RACGP
Royal Australian College *of* General Practitioners

RACGP aged care clinical guide (Silver Book)

5th edition

Part B. Principles of medication management

General principles

- Older people have complex medication needs and are more vulnerable to side effects.
- Drug interactions are more likely in older people because of multiple medications for multiple comorbidities.
- There is a relative lack of scientific evidence regarding medication use in advanced age.
- Prescribing decisions need to consider the older person's medical and psychosocial condition, prognosis, quality of life and wishes.
- Generally, general practitioners should prescribe the least number and lowest doses of medications with the simplest dosing regimens.
- Regularly review the effects of treatment and the patient's ongoing adherence to it.
- Avoid or reduce medications that increase the risk of falls.
- Consider medication adverse effects if there is a corresponding decline in cognition or functional abilities.
- Older people are eligible under Medicare for medication management reviews, in conjunction with the community pharmacist.

Introduction

Whether managing older people in the community or residential aged care facilities (RACFs), patients in this population group can have complex medication needs. Older people are large users of medication because they often have multiple comorbidities (refer to Part A. Multimorbidity), and are often dependent on others (eg aged care staff, family/carers) to administer their medication (refer to Part A. Medication management).

Older people, particularly those who are frail (refer to Part A. Frailty), have greater vulnerability to the side effects and adverse reactions of medication.[1] The underlying factors for greater vulnerability include:[2,3]

- reduced body water
- increased body fat
- reduced protein binding
- renal and hepatic impairment
- increased receptor sensitivity
- decline in compensatory homeostatic mechanisms.

Drug interactions are also more common because of the multiple medications often prescribed for older people for the management of their comorbidities.

Part B. Principles of medication management highlights the essential components of providing healthcare to older people both in RACFs and in the community, while complementing Part A. Medication management, which focuses on assisting in clinical decision making.

General principles for prescribing

General principles for prescribing medication to older people:[4,5]

- Always consider the use of non-pharmacological interventions first, where possible (eg heat packs and massage for musculoskeletal pain; behavioural strategies rather than antipsychotics for behavioural and psychological symptoms of dementia [BPSD]).
- Use the 'Start low and go slow' approach for all new medication.
- Use the lowest effective maintenance dose.
- Avoid under-prescribing where it may result in suboptimal treatment.
- Use the simplest and safest medication (eg regular paracetamol rather than nonsteroidal anti-inflammatory drugs [NSAIDs]).
- Prescribe the least number of medications with the simplest dosing regimens.
- Consider all medications taken by the patient, including non-prescription and complementary and alternative medications.
- Consider the older person's cognitive and functional abilities and economic situation (especially for the use of medication outside its Pharmaceutical Benefits Scheme indication).
  - Consider cumulative risk of adverse effects from taking multiple drugs with the same effects (eg sedative or anticholinergic effects, falls risk–increasing drugs, hypotensives, hypoglycaemics or anticoagulants/antiplatelets).
  - Consider the risk of drug–disease interactions in the presence of multimorbidity.
- Regularly review treatment and the person's adherence (ie purchasing, managing, actually taking the medication).
- Avoid prescribing to compensate for the side effects of other drugs.
- Avoid or reduce medication that increases the risk of falls (eg benzodiazepines, diuretics, tricyclics, higher doses of antihypertensives, antipsychotics, antidepressants).
- Minimise medication that will aggravate cognitive impairment (eg anticholinergics, tramadol, higher doses of opiates).
  - Refer to the list of anticholinergics in Appendix A of the *AMH aged care companion*.

- Consider the adverse effects of medication if there is a corresponding decline in cognition or functional abilities.
- Provide suitable formulations where there are swallowing problems.
- Provide patient and/or carers with instruction and education with consumer medical information, patient information handouts or even simple written instructions.
- Aim to prescribe from a limited range of medication, and ensure you are familiar with their effects in older people.
- Where possible, weigh up the advantages and disadvantages of treatments in older people with limited life expectancy, and discuss with them or their representatives if necessary.

Goals of care

There is a relative lack of evidence in scientific literature and pharmaceutical trials about medication use in older people. Refer to the resources section for more information on useful prescribing information for doctors and patients.

It is important to establish treatment goals and preferences with all patients and/or their representatives in easily understood language, so that informed consent is established. The requirement for consent is particularly important if considering prescribing antipsychotics for BPSD (refer to Part A. Behavioural and psychological symptoms of dementia).[6]

The new Aged Care Quality Standards (ACQS) requires RACFs to identify and document the resident's condition, needs and preferences for clinical care. This includes identifying the person's goals for medications, and requires partnership between doctors and RACF nursing staff.[7]

All patients have a right to refuse any medical intervention, including the use of medication. The process is complicated in aged care with the presence of:

- cognitive impairment
- language difficulties
- chronic pain
- disability
- depression
- cultural issues
- conflicting views on the benefits of treatment between the patient and their family.

The goals of care in older people can range from prolonging life, preventing morbidity, slowing disease progression and preventing decline, to providing simple comfort measures. Treatment targets in older people can include primary and secondary prevention, chronic disease control, acute disease treatment, and purely symptomatic treatments.[8] Prescribing decisions need to be made in the context of the patient's medical and psychosocial condition, prognosis, quality of life and wishes.

