

Polypharmacy can be a marker of problematic prescribing. Not all polypharmacy is problematic, however, and for a number of patients the potential benefits of multiple medicines outweighs the potential harms. For the purposes of reporting, high-risk polypharmacy is defined as the concurrent prescribing of ten or more medicines.

This report provides prescribers with details about patients in their practice who are taking ten or more medicines over a 12 month period (April, 2015 – March, 2016) and suggests approaches to optimise medicine use in these patients.

## **Key messages:**

- For many people, appropriate polypharmacy will extend life expectancy and improve quality of life
- Older patients are more likely than younger patients to be affected by problematic prescribing due to comorbidities and reduced renal and hepatic function
- Polypharmacy may result in patient confusion as well as contributing to reduced adherence and an increased burden of treatment
- Polypharmacy increases the risk that unused medicines will accumulate and contributes to waste

For further information see: "Polypharmacy in primary care: Managing a clinical conundrum", BPJ 64 (Oct, 2014).

better

A polypharmacy practice audit is available from: www.bpac.org.nz/Audits/polypharmacy.aspx

## Patients with 10+ medicines at your practice

Older age is associated with an increased number of long-term conditions and increased polypharmacy (Table 1). Due to age-related pharmacokinetic and pharmacodynamic changes, older patients taking ten or more medicines are at an increased risk of adverse events and hospitalisation. Withdrawal of medicines may be appropriate for some of these patients following a medicine review (see below).

**Table 1.** Number, proportion and age of registered patients who have had 10 or more medicines at sample practice, similar practices and nationally between April, 2015 – March, 2016\*

	Sample practice	Similar practice	National
Age Band Years	10+ Medicines	Patients with 10+ medicines	Patients with 10+ medicines
0-29	0% (n=0)	0%	0%
30-39	0% (n=1)	0%	0%
40-49	1% (n=3)	1%	1%
50-59	4% (n=12)	3%	2%
60-69	5% (n=11)	6%	5%
70-79	14% (n=17)	13%	12%
80+	21% (n=6)	25%	23%

Patients
taking ten or more
medicines are reported
to have an 80% chance
of an adverse event
occurring in the next
12 months<sup>1</sup>

## **Optimising Medicines – Where to start?**

Medicine reviews can be challenging and at times it is difficult to know where to begin. The list below contains medicines that are frequently used by patients taking ten or more medicines, and the number of patients in your practice taking ten or more medicines who are prescribed these medicines. Recommendations are included to help optimise medicine use in these complex patients.

Medicine (% National)**	Number of patients at sample practice (%)**	Recommendation	
Paracetamol (54%)	21 (42%)	Consider the quantities prescribed - check with the patient if they need more before issuing a repeat	
Omperazole (49%)	33 (66%)	Check if a PPI is still required, especially if it was initiated with a corticosteriod or NSAID that is no longer taken	
Atorvastatin (36%)	27 (54%)	Consider stopping statins for primary prevention in those ≥ 85 years or frail older patients as statin-induced myopathy and medicine interactions are increased in these groups	
Simvastatin (24%)	3 (6%)		
Zopiclone (17%)	13 (26%)	Long-term use is associated with increased risk of falls and adverse events	
Codeine phosphate (12%)	2 (4%)	Opioid dose requirement decreases with age	
Tramadol (11%)	7 (14%)	There is an increased risk of adverse effects including cognitive impairment, sedation, respiratory depression and falls in older patients  Use a lower initial dose and titrate to effect	

<sup>\*\* %</sup> of patients with 10+ medicines who have been dispensed the following medicines e.g. 54% of patients who take 10+ medicines in New Zealand are regularly dispensed paracetamol.

## Helpful tips for tackling polypharmacy

- Take it slowly, choose one medicine to review per consultation with the aim of reviewing all medicines over the next 12 months
- Agree on a course of action with the patient via shared decision-making. Consider asking questions such as:
  - Do you have any problems taking your medicines?
  - How do you take your medicines?
  - Do you have any concerns about your medicines?
- Document the medicine review and the decisions. Patients with ten or more medicines see an average of four prescribers per year
- Many DHBs have pharmacists who are funded to undertake Medicine Therapy Assessments (MTA); consider referring more complex patients to this service

<sup>\*</sup> A medicine was counted if the patient received three of more dispensings of that medicine during the year

<sup>1.</sup> Patterson SM, Cadogan CA, Kerse N, Cardwell CR, Bradley MC, Ryan C, Hughes C. Interventions to improve the appropriate use of polypharmacy for older people. Cochrane Database of Systematic Reviews 2014, Issue 10. Art. No.: CD008165.