

Expansion of the 'Reducing Use of Sedatives' (RedUse) project to Australian nursing homes

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Antipsychotics

- The overall treatment effect of antipsychotics to manage agitation in dementia is 18%
- Associated with movement disorders, confusion, increased falls risk and metabolic disturbances
- Increases stroke risk and all-cause mortality



Benzodiazepines

- Effective for anxiety and sleep disturbance.... But short term
- Development of tolerance/dependence after 2-4 weeks
- Use is linked to falls, gait & language impairment and cognitive decline



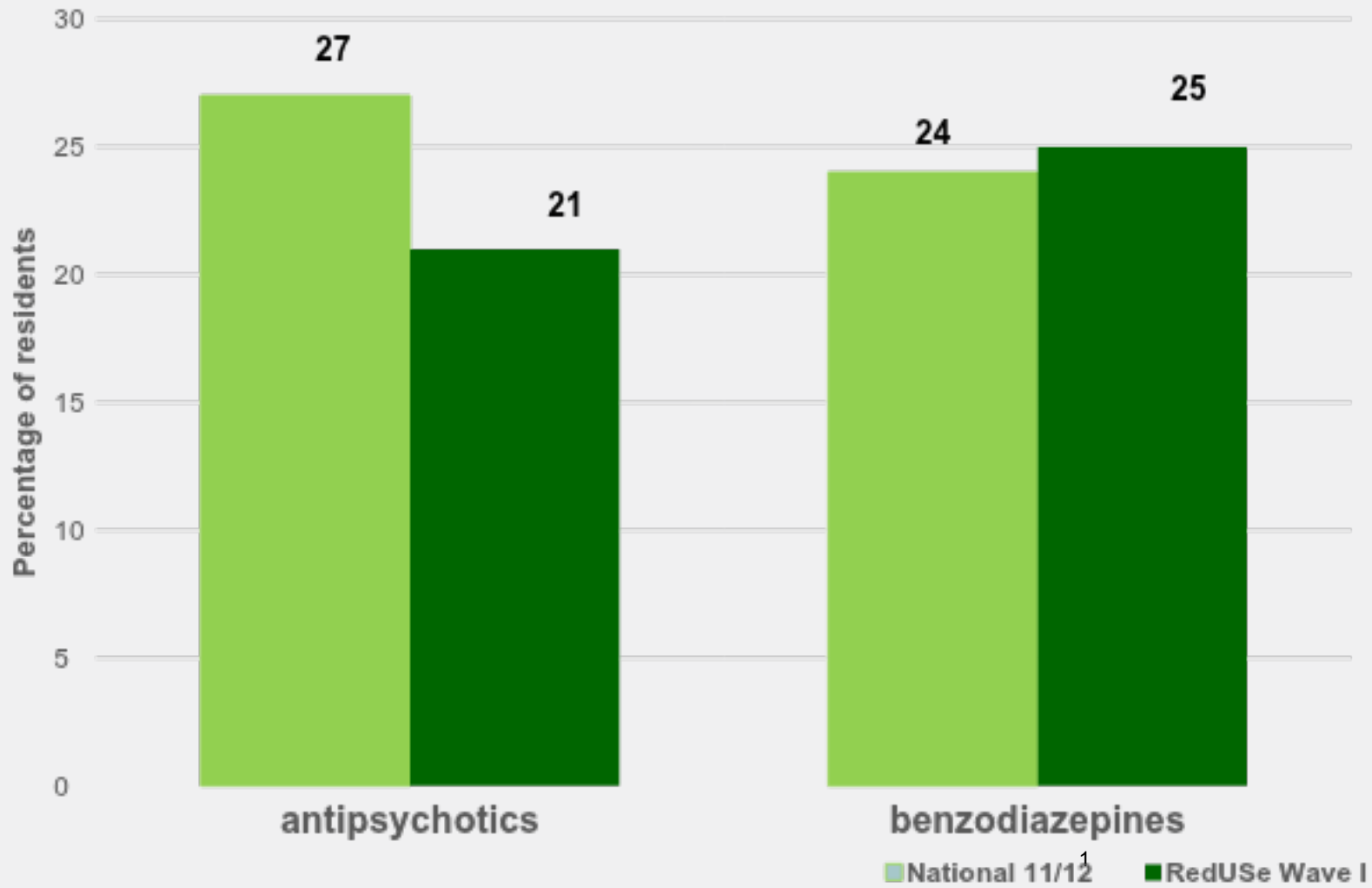
'Good Practice' to manage behaviours, anxiety and sleep