Process of prescribing medication to older people:

- Start with a clinical and medical assessment of the patient, establishing the nature of the presenting problem and its probable causes.
- Review information regarding the patient's medical history, including current medications, allergies, adverse reactions, comorbidities and pre-existing conditions.
- Document reasons behind the decision/s to treat or not treat, and why certain medication was chosen; include any patient or carer input to the decision.
- Consider and document the benefits and risks of treatment, adverse effects and possible drug interactions with the chosen medication.
- Follow up by assessing the patient for medication effectiveness, adverse effects, complications and need for modification of the treatment regime.

Residential aged care facilities

Optimal medication management for older people in RACFs involves a systematic and multidisciplinary team approach (refer to Part B. Collaboration and multidisciplinary team-based care). This multidisciplinary team will generally involve the resident or their representative, general practitioners (GPs), other specialist medical practitioners, nurses, nurse practitioners, pharmacists, allied health professionals and other relevant staff. A similar approach can also be applied, where necessary, to older people living in the community.

The Australian Government Department of Health has developed *Guiding principles for medication management in residential care facilities* (Guiding Principles), which provides a series of recommendations around medication management in RACFs.[9]

Importantly, the Guiding Principles highlight the importance of having a medication advisory committee (MAC) comprising GPs, pharmacists, management staff, nursing staff and resident advocates, which will oversee the quality of medication delivery and use.

The Guiding Principles also aim to support RACFs to achieve high-quality use of medications from initiation, storage, supply, administration, review and cessation. This requires efficient and effective partnerships between all those involved in the prescribing process.

Specific aspects of medication management in RACFs:

- Monitor and record adverse reactions or interactions.
- Regularly review medication where indicated by changes in comorbidities or progression of disease.
- Consider prescribing as required (*pro re nata* [PRN]) and nurse-initiated medications for anticipated situations (refer to Part B. Anticipatory care).
- Use alternative oral formulations or alternative forms of drug delivery.
- Use of complementary and self-selected medications should be consistent with the RACF's MAC policy.
- Avoid potentially inappropriate medications.
- Deprescribe where necessary.
- Consider medication requirements during end-of-life care.

Some of the concerns driving these principles include:

- older, frailer populations entering RACFs
- use of high-risk medications in RACFs (eg insulin, chemotherapy agents)
- changing staff profiles (more non-nursing qualified personal care staff)
- problems with timely access to GPs
- use of nurse practitioners.

Medication charts

The National Inpatient Medication Chart (NIMC) – Long stay is generally used for residents in RACFs. In most cases, the patient's regular GP completes the chart; however, medications may be prescribed in certain circumstances by other visiting medical specialists, locums, hospital junior doctors or nurse practitioners. The GP has the important role of regularly reviewing and rewriting the medication charts of those in RACFs, working closely with the nursing staff to ensure continuity of treatment and to address any concerns or modifications needed.

Medication review

All new RACF residents are eligible to receive a Residential Medication Management Review (RMMR) via the Medicare Benefits Schedule (MBS), and this should ideally be performed as soon as possible after admission. The RMMR should generally be undertaken by:

- the resident's usual GP
- a doctor from the medical practice providing the majority of the previous and/or future care
- a GP contracted to provide care on a facility-wide basis

- a GP who provides services as part of an aged care panel arrangement.

Once the process of the RMMR has been discussed with the resident and/or their representative, and consent has been obtained, the GP provides details of the resident's most recent comprehensive medical assessment and any other relevant clinical information to the accredited pharmacist for review. After patient consent is obtained, a patient's GP needs to provide a written referral, which should include the reason for referral and all relevant prescribing and clinical history to the RMMR service provider.

The RMMR is conducted by an accredited pharmacist who identifies actual and potential causes of medicine-related problems and presents suggested solutions in a written report to the GP.

After the pharmacist performs the analysis, they discuss the outcomes of the review with the GP (usually in a written report), including findings, medication management strategies or recommendations, means of implementation, and follow-up. The GP then develops or revises the medication management plan, and finalises it after discussion with the resident and/or their representative. Copies of the plan are provided for the patient's records, RACF nursing staff, and (if desired) resident/representative.

A post-review discussion with the pharmacist is not necessary if there are no, or only minor non-urgent, changes to the older person's treatment, or if the issues require discussion as part of a case conference.

The RMMR is rebatable as an MBS item every 12 months, except where there has been a significant change in the patient's medical condition or medication regimen (refer to Part B. Medicare Benefits Schedule item numbers). Such situations include, but are not limited to, discharge from an acute care facility in the previous four weeks, falls, changes in cognition or physical function, or symptoms suggestive of an adverse drug reaction.

Older people who do not live permanently in an RACF (eg respite patients) and those living in the community are not eligible for the RMMR. Instead, the GP can initiate a Domiciliary Medication Management Review (DMMR) or home medicines review in conjunction with their community pharmacist. The pharmacist performs a comprehensive medication review during a home visit, and provides a report and findings to the GP. The GP and patient and/or representative are then able to agree on an appropriate medication management plan.

Resources

- NPS MedicineWise – Provides useful prescribing information to doctors.
- Reference databases – *Australian medicines handbook (AMH) aged care companion*, MIMs Online and Therapeutic Guidelines Limited provide guidelines as to appropriate dosing in older patients, and dosing in renal or hepatic impairment.
- Consumer information – Therapeutics Goods Administration (TGA), NPS MedicineWise and MIMs Online.

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