

Clinical audit: Use of benzodiazepines, zolpidem and zopiclone in insomnia

Improving clinical practice for better patient health

How are you managing your patients?

This clinical audit will assist you to review your management of patients prescribed a benzodiazepine, zolpidem or zopiclone for insomnia, identify and address factors that may be contributing to sleep difficulties, review use of non-drug therapies, and identify patients suitable for gradual discontinuation.

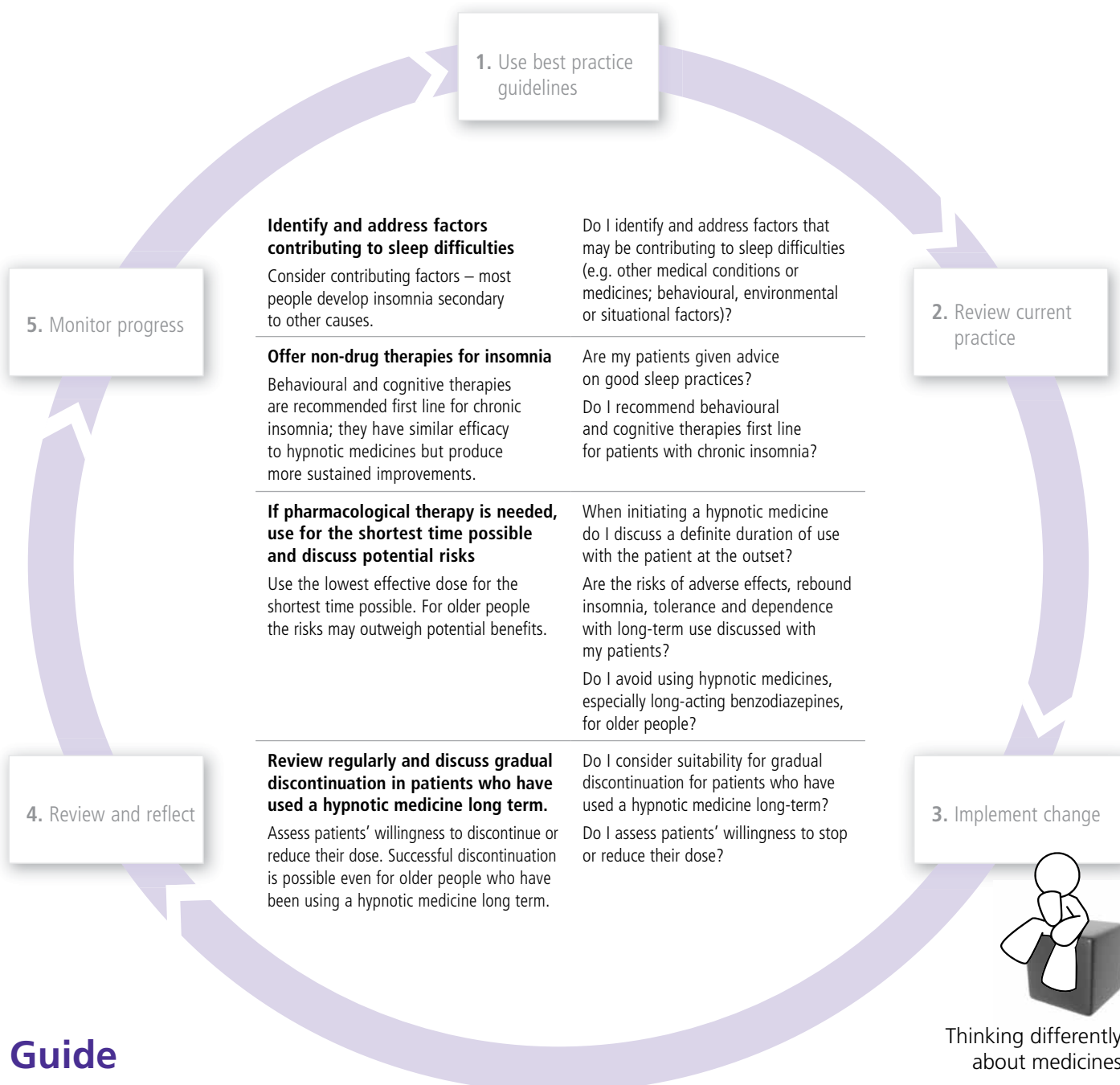
Identify 15 adult patients (>18 years) who are prescribed a benzodiazepine, zolpidem or zopiclone for insomnia (either an initial prescription or continuing therapy).

