

Key strategies for prescribers and pharmacists

Key strategies to reduce medicine wastage and prevent "piles of pills" creating a safety issue in homes include:

- Regular review of a patient's current medicines
- Prescribing a new medicine for a trial period and assessing efficacy and tolerability before continuing
- Prescribing appropriate quantities of "as required" medicines, e.g. analgesics
- Prescribing and dispensing "safety medicines" in smaller than 90-day stat quantities
- Using the Long Term Condition Service offered by pharmacists for support with medicines adherence

Every year in New Zealand, it is estimated that hundreds of thousands of subsidised medicines are dispensed to patients and never used. These medicines often end up accumulating in people's homes. This can cause safety issues such as inappropriate sharing of medicines, accidental or intentional overdose or use of expired medicines which may no longer be effective. If medicines are inappropriately disposed of they can also cause environmental pollution, e.g. if placed in household rubbish or flushed down the toilet.

Medicines are wasted for various reasons, including unintentional oversupply, non-adherence, changes in treatment or dose, allergic reaction or intolerance, resolution of the condition or death of the patient. Many patients collect all medicines prescribed to them including medicine repeats, even if the medicine is no longer needed or wanted.¹

Whenever medicines are prescribed or dispensed a conversation should take place with the patient about their use of each medicine.

Prescribers:

- Ask what medicines* the patient has at home before prescribing more
- Ask if they are using each medicine they have been prescribed
- Ask if they know what each of their medicines are for
- Ask if they are experiencing any adverse effects or difficulties with taking any of their medicines
- When prescribing "as required" medicines, consider giving these to patients on a separate prescription so that they can collect any other prescription medicines they need and hold onto their separate "as required" prescription for if, or when, it is needed, e.g. as required omeprazole or paracetamol
- * Include all options, e.g. pills, inhalers, topical preparations and over-thecounter products

Pharmacists:

- Ask the patient if they require all of the medicines on their prescription before they are dispensed
- Let patients know that they can put items on hold if they are not currently required; any item on the prescription can be held at the pharmacy for up to three months, and dispensed at a later date if needed
- Ask if they have any concerns or questions about the medicines they have been dispensed
- Ask patients to dispose of any unwanted medicines by returning them to the pharmacy

Consider a trial period

The "trial period" dispensing provision of the Pharmaceutical Schedule can be used to allow dispensing of a small portion of the first supply of a new or changed dose of medicine in order to check the acceptability and tolerability of the medicine for the patient. The prescription must be endorsed with the words "Trial period" or "Trial" and the quantity or time for the trial specified, e.g. by writing "trial supply 30 days" on the prescription or by entering the number of days supply in the "Initial Dispensing Period" box in Medtech. A reminder placed in the patient's notes at the start of the trial period can be used to ensure that the outcome of the trial is documented and to check that the patient has correctly understood the reason for the trial and is continuing to take the medicine or has a review in place. If the trial of treatment goes well, the patient can contact their pharmacist so that the remainder of the prescription can be dispensed; this is at no additional cost to the patient provided the medicine is fully subsidised.

Appropriate quantities for "as required" medicines

PHARMAC subsidy regulations require pharmacists to dispense 90-day single "stat" supply for many medicines, even if they are prescribed "as required". This can lead to unnecessarily large quantities of medicines being dispensed. Prescribers can calculate the number of tablets or inhalers needed for a patient on an "as required" basis and specify the quantity to be dispensed.

For example, a prescription for paracetamol to be used occasionally when required, and not continuously, could be:

- Rx Paracetamol 500 mg tablets
- Sig 1 2 tablets q4h prn, up to qid
- Mitte 180 tablets

This quantity provides the patient with enough supply to take two tablets, twice daily, for a few days a week, over a three month period.

Consider more frequent dispensings of Safety Medicines, where appropriate

"Safety Medicines" are medicines which carry a risk of harm to the patient when dispensed in large quantities, including tricyclic antidepressants, antipsychotics, benzodiazepines and zopiclone, codeine, buprenorphine with naloxone and Class B controlled drugs. For these medicines the prescriber can determine the dispensing frequency so that a patient receives

the same 90-day supply but in smaller quantities dispensed more frequently, at no extra cost to the patient. Clinicians can do this by specifying a maximum quantity of the medicine to be supplied to the patient on each dispensing (e.g. 90 tablets in total, supplied 30 tablets at a time) or time period of supply (e.g. supply tablets for 90 days in total, 30 days at a time). Safety Medicines are identified in the Pharmaceutical Schedule with the words "Safety Medicine" written alongside the medicine's listing.

Consider eligibility for the Long Term Condition (LTC) service

General practitioners, other health professionals, family members or patients themselves can make referrals to the Long Term Condition service which is offered by community pharmacies. The service is delivered by a pharmacist and is designed to help patients to self-manage their medicines regimen and improve their adherence, including assessing factors affecting adherence, determining an appropriate dispensing frequency or increasing a patient's understanding of their medicines and how to use them.

To be eligible for the service:

- The patient must live in the community and have at least one long term condition that requires medicine as part of its management
- The patient must have been referred for assessment by a general practitioner or other allied health service, e.g. district nursing or secondary care, or have concerns about self-managing their condition identified by their family, pharmacist, or the patient themselves
- There must be evidence that the patient has collected less than 80% of their regular medicines over the past six months
 - OR that despite collection there are concerns regarding adherence
 - OR the patient has had a recent review of their medicine use which has identified that support and monitoring is required

For further information, see: "Piles of pills: Prescribing appropriate quantities of medicines", BPJ 69 (Aug, 2015).

Reference:

 Braund R, Peake B, Shieffelbien L. Disposal practices for unused medications in New Zealand. Environ Int 2009;35:952–5. doi:10.1016/j. envint.2009.04.003