- **Seek other causes**
- **Use non-drug measures first line**

Sedative medications have modest effects with significant risks

- Antipsychotics should only be used in situations where behaviour causes significant distress or risk of harm
- Benzodiazepines should only be used short term, intermittently
- **Review regularly and stop as soon as possible**
 - **Antipsychotics: review every 3 months**
 - **Benzodiazepines: review after 2 weeks**

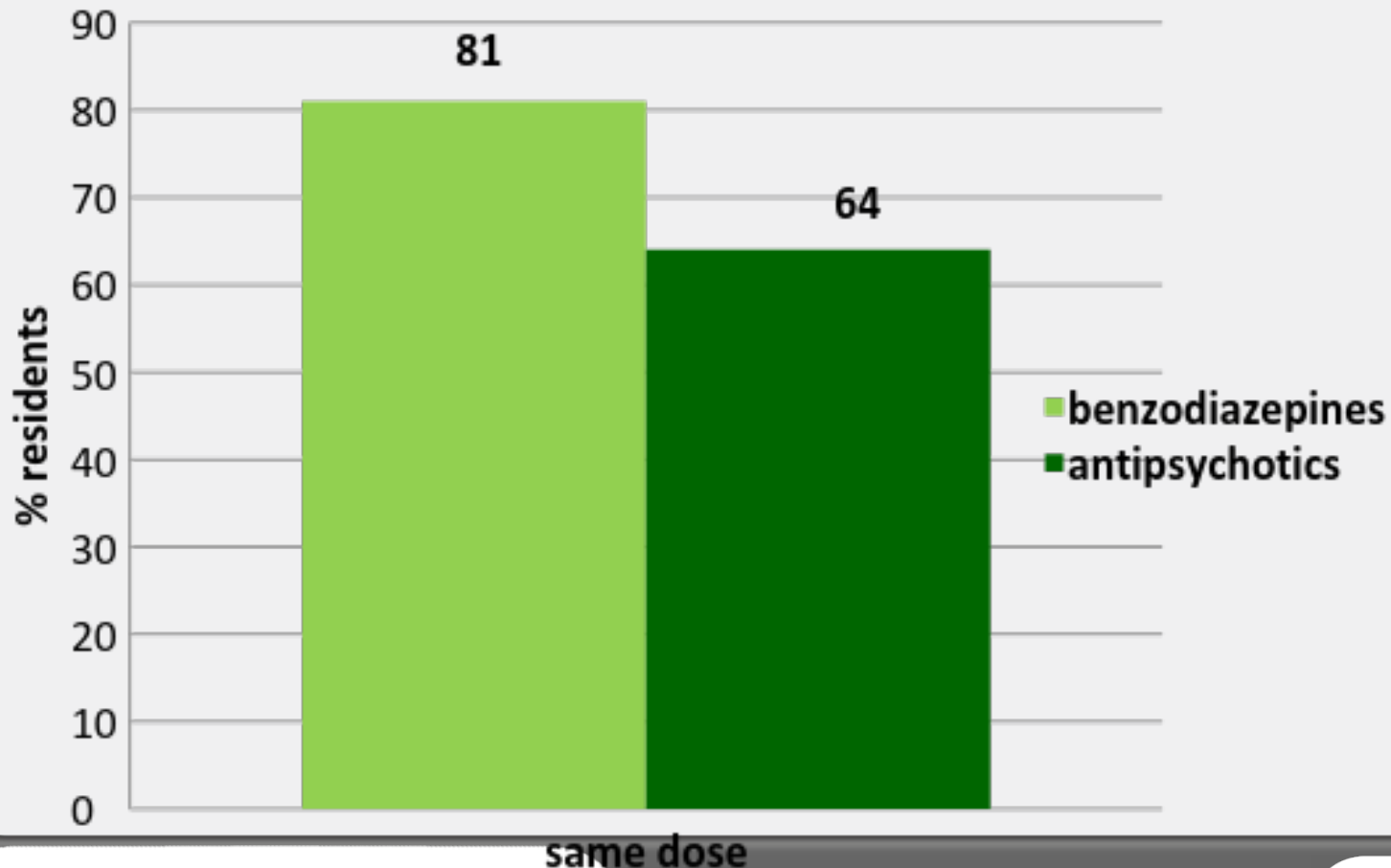
Use of sedatives in Australian nursing homes



¹ Westbury J et al. Psychotropic medication utilisation in Australian nursing home medication reviews. 2014; NMS poster 422

How often are sedatives reviewed?