Exclude palliative care patients.

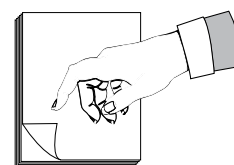
This clinical audit activity has been approved by the RACGP QA&CPD Program, total points: 40 (Category 1) and by the ACRRM PD Program for 30 points (extended skills) in the 2008–2010 triennium. Points are awarded only to participants who complete the review phase.

This audit is recognised for the Quality Prescribing Initiative of the Practice Incentives Program (May 2010 to April 2011).

Best practice for the use of benzodiazepine, zolpidem or zopiclone for insomnia



Notes for the clinical audit



Additional information to assist you to review your management.

Identify 15 patients prospectively as they present or retrospectively from a search of your medical records who are:

- older than 18 years
- prescribed a benzodiazepine, zolpidem or zopiclone for insomnia (either an initial prescription or continuing therapy).

Exclude palliative care patients.

Patients should be aware that your practice participates in quality assurance activities; display the poster *Quality assurance in this practice and your privacy* and make available the patient information leaflet *Your health records and NPS clinical audits*.

Complete one double-sided audit form for each patient.

Insomnia can be defined as a complaint of difficulty initiating or maintaining sleep, waking up too early or poor quality sleep that results in daytime impairment.¹⁻³ Insomnia is generally considered chronic if symptoms have persisted for longer than 4 weeks.^{1,3}

Identify and address factors contributing to sleep difficulties

Most people develop insomnia secondary to other causes (see Table 1).^{3,4}

- Ask about recent stressors (e.g. bereavement).³
- Complete a thorough sleep history and detailed medical, psychiatric, medicines and substance use history to identify possible contributing factors and coexisting conditions (see Table 1).²
- Optimise management of coexisting conditions that may be contributing to sleep difficulties.⁵
- Modify use of medicines or substances that may impair sleep (consider dose and timing).^{2,4}
- Address poor sleep practices.⁵

Recommend the use of a sleep diary for 1–2 weeks. This can provide valuable information to clinicians, assist patients to monitor their sleep habits and allow patients to be actively engaged in their management.^{1,6} (Sleep diaries are available from www.nps.org.au/sleep.)

Table 1: Common causes of insomnia^{3,4,7,8}

| |
|--|
| Coexisting conditions |
| Medical conditions: e.g. angina, asthma, chronic pain, COPD, heart failure, gastro-oesophageal reflux disease, menopause (e.g. hot flushes), thyroid dysfunction, urinary incontinence |
| Psychiatric disorders: e.g. anxiety disorders, bipolar disorder, dementia, depression, schizophrenia |
| Other sleep disorders: e.g. sleep apnoea, restless legs syndrome, periodic limb movement disorder, circadian rhythm sleep disorders (e.g. shift work, jet lag) |
| Other medicines / substance use |
| Medicines: e.g. antidepressants (e.g. SSRIs, venlafaxine, bupropion), antiepileptics (e.g. lamotrigine, phenytoin), beta blockers, beta ₂ agonist bronchodilators; CNS stimulants, corticosteroids, diuretics, levodopa, thyroid hormone |
| Substance use: e.g. alcohol, caffeine (including food and energy drinks), nicotine, recreational drugs |
| Environmental factors |
| E.g. hot or cold ambient temperatures, light, noise |
| Behavioural factors |
| E.g. daytime napping, early retirement to bed, heavy meals, lack of exercise, irregular getting up time, long periods in bed when awake, no wind-down time before bed |
| Situational factors |
| E.g. death/illness of loved one, stress (interpersonal, occupational, academic or financial) |

Non-drug management of insomnia

Behavioural and cognitive therapies should be used first line for the management of chronic insomnia.^{2,3} People with acute insomnia that persists despite addressing sleep practices and other factors (e.g. psychosocial stressors) should also be considered for these therapies.³ Behavioural and cognitive therapies with the most evidence for effectiveness are listed in Table 2.

