Polypharmacy is a marker of potential problematic prescribing. In clinical practice, defining polypharmacy purely by a specific number of medicines does not acknowledge that the potential risk of adverse effects of medicines can vary widely. However, for the purposes of reporting on polypharmacy, it can be defined as the prescribing of five or more concurrent medicines, and excessive polypharmacy as the prescribing of ten or more concurrent medicines. This report provides an update on polypharmacy over a 12 month period (July 2013 – June 2014).

Key messages:

1. Not all polypharmacy is problematic - when the potential benefits outweigh the potential harms the use of multiple medicines can be appropriate
2. Older people are more likely than younger people to be affected by problematic prescribing and resulting medicine adverse effects and interactions, due to multiple co-morbidities and reduced renal and hepatic function
3. When deciding whether to add a medicine to a patients regimen, consider whether the symptom being treated is due to an adverse medicine reaction (the “prescribing cascade”), what the goals of treatment are, what the expected magnitude of benefit that the patient will receive from the treatment is and whether there are any non-pharmacological treatments that can be considered instead
4. An individualised assessment that includes a review of the need for each medicine can simplify treatment regimens and reduce the potential for harm. “De-prescribing” may be the best clinical decision for some patients and result in significant clinical benefits.

Please see BPJ 64 (October, 2014) for further information on polypharmacy
Over the last five years the proportion of the population experiencing either polypharmacy (five medicines) or excessive polypharmacy (10+ medicines) has continued to increase with >11% of the population having five or more medicines between July 2013 and June 2014 (Figure 1). These proportions have increased in all age groups over the last five years.

Helpful tips for tackling polypharmacy

While there are no criteria for optimal performance, this report is intended to help you benchmark your practice in relation to national data on polypharmacy. It may highlight some target groups who could potentially benefit from a medicines review or be used as a starting point for peer discussion around polypharmacy in your practice (Table 1).

Always consider the option of discontinuing or reducing the dose of medicines

Ensure you are comfortable that each medicine has a relevant indication

Seek the advice of a pharmacist or clinical specialist if you are not sure whether a medicine is causing problems or is able to be discontinued

Agree on a course of action with the patient – they are more likely to follow a plan if they are part of the shared decision-making process

National Trends

![Proportion of polypharmacy in the New Zealand population over the last five years*](image)

Patients with polypharmacy are more likely to have multiple prescribers than those with few medicines. Asking patients if they have visited another health professional is a simple way of checking if their medicine regimen may have been altered.

Nationally between July, 2013 and June, 2014:
- Patients who received 1 long-term medicine had an average of 2.5 prescribers
- Patients who received 5–9 long-term medicines had an average of 3.2 prescribers
- Patients who received 10+ long-term medicines had an average of 4.3 prescribers

Sample Practice Data

While there are no criteria for optimal performance, this report is intended to help you benchmark your practice in relation to national data on polypharmacy. It may highlight some target groups who could potentially benefit from a medicines review or be used as a starting point for peer discussion around polypharmacy in your practice (Table 1).

<table>
<thead>
<tr>
<th>Age Band</th>
<th>5–9 Medicines</th>
<th>10+ Medicines</th>
<th>Proportion (number) of patients with 5–9 medicines</th>
<th>Proportion (number) of patients with 10+ medicines</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–29</td>
<td>1%</td>
<td>0%</td>
<td>1% (22)</td>
<td>0% (2)</td>
</tr>
<tr>
<td>30–39</td>
<td>2%</td>
<td>0%</td>
<td>5% (33)</td>
<td>1% (9)</td>
</tr>
<tr>
<td>40–49</td>
<td>5%</td>
<td>0%</td>
<td>9% (77)</td>
<td>2% (21)</td>
</tr>
<tr>
<td>50–59</td>
<td>11%</td>
<td>2%</td>
<td>12% (103)</td>
<td>3% (32)</td>
</tr>
<tr>
<td>60–69</td>
<td>21%</td>
<td>5%</td>
<td>21% (142)</td>
<td>9% (64)</td>
</tr>
<tr>
<td>70–79</td>
<td>35%</td>
<td>12%</td>
<td>37% (136)</td>
<td>19% (71)</td>
</tr>
<tr>
<td>80+</td>
<td>42%</td>
<td>23%</td>
<td>38% (22)</td>
<td>35% (83)</td>
</tr>
</tbody>
</table>

Table 1. Proportion of registered patients with polypharmacy in New Zealand and your practice, July 2013–June 2014.*

Multiple Prescribers

It is increasingly recognised that health outcomes for patients are improved when one prescriber takes responsibility for all of a patient’s medicines. An important reason for this is that as the number of prescribers increases, so too does the risk of problematic prescribing and adverse medicine reactions.

Nationally between July, 2013 and June, 2014:
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- Patients who received 5–9 long-term medicines had an average of 3.2 prescribers
- Patients who received 10+ long-term medicines had an average of 4.3 prescribers

Helpful tips for tackling polypharmacy

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- Ensure you are comfortable that each medicine has a relevant indication
- Seek the advice of a pharmacist or clinical specialist if you are not sure whether a medicine is causing problems or is able to be discontinued
- Agree on a course of action with the patient – they are more likely to follow a plan if they are part of the shared decision-making process

To review your individual prescribing data for polypharmacy in the last 12 months, please log in to My bpac: [www.bpac.org.nz](http://www.bpac.org.nz)

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* A medicine was counted as contributing to polypharmacy if the patient received three or more dispensing of that medicines in a year