Tasmanian ACH residents taking sedatives were compared from 2005 to 2006 (1005 residents)



Objectives of our intervention

- To promote the appropriate use and review of benzodiazepines and antipsychotics in nursing homes
- To implement a multi-faceted interdisciplinary intervention that specifically targets sedative medication



About the initial RedUse trial

A controlled trial of 25 Tasmanian nursing homes in 2008/9:

- 13 homes in Hobart (intervention)
- 12 homes in Launceston (control)

Both Intervention and Control nursing homes:

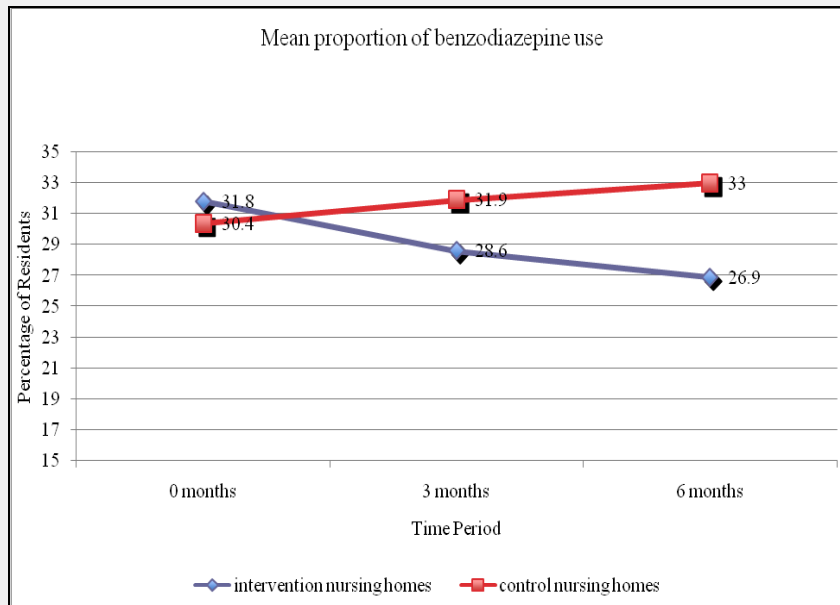
- Clinical audit of sedative use, benchmark & feedback

Intervention nursing homes only:

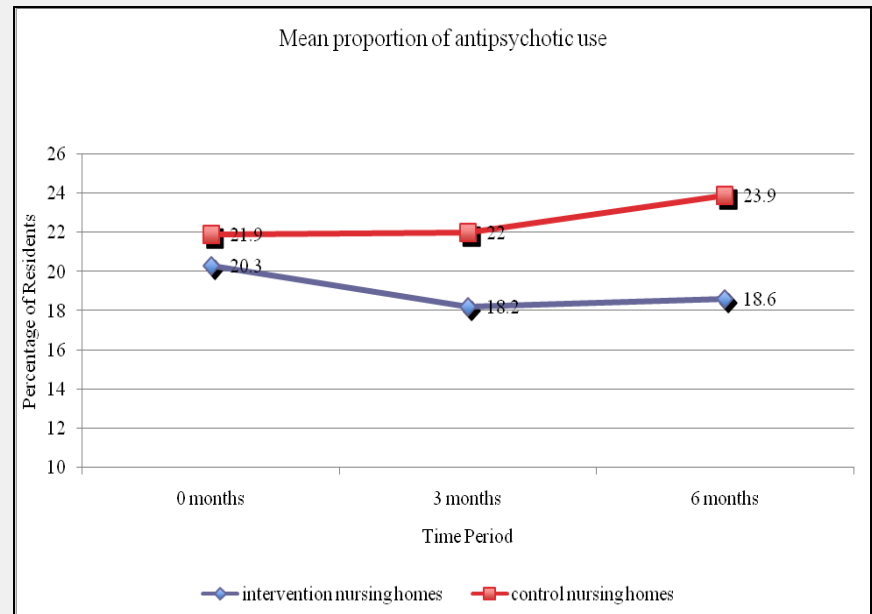
- Educational sessions for nursing staff
- Interdisciplinary sedative medication review plan
- Promotional material, printed guidelines, academic detailing, newsletters etc.