Providing all patients with advice on good sleep practices is important (see the *Sleep right. Sleep tight* fact sheet).^{1,3} Combine this with at least one of the therapies listed in Table 2 for patients with chronic insomnia, as there is insufficient evidence that advice on good sleep practices alone is effective.²

Using advice on good sleep practices with behavioural and cognitive therapies (with sessions over 4–8 weeks), has similar efficacy to hypnotic medicines, but produces more sustained improvements in sleep (for up to 2 years after therapy is completed).⁹

Regular exercise (not near bedtime) and bright light exposure may also aid sleep, especially in older people.^{6,7,10,11} GPs can start non-drug therapies or refer patients to a specialist sleep clinic, sleep physician, psychiatrist or psychologist.^{6,10}

Table 2: Evidence-based behavioural and cognitive therapies for insomnia^{6,11,12}

| Possible sleep pattern disturbances/symptoms | | | | |
|--|---|--|--|---|
| Patient excessively worried about sleep difficulties or has unrealistic expectations. | Patient spends excessive time in bed awake, or has broken sleep or difficulty going back to sleep. | Patient takes a long time to fall asleep or getting back to sleep after waking at night, and associates bed with arousal and frustration. | Patient unable to sleep due to either physical tension or excessive thoughts at bedtime. | Patient has a fear of not being able to sleep (i.e. remaining awake). |
| Cognitive therapy* | Sleep restriction | Stimulus control therapy | Relaxation therapy | Paradoxical intention |
| Reassure and inform about normal sleep and principles of sleep regulation. Techniques include de-catastrophising [†] , goal setting, planning coping responses, attention shifting and problem solving. | Restrict the time in bed according to estimated total sleep time. Have a fixed wake-up time in the morning. Periodically reassess sleep and gradually increase time in bed as total sleeping time improves, until ideal sleep duration is obtained (lower limit 5 hours sleep). | Go to bed only when sleepy (use the bed for sleep and sex only). If unable to fall asleep after a perceived 20 minutes (do not watch the clock), get out and return when sleepy; repeat as required through the night. Avoid daytime napping and arise at the same time every day. Continue each night until a regular sleep cycle is established. | Progressive muscle relaxation: Focus on each part of the body separately and gradually relax / allow to become heavy. Mental imagery: Take a few deep breaths and relax then imagine a pleasant place and maintain this image as long as possible. Ignore irrelevant thoughts. | When in bed remain awake as long as possible. Do not try to fall asleep. Do not partake in activities that are incompatible with sleep e.g. reading, watching TV and keeping lights on. |
| Provide advice on good sleep practices (see the <i>Sleep right. Sleep tight</i> fact sheet) when using one or a combination of above therapies | | | | |

* Cognitive therapy is effective when used as multi-modal treatment with the above behavioural therapies (e.g. cognitive-behavioural therapy for insomnia).

† Aimed at balancing anxious thoughts.

Pharmacological treatment of insomnia

Benzodiazepines, zolpidem and zopiclone use

Pharmacological treatment may be considered if immediate short-term relief of symptoms is required for:

- acute insomnia (e.g. due to grief)
- chronic insomnia unresponsive to non-drug therapies alone.¹

A short-acting benzodiazepine (e.g. temazepam), zolpidem or zopiclone may be used.¹

If pharmacological treatment is prescribed:

- Use the lowest effective dose for the shortest possible time, preferably intermittently and for less than two weeks.^{1,3}
- Agree on a definite duration of use with the patient at the outset.¹
- Before prescribing, inform patient of potential risks regarding^{1,2}:
 - adverse effects (e.g. daytime drowsiness, cognitive impairment, psychomotor impairment)
 - rebound insomnia (see *Discontinuing hypnotic medicines*)
 - tolerance and dependence with long-term use.

There is no convincing evidence that the benefit–harm profile of zolpidem or zopiclone is more favourable than that of short-acting benzodiazepines.^{13,14} Zolpidem and zopiclone may cause less morning sedation, however tolerance, dependence and withdrawal symptoms are possible.^{1,14,15}

For people aged over 60, the risk of adverse events may outweigh the modest benefits seen with hypnotic medicines¹⁶; they should be avoided in these patients where possible.¹ If treatment cannot be avoided in older people, do not use long-acting benzodiazepines such as diazepam, flunitrazepam and nitrazepam as these may cause accumulation and excessive sedation.^{6,17}

Other agents

- Sedating antidepressants (e.g. tricyclic antidepressants and mirtzapine): avoid in the absence of a depressive disorder.¹
- Sedating antihistamines: limited evidence for efficacy and may cause significant adverse effects.¹
- Antipsychotics: no role in management of insomnia.¹
- Complementary medicines (e.g. melatonin, valerian): there is limited data.^{2,14}

Review regularly and avoid long-term use

Regular review is important for all patients using a hypnotic medicine.

