RACGP
Royal Australian College of General Practitioners

RACGP aged care clinical guide (Silver Book)

5th edition

Part A. Medication management

General principles

- As the population ages, more people are living with multiple chronic diseases with an associated increase in polypharmacy (multiple medicines use).
- Medication use in older people is a complex balance between managing disease and avoiding medication-related problems.
- Supervised withdrawal of unnecessary medicines (deprescribing) is safe and may improve quality of life in older people.
- Optimal medication management in older people requires a multidisciplinary approach to ensure the best quality of life.

Practice points

Practice points	References	Grade
Assess a patient's risk of adverse medication events and drug interactions, particularly if polypharmacy includes over-the-counter medications or complementary and alternative medicines	1	Consensus-based recommendation
Review all prescription medication following changes in comorbidity and progression of disease	1	Consensus-based recommendation
Consider pre-planning medications when required for anticipated events from specific conditions (eg allergic reaction, angina, asthma, chronic obstructive pulmonary disease, constipation, diabetes, diarrhoea, dry eyes, nausea, pain, skin rashes)	7	Consensus-based recommendation
Dose forms and devices for administration of medicines may be of assistance to patients	1	Consensus-based recommendation

Consider the patient's requirements for end-of-life care	1	Consensus-based recommendation
Wherever possible, use non-drug treatments either alone or as an adjunct to medication	6	Consensus-based recommendation
Use the lowest effective maintenance dose when starting a patient on a new medication	1	Consensus-based recommendation
Consider the changing pharmacokinetics in older people that can affect drug absorption, distribution, metabolism and excretion, and adjust doses as appropriate	6	Consensus-based recommendation

Introduction

Older people's medication needs may be complex because of the high prevalence of disease and comorbidities (refer to Part A. Multimorbidity). Optimal medication management for older people in residential aged care facilities (RACFs) and the community involves a multidisciplinary and systematic approach with patients and/or their representative, general practitioners (GPs), pharmacists, aged-care nurses, other RACF staff, health service providers and allied health practitioners.

The Australian Pharmaceutical Advisory Council's (APAC's) *Guiding principles for medication management in residential aged care facilities* (the Principles) builds on previous editions of guidelines developed under Australia's National Medicines Policy. It promotes safe, quality use of medicines and medication management in RACFs.[1] The Principles is intended to assist RACFs to:

- develop, implement and evaluate locally specific policies and procedures
- support those involved in assisting residents
- support residents in the medication management process.

It is essential that GPs working in RACFs are familiar with the 17 Guiding principles as listed in Table 1.

Table 1. APAC's guiding principles[1]

Guiding principle	Comments
Guiding principle 1. Medication Advisory Committee	The residential aged care facility (RACF) should establish (or have direct access to) and use a Medication Advisory Committee to support the safe and effective management and quality use of medicines in the facility
Guiding principle 2. Information resources	The RACF should ensure that current and accurate medicines information resources are available to all residents, carers, staff and visiting healthcare professionals
Guiding principle 3. Selection of medicines	The RACF should support informed and considered selection of all medicines used in the facility
Guiding principle 4. Complementary, alternative and self-selected non-prescription medicines	The RACF should support informed selection and safe use of complementary, alternative and self-selected non-prescription medicines used by residents
Guiding principle 5. Nurse-initiated non-prescription medicines	The RACF should develop policies and procedures for safe practice in nurse-initiation of non-prescription medicines
Guiding principle 6. Standing orders	The RACF should develop policies and procedures to guide the use and review of standing orders where these are used in the facility
Guiding principle 7. Medication charts	The RACF should ensure all residents have a current, accurate and reliable record of all medicines selected, prescribed and used, to support safe prescribing and administration of medicines and effective communication of medicines information between residents and their healthcare professionals, and between care settings
Guiding principle 8. Medication review and	The RACF and residents' visiting healthcare professionals should ensure each resident's medication management is reviewed regularly and as needed.

