ALLIANCE-MIDMED MEDICAL SCHEME

Doctor Booklet: Deprescribing

Reducing Medication to Improve Patient Outcomes

Odes Medical

Prepared by Odes Medical Consultancy Pty Ltd on behalf of Alliance-Midmed Medical Scheme.

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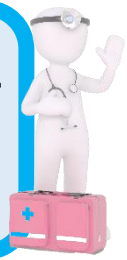
DEPRESCRIBING: WHAT IS IT?

Deprescribing is a systematic process of identifying and discontinuing any inappropriate or unnecessary medications to improve patient well-being.

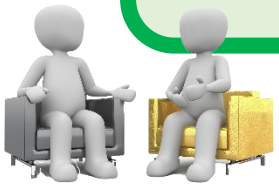
As life changes, our patients' medication needs change.

Medications that were once good for them may not be the best choice now.

It is important to periodically review the medications that our patients are on, and adjust them to ensure their optimum health.



Studies have shown that deprescribing leads to improvement in cognition, fewer falls, and improved survival[1].
With our guidance, we can safely eliminate medication that has become unnecessary, and improve our patients' health!



POLYPHARMACY AND DEPRESCRIBING

Polypharmacy refers to the use of more than 5 different medicines concurrently.

In many cases polypharmacy is appropriate and beneficial for the patient.

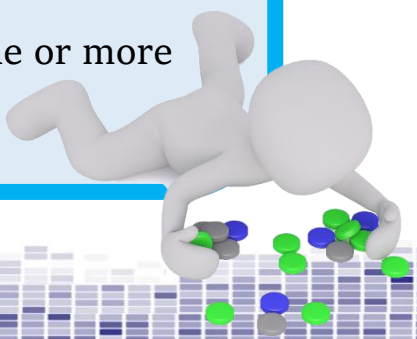
However, it becomes inappropriate when the risks of multiple medications begin to outweigh their potential benefits for an individual patient.

Appropriate polypharmacy occurs when:

- ✓ All drugs are prescribed for the purpose of achieving specific therapeutic objectives that have been agreed with the patient.
- ✓ Therapeutic objectives are actually being achieved or there is a reasonable chance they will be achieved in the future.
- ✓ Drug therapy has been optimised to minimise the risk of adverse drug reactions (ADRs).
- ✓ The patient is motivated and able to take all medicines as intended.

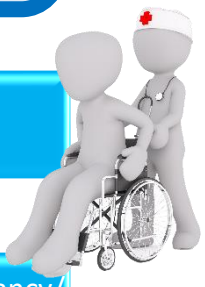
Inappropriate polypharmacy occurs when:

- One or more drugs are prescribed that are not/no longer needed as there is no evidence-based indication, or the indication has expired, or the dose is unnecessarily high.
- One or more medicines fail to achieve the therapeutic objectives they are intended to achieve.
- One, or the combination of several, drugs cause unacceptable ADRs, or put the patient at an unacceptably high risk of such ADRs.
- The patient is not willing or able to take one or more medicines as intended.



DEPRESCRIBING: WHO IS IT FOR?

While all patients can benefit from a medication review, it is critical in the following patient groups as they are particularly vulnerable to adverse drug reactions:



Multi-morbidity	Polypharmacy	Elderly (>65yr)
Frail	Housebound	Shortened life expectancy/ end of life
Vulnerable	Difficulty managing treatment and/or daily activities	Receive care and support from multiple services
Frequent unplanned/ emergency care	Decline in hepatic function	Decline in renal function
At treatment resolution	At treatment failure	At transfer of care

For many preventative medicines, the benefits may never be realised in cases of shortened life expectancy.

The increased risk of harm is not always offset by increased benefits.

Due to reduced ability to clear drugs and increased vulnerability to drugs' adverse effects, the risk of harm is generally higher in older people.

People with multi-morbidity have greater medication burden and greater risks of the adverse effects of drug-drug and drug-disease interactions.