Treatment review should include:

- clinical indication(s)
- dose
- ongoing assessment of effectiveness
- monitoring for adverse effects
- evaluation for new or exacerbation of existing comorbid disorders.^{2,18}

Prolonging treatment with hypnotic medicines (for > 4 weeks) increases the risk of dependence.¹ There is insufficient evidence to assess the long-term safety and efficacy of hypnotic medicines.⁹ Use the lowest effective dose of hypnotic medicine for the shortest possible time and discontinue use when conditions allow.^{1–3}

Benzodiazepine use in anxiety

For information on the appropriate use of benzodiazepines in anxiety disorders refer to *NPS News 65* (available at www.nps.org.au/news_65).

Discontinuing hypnotic medicines

After short-term use (e.g. 1–2 weeks) at recommended therapeutic doses

- Treatment can usually be stopped abruptly without problems.
- Reassure and inform patients that rebound insomnia can occur but this does not mean that ongoing treatment is necessary.¹

After long-term use (> 4 weeks)

- Establish the patient’s willingness to stop or reduce their dose.^{6,18}
- Assess whether it is a suitable time for the person to stop taking the hypnotic medicine.¹⁹

Simple strategies used in a primary care setting — such as sending a letter advising patients to consider reducing hypnotic medicine use or providing brief self-help advice on discontinuing, can be effective in reducing or ceasing use.¹⁹ If brief interventions are unhelpful, a strategy of gradual dose reduction guided by a primary care practitioner increases the chance of successful discontinuation.²⁰ This can be further increased by the use of behavioural and cognitive therapies.^{2,20}

There is no established optimum rate of dose reduction.²¹ See Table 3 for a suggested tailored approach.

Table 3: Tailored approach to gradual dose reduction^{1,6}

| Type of use / dose of hypnotic medicine | Dose reduction plan |
|---|---|
| Within or slightly above recommended therapeutic range for few months | Reduce dosage by 10% to 20% per week |
| High doses or difficulty in reducing a short-acting benzodiazepine | Stabilise on equivalent dose of diazepam for a few days and gradually taper* [†] |
| Concurrent use of multiple benzodiazepines | Stabilise on diazepam (sum the equivalent doses) and gradually taper* [†] |

* See Table 4 for approximate diazepam dose equivalents.

† Avoid diazepam in older people.

- Modify dose reductions according to severity of withdrawal symptoms.⁶
- Allow patient to stabilise between dose reductions.⁶
- Consider referral to a specialist if discontinuation is likely to be complex, e.g. patients taking very high doses, or patients with a history of seizures, psychosis or alcohol/substance abuse.⁶

In some circumstances it may be appropriate to wait until a person's physical and psychological health and personal circumstances are improved or stable before considering or starting drug withdrawal.¹⁹ Successful discontinuation is possible even in older people who have been using a hypnotic medicine long term.^{1,6,18} Stopping long-term benzodiazepines in older people can improve memory, reaction times, alertness and concentration.¹⁹

A reduction plan with helpful hints is available (see the leaflet *A reduction plan for your sleeping tablets*). Examples of gradual dose reduction approaches are included in *NPS Prescribing Practice Review 49* (at www.nps.org.au/ppr_49). For more detailed information on discontinuing hypnotic medicines, see the *STOP guide for long-term use of hypnotic medicines* (at www.nps.org.au/news_67).

Patients who do not wish or are unable to stop

Patients who have taken hypnotic medicines to aid sleep for more than 4–6 months are likely to have become unwittingly dependent.¹ Continued treatment may be acceptable if the patient continues to sleep well with the same dose of hypnotic medicine and:

- there are no adverse effects present
- the patient is aware that they may be dependent and
- a reduction program has been unsuccessful or is against the patient's wishes.¹

These patients should have regular medication reviews and be offered non-drug therapies that might reduce their need for a hypnotic medicine.¹

- Encourage the person to stop or reduce their use without them feeling pressured.¹⁹
- Listen to their views and address any concerns they have.¹⁹
- Discuss the benefits of stopping treatment (e.g. better sleep quality, improved alertness, no adverse effects and potential reduction in risk of serious events such as falls and traffic accidents).¹⁹
- Review at a later date and reassess patient's willingness to stop.¹⁹
- Suggest they try a small reduction in dose. This may help with addressing their concerns, such as rebound insomnia.¹⁹

