Polypharmacy: Guidance for Prescribing

Figure 2: A Practical Guide to Stopping Medication in the Elderly
This guidance has been prepared by Emyr Jones, Macmillan Palliative Care Pharmacist, Aneurin Bevan University Health Board and Jenny Pugh-Jones, Head of Medicines Management, Hywel Dda University Health Board, with support from the All Wales Prescribing Advisory Group (AWPAG) and the All Wales Therapeutics and Toxicology Centre (AWTTC), and has subsequently been endorsed by the All Wales Medicines Strategy Group (AWMSG).

Please direct any queries to AWTTC:

All Wales Therapeutics and Toxicology Centre
University Hospital Llandough
Penlan Road
Llandough
Vale of Glamorgan
CF64 2XX

awttc@wales.nhs.uk
029 2071 6900

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Acknowledgements
This guidance has been adapted from documents developed by Abertawe Bro Morgannwg and Hywel Dda University Health Boards, originally adapted from NHS Highland with their kind permission, and from resources produced by Emyr Jones of Aneurin Bevan University Health Board, to provide clinicians with a structured process of rationalising patients’ medication, in particular the frail and elderly.
Recognise the need to stop a medicine

Reduce or stop one medicine at a time

Taper medicines when appropriate

Check for benefit or harm after each medicine has been stopped

Most medicines do not need to be used lifelong and their risk–benefit profile should be frequently reassessed by both primary and specialist prescribers.

Is there a medication that can be stopped?

Try to reduce or stop only one medicine at one time. If problems develop it is then easier to identify the likely cause.

To reduce the likelihood of an adverse withdrawal event, some therapies should not be stopped abruptly following long-term use. The number of medicines to which this applies is relatively limited; important examples are seen below. (If in doubt taper, as it is safer.)

This should be done in a stepwise manner to establish if the patient’s symptoms, conditions or risks can be managed with a lower dose or whether the medicine can be stopped completely.

Has the patient had any problems since the medicine has been stopped?

Beneficial effects should be noted to reinforce that the decision to reduce or stop the medicine was correct.

If symptoms of the initial condition return and are troublesome, despite gradual tapering, then it may be that the medicine cannot be stopped completely. The patient may however be able to be managed on a reduced dose.

A general guide to tapering medicine

Halve the dose. At the next scheduled visit review progress, then either:

- Maintain (at half dose)
- Continue to taper (e.g. quarter dose)
- Stop

Notes:

- View the discontinuation process as a trial
- Time taken to taper may vary from days to weeks to months

Examples of drugs that require a cautious stepwise withdrawal

Drugs in this group may require specialist advice:

- Opioids/antidepressants/antipsychotics/anticonvulsants/centrally acting antihypertensives/corticosteroids/hypnotics and tranquilisers
Antihypertensives

Why consider stopping?
- Check if there is a valid indication for prescribing – is the blood pressure (BP) at a normal level or too low?
- Do the known possible ADRs outweigh the possible benefits? E.g. risk of falls; loop diuretic for ankle oedema – following an appropriate assessment, would compression hosiery be more appropriate?

General tapering guide
- If > one antihypertensive is used, stop one at a time, maintaining the dose of the others without change. Restart antihypertensives if BP increases above 90 mm Hg diastolic and/or 150 mm Hg systolic (160 mm Hg if no organ damage).

Withdrawal effect:
- Wide range depending on the specific medicine and the condition being treated.
- Beta-blockers are often associated with adverse withdrawal events. Abrupt withdrawal may cause rebound hypertension, tachycardia, arrhythmia or angina. Gradual dose reduction is required.

Benzodiazepines

Why consider stopping?
Regular and prolonged use should be avoided because of the risk of tolerance to effects, dependence and an increased risk of adverse effects.

General tapering guide
Withdrawal should be gradual in steps of about one-eighth (range one-tenth to one-quarter) of the daily dose every fortnight.

1. Transfer patient to equivalent daily dose of diazepam, preferably at night.
2. Reduce diazepam dose every 2–3 weeks; if withdrawal symptoms occur, maintain this dose until symptoms improve.
3. Reduce dose further, if necessary in smaller steps; it is better to reduce too slowly rather than too quickly.
4. Stop completely; period needed for withdrawal can vary from about four weeks to a year or more.

Approximate equivalent doses, diazepam 5 mg
- Chlordiazepoxide 15 mg
- Loprazolam 0.5 mg–1 mg
- Lorazepam 0.5 mg–1 mg
- Lormetazepam 0.5 mg–1 mg
- Nitrazepam 5 mg
- Oxazepam 15 mg
- Temazepam 10 mg

Withdrawal effects
- These may develop at any time up to three weeks after stopping a long-acting benzodiazepine, but may occur within a day in the case of a short-acting one.
- Characterised by insomnia, anxiety, loss of appetite and of body-weight, tremor, perspiration, tinnitus, and perceptual disturbances. Some symptoms may be similar to the original complaint and encourage further prescribing; some symptoms may continue for weeks or months after stopping benzodiazepines.
- Seek advice from benzodiazepine withdrawal service if one in your area.