DEPRESCRIBING: EVIDENCE

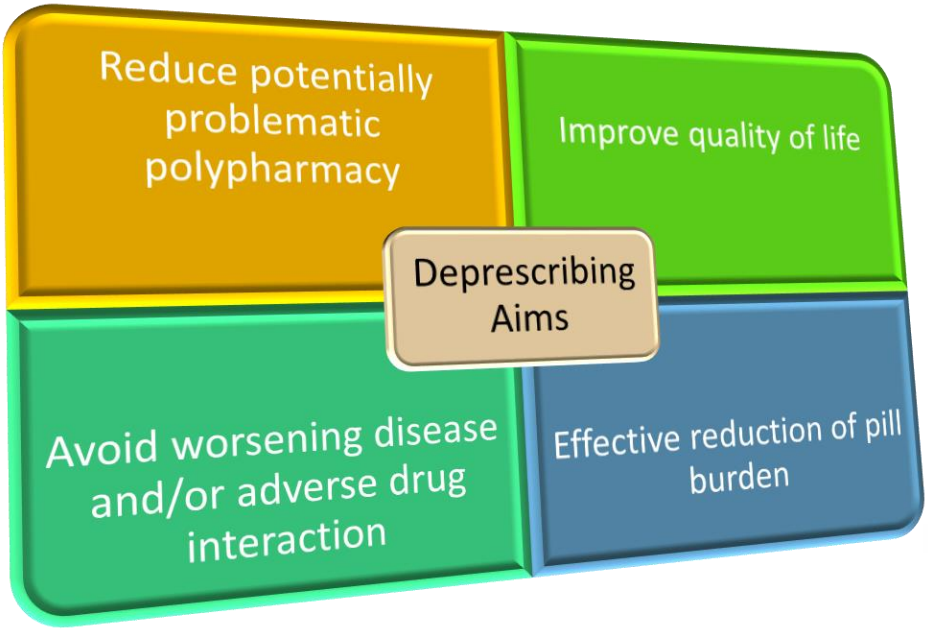
Studies both abroad and locally have found that there is a trend of prescribing more medication for older, more frail patients. And, as patients age, inappropriate prescriptions increase.
Polypharmacy is a defined risk for frailty and may be contributing to a worsening of frailty, decreased functioning and increased occurrence of adverse events, including hospitalisations

A 2016 study in the **US** found that 36% of community dwelling adults, age 62 to 85, were taking five or more medications. This is up from 31% in 2005. 15% of older adults are potentially at risk for a major drug-drug interaction.[3]

A **South African** study published in the SAMJ in October 2016 (A retrospective drug utilisation review) found that 68.9% of patients over 65 years of age had Potentially Inappropriate Prescriptions (PIP's), as defined by the 2012 Beers criteria. The study thus concluded that PIP's were common among older patients.[4]

Further **South African** studies showed that adverse drug reactions (ADRs) account for 3.2–7% of acute hospital admissions.[5]
About 17% of hospital admissions in patients older than 70 years.[6]
Results among adult medical inpatients 56 of 357 deaths (16%) and 164 of 1951 admissions (8.4%) were ADR-related, and 43% and 45% respectively of these serious ADRs were preventable.[7]

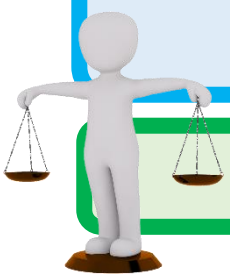
DEPRESCRIBING: AIMS



The aim of deprescribing is to improve the health of the patient by assessing that all medication being taken is most appropriate for the patient.

Doctor needs to assess the benefit vs harm of each medication.

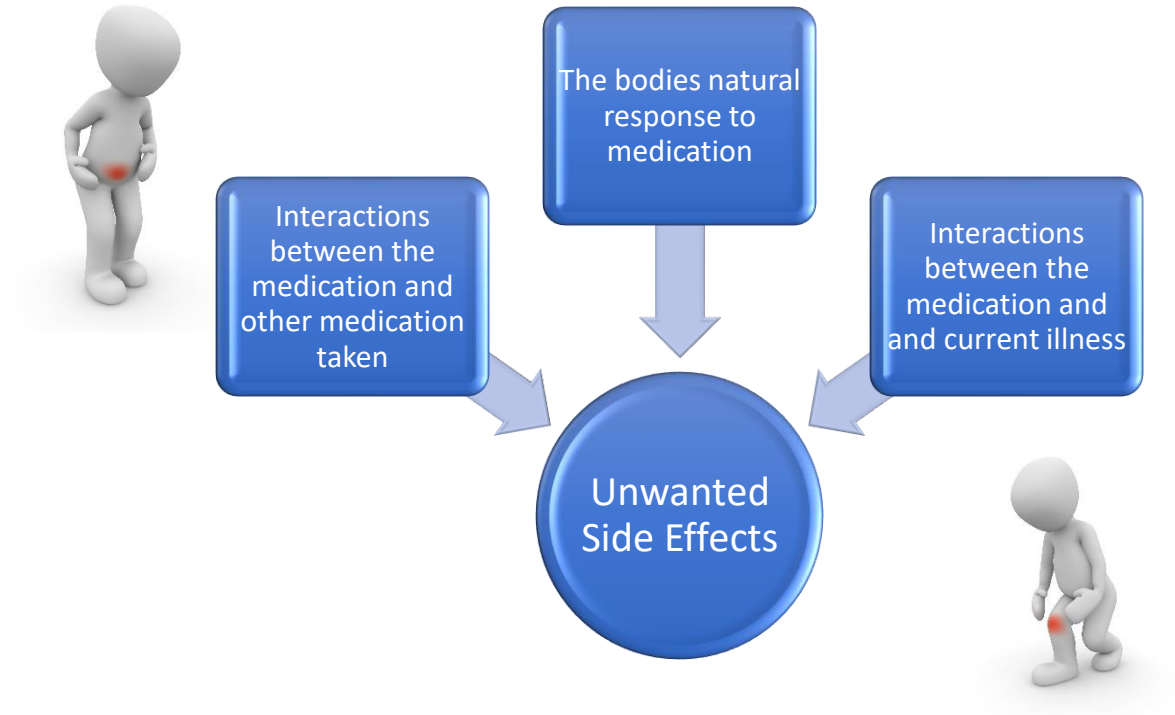
When possible, low benefit, high harm medication should be discontinued.



Continue high benefit and low harm medication

THE PROBLEM WITH UNNECESSARY MEDICATION

Medication often has unwanted side effects.



When the medication is needed, then it is important for the patient to take the medication for the benefit received. The dosage is initially set to maximise the benefit to the body while minimising the negative side effects.

However, if the patient is taking medication that is not needed, or in doses that are too high, the patient is suffering these negative side effects for no reason!

Side effects from too much medication may include:

Decreased Functioning

Confusion

Cognitive impairment

Dizziness

Falls

Increased expenses

Co-payments for:

Medicine

Hospitalisation

Service providers

Treatments for side effects

More doctor visits

More hospitalisations

Risks of hospital-acquired illnesses

Complicated medicine regimens

Remembering to take all medications

Mistakenly taking too little medicine

Mistakenly taking too much medicine

Increased risk of Geriatric Syndromes

Depression

Cognitive impairment

Frailty

Falls

Malnutrition

Decreased ability to perform activities of daily living

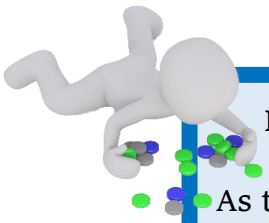
THE BENEFITS OF DEPRESCRIBING

Benefits of taking the correct levels of medication

- Improved quality of life
- Easier to take the necessary medication and take it correctly
- Avoid unwanted side effects from over-medicating
- Avoid worsening disease
- Avoid problems from medication reacting with other medication
- Decreased hospitalisations
- Decreased falls
- Improved cognition
- Increased level of functioning
- Increased life expectancy

People over 65 years old, and especially when over 85 years old, are at the highest risk of being over-medicated!

HOW TO SAFELY DECREASE MEDICATION



Medication may only be stopped or changed on Doctor's advice.

As the doctor, you will need to review the medication list and see what is unnecessary.

The full picture is needed to properly review medication.

When visiting, the patient will need to bring:

All **prescribed** medication.

All **over-the-counter** medication.

All **supplements/vitamins**.

Educate your patients so that they can be empowered to answer these important questions:

- Why am I on this medication? What is it for?
- Is it effective for the purpose it was prescribed based on good research?
- Do I still need to take this medication?
- Do any of the other medications I am on achieve the same thing?
- Do I need this dosage or would a lower amount of medication also be adequate?
- What is the benefit to me?
- What are the risks/ side effects of continuing this medication?
- Is there a cheaper option of a similar type of medicine?

- Does the medicine interact harmfully with other medicines I am taking?
- Does this medicine have any effects on another illness I have?
- What will happen if I go off/ decrease this medication?
- Are there any lifestyle changes or non-medication treatment options that would allow me to stop or decrease the medication?
- Are any of the medicines I am taking being used to treat a side effect of a different medicine?
- Is there another medicine I could take which has less unwanted side effects?

Encourage your patients to take responsibility and have clarity on how medication impacts their health!

STEPS OF DEPRESCRIBING – OVERVIEW

A MODIFIED "7 STEPS" APPROACH

Step 1: Identify aims and objectives of treatment

Step 2: Identify what the patient is taking

Step 3: Does the patient take unnecessary drug therapy?

Step 4: Effectiveness - Are therapeutic objectives being achieved/will they be achieved?

Step 5: Safety - Is the patient at risk of/ does the patient currently suffer from Adverse Drug Reactions (ADRs)?

Step 6: Is the medication cost-effective?

Step 7: Is the patient willing and able to take the medication as intended?

Step 8 - Review

Step 9 – Collaborate with other doctors/specialists that the patient is seeing

STEPS OF DEPRESCRIBING – A MODIFIED "7 STEPS" APPROACH

Step 1 **Identify aims and objectives of treatment**

ASK What matters to the patient?
What are their goals and priorities?

USE Use shared decision making

EXPLAIN Explain the key information relevant to the patient e.g. Laboratory markers

ENSURE Ensure that medication allows for optimal functioning of this particular patient. (Keep in mind patient goals!)

Good prescribing is a collaborative process with the patient and takes into account

- Patient values, preferences and goals
- Life expectancy of patient
- Level of functioning of patient

Step 2	Identify what the patient is taking

ASK

Ask the patient to bring ALL medication they have, including:
Prescribed medication
Over the Counter medications
Herbal remedies
Traditional remedies.

ASK

Ask for each medication:
Are they actively taking it?
What is the dose and frequency?

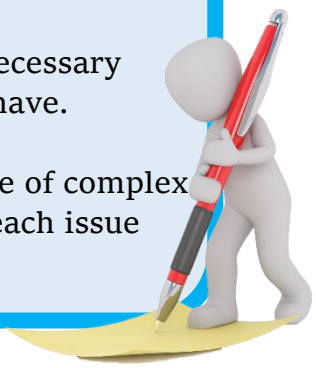
ENSURE

Ensure the patient understands the importance of taking medication which is truly necessary.

For an effective and efficient medication review, the patient should come prepared.

The patient should be advised in advance to brings all necessary medication, as well as note any questions they may have.

Ensure that adequate time is set aside for the session. In case of complex polypharmacy, consider using several sessions to tackle each issue separately.



Step 3 Does the patient take unnecessary drug therapy?

Doctor, ask yourself:
Why was this medicine prescribed?
What is the medicine being used to treat?
Is this medicine being used to treat side-effects from another medication?
Does the medicine lack efficacy?
Does the medicine provide additional benefit?
Does the medicine require a long duration for effect to be seen, and is not relevant to the patient?
Can this medicine be replaced with lifestyle changes?

ASK

Doctor, ask yourself:
Is the medication achieving the therapeutic goals or outcomes that matter most to the patient?

Consider reducing medication when…

- The dosage rate can be reduced with no significant risk.
- There are adverse effects

Consider stopping a medication when…

- Known possible adverse reactions of the medication outweigh possible benefit
- Indication does not seem valid and relevant in this patient's disability level
- Indication does not seem valid and relevant in this patient's age group

Consider shifting to an alternate medication when…

- There are adverse symptoms or signs that may be related to the medication
- Another medication is being used to manage the side effects of this medication
- There is another medicine that may be superior

Consider maintaining medication when…

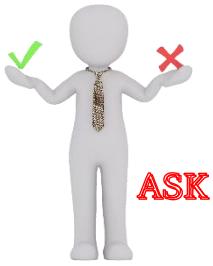
- There is evidence that using the drug at its current dosage rate is indicated for patients of this age group and disability level and the benefit outweighs all possible known adverse effects

Step 4	Effectiveness - Are therapeutic objectives being achieved/will they be achieved?

ASK

Doctor, ask yourself:
Is the treatment the most effective to achieve intended outcomes?

If not: Investigate whether the patient is compliant.
If they are: Consider titrating the dose as this medication is not effective/needed.



ASK

Doctor, ask yourself:
When the medicine is used as preventative treatment, is the patient able to continue taking medicine for required time to gain benefit?
(For guidelines, see Drug Efficacy (NNT) table)[2].

Step 5	Safety - Is the patient at risk of/ does the patient currently suffer from Adverse Drug Reactions (ADRs)? (A risk vs benefit assessment for each medication)

ASK

For each medication ask: Does the patient suffer from any symptoms? (Medication side effects, drug-drug or drug-disease interactions)

REVIEW

Review: Laboratory data for presence of ADRs

ENSURE

Ensure safety optimisation according to the individual patient condition e.g. renal/hepatic function and other medications that the patient is taking simultaneously.

EVALUATE

Consider switching to a medicine that will provide the benefit needed at a lower risk.

Step 6	Is the medicine cost-effective?

CONSIDER

Consider opportunities for cost minimisation, but do not compromise on effectiveness, safety or adherence.

ENSURE

Ensure prescribing is in line with current formulary recommendations.

Step 7	Is the patient willing and able to take the medication as intended?

OPTIMISE — Avoid complex dosing regimens to increase chance of compliance.

ENSURE — Ensure the drug therapy is tailored to patient preferences.

ASK — Does the patient understand the outcome of the review?

COMMUNICATE — Agree to and communicate the plan with patient and/or family.

Plan deprescribing with the patient.

Many patients will resist stopping medications, especially those they have been taking them for a long time.

They may be concerned about their conditions worsening or about contradicting the original prescriber.

To help patients buy into the deprescribing process, consider discontinuing one medication at a time or tapering medications if necessary (prioritse those with the highest risk), and assure your patients that you will monitor them for worsening conditions or withdrawal effects.

Also, discuss the potential or real adverse effects of their medications; the potential benefits of deprescribing, such as reduced risk of hospitalization, cognitive or functional gains, and improved quality of life; and the minimal (if any) impact deprescribing would have on their medical conditions.

This latter point is especially true for medications prescribed without a clear indication or with no significant clinical benefit. These benefits of deprescribing are also critical to consider in patients who are receiving palliative or end-of-life care.

Step 8	Review

REASSESS

One week after making changes, reassess:

1. Function (ADL's and cognitive such as Folstein's mini mental)
2. Clinical status
3. Medication compliance

REVIEW

Medication review should ideally be done at each visit and the updated list of all medications (including OTC's) should be noted down.

Regularly re-review medications.

[a US study showed that only 19% of visits to an internal medicine specialist included a medication review][8]

MONITOR

Because deprescribing may require tapering of medications or may involve withdrawal symptoms, the process needs to be monitored closely.

Step 9	Collaborate with other doctors/specialists that the patient is seeing

Ensure all providers are onboard with the new regimen so that patient does not receive conflicting advice/scripts

Many patients see multiple providers and can quickly accumulate medications across conditions. As much as you are able, actively engage your specialist colleagues in discussions of benefits and harms of new medications, as well as other options. One way to facilitate this is by using electronic or paper consultation reports that clearly list new or modified medications.

REFERENCES

1. **Page AT, Clifford RM, Potter K, Schwartz D, Etherton-Beer CD. The feasibility and effect of deprescribing in older adults on mortality and health: a systematic review and meta-analysis. Br J Clin Pharmacol. 2016;82(3):583-623.**
2. **Drug efficacy chart can be found at: https://managemeds.scot.nhs.uk/for-healthcare-professionals/help-more-info/appendices/appendix-c-developing-and-maintaining-numbers-needed-to-treat-nnt-standard-operating-procedure-sop/ Note: Although the NNTs provided allow a numerical comparison between treatments, it is important that they are not taken in isolation from other issues**
3. **Qato DM, Wilder J, Schumm LP, Gillet V, Alexander GC. Changes in prescription and over-the-counter medication and dietary supplement use among older adults in the United States, 2005 vs. 2011. JAMA Intern Med. 2016;176(4):473-482**
4. **J A van Heerden; J R Burger; J J Gerber. Inappropriate medicine prescribing in older South Africans: A cross-sectional analysis of medicine claims data. SAMJ, S. Afr. med. j. vol.106 n.10 Pretoria Oct. 2016**
5. **Pouyanne et al., 2000:1036; Wasserfallen et al., 2001**
6. **Cruikshank, 2003:53**
7. **UCT study; Mouton, J.P. 2022. The burden of serious adverse drug reactions in South Africa. Faculty of Health Sciences, Department of Medicine. http://hdl.handle.net/11427/36697**
8. **This was an internal study done at an American medical centre.**

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