

# Partnered Pharmacist Medication Deprescribing: a collaborative approach to deprescribing sedatives and anticholinergics

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## Background

Medications with sedative or anticholinergic effects are associated with an increased risk of falls and decreased function and cognition in older patients.

These potentially inappropriate medications (PIMs) warrant consideration of deprescribing where potential harm outweighs expected benefits.

Pharmacists are well placed to partner with hospital doctors to help identify sedative and anticholinergic PIMs, formulate deprescribing plans, and communicate deprescribing changes and recommendations across transitions of care.

## Objective

To test the feasibility of a partnered workflow between pharmacists and doctors to **identify, action & communicate** deprescribing recommendations to reduce sedative and anticholinergic burden.

## Method

A partnered deprescribing workflow trial was commenced on two geriatric rehabilitation wards from April 2024.

### Identify

Pharmacists used a locally-developed **Deprescribing Opportunity Identification Tool (DO-IT)** to identify sedative and anticholinergic PIMs (Fig 1).

### Action

Pharmacists used local deprescribing guidelines to formulate & document recommendations (Fig 2). These deprescribing recommendations were used by doctors to facilitate shared decision-making during ward rounds.

### Communicate

Pharmacists helped to ensure changes to preadmission medicines were documented in the discharge summary (Fig 3).

Figure 1. DO-IT electronic deprescribing tool, incorporating Drug Burden Index (DBI) to measure sedative and anticholinergic drug burden

UR	Bed	DBI yesterday (reg + PRN)	DBI last week	DBI (preadmission meds)	DBI meds yesterday (reg + PRN)
○	24	2.32	2.25		buprenorphine 400.0MICROg, buprenorphine MR 1.98 15.0MICROg/hr, moxonidine 400.0MICROg, tramadol 100.0mg
○	23	2.17	2.6		escitalopram 10.0mg, mirtazapine 15.0mg, 1.93 oxycodone-naloxone MR 10.0mg, pregabalin 300.0mg
○	18	2	1.83		buprenorphine MR 10.0MICROg/hr, loratadine 10.0mg, pregabalin 75.0mg, tapentadol 100.0mg
○	12	1.46	1.46		1 oxycodone-naloxone MR 15.0mg, sertraline 125.0mg

Figure 2. Pharmacist documented DO-IT deprescribing assessment and recommendation

**Drug Burden Index (DBI) Review:**  
Patients with high DBI scores (i.e. high sedative or anticholinergic medication burden) may be at higher risk of falls, cognitive impairment, or side effects, particularly if DBI ≥1. (<https://doi.org/10.1080/17512433.2018.1528145>)  
- Current DBI score: 1.42  
- Medications contributing to DBI: Amitriptyline 50mg, Metoclopramide 10mg, Oxycodone 10mg, Oxycodone-Naloxone MR 2.5mg

**Deprescribing recommendations to reduce sedative or anticholinergic drug burden**

- Medication & indication: Amitriptyline, for "sleep" per daughter
- Approx. duration of use: ≥ 23 months
- Trigger(s) for deprescribing: Falls risk (tx of recurrent falls)
- Suggested change: Consider reducing dose to 25mg nocte for 2/52, then 10mg nocte for 2/52, and review response.

**Monitor for potential withdrawal symptoms:**

- > Hypersalivation
- > Rhinorrhoea
- > Abdominal cramping
- > Diarrhoea
- > Insomnia
- > Anxiety, irritability
- > Headache, myalgia

Figure 3. Discharge summary "Changes to Home Medicines" section

**Changes to Home Medicines and Reasons (Includes Ceased Medicines)**

**New**

- Docusate/senna, Lactulose, Macrogol (aperients)
- Targin, Oxycodone IR, Diclofenac gel (analgesia post L) NOF #)
- Denosumab (administered at AH on 2/04)
- Metoclopramide PRN (nausea 2' poor appetite)
- Potassium (Kl = 3.4)

**Dose changed**

- Paracetamol - changed to IR & regular
- Amitriptyline - weaning with aim to cease
- Fruzemide - dose increased (ongoing LL oedema)

**Withheld**

- Telmisartan (normotensive)
- Betamethasone ointment (whilst IP)

## Evaluation: 1<sup>st</sup> month of feasibility testing

### Identify:

- 37 patients were admitted with sedative and/or anticholinergic medications and later discharged to home or residential aged care facility
- **25/37 (68%)** had DO-IT assessments documented by a pharmacist
- **17/25 (68%)** assessed patients had deprescribing recommendations documented for 22 PIMs
- Common PIMs included oxycodone-naloxone, mirtazapine, and pregabalin

### Action & Communicate:

- **8/22 (36%)** PIMs were deprescribed in hospital (stopped or dose reduced)
- 3 PIMs had a deprescribing recommendation documented in the discharge summary for the GP to consider stopping or further dose reduction
- 10 of 12 changes to PIMs (compared with preadmission medication list) were accurately documented in the discharge summary

## Discussion

A partnered deprescribing workflow between pharmacists and doctors facilitates identification and deprescribing of PIMs in hospital and helps to ensure changes to preadmission medicines are documented in discharge summaries.

Further work is required to support routine use of DO-IT during medication reviews and encourage documentation of deprescribing recommendations for GPs when in-hospital deprescribing is not feasible.