Table 4: Benzodiazepine comparative information*^{1,14}

| Length of action | Drugs | Aproximate equivalent dose to diazepam 5 mg [†] |
|--|---------------|--|
| Very short-acting (t _{1/2} < 6 hours) | midazolam | Acute use only |
| | triazolam | 0.25 mg |
| Short-acting (t _{1/2} 6–12 hours) | alprazolam | 0.5 mg |
| | oxazepam | 15 mg |
| | temazepam | 10 mg |
| Medium-acting (t _{1/2} 12–24 hours) | bromazepam | 3 mg |
| | lorazepam | 1 mg [‡] |
| Long-acting (t _{1/2} > 24 hours) | clobazam | 10 mg |
| | clonazepam | 0.25 mg |
| | diazepam | 5 mg |
| | flunitrazepam | 1 mg |
| | nitrazepam | 2.5 mg |

* This table includes benzodiazepines that do not have a licensed indication for insomnia.

[†] Exact dose equivalents difficult to establish due to widely varying half-lives and receptor binding characteristics of these drugs.

[‡] Lorazepam may be relatively more potent at higher doses.

Adapted with permission from Psychotropic Expert Group. Table 5. Comparative information for benzodiazepines, zolpidem and zopiclone. In: *Therapeutic Guidelines: Psychotropic*. Version 6. Melbourne: Therapeutic Guidelines Limited, 2008. p.24.

General list of precautions/contraindications for benzodiazepines, zolpidem and zopiclone*¹⁴

| Contraindications |
|--|
| Respiratory depression |
| Sleep apnoea |
| Myasthenia gravis |
| Severe hepatic impairment |
| Previous or concomitant alcohol use is contraindicated with zolpidem and zopiclone — this increases the risk of somnambulism and associated bizarre behaviours. (Alcohol may also increase CNS depressant effects of zolpidem, zopiclone and benzodiazepines.) |
| Precautions |
| Renal impairment |
| Mild-moderate hepatic impairment |
| Older patients: increased risk of oversedation, ataxia, confusion, falls, respiratory depression and short-term memory impairment |
| Drug and alcohol abuse history |
| Pregnancy |
| Breastfeeding |

* This is a general list of contraindications and precautions, and is not exhaustive. See individual product information for full list of precautions/contraindications for each medicine and appropriate management.

Confidentiality and privacy

You must sign and date the **Submission cover sheet** to participate in this audit. By participating you agree to aggregation of your de-identified patient data and use of your personal data. Individual results of your clinical audit are kept confidential by NPS.

What will happen to your patient data

- Your de-identified patient data forms are scanned and returned to you.
- Your individual results are provided to you only.
- Your data are aggregated with those of other participants and the de-identified aggregate results:
 - are provided to all participants
 - may be used in NPS evaluation and reports
 - are provided to the RACGP and ACRRM.

The RACGP has advised that program information may be shared with researchers and interested general practitioners for the purpose of continuing education coordination at the discretion of the QA&CPD Program.

What will happen to your personal details

Your personal details:

- are provided to the mail house for processing
- are provided to the RACGP QA&CPD Program and/or ACRRM Professional Development Program for point allocation (if applicable)
- are recorded for the purpose of the PIP and NPS evaluation
- can be obtained from NPS by request in writing.

Individual clinical audit results will not be available after potentially identifying data are removed from NPS records at the close of the clinical audit cycle.

Please note: You are responsible for advising NPS of any changes of address during the audit cycle.

Further information

Contact NPS customer service on 02 8217 8700 (option 2).

References

1. Psychotropic Expert Group. Therapeutic Guidelines: Psychotropic. Melbourne: Therapeutic Guidelines Ltd, 2008.
2. Schutte-Rodin S, Broch L, Buysse D, et al. Clinical guideline for the evaluation and management of chronic insomnia in adults. *J Clin Sleep Med* 2008;4:487–504.
3. Clinical Knowledge Summaries. Insomnia. 2009. www.cks.nhs.uk/insomnia (accessed 12 August 2009).
4. Ramakrishnan K, Scheid DC. Treatment options for insomnia. *Am Fam Physician* 2007;76:517–26.
5. Toward Optimized Practice Program. Clinical practice guideline adult insomnia: Assessