the medication pack(s). This sticker would alert the person administering the medications to the need for alteration, and provide information about any precautions and/or exemptions particular to the individual resident and/or individual medications.

4. ALTERING (CRUSHING) OF MEDICATION DOSE FORMS

Summary of Important Points for Staff

Medication Dose Forms Not To Be Altered

1. Some tablets and capsules should not be crushed or altered.
2. A list of the tablets and capsules that should not be altered is contained in Table 1 of the document 'Crushing Medications – Guidelines for Staff'

Altering Medication

1. Use a glass mortar and pestle or other suitable non-porous equipment that can be easily cleaned and that avoids cross-contamination.
2. Clean and dry after each set of medications is crushed and/or mixed.
3. Tablets that are OK to crush can usually be crushed together – note, however, that some drugs should not be mixed together (see Table 2 of the document 'Crushing Medications – Guidelines for Staff')
4. Crush tablets first then open capsules and add contents to the crushed tablet(s).
5. Mixing with a small amount of a soft food that the resident likes is OK. Note, however, that some drugs should not be mixed or taken with dairy products (e.g. yoghurt) – see Table 2 of the document 'Crushing Medications – Guidelines for Staff'. Do not sprinkle on meals.
6. Give altered medication to the resident immediately.

Administration to the Resident

1. Resident should be as upright as possible when having medication.
2. Give sufficient water for the resident to swallow the medication and avoid oesophageal irritation.
3. Observe that the medication is swallowed.
4. Record the administration of the medications(s) on the resident's medication sheet.
5. Monitor for appropriate therapeutic response to all medications.

See the document 'Crushing Medications – Guidelines for Staff' for additional information

APPENDIX G

Example of a policy on the use of complementary medicines within an aged care facility

Definition

The term complementary medicine includes herbal medicines, homeopathy, nutritional therapy, aromatherapy and health food supplements.

All complementary health care products used in the facility must have an Aust L (Listed) or Aust R (Registered) designation. The number for such products is required to be clearly printed on the manufacturer's label.

The facility can not effectively prevent complementary medicines from being used in the facility or prevent self-medication of such products by residents. It is essential however that the facility and the resident's medical practitioner, pharmacist and other health professionals are aware of all medicines being used by the resident.

Procedures

- A complete history of all medicines, including complementary medicines is to be obtained from the resident/carer at the time of entry into the facility. All current medicines should be included in the appropriate section of the medication chart.
- The facility should seek the comment of the patient's medical practitioner or pharmacist regarding the clinical appropriateness of any complementary medicines, taking into account the residents medical condition(s) and concurrent therapy.
- If the advice from the medical practitioner or pharmacist is that continuation of a complementary medicine should be reconsidered by the resident/carer in light of possible adverse health outcomes due to a potential drug interaction or adverse effects, such advice should be discussed with the resident/carer and entered into the residents clinical notes. If the resident/carer wishes to continue with the medicine this action should be documented in the residents clinical notes.
- Residents/carers must notify the facility of any complementary medicine being used and have these entered, as appropriate, on the medication chart or included in the medication record card.
- Complementary medicines should be kept in secure storage as with all other medicines in the facility.

APPENDIX H

Potential QUM indicators for residential aged care facilities

Potential QUM Indicators for Residential Aged Care Facilities	
Policy	1. Is there a medicines policy in place? This is a formal document which describes the approach to medicines use and the goals of medicine use in the facility.
	2. Is the medicines policy based on Quality Use of Medicines (QUM) principles?
	3. Does the facility have a medicines disposal policy?
	4. Is the Medication Advisory Committee integrated within the quality care framework of the facility?
	5. Does the facility have a comprehensive medication review service conducted by an accredited pharmacist?
	6. Is there an established mechanism for communicating about medicine issues between facility staff and all practitioners visiting the facility?
	7. Are there policies in place for the use of medicines in treating common problems of residents of aged care facilities eg laxatives, pain, sleep?
	8. Is there a mechanism in place to support continuous improvement in medication management?
	9. Is there a mechanism for alerting all staff and visiting health professionals to changes in medication policies?
	10. Are alternatives to medication therapy, including complementary medicines required to be documented?
Education	11. Is there an education program in place for increasing staff knowledge about QUM in the elderly?
	12. Are there established mechanisms to encourage the reporting and monitoring of adverse drug events (ADE) in residents, by residents and staff?
Services	13. Are medication aids available to assist management of medicines?
	14. Is there a drug utilisation feedback program available to facilities? Is there a formal agreement regarding the provision of pharmaceutical goods and services?

	<p>15. Is there a mechanism in place for collecting data about medication use in aged care residential facilities including emergency medicines, 'when required' medicines and the use of psychotropic agents for behavioural management?</p> <p>16. Is there a formal mechanism for the recommendations of the Medication Advisory Committee to be considered and responded to by the appropriate committee/personnel?</p>
	Impact Indicators
Affordable medications	<p>Rate of utilisation of generic preparations</p> <p>Index of pharmaceutical a:b - where pharmaceutical a is more cost effective than pharmaceutical b when used for the same indication</p>
Efficacious use	Rate of utilisation of pharmaceutical a:b – where pharmaceutical a is safer than b when used for the same indication in this group
Judicious use	Rate of utilisation of index pharmaceutical a:b – where a is known to be underused and b used at a rate thought to be appropriate. Eg the use of ACE inhibitors in patients with cardiac failure
Appropriate use	Rate of utilisation of index pharmaceutical a:b – where a is preferred treatment to be as identified in Therapeutic Guidelines and Australian Medicines Handbook and b is the non preferred treatment
	Rate of utilisation of cephalexin: flucloxacillin
	Rate of utilisation of lower risk/higher risk NSAIDs particularly in the management of pain associated with osteoarthritis
	Rate of lower risk oral hypoglycaemics: higher risk hypoglycaemics
	Number of prescriptions written for selected conditions in accordance with therapeutic guidelines
	Rate of hospital separations per resident associated with ADR in therapeutic use
	Number of persons with inadequately treated indications or conditions
	Annual mortality rate due to medication misadventure
	Annual mortality rate due to GI ulcer

	% residents taking: Amantadine Anticholinergics Benzodiazepines Chlorpromazine Chlorpropamide Cimetidine Combination diuretics Co-trimoxazole Dextropropoxyphene Doxycycline Methyldopa Prazosin Higher doses of allopurinol (eg300mg/day) Urinary alkalisers Prochlorperazine Phenothiazines/haloperidol Long term metoclopramide Long term loperamide Long term corticosteroid eye preparations Long term chloramphenicol eye preparations
	% changes in prescribing following recommendation from accredited pharmacist
	Resident satisfaction with medication therapy, including information received about their medicines
	Number of residents who participate in daily recreational activities.

APPENDIX I

Example of medication charts — management audit*

Name of Facility

Auditor's name: _____

Signature: _____

Date: _____

	RESIDENT NAMES - write yes/no/date of data as applicable in each								
DO THESE RESIDENTS MEDICATION CHARTS HAVE:									
Date of Birth listed									
Residents complete name									
Allergies Marked Yes or No									
All Allergies listed									
Doctor's Signature for each Entry									
Every entry dated									
All routes identified									
Legible Medication Names									
Identifiable Med. Pract. signatures									
Correct frequency identified from doctor's orders									
Correct dosages for usual medication range									
All Medications ordered signed									
All Medications ordered – provided as ordered for period ordered									
Residents with similar or same names have alerts written on their charts									
Relevant Months and Year identified on chart									
Issues regarding medications are documented in the progress notes or on the chart by the medical practitioner.									
Medication charts have "crush tablets" identified on charts for those requiring this intervention									
Specific administering care needs are written on the medication chart									
Dates of medications ordered for 2-3 monthly administration are written on each chart until the chart with relevant date is used									
PRN medications for pain relief are accompanied by progress notes or pain assessment entries									

* Reproduced with the permission of Lee Consulting Australia Pty Ltd.

Auditor's name: _____**Signature:** _____**Date:** _____

	RESIDENT NAMES - write yes/no/date of data as applicable in each								
IN RELATION TO THIS RESIDENT, ARE THE FOLLOWING APPLICABLE :									
All medications are stored in individual containers in the locked facility, ie. trolley, cupboard									
All medications are clearly labeled with resident's name									
There is no clear evidence of sharing of medications									
Photographs accompany medication charts, the name of the resident and date of the photo is printed clearly on the back									
All medication orders are placed on medication charts only									
Two nursing personnel sign they have listened to medication phone orders in the 'once only' administration section on the medication chart for the relevant doctor to sign as soon as possible									
No drugs have been administered if the medication chart has expired or medication is not prescribed									
There is evidence RNs contacted doctors to attend the home at least three days prior to the charts expiry									
If medication is not given, this is documented on the front of the medication chart with reason listed									
Eye drops and ointments expire 30 days after opening. Dates opened are affixed to all bottles									
Anginine expires 90 days after opening. Dates opened are affixed to all bottles									
Insulin expires one month after removal from refrigeration. Date bottle is opened is affixed to each bottle									
If person cannot swallow tablets, appropriate alternatives are present									

Auditor's name: _____ **Signature:** _____ **Date:** _____

MEDICATION DELIVERY PRACTICES AUDIT

Was the medication trolley locked when not in use and never left unattended when unlocked	
Is there evidence that enteric coated drugs are never crushed	
Was the drug fridge locked at all times when observed	
Only RNs give medications	
Medications were not placed in meals when observed	
Medications not left beside bedsides, the nurse witnessed the resident swallowing them	
Medications were not transcribed by nursing staff	
Controlled drugs checked out, administered and signed for by two RNs	
Controlled drugs checked at the beginning and end of each shift by two RNs	
All injectable drugs checked by two RNs, as possible, before administration	
Progress notes written re ringing the doctor, if not available, and the following actions	

Other Findings details: _____

Actions undertaken to resolve issues are to be documented on the Continuous Improvement / Corrective Action forms. Long-term strategies to resolve issues, including required education etc. are to be documented on Continuous Improvement Plans.

APPENDIX J

Example of a Medication Incident Report

Facility Name.....

Who?	Person Identifying Error							
	Resident							
	Person/s who may have been responsible for the error. (e.g. Night shift on 23/5/01)							
	Prescribing doctor							
What happened?	Wrong Medication	Missed Medication	Wrong Dose	Wrong Time	Wrong Resident	Wrong Route	Other	
Name of medication			Dose	Route		Frequency		
When did it occur?	Date/s				Time/s			
When was the incident identified	Date/s				Time/s			
Describe the incident or error								
Your name				Signature				

Actions taken

People Informed	By Whom	Time	Date
Manager			
Resident			
Next of Kin			
Doctor			

If the incident is an adverse drug reaction, has it been reported to ADRAC? Yes / No

Manager Action: (CIP to be raised if complex or multiple actions required)

APPENDIX K

Nursing Guidelines for the Management of Medicines in an Aged Care Setting



nursing guidelines

for the Management of Medicines
in an Aged Care Setting



nursing guidelines

for the Management of Medicines
in an Aged Care Setting

Nursing Guidelines for the Management of Medicines in an Aged Care Setting
Developed under the auspices of the Australian Nursing Federation, Geriacton, and Royal College of
Nursing Australia.

This publication was originally published in June 1996.

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Published 1996

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Nursing Guidelines for the Management of Medicines in an Aged Care Setting
Published 2002

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Copies of the Guidelines may be obtained from the Australian Nursing Federation, Level 2, 21 Victoria
Street, Melbourne Victoria 3000 Australia. Telephone: (03) 9639 5211 Fax: (03) 9652 0567
Email: publications@anf.org.au

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Foreword

The Nursing Guidelines for the Management of Medicines in an Aged Care Setting has been a collaborative project of three national nursing organisations, the Australian Nursing Federation (ANF), Geriaction, and Royal College of Nursing Australia (RCNA). The contribution of the Pharmaceutical and Rational Use of Medications (PHARM) Nursing Technical Advisory Group (TAG) is also acknowledged.

The Guidelines are intended to provide support and direction for registered¹ and authorised enrolled nurses² in the administration of medicines in an aged care setting³. The Guidelines inform providers and consumers of aged care services, medical practitioners, and pharmacists, of the expectations of registered and authorised enrolled nurses, in order to effectively contribute to the quality use of medicines.

The Guidelines establish the standard to which consumers of aged care services and the general community should be entitled.

These Guidelines are also included as part of the Integrated Best Practice Model for Medication Management in Residential Aged Care Facilities by the Australian Pharmaceutical Advisory Council (APAC) 2002.

In particular, acknowledgment is made of the following three nurses' contribution to the initial development of the Guidelines: Jill Iliffe (Australian Nursing Federation), Pauline Pallister (Geriaction), and Irene Stein (Royal College of Nursing Australia).

The Guidelines have been reviewed to ensure currency and relevancy both to the aged care setting and to nursing.

¹Registered nurses are called Registered Nurse Division 1 (RN Division 1) in Victoria.

²Enrolled nurses are called Registered Nurse Division 2 (RN Division 2) in Victoria. Not all enrolled nurses (RN Division 2) are endorsed to administer medicines. Different processes are in place in different States and Territories to authorise enrolled nurses to administer medicines. Reference should be made to the State or Territory nurse regulatory authority or Department of Health.

³Aged care settings include residential facilities and community settings.

Preface

The Guidelines were initially developed by the nursing profession as part of the Australian Pharmaceutical Advisory Council's Integrated Best Practice Model for Medication Management in Residential Aged Care Facilities (1997) project.

The Australian Pharmaceutical Advisory Council (APAC) Working Party on the Quality Use of Medications in Residential Aged Care Facilities comprised representatives from the medical, nursing and pharmacy professions, consumers and external representation from the aged care industry and the Aged and Community Care Division of the Commonwealth Department of Health and Family Services. The Terms of Reference for the Working Party included an examination of those factors which impact on the quality use of medicines, and therefore on quality outcomes and quality of life for residents of aged care facilities, and to develop recommendations to APAC for improving quality use of medicines and quality medicine outcomes for residents of aged care facilities.

The Working Party also considered the changing nature of residential aged care facilities. Due to a trend to early hospital discharge, APAC noted that residential aged care facilities are now providing a considerable amount of post-acute care for older people that was formerly provided by hospitals. Ageing in place has seen an increase in the number of high care residents in formerly low care facilities, which requires the employment of skilled nursing staff to ensure safe care and the quality use of medicines. Current policies encourage older people to remain in their homes for longer than in the past by providing community based aged care services. Overall, there is increased acuity and co-morbidity in consumers of aged care services.

This edition of the Guidelines, while primarily focused on residential aged care settings, is also applicable to aged care services provided in the community.

Further, the Accreditation Framework and the documentation required in relation to the Standards for Aged Care Facilities and the Resident Classification Scale (RCS) reinforces the need for a safe medicine delivery system. The APAC Model states that in cases where older people are unable to self-administer, registered nurses or authorised enrolled nurses, in consultation with medical practitioners and pharmacists, are the most appropriate carers to administer medicines.

The Integrated Best Practice Model for Medication Management in Residential Aged Care Facilities (APAC 2000) noted polypharmacy, excessive use of tranquillisers and psychotropic agents, lack of medicine review, and administration of medicines by unqualified or inappropriately qualified staff, as barriers to the quality use of medicines in aged care settings. According to APAC, administration of medicines by unqualified staff or inappropriately qualified staff not only leads to the potential for error, but such staff are unaware of potential side effects or adverse reactions that may require medical intervention.

It is of concern to registered and authorised enrolled nurses that in some circumstances, unqualified or inappropriately qualified workers are being utilised to administer medicines to residents in aged care facilities who are unable to perform this function for themselves. While unqualified or inappropriately qualified workers may be taught to deliver the right medicine to the right person in the right dose at the right time by the right route, they do not have the necessary education and knowledge required for making clinical judgements such as knowing why they are administering or when not to administer. Safe care and safe practice in the administration of medicines require administration by a suitably qualified nurse. Adequate resources must be made available by both governments and proprietors of aged care facilities, for medicines to be administered safely and within legislative requirements.

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Nursing Guidelines for the Management of Medicines in an Aged Care Setting

Medicine administration for those people who are unable to self administer, or to take responsibility for instructing the person administering the medicine when to administer and when not to administer, is a function of registered nurses and authorised enrolled nurses.

Enrolled nurses, including authorised enrolled nurses, work under the direction and supervision of registered nurses. Registered nurses are cognisant of the benefits and potential hazards of the use of medicines and have been educated to administer medicines safely and to monitor their efficacy and any adverse effects. Additionally, registered nurses have the skill to assess the changing needs of the older person and their care, evaluate the person's response to their medicines and accurately communicate that information. Registered nurses provide the vital link between the older person, the medical practitioner and the pharmacist.

1. Introduction

Medicines, while making a significant contribution to the treatment of ill health and the prevention of disease, to increasing life expectancy and improving health outcomes, have the potential to cause harm. The quality use of medicines requires that the appropriate medicine is prescribed; that it be available at a price the individual can afford; and that it be prescribed, dispensed and administered correctly. The goal of any medicine service for older people is to promote quality of life.

Age related changes in physiology affect the manner in which the body handles medicines. In addition to pharmacokinetic changes that take place as a result of normal healthy ageing, the effects of pathology must also be considered. A significant proportion of older people suffer from more than one illness. Polypharmacy results from concurrent disease processes and leads to complex medicine regimens and complex interactive patterns. This makes evaluation of adverse drug reactions difficult, particularly as the incidence of adverse drug reactions increases with age. Because of the chronic nature of some of those diagnoses, treatment may be lifelong.

The altered pharmacokinetic and pharmacodynamic changes in older people require the specific pharmacological knowledge and skills of medical practitioners, pharmacists, registered nurses and authorised enrolled nurses for best practice in the management of medicines in aged care settings. The following standards represent best practice guidelines for registered and authorised enrolled nurses in medicine management in aged care settings and are regarded as minimum standards for best practice and safe care. The overriding principles on which these best practice guidelines are based are:

- > all consumers of aged care services have the right to a quality medicine system,
- > medicines have the potential for harm if not prescribed, dispensed and administered correctly,
- > the right medicine in the right dose must be administered to the right person at the right time by the right route,
- > the person administering the medicine must not only know when and how to administer the medicine, but also why to administer and when not to administer, and
- > the person administering medicines must be able to recognise the adverse effects of the medicines administered and respond appropriately.

2. Rights of Older People

2.1 Every consumer of aged care services is entitled to a quality medicine service which includes:

- a) ongoing assessment by a health professional who is qualified to assess the physical, mental and behavioural aspects of the person, and the ways in which medicines may affect them,
- b) care from a health professional who is able to exercise clinical judgement with regard to medicines, integrating physical, mental and behavioural assessment with relevant contextual variables,
- c) care by a health professional who is competent to act alone with regard to medicines in a situation where medical advice is not available,
- d) care by a health professional who is able to collaborate with medical practitioners regarding the appropriateness of medicines in response to the older person's changing physical, mental and behavioural needs,
- e) care by a health professional who is skilled and experienced in communicating with older people, their families, and other health personnel with regard to medicines,
- f) care by a health professional who is skilled and experienced in teaching and assisting older people and their families to use medicines in a way which enhances the older person's quality of life, and
- g) care by a health professional who recognises the dynamic nature of the older person's health status, and is constantly evaluating the need for change in response to any health status change.

2.2 Consumers of aged care services have a right:

- a) to consent, or refuse consent, to a medicine,
- b) to medicine care which is provided by appropriately qualified health personnel,
- c) to manage their own medicine regimen where possible,
- d) to regular review of their medicine regimen,
- e) to confidentiality in relation to their medicine regimen,
- f) to a medicine storage system which maintains their privacy,
- g) to education, counselling and advocacy in relation to their medicine use,
- h) to the administration of their medicine by appropriately qualified nurses in a manner which maintains their dignity and safety, and
- i) to know which pharmacist is dispensing their medicines and to nominate their preferred pharmacist.

- 2.3 All older people have a right to have their medicine regimen kept current by their treating medical practitioner, through regular reviews, and regular re-issuing of their medicine instructions. Regular reviews should address issues of polypharmacy. It is the medical practitioner's responsibility to ensure that such reviews and instructions are attended at the recommended intervals of no less frequently than on a six weekly basis or in accordance with state or territory legislative requirements.

3. Proprietor's Responsibilities

- 3.1 The providers of aged care services have a responsibility to provide a medicine system which contributes to the quality use of medicines by:
- a) the provision of an appropriately qualified nurse to safely undertake the administration of medicines,
 - b) the provision of resources to enable the medicine and the medicine record to be available at the time and place of administration of the medicine,
 - c) the provision of current medicine information (eg a drug handbook), which includes the name of each medicine, the schedule, the reason for its use in particular circumstances, the expected outcomes, contraindications for use, and the possible side effects,
 - d) the provision of current information and education on relevant drugs and poisons legislation,
 - e) the provision of education regarding current trends in the use of medicine for older people and in specific age related diseases,
 - f) the provision of a system by which all medicine administration is documented and medicine incidents and errors are accurately reported, assessed, and remedial action taken, and
 - g) the provision of a system of safe storage for all medicines, including those being self administered by older people in residential aged care settings, which complies with relevant legislative requirements.
- 3.2 The providers of aged care services have a responsibility to provide written policies and protocols, which reflect relevant legislative requirements and which include:
- a) the specific responsibilities of each health professional involved in the medicine chain, including the provision of information, prescribing, dispensing, administration, storage, disposal, and evaluation,

- b) an acknowledgment of the arrangement of medicines into schedules, by clearly stating the organisation's policy, consistent with relevant legislation, for each applicable division of the schedule, that is S2, S3, S4, S8 and other restricted substances, with particular and separate requirements for S8 and other restricted substances,
- c) the specific requirements for the different routes of medicine administration,
- d) the mechanism by which each consumer of aged care services can be correctly identified (eg names, photographs), and
- e) the mechanism by which medicines and medicine records can accompany older people throughout the continuum of their care, ie if they are discharged; if they are receiving care in a community setting; if they are transferred to another facility, including a hospital; or if they are in residential care and absent from the facility for any reason.

3.3 The providers of aged care services have a responsibility to provide, as a minimum, medicine records, which contain:

- a) the older person's identifying information,
- b) a record of allergies,
- c) the consent of the older person or their representatives to their medicine regimen,
- d) the name, strength, dose, route and frequency of the medicine,
- e) the date of commencement of a medicine and duration where applicable, and
- f) the date of medicine review.

4. Medicine Advisory Committee

- 4.1 Each aged care service should have, where possible, a medicine advisory committee, whose objectives are to develop, promote, monitor and evaluate activities, which support the quality use of medicines. Such a committee should include a medical practitioner, a pharmacist, a registered nurse, a representative of the provider and a representative of a consumer of aged care services.

4.2 The responsibilities of the medicine advisory committee shall include:

- a) the promotion and support of intra and interdisciplinary communication, collaboration and co-operation,
- b) the development of medicine policies and protocols,
- c) the development of a list of medicines, including unscheduled substances, able to be initiated by those nurses authorised to do so,
- d) the maintenance of a register of medicine incidents or errors,
- e) the monitoring of compliance to medicine policies and protocols,
- f) the monitoring of compliance to the review of older person's medicine regimens,
- g) the review of medicine usage generally within the facility,
- h) the provision of advice on the implementation of national policies and relevant legislation,
- i) the implementation of education programs related to the quality use of medicines, and
- j) the implementation of medicine quality assurance activities.

4.3 All activities of the committee must comply with the requirements of the Privacy Act 2001 and the privacy principles.

5. Prescribing

5.1 No medicine should be administered without a legible, signed and dated instruction from a registered medical practitioner, registered nurse practitioner, or registered dental practitioner in the aged care service's designated medicine record. Such instructions shall include:

- a) the full name of the older person,
- b) the name and strength of the medicine,
- c) the dose, route and frequency of the medicine, and
- d) the date of commencement and the duration where applicable.

6. Dispensing and Supply

- 6.1 Each aged care service should have access to a community pharmacist who can provide a medicine service, which includes:
- a) the dispensing and supply of medicines,
 - b) the provision of information and advice,
 - c) involvement in medicine education for consumers of aged care services and staff,
 - d) involvement in medicine advisory committees, and
 - e) involvement in relevant quality assurance activities.

7. Administration

7.1 Consent

A person has the right to consent, or refuse consent, to a medicine. Should an older person refuse consent to a medicine, it is the responsibility of the registered or authorised enrolled nurse administering the medicine to document that refusal. The treating medical practitioner should also be notified.

7.2 Self Administration

Where it has been assessed by the registered nurse and the medical practitioner that the older person can safely administer their own medicines, the individual should be enabled to do so, within written policies and protocols. Assessment that the older person may self administer their medicine should be documented in their health record and/or their medicine record. Persons other than registered or authorised enrolled nurses, eg enrolled nurses not authorised to administer medicines or unlicensed nursing or personal care assistants, may only support the self administration of medicines by the older person eg by unscrewing the cap from a medicine bottle.

All medicine administration should be documented, including self administered medicine. Secure storage of medicines for self administration must be provided. This is the responsibility of the provider of the aged care service.

7.3 The Role of the Registered and Authorised Enrolled Nurse

- 7.3.1 In some States and Territories of Australia, enrolled nurses with additional qualifications are authorised to administer medicines. Medicine administration by authorised enrolled nurses must comply with relevant state and territory legislative requirements and be covered by written organisational policies and protocols. Enrolled nurses, including those authorised to administer medicines, work under the direction and supervision of registered nurses. At all times, the enrolled nurse retains responsibility for their actions and remains accountable to the registered nurse for all delegated functions.
- 7.3.2 Registered nurses must only delegate medicine administration to appropriately qualified enrolled nurses with regard to state/territory legislation and regulations and nurse regulatory authority policies and guidelines.
- 7.3.3 Registered nurses and authorised enrolled nurses have a duty of care to consumers of aged care services, are accountable within legislation, and have a professional responsibility within national nursing codes of conduct and codes of ethics.
- 7.3.4 In order to ensure safe care and safe practice, registered and authorised enrolled nurses must be provided with the resources and an environment in which they are enabled to undertake their medicine responsibilities according to these best practice medicine administration guidelines.
- 7.3.5 The role of the registered and authorised enrolled nurse includes:
- i) the administration of medicines,
 - ii) the supervision of individuals who are self administering their medicines,
 - iii) the recording of any medicines administered,
 - iv) compliance with legislative requirements and organisational policies and protocols, in particular medicine incident and error recording and reporting requirements,
 - v) participation in medicine quality assurance activities,
 - vi) a willingness to maintain contemporary knowledge and skills in relation to pharmacology and health assessment, and
 - vii) a knowledge of pharmacokinetics, pharmacodynamics and pharmacogenetics in older persons.

7.3.6 Additionally, the role of the registered nurse in relation to the quality use of medicines includes:

- i) the exercise of decision making skills and professional judgement in relation to medicine use, including knowing why to administer, how to administer, when to administer, when not to administer, and when to report back or refer to a medical practitioner or pharmacist,
- ii) the implementation, supervision, ongoing monitoring, and evaluation of safe medicine administration practices,
- iii) the monitoring and evaluation of medicine use, including reporting and recording of reactions to medicines and the initiation of required interventions in consultation with medical practitioners and pharmacists,
- iv) the monitoring and encouragement of compliance with medicine use,
- v) the consideration of alternative nursing actions which do not involve medicine use, particularly in relation to medicines ordered 'when required', or in the situation where consent to medicine use has not been given or has been withdrawn by the older person,
- vi) the provision of information and education to consumers of aged care services in relation to medicine use,
- vii) the provision of education to carers, other health care workers and students in relation to all aspects of medicine use,
- viii) the provision of advocacy on behalf of consumers of aged care services in relation to all aspects of their use of medicines, and
- ix) the delegation of medicine administration to authorised enrolled nurses.

7.3.7 No medicine is to be administered to an older person unless it has been dispensed by a registered pharmacist into an individual container or pack labelled with the person's name, the name and strength of the medicine and the dosage, frequency and route of administration. If registered and authorised enrolled nurses are administering medicines from individualised medicine regimen blister packs, the blister pack must be packaged and fully labelled by a pharmacist. Registered and authorised enrolled nurses should not administer medicine from blister packs containing more than one type of medicine in the blister.

7.3.8 Medicines must be administered to older persons from their own dispensed medicine containers. The nurse who removes the medicine from the dispensed medicine container must also administer the medicine to the person and sign the medicine record at the time of administration.

- 7.3.9 Medicines dispensed for one person must not be administered to any other person.
- 7.3.10 All medicines must be administered within infection control and standard precautions principles.
- 7.3.11 Occupational health and safety principles must be observed during medicine administration.
- 7.3.12 In addition to regular reviews by the treating practitioner of each person's medicine regimen, the registered nurse will exercise clinical judgement to determine if reviews or instructions are required more frequently.
- 7.3.13 Any questions or concerns regarding a person's medicines must be directed to either the medical practitioner or the pharmacist prior to administration.

7.4 'When Required' (PRN) Medicines

PRN medications are those which are ordered by a medical practitioner for a specific person on that person's medicine record and which the registered nurse, using clinical judgement, initiates, or delegates to an authorised enrolled nurse, when necessary. The administration of PRN medicines must be recorded on the person's medicine record.

7.5 Nurse Initiated Medicines

Registered nurses may use their clinical assessment and judgement to initiate, or delegate to an authorised enrolled nurse, S2 or S3 medicines, within their state or territory legislation and according to organisational guidelines. A record of any nurse initiated medicines should be included on the person's medicine record.

7.6 Standing Orders

Standing orders, covering S4, S8 and other restricted substances, may be ordered by a medical practitioner to be administered to a specific individual in prescribed circumstances or for general administration to any person in prescribed circumstances. Currently in aged care services, all medicines are dispensed for individuals on the written instructions of a medical practitioner, nurse practitioner or dental practitioner. The absence of general stocks of S4, S8 or other restricted substances in aged care services makes the use of standing orders for the administration of medicines in aged care services not appropriate or necessary.

7.7 Emergency Medicine Instructions

- 7.7.1 In an emergency, a medicine instruction may be given by telephone or facsimile. Emergency medicine instructions are only for emergency use and are not an acceptable substitute for a comprehensive medicine policy for the regular and routine management of medicines, which is responsive to predictable changes in medicine requirements.

- 7.7.2 The registered nurse or authorised enrolled nurse taking the emergency telephone medicine instruction should verify the prescriber, write the instruction in permanent ink directly onto the person's medicine record, confirm the instruction with the prescriber, and sign and date the record. Where possible, if a second person is present, they should also check the instruction with the prescriber.
- 7.7.3 The registered nurse or authorised enrolled nurse receiving the emergency medicine instruction by facsimile should write the instruction directly onto the person's medicine record in permanent ink, and sign and date the record. The facsimile should be placed in the person's medicine record.
- 7.7.4 Any emergency telephone/facsimile medicine instruction must be confirmed in writing by the medical practitioner. It is the responsibility of the medical practitioner issuing the emergency telephone/facsimile medicine instruction to notify the pharmacist, and to confirm the emergency medicine instruction in writing within 24 hours, or according to the requirements of state or territory legislation or regulation.

7.8 Compliance

Every individual, or their representative, has the right to consent, or refuse consent, to medicine administration. Any refusal of medicines, even medicines which are self administered, must be documented in the medicine record and the medical practitioner advised. The registered nurse is able to provide information and education to individuals to encourage compliance. The registered nurse exercises professional judgement in assessing non compliance and recommending alternative options.

7.9 Monitoring

- 7.9.1 Registered nurses and authorised enrolled nurses have a professional responsibility to participate in medicine audits as a part of routine quality assurance activities.
- 7.9.2 Registered nurses and authorised enrolled nurses have a professional responsibility to report misuse or misappropriation of medicines within written policies and protocols which clearly identify the process by which this is to be undertaken and the expected outcomes.

7.10 Evaluation

Registered nurses and authorised enrolled nurses should observe each person receiving medicine, and exercise professional judgement to:

- a) evaluate all medicine use for appropriateness, unwanted side effects, allergies, toxicity, medicine intolerance, medicine interactions and adverse reactions, and to document and report same,

- b) in conjunction with the provider of aged care services, the medical practitioner, nurse practitioner and the pharmacist, ensure that medicine instructions are regularly reviewed for each individual.

7.11 Non Prescription and Unscheduled Substances

7.11.1 An individual has the right to request a non prescription substance, including herbal, homoeopathic, non Australian and 'over the counter' S2, S3 and unscheduled substances.

7.11.2 It is important that the ingredients contained in the non prescription substance are scrutinised by the treating medical practitioner or pharmacist to ensure compatibility with other medicines being taken by the person. The treating medical practitioner must document endorsement of the use of such substances in writing on the medicine chart. The registered or authorised enrolled nurse should:

- i) not initiate, supply or administer such substances unless they have been approved in writing by the treating medical practitioner or included in the list of nurse initiated medicines by the medicine advisory committee,
- ii) document the use of any such substances.

8. Documentation

- 8.1 All medicine administration must be documented in the medicine record. Such documentation should be contemporaneous, legible and accurate and meet legislative and organisational requirements and any specific requirements for accreditation of the facility.
- 8.2 The medicine record should have a separate section for PRN medicines, nurse initiated medicines and emergency telephone/facsimile instructions. The medicine record should also note any allergies, and indicate when medicine review is required.
- 8.3 The transcription of medicine orders increases the margin for error, and should only be carried out where it is supported by legislation and organisational policies and protocols.

9. Dose Administration Aids

- 9.1 Dose administration aids (DAA) may consist of either 'blister' packaging systems or 'compartmentalised boxes'.
- 9.2 Assessment of a person who is likely to benefit from the use of a DAA should be undertaken by a medical practitioner (in consultation with other members of the medicine team), the registered nurse in charge of the aged care service and the community pharmacist who will be filling the DAA.
- 9.3 DAAs may be utilised to assist people who are self administering their medicines. Where the person is not self administering their medicines, a registered nurse or an authorised enrolled nurse should administer all medicines.
- 9.4 DAAs are not able to give direction to the person administering the medicine as to why a particular medicine is being administered, when not to administer the medicine, or information about the appropriateness, unwanted side effects, toxicity, medicine intolerance, medicine interactions and adverse reactions.
- 9.5 All medicine administration by a registered or authorised enrolled nurse to an individual must be from the original dispensed container. Dispensed medicines should be compatible with the legal and professional responsibilities of the person charged with administering the medicine.
- 9.6 A registered nurse may fill a DAA from a person's own dispensed medicines for the person to self administer. The box must be labelled with:
 - a) the full name of the person,
 - b) the name and strength of the medicine,
 - c) the dose, route and frequency of the medicine, and
 - d) the date of commencement and the duration where applicable.
- 9.7 It is recommended that no more than a seven day supply be provided in this way at any one time. A registered nurse may only fill a person's own medicine into a DAA if the person fully understands the medicines they are taking, the reason they are taking them, when not to take them, and their medicine regimen.
- 9.8 A registered nurse must not fill a DAA with a person's own medicines for another worker to administer.
- 9.9 The filling of DAAs by registered nurses must be in accordance with legislative requirements. It is the responsibility of the registered nurse to be familiar with the legislation that is relevant to the jurisdiction in which they are working.

10. Storage

- 10.1 The provider of aged care services is responsible for ensuring that there is provision for all medicines to be securely stored in a manner that meets legislative and manufacturers requirements, which protects the individual's safety and privacy, and promotes the safety of staff. This may be in a cupboard or other designated area which should be locked and secure from consumers of aged care services, visitors and other staff when not in use. The provision of an alarm system should be considered. The registered nurse in charge should be in possession of the keys to the medicine cupboard or other designated area at all times whilst on duty.

11. Disposal

- 11.1 Medicines belonging to a person who is deceased, or any medicines that are out of date or discontinued should be returned to the pharmacist for disposal. S8 medicines must be disposed of according to legislative requirements.

12. Information

- 12.1 Consumers of aged care services have the right to information about their medicine regimen at their level of understanding, which takes into account any specific disability (eg visual impairment, poor literacy), and which is in their language of choice, using an interpreter if necessary.
- 12.2 The prescriber has the primary responsibility for informing the individual about their medicine regimen, however the provision of information and education to older people in relation to their medicine is also a function of pharmacists, registered nurses and authorised enrolled nurses.
- 12.3 Consumer Product Information (CPI) should be made available to each individual in relation to their medicines, for each new medicine and when medicines are reviewed. Written policies and protocols should be in place which identify the process by which this to be achieved. The primary responsibility for the provision of CPI rests with the prescriber. Nurses should have ready access to CPI. Consideration should be given to computer linked CPI to facilitate access and ensure accuracy.

13. Quality Assurance

13.1 Formal quality assurance programs must be established which are able to:

- a) evaluate the degree to which the best practice standards have been met,
- b) evaluate the satisfaction level of the those involved in the medicine chain (individual, provider of aged care services, medical practitioner, pharmacist, registered nurse and authorised enrolled nurse), and
- c) make recommendations for better practice.

APPENDIX L

Pharmaceutical Society of Australia.
Guidelines for pharmacists.
Comprehensive medication review in
residential aged care facilities



Guidelines for Pharmacists

August 2000

COMPREHENSIVE MEDICATION REVIEW IN RESIDENTIAL AGED CARE FACILITIES

INTRODUCTION

These guidelines have been developed by the Pharmaceutical Society of Australia for use by pharmacists providing services to residential aged care facilities. They are designed to assist pharmacists to exercise their professional judgement in specific presenting circumstances and to promote a consistently high quality of service delivery.

The comprehensive medication review process is designed to improve health outcomes by promoting quality use of medicines. It is a process where the pharmacist works in cooperation with the resident's medical practitioner(s) to source, collate, and evaluate medication-related information with a view to identifying, preventing and solving medication-related problems.

Effective lines of communication between the reviewing pharmacist and facility staff, medical practitioners and residents must be established to ensure that:

- both the service and its desired outcomes are described to the residents, carers, and other members of the health care team, prior to commencement of the service (preferably in face-to-face meetings);
- operational details for the medication review service are confirmed.

The aims of comprehensive medication review are to:

- contribute to optimising the therapeutic effectiveness and management of the resident's medication regimen;
- facilitate a cooperative working relationship between pharmacists and other members of the health care team in order to benefit the health and well being of residents;
- provide a medication information resource for residents and health professionals involved.



CONSENT AND CONFIDENTIALITY

Strict confidentiality applies to the information pharmacists acquire about residents and their families in the course of providing a medication review service.

The rights of residents to make an informed decision as to whether they participate is acknowledged and reviews are only undertaken with the consent of the resident (or other legally recognised authority/individual where the resident is unable to consent).

Where residents agree to participate in a review, a record of this consent is attached to the medication chart and the review is conducted with their full involvement, ensuring their information needs are met regarding the process and their medications.

Under certain circumstances in a residential care facility, the pharmacist may judge that obtaining a signed consent form is not necessary. In such cases, the pharmacist should record what method was employed to obtain the resident's agreement for a review to be undertaken.

Residents have the right to obtain pharmacy services from any pharmacist of their choosing but, in the absence of a stated preference, the facility may arrange for provision of appropriate pharmacy services.

THE MEDICATION REVIEW PROCESS

A comprehensive medication review is a resident-focused, quality assurance process which involves a systematic evaluation of the resident's complete medication treatment regimen and management of that medication in the context of other clinical information and the resident's health status. It is conducted in collaboration with other members of the health care team and includes communication and follow-up of findings and recommendations. It enables pharmacists to apply their specific skills and knowledge to support other health professionals and contribute to resident care.

Identification of risk

The comprehensive medication review may be triggered by the pharmacist, the facility staff, medical practitioner, other members of the health care team, the resident or a carer, according to the agreed criteria.

Liaison

Consulting the resident's medical practitioner prior to conducting the review will assist in obtaining relevant information which may influence the review and also extends professional courtesy to the medical practitioner who may have responsibility for action arising from the review.

Examination of medication

The comprehensive medication review is a comprehensive and integrated activity which relies on information from all data sources and all aspects of care relating to residents. It involves clarification of the indication for use and administration details of all prescription and non-prescription medicines (including nutritional supplements, vitamins, herbal/complementary medicines and other remedies).

Clinical consideration

A medication chart review is an integral part of the medication regimen review but additional information sources are used to collate complete drug treatment information. This information is evaluated in the context of the information gathered in the resident medication profile to identify actual, suspected or potential drug-related issues or needs.



Reporting	<p>The reviewing pharmacist provides a report for consideration by the medical practitioner which documents actual or potential drug-related issues and needs, recommendations for change and options for adjusting the medication regimen. The report should be communicated in a way agreed with the medical practitioner, preferably including direct discussion.</p>
Follow-up	<p>Changes to the resident's treatment regimen will be determined by the medical practitioner in consultation with the facility and pharmacist, after consideration of the pharmacist's report in the context of the clinical status and needs of the resident.</p> <p>When they are known at the time of reporting, the report will also record outcomes resulting from the interventions and recommendations and when they are not known, it is expected that pharmacists will pursue the appropriate follow-up activities.</p>
Education and compliance assistance	<p>The reviewing pharmacist is also responsible for the provision of information and advice to staff, residents and their carers regarding medications or therapeutic devices, to raise their awareness about quality use of medications and devices, encourage compliance and ensure products are stored, prepared, distributed and administered appropriately.</p>
AGREED CRITERIA	<p>Each of the following criteria has been shown to be a contributing factor for medication misadventure and should guide the selection of residents likely to benefit from a comprehensive medication review:</p> <ul style="list-style-type: none"> • five or more regular medications; • more than twelve doses of medication per day; • three or more medical conditions; • admission to facility or hospital in the last four weeks; • significant changes to medication regimen in the last three months; • medication with a narrow therapeutic index or requiring therapeutic monitoring; • symptoms suggestive of an adverse drug reaction; • sub-therapeutic response to treatment; • suspected non-compliance or problems with managing drug-related therapeutic devices; • manage own medications and at risk due to language difficulties, dexterity problems, or impaired sight.



FREQUENCY OF REVIEW

The frequency with which reviews are conducted for individual residents will be influenced by their health status and aspects of their medication regimen. The nature of the agreement between the residential care facility and the pharmacist providing medication review services will also impact on the frequency of reviews.

The residents of aged care facilities have a wide range of clinical and social support needs and many have multiple disease states or conditions for which they are receiving drug treatment. It is therefore recommended in the *Integrated Best Practice Model for Medication Management in Residential Aged Care Facilities* (Australian Pharmaceutical Advisory Council, 2000) that every resident who meets the agreed criteria receive a regular comprehensive medication review, in cooperation between the prescriber and an accredited pharmacist, in consultation with the nursing staff.

The pharmacist should record the date at which a comprehensive medication review is conducted, on the resident's medication chart.

SOURCES OF INFORMATION

Much of the information required will be gained from the resident or found within the resident's progress notes and charts. However, in order to acquire all relevant information the pharmacist may also need to refer to some of the following sources:

- family/carers;
- nursing or other health professionals providing services within the facility;
- the resident's medical practitioner(s);
- medication charts/prescriptions;
- hospital discharge summaries;
- progress notes/case notes;
- treatment and/or care plans;
- laboratory test results/resident record sheets.

Pharmacists conducting reviews should confirm the preferred means by which they may access required information with appropriate personnel within the facility. They should also ensure they have access to appropriate drug information resources to check or research drug-related issues.

ELEMENTS OF THE REVIEW

A comprehensive medication review contains the following elements:

- resident medication profile;
- identification and clinical consideration of medication-related problems;
- documentation;
- reporting mechanisms;
- follow-up procedures.


Resident medication profile

The resident medication profile gathers relevant personal, social and health information which provides a context in identifying and assessing medication-related issues and problems. A medication profile should be established for each resident undergoing comprehensive medication review and updated prior to conducting subsequent reviews to enable monitoring of therapeutic progress. The type and range of information which may be gathered to develop the resident medication profile is outlined below.

Demographic / personal detail

- Full name of the resident.
- Resident's facility record number (or Medicare or concession number).
- Bed or room number of resident.
- Age, gender, weight (including recent changes) and height of the resident.

Relevant social history

Factors that may influence health status, therapeutic outcomes and willingness or ability to manage a therapeutic regimen include:

- occupation, lifestyle and cultural factors;
- possible detrimental exposure to environmental substances;
- family and other social support systems;
- particular circumstances (eg. disability or stress) that influence implementation of therapeutic plan;
- attitudes to health, illness and treatments that influence the resident's understanding, expectations, concerns or preferences.

Health and medical history

- Alcohol, caffeine and nicotine consumption.
- Past medical history.
- Past surgical history.
- Current acute and chronic conditions/diseases and associated clinical signs and symptoms.
- Chronology of events in period preceding review.
- Fluid status, dietary habits and special dietary requirements.
- Laboratory test results, especially those which relate to medication excretion and metabolism, including monitoring of renal, hepatic, cardiovascular and gastrointestinal functions.



Medication history	<p>A complete medication treatment profile is developed for each resident by collating therapeutic information from a medication chart review, with information obtained from other sources. This process assesses the completeness and accuracy of medication records and highlights issues related to the storage, supply and administration of medications. The profile will include:</p> <ul style="list-style-type: none"> • current medications, ie. prescription and non-prescription medications, including nutritional supplements, vitamins, herbal/complementary medicines and other remedies; • dose, dose form, schedule and duration; • medication on arrival at the facility and any subsequent/recent changes; • legal requirements for drug prescribing and administration; • completeness of medication chart/list and prescribed regimen; • previous history of allergy, drug sensitivity or adverse drug reaction; • electrolyte levels or other parameters required to monitor medication therapy (including therapeutic drug monitoring requirements); • therapeutic goals/management plans.
Identification of medication-related problems	<p>Issues requiring consideration during the process of identifying and resolving medication-related problems include:</p> <ul style="list-style-type: none"> • appropriateness of specific drug choice particularly in relation to precautions, contraindications and relative cost; • appropriateness of dose, dosing interval, route, dosage form, timing of dose; • appropriateness and frequency of use of 'prn' medication; • length of time on medication and intended length of treatment, too long or too short; • therapeutic or drug duplication; • possibility of current adverse or toxic effects; • possibility of drug induced therapy; • untreated conditions/symptoms; • potential for development of drug dependence; • potential for clinically significant drug-drug, drug-condition, drug-laboratory test and drug-food interactions; • unanticipated sub-therapeutic response to treatment; • confusion or concern about purpose or use of medication; • compliance with prescribed/intended treatment regimen; • treatments declined by the resident; • dosage alterations required to facilitate administration, eg. crushing of tablets in the absence of suitable liquid dosage forms; • suitability of available sites for medication administration/application.



Education and compliance assistance

This aspect of the comprehensive medication review process is to provide medication information (including that required to safely and effectively administer the medication). The information provided is designed to determine resident (carer, staff) concerns, clear confusion, achieve safe and appropriate use of medication and compliance with the medication regimen, in order to optimise therapeutic outcomes.

To ensure maximum effectiveness the information should be provided both verbally and in written form, including Consumer Medicines Information (CMI). The pharmacist should determine that the resident (staff, carer) understands the purpose and use of the medications, is able to use any medication delivery devices and understands what to expect and what to do if specified adverse effects occur.

Appropriate aids and systems for assisting compliance should be outlined where necessary.

Documentation

Accurate documentation must be initiated and maintained for all stages of the comprehensive medication review process. In particular, a record should be kept of all problems identified, recommendations, interventions and follow-up activities, the date and time they were made/taken and whether they were verbal or written. The names of medical practitioners and nursing staff with whom contact was made and the dates of contacts should also be documented. The documentation must be presented in a manner that allows colleagues involved in the process to assess the date on which the action was taken, what action was taken and by whom.

Pharmacists should complete the following documentation.

- Resident Medication Profile
- Intervention Record
- Comprehensive Medication Review Report

Proformas have been produced to assist pharmacists with this documentation and software versions are available. While the proformas may be adapted, the elements of the forms should be preserved.

Reporting mechanisms

The pharmacist must identify and document the preferred means of reporting to other pharmacists, the prescriber and nursing staff.

Supply issues

Upon identification of a problem relating to supply of a medication, if the pharmacist conducting the review is not the supplying pharmacist, they will contact the pharmacist supplying the medication to the facility.

Record issues

Upon identification of a problem relating to completeness and accuracy of records (eg. medical history, prescriptions, administration charts) the pharmacist will initiate action with the appropriate person to rectify the situation.

Administration issues

Upon identification of a problem relating to the administration of medications, the pharmacist will consult with the appropriate nursing or medical personnel with a view to resolving the problem.



<i>Therapeutic issues</i>	Upon identification of a current or potential therapeutic problem, the pharmacist will consult with the prescribing medical practitioner to advise on the nature of the problem and offer options and advice for resolving it. Where appropriate the pharmacist will also ensure relevant advice is provided to nursing personnel.
Follow-up procedures	The pharmacist must ensure documentation systems and procedures exist for follow-up of all interventions, recommendations and advice. The outcomes should be recorded and further follow-up considered if no action has been taken. The proforma Intervention Record form may be used to facilitate follow-up procedures.
CONTRACTURAL ARRANGEMENTS	<p>The provider of a comprehensive medication review service should have a written agreement with the facility to which the service is provided. The purpose of the agreement is to outline the respective responsibilities of the pharmacist and the facility operator and the conditions applicable to the provision of medication review services.</p> <p>An agreement is mandatory to access Commonwealth government remuneration for comprehensive medication review. A model agreement has been developed by the Australian Association of Consultant Pharmacy to meet Commonwealth requirements.</p>
REFERENCES AND RECOMMENDED READING	<p><i>Integrated Best Practice Model for Medication Management in Residential Aged Care Facilities</i>, 2nd edition, Australian Pharmaceutical Advisory Council 2000.</p> <p><i>SHPA Standards of Practice for Clinical Pharmacy</i>, The Society of Hospital Pharmacists of Australia, 1996.</p>

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Bibliography

- Australian Institute of Health and Welfare, 2001, *Residential Aged Care in Australia 1999-00: A Statistical Overview*, Canberra.
- Bonner C., Roberts M., 1997, *Quality of Medication Care in Hostels project*, Department of Veterans Affairs, Canberra.
- Department of Health and Aged Care, 1998, *Standards and Guidelines for Residential Aged Care Services Manual*, Commonwealth of Australia, Canberra.
- Department of Health and Aged Care, 1999, *Report of the national indicators. Evaluating the Quality Use of Medicines component of Australia's National Medicines Policy*, Canberra.
- Department of Health and Aged Care, 2001, *Consumer perspectives on managing multiple medications*, Canberra.
- Department of Health and Aged Care, 2001, *Exploring Alteration of Medication Dose forms in Residential Aged Care Facilities*, Canberra.
- Department of Health and Aged Care, 2001, *Quality Use of Medicines in Residential Aged Care "Factors influencing the implementation of best practice with respect to quality use of medicines in residential aged care"*, Canberra.
- Department of Health and Aged Care, 2001, *Residential Care Manual*, Commonwealth of Australia, Canberra.
- National Health and Medical Research Council, 1994, *Medication for the Older person — Series on clinical management problems in the elderly, No. 7 — NHMRC Report of the Health Care committee Expert Panel for health care of the elderly*, Canberra.
- NSW Department of Health, 1997, *Psychotropic Medication Use in Nursing Homes: Report of the New South Wales Ministerial Taskforce*.
- Society of Hospital Pharmacists of Australia, 1996, *Standards of practice for Clinical Pharmacy*.
- Society of Hospital Pharmacists of Australia, 1999, *Standards of Practice for the provision of Consumer Medicine Information by Pharmacists in Hospitals*. Aust J Hosp Pharm 2000; 30 (5): 225-8
- Pharmaceutical Society of Australia, 1999, *Professional Practice Standards*.
- Pharmaceutical Society of Australia, 2000, *Pharmacy Practice Handbook*.