Rates of sedative use

Overall proportion taking benzodiazepines and antipsychotics



32% to 27%, $p < 0.005$ (15%)



21% to 18%, $p = 0.047$ (15%)

RedUSe national extension

- Intervention extended from 13 homes to 150 nursing homes
- Nationwide - not confined to Tasmania...involve rural/remote

FOUR STEPS of a systematic approach using the TDF: ¹

1. Who needs to do what, differently?
2. What worked, what didn't? (enablers and barriers)
3. How can we improve outcomes?
(enhancing enablers & overcoming barriers)
4. Improve change measures.....Rigorous evaluation

1. French S, Green S, O'connor D, Mckenzie J, Francis J, Michie S, Buchbinder R, Schattner P, Spike N, Grimshaw J:
Developing theory-informed behaviour change interventions to implement evidence into practice: a systematic approach using the Theoretical Domains Framework. *Implement Sci* 2012, **7**: 38 <http://www.implementationscience.com/content/7/1/38>

Step 1: What and who?

What is the evidence-practice gap?

Following sedative 'good practice' recommendations

What behaviour change is needed?

Review of sedative medication

Specify the health professional group whose behaviour needs changing?

“ Involvement of nursing staff is a key consideration”¹

¹ Nishtala P et al. 'Psychotropic prescribing in long term care facilities: Impact of medication reviews and educational interventions.' Am J Geriatr Psychiatry 16:8, August 2008

Steps 2 & 3:

Barriers, Enablers & change

The Theoretical Domains Framework (TDF) was used to identify enablers and barriers to the target behaviours and to refine the intervention.

- Qualitative methodology comprising of two focus groups with nurses and pharmacists was selected to ascertain key barriers and enablers.
- Behavioural change techniques were subsequently identified to overcome the barriers and enhance the enablers, and were tested in a pilot phase comprising of 27 nursing homes across three states for 6 months.

Key barriers, enablers & behaviour change techniques

Barrier/enabler	Which TD?	Behavioural change techniques
Belief that sedatives improve quality of life	<ol style="list-style-type: none"> 1. Beliefs about consequences 2. Knowledge 	<p>Information provision; persuasive communication</p> <p><i>Mode:</i> two facilitated staff workshops, case study</p>
GP engagement	<ol style="list-style-type: none"> 1. Professional role and identity 2. Environmental context 	<p>persuasive communication</p> <p><i>Mode:</i> respected professional - academic detailing, role model emphasising GP role in inter-professional team.</p>
No clear role delineation for sedative review process	<ol style="list-style-type: none"> 1. Professional role and identity 2. Skills 	<p>Persuasive communication; rehearsal of review process</p> <p><i>Mode:</i> workshop with champion nurses and pharmacists</p>
Nurses wanting knowledge and empowerment	<ol style="list-style-type: none"> 1. Knowledge 2. Professional role and identity 	<p>Information provision; persuasive communication; model behaviour</p> <p><i>Mode:</i> staff workshops, increasing nurse involvement in decisions</p>

Step 4: Rigorous Evaluation

- **Of behavioural change techniques**
 - qualitative interviews, surveys
 - Rates of sedative use, dosage reduction, initiation
- **Practitioner outcomes**
 - Job satisfaction surveys
 - Qualitative focus groups
- **Resident health outcomes**
 - Psychometric testing, QOL measures, engagement

Conclusion

- The TDF looks to be an effective tool to identify the key barriers and enablers to the RedUse project, facilitating the incorporation of several novel behavioural change techniques.
- The success of the expanded project will be reported after full implementation and evaluation.

UMORE

UNIT FOR MEDICATION OUTCOMES RESEARCH AND EDUCATION

Innovative research. Inspired results.

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RedUse 
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TASMANIA