Useful link:
**Oral corticosteroids**

**Why consider stopping?**

- The consequences of the common adverse effects (such as osteoporosis, diabetes, glaucoma and GI toxicity) may be more serious in elderly people, especially for those receiving long-term treatment.

**General tapering guide**

The magnitude and speed of dose reduction should be determined on a case-by-case basis, taking into consideration the underlying condition that is being treated, the likelihood of relapse and the duration of corticosteroid treatment.

Gradual withdrawal should be considered in those whose disease is unlikely to relapse and have:

- received more than 40 mg prednisolone (or equivalent) daily for more than one week;
- been given repeat doses in the evening or received more than three weeks' treatment;
- recently received repeated courses (particularly if taken for longer than three weeks)/taken a short course within one year of stopping long-term therapy;
- other possible causes of adrenal suppression.

| The dose may be reduced rapidly down to physiological doses (equivalent to prednisolone 7.5 mg daily) e.g. 2.5–5 mg every 1–3 days. | Reduce more slowly initially if it is likely that the disease will relapse e.g. 2.5–5 mg every 1–3 weeks. | Once the dose has reached 5–10 mg daily, reduce the dose more slowly, e.g. by 1 mg each week. | Patients on longer term treatment may require withdrawal at a more gradual rate over many months (such as a reduction of 1 mg every 1–4 weeks). |

**Withdrawal effects**

Include:

Anorexia, hypotension, nausea, weakness, fever, myalgia, arthralgia, weight loss
Antidepressants

Why consider stopping?

- Check if there is a valid indication for prescribing. For a single episode of depression treat for 6–9 months; for multiple episodes, treat for at least two years, no upper duration of treatment has been identified.
- Dosulepin should not be routinely initiated as treatment for depression.
- Do the known possible ADRs outweigh the possible benefits? E.g. TCAs can worsen dementia, glaucoma, constipation, urinary retention; SSRIs may induce clinically significant hyponatraemia.
- Are TCAs being taken with other medicines that have anticholinergic activity and can increase risk of cognitive impairment e.g. chlorpromazine, oxybutynin, chlorphenamine?

General tapering guide

Dose should preferably be reduced gradually over about four weeks, or longer if withdrawal symptoms emerge

<table>
<thead>
<tr>
<th>For people with severe adverse reactions to treatment (e.g. cardiac arrhythmia with a TCA) – a more abrupt discontinuation may be necessary.</th>
</tr>
</thead>
<tbody>
<tr>
<td>For people on shorter half-life medication such as paroxetine or venlafaxine a longer period is needed.</td>
</tr>
<tr>
<td>For people who have been receiving longer term maintenance treatment – may need to be tapered for much longer e.g. over six months.</td>
</tr>
<tr>
<td>Fluoxetine has a long half life and active metabolites, therefore can be stopped abruptly. Patients taking higher doses (40–60 mg) may require a more gradual withdrawal.</td>
</tr>
</tbody>
</table>

Withdrawal effects

- Discontinuation symptoms include dizziness, nausea, paraesthesiae, anxiety, diarrhoea, flu-like symptoms, and headache. They may occur when stopping or reducing the dose of any antidepressant.
- Onset is usually around five days of stopping therapy. Occasionally, symptoms occur during tapering or after missed doses.
- These symptoms are usually mild and self-limiting, rarely lasting for more than 1–2 weeks. However, occasionally they can be severe, particularly if the drug is stopped abruptly.
- Discontinuation symptoms are more likely with antidepressants with a short half-life, in people who developed anxiety symptoms at the start of treatment, and in people taking other centrally acting drugs.

Useful link: [www.wemerec.org/Documents/enotes/Stoppingantidepressantse-notes.pdf](http://www.wemerec.org/Documents/enotes/Stoppingantidepressantse-notes.pdf)
Acid suppressants

Why consider stopping?
- PPIs have been implicated with an increased risk of infection including pneumonia and *C. difficile*.
- More recently reports have also highlighted potential increases in bone fracture rates, hyponatraemia and hypomagnesaemia seen in patients taking long-term PPIs.

General tapering guide
- Tapering the dose of an acid suppressant (both PPIs and H2RAs) is recommended because of the risk of rebound hypersecretion of gastric acid.
- A step down approach can be employed for certain patients, alongside recommendations for appropriate trials of antacids or alginates and lifestyle changes.
- Halve the dose for 4–8 weeks then stop (or step down to a less potent agent).