medication reconciliation	Medication reconciliation processes should be used to ensure residents receive all intended medicines, and to reduce risk of errors in documentation when care is transferred or new medicines are ordered
Guiding principle 9. Continuity of medicines supply	The RACF should ensure that medicines supply is maintained for residents in changed circumstances to reduce disruption of their access to needed medicines
Guiding principle 10. Emergency stock of medicines	The RACF should develop policies and procedures for the management of an emergency stock of medicines where this is used
Guiding principle 11. Storage of medicines	The RACF should ensure all medicines, including self-administered medicines, are stored safely and securely and in a manner that maintains the quality of the medicine
Guiding principle 12. Disposal of medicines	The RACF should ensure that unwanted, ceased or expired medicines are disposed of safely to avoid accidental poisoning, misuse and toxic release into the environment
Guiding principle 13. Self-administration of medicines	The RACF should support those residents who wish to administer their own medicines as part of maintaining their independence. This should follow assessment and regular review of these residents' capacity to self-administer medicines safely
Guiding principle 14. Administration of medicines by RACF staff	The RACF should ensure that staff are appropriately qualified and authorised to administer medicines, and that administration practices are monitored for safety and quality
Guiding principle 15. Dose administration aids	The RACF should develop policies and procedures to guide dose administration aid, needs assessment, preparation, use, monitoring and quality assurance
Guiding principle 16. Alteration of oral dose forms	The RACF should ensure that residents, their carers and staff administering medicines know which oral dose medicines can and cannot be altered in form, such as by crushing or chewing and any special conditions relating to the alteration or administration of specific medicines
Guiding principle 17. Evaluation of medication management	The RACF should regularly review and evaluate each area of medication management for outcomes and take follow-up action where required

Particular aspects of medication management for GPs to consider when working in RACF include:[1]

- efficient and effective partnership between patients, prescribing GPs, dispensing and accredited consultant pharmacists and support staff (eg nursing staff, RACF staff, clinical care coordinator)
- assessing risks of adverse medication events and drug interactions, particularly if polypharmacy is combined with over-the-counter medications, or complementary and alternative medicines (refer to Part A. Polypharmacy)
- regular reviews of prescribed medication following changes in comorbidity and progression of disease to optimise medication use
- prescribing as required to cover anticipated events
- using appropriate dose forms and devices for administrating medicines
- requirements for end-of-life care (refer to Part A. Palliative and end-of-life care).

Medication management differs between residents in RACFs and older people in the community as, for the former group, medications are administered by staff at the optimal times with few issues in compliance. In addition, regular observation of residents in RACFs enables early recognition of medical conditions and monitoring of treatment goals.

Clinical context

All people have the right to give informed consent or refuse any medical intervention, including medication. It is important to discuss treatment issues and ongoing care plans with patients and their relatives/carers or representatives using language that can be easily understood.[2] Prescribing principles for older people include the following:[1,2,3,4, 5,6]

- Consider medication being taken by the patient on admission, including prescription, non-prescription and complementary and alternative medication, and effect of prior adherence or non-adherence.
- Wherever possible, use non-drug treatments either alone or as an adjunct to medication in preference to medication.
- New medications should follow a 'start low, go slow' approach; increase slowly according to tolerability and response.
- Use the lowest effective maintenance dose.
- Select medications that are suitable for use in older people with minimal adverse effects.
- Be aware of changing pharmacokinetics in older people that can affect drug absorption, distribution, metabolism and excretion, and adjust doses as appropriate.
- Check drug–drug, drug–disease and drug–food interactions using evidence-based references.
- Set monitoring protocols when appropriate.
- Prescribe the least number of medications, with the simplest dose regimens.
- Consider the patient's functional and cognitive ability when prescribing.
- Consider medication adverse effects if there is a decline in physical or cognitive function.
- Prescribe suitable formulation of medications if a person experiences problems with swallowing.
- Involve patient and family regarding any significant changes in medication (eg deprescribing; refer to Part A. Deprescribing).
- Regularly review treatment and cease medications if they are no longer appropriate or goals of management change.
- If the patient is self-administering, regularly assess their ability to continue to manage their medication administration and storage.

Prescribing medications include routine medications, as well as pre-planning medications when required for anticipated events from specific conditions (eg allergic reaction, angina, asthma, chronic obstructive pulmonary disease [COPD], constipation, diabetes, diarrhoea, dry eyes, nausea, pain, skin rashes).

The decision to prescribe medications should optimally be:

- evidence based
- made in the context of the patient's medical and psychosocial condition, prognosis, quality of life and wishes
- made in the context that overuse, underuse and inappropriate use of medications are equally important quality of care concerns.

The Australian and New Zealand Society for Geriatric Medicine (ANZSGM) has released a position statement on *Prescribing in older people* that provides further details.[7]

In practice

In the RACF setting, medication orders are written on the RACF medication chart by qualified prescribers, taking into account the needs and views of residents (or representatives), policies of the RACF, legislative requirements and professional standards. The qualified prescriber is usually the resident's GP, but may also be a locum or hospital doctor, Hospital in the Home (HITH) prescriber, geriatrician or palliative care team member. In some situations, registered dental practitioners or registered nurse practitioners may be able to prescribe medications.

It is necessary for GPs to work closely with RACF staff to regularly review and rewrite medication charts and prescriptions to maintain a continuum of medication for residents. There is currently a transition from medication charts to the national standard medication chart, and also to electronic chart prescribing in accordance with mandatory legislative requirements.[8]

APAC's *National guidelines to achieve continuity in medication management* should be referenced when a resident moves between different healthcare settings (eg hospital to RACF).[7] The World Health Organization's (WHO's) *Medication safety in transitions of care* provides further detailed information to improve safety in transition from hospital to home or RACF.[9]

Residential medication management review

Under the sixth Community Pharmacy Agreement, Medicare requires contracts in order for accredited pharmacists to undertake a Residential Medication Management Review (RMMR; Medicare Benefits Schedule [MBS] item number 903) in a particular RACF.[10]

RMMRs are services provided to permanent residents of Commonwealth-funded RACFs. The RMMR is conducted by an accredited pharmacist when requested by a resident's GP, and undertaken in collaboration with the resident's GP and appropriate members of the resident's healthcare team. A comprehensive assessment is undertaken to identify, resolve and prevent medication-related problems, and this assessment is provided to the resident's GP. The RMMR is recommended for each resident on admission and regularly reviewed thereafter when there is a therapeutic need.

As of April 2020, pharmacists are able to undertake two additional follow-up reviews after the initial RMMR. Referrals are no longer required by GPs and there is no MBS item number for follow-up reviews. Follow-up services should be provided by an accredited pharmacist and fed back to the resident's GP. The first follow-up interview should be undertaken no earlier than one month and no later than nine months after the initial interview. If a second follow-up interview is required, it should be undertaken no earlier than one month after the first follow-up interview and no later than nine months after the initial interview.[10]

Quality Use of Medicines

The Quality Use of Medicines (QUM) program is a separate service provided by a registered or accredited pharmacist, and focuses on improving practices and procedures as they relate to QUM in an RACF.[10]

Home Medicines Review

In the community, medication should be reviewed regularly to identify discrepancies between medicines being taken and those prescribed. The initial Home Medicines Review (HMR) requires a GP referral. If follow-up services are required, this should be undertaken by an accredited pharmacist. The first follow-up interview should be undertaken no earlier than one month and no later than nine months after the initial interview. If a second follow-up interview is required, it should be undertaken no earlier than one month after the first follow-up interview and no later than nine months after the initial interview.[12] The Home Medicines Review (HMR; MBS item number 900) is available for the GP and pharmacists to assess optimal medication management.

Dispensing, storage and disposal

Pharmacists work closely with GPs to dispense and supply medication safely, and accredited consultant pharmacists conduct medication reviews only on referral from a GP. All three can work closely as a team with the RACF staff to supply the dispensed medications in a suitable form and ensure their safe handling at the facility.

The Pharmaceutical Society of Australia has developed standards for pharmacy services to residents, outlining the following recommendations:[13]

- Maintain appropriate systems for the supply of medicines to the facility.
- Ensure medicines are delivered to the RACF in a timely manner.
- Ensure medicines are stored within the RACF in accordance with legislative and manufacturers' storage requirements.
- Monitor stock medicines used in the RACF.
- Check medications brought into the RACF by new patients, as soon as practicable after admission, to ensure consistency with currently prescribed medications.
- Conduct a comprehensive medication review of all residents at regular intervals and maintain appropriate records.
- In consultation with medical practitioners, identify residents who may require therapeutic medication monitoring.
- Identify, monitor and document adverse medication events.

- Provide information on medicines that adequately meet the needs of the RACF.
- Provide an education program appropriate to the needs of the RACF.
- RACFs must have a mechanism in place for the disposal of returned, expired and unwanted medicines.

Administering medication

Medication can be administered by a registered nurse (RN), an endorsed enrolled nurse (EN) or a personal care assistant (PCA) who is qualified to administer medication, or can be self-administered by the resident if they are assessed to be competent to do so.[1]

Dose administration aids can be used to provide medications where an RN who is qualified to administer medications is unavailable, and can be used to assist residents to self-administer. 'Blister' packaging systems or medication sachets are packed and labelled by a pharmacist, and the medication is administered directly from the dose administration aid to the resident. If the prescriber alters any medication order, the entire dose administration aid must be returned to the supplying pharmacist for repackaging. RACF staff should refer to relevant state/territory legislation for further information on dose administration aids. Older people in the community may administer from original containers or use dose administration aids either packed by themselves, family members or the supply pharmacy.

Modifying oral products

Many older people have difficulty swallowing tablets and capsules. Wherever possible, oral dose forms of medicines should not be altered.[1,2]

Medications must not be crushed or altered without consultation with the pharmacist or drug information centre. Altering the form of medication by crushing, cutting or dispersing may result in the risk of toxicity, reduced effectiveness, gastrointestinal irritation, unacceptable presentation to residents in terms of taste or texture, or an occupational health and safety issue to nursing staff.[1,2]

Details about the suitability for dispersion, crushing or cutting for people with difficulties swallowing or with enteral feeding tubes are provided in The Society of Hospital Pharmacists Australia's *Don't rush to crush*.[14] This resource is available as a text or as part of Monthly Index of Medical Specialities (MIMS) or Australian Drug Information (AusDI) as an additional subscription and should be used in conjunction with advice from a pharmacist.

Alterations in drug delivery should be recorded on the patient's medication chart with the date reviewed, so that all members of the healthcare team are aware of the new procedures. Each RACF is required to have a policy for the administration of altered medications, and suitable techniques if the drug is approved for crushing.[12]

Review medication regimen

Difficulty in swallowing provides an opportunity to review the medication profile; before trying to cut, crush and/or dissolve a tablet or capsule, consider: [2]

- stopping medicines that are no longer necessary
- using an oral liquid
- using other available routes (eg rectal, topical, transdermal, parenteral) that may be appropriate
- changing to an alternative drug that is easier to give or has a liquid or dispersible preparation available.

If a resident has difficulties swallowing medicines, it can be assumed that they will also encounter difficulties with food. Referral to a speech pathologist and dietitian may also be considered.

Resources

GPs should have access to evidence-based information on prescribing medication, including the following:

- *Australian medicines handbook*:[1] Provides a comparative, practical formulary covering medications marketed in Australia
- AMH aged care companion (online):[2] Particularly relevant for older people living in RACFs
- National Prescribing Service: A free service
- *Australian Prescriber*: An independent peer-reviewed journal providing critical commentary on drugs and therapeutics
- Veterans' Mates publications
- Therapeutic Guidelines: Series of 15 texts reviewed by expert consensus groups at regular intervals
- Australian and New Zealand Society for Geriatric Medicine's (ANZSGM's) Position statements
- *Quality use of medicines to optimise ageing in older Australians: Recommendations for a national strategic action plan to reduce inappropriate polypharmacy*

Production information and consumer medicines information guides are available from MIMS, AusDI, the Australian Register of Therapeutic Goods (ARTG), and are included in most prescribing software. Prescribers should ensure they are registered to receive regular Therapeutic Goods Administration (TGA) alerts (including any adverse event reporting) and alerts on the monthly changes to the Pharmaceutical Benefits Scheme (PBS).

Prescribing guidelines and position statements are also available from many chronic disease organisations, including:

- National Heart Foundation
- National Asthma Council of Australia's *Australian asthma handbook*
- Australian Lung Foundation
- The Royal Australian College of General Practitioners (RACGP) and Diabetes Australia's *General practice management of type 2 diabetes*
- The RACGP and Arthritis Australia's *Guideline for the management of osteoarthritis*
- Osteoporosis Australia

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