Withdrawal effects
- Rebound hypersecretion (which may last up to 6–8 weeks)
- If rebound hyperacidity is mistaken for a return of the underlying condition then acid suppressants may be restarted unnecessarily

Useful link: [www.wemerec.org/Documents/enotes/StoppingPPIsenotes.pdf](http://www.wemerec.org/Documents/enotes/StoppingPPIsenotes.pdf)

Bisphosphonates

Why consider stopping?
- Check if there is a valid indication for prescribing.
- Has treatment been taken for five years or more?
- Do the known possible ADRs outweigh the possible benefits?
- If the patient is at low risk of falls, are these still needed?
- Prolonged immobility is a risk factor for low bone mineral density.
- Compliance is often poor.
- Alendronate can be stopped abruptly without the need for tapering.

Useful link: [www.wemerec.org/Documents/enotes/Stoppingbisp hosphonates-notes.pdf](http://www.wemerec.org/Documents/enotes/Stoppingbisp hosphonates-notes.pdf)

Statins

Why consider stopping?
The decision to stop a statin is based on an assessment of individual benefits and risks.
- Stopping may be justified in a person at relatively low risk of a cardiovascular event, who is also poorly compliant or experiencing troublesome adverse effects.
- Statins should be stopped in palliative patients.

Useful link: [www.wemerec.org/Documents/enotes/StoppingPPIsenotes.pdf](http://www.wemerec.org/Documents/enotes/StoppingPPIsenotes.pdf)
Transdermal opioids (patches)

Why consider stopping?
- Modified release morphine is the recommended first choice strong opioid.
- There is increasing prescribing of opioid transdermal preparations, which has both safety and cost implications. (Perhaps it’s because patches seem simple that we get complacent about the potential risks.) [www.mhra.gov.uk/Safetyinformation/DrugSafetyUpdate/CON087796](http://www.mhra.gov.uk/Safetyinformation/DrugSafetyUpdate/CON087796)

Is a transdermal patch appropriate? Can the patient be switched to oral medication?
- Patches are only for patients with stable pain AND significant side effects to morphine or when the oral route is unacceptable e.g. dysphagia.
- They are NOT suitable for patients with unstable pain.

What are the problems associated with transdermal patches?
- Analgesic patches are all similar in their indications but vary greatly in their potency. Fever or external heat, e.g. a hot bath or sauna, may increase absorption and hence increase risk of adverse effects.
- Transdermal adhesion problems – patches do not always stay tightly bound to the skin’s surface e.g. during excessive sweating.

When is a transdermal patch appropriate?
- Stable analgesia requirements where dexterity/confusion are issues for taking oral medication.
- Chronic nausea/vomiting, or malabsorption/bowel obstruction.
- Transdermal patches may be particularly suitable for frail elderly people requiring steady drug levels or where daily administration is difficult.

Buprenorphine patches are approximately equivalent to the following 24-hour doses of oral morphine³

<table>
<thead>
<tr>
<th>Morphine Dose</th>
<th>Patch Brand</th>
<th>Patch Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>morphine salt 12 mg daily</td>
<td>BuTrans® ‘5’ patch</td>
<td>7-day patches</td>
</tr>
<tr>
<td>morphine salt 24 mg daily</td>
<td>BuTrans® ‘10’ patch</td>
<td>7-day patches</td>
</tr>
<tr>
<td>morphine salt 48 mg daily</td>
<td>BuTrans® ‘20’ patch</td>
<td>7-day patches</td>
</tr>
<tr>
<td>morphine salt 84 mg daily</td>
<td>Transtec® ‘35’ patch</td>
<td>4-day patches</td>
</tr>
<tr>
<td>morphine salt 126 mg daily</td>
<td>Transtec® ‘52.5’ patch</td>
<td>4-day patches</td>
</tr>
<tr>
<td>morphine salt 168 mg daily</td>
<td>Transtec® ‘70’ patch</td>
<td>4-day patches</td>
</tr>
</tbody>
</table>

72-hour fentanyl patches are approximately equivalent to the following 24-hour doses of oral morphine³

<table>
<thead>
<tr>
<th>Morphine Dose</th>
<th>Fentanyl Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>morphine salt 30 mg daily</td>
<td>fentanyl ‘12’ patch</td>
</tr>
<tr>
<td>morphine salt 60 mg daily</td>
<td>fentanyl ‘25’ patch</td>
</tr>
<tr>
<td>morphine salt 120 mg daily</td>
<td>fentanyl ‘50’ patch</td>
</tr>
<tr>
<td>morphine salt 180 mg daily</td>
<td>fentanyl ‘75’ patch</td>
</tr>
<tr>
<td>morphine salt 240 mg daily</td>
<td>fentanyl ‘100’ patch</td>
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</tbody>
</table>

Reference: BNF April 2014. Conversion ratios vary and these figures are a guide only. There are numerous available opioid dose conversion charts and tools show considerable variation. The important thing is to remember that all these conversions are approximations only. See [http://book.pallcare.info/index.php](http://book.pallcare.info/index.php) for more detail.
REFERENCES


2  NHS Midlands and East. PrescQIPP - optimising safe and appropriate medicines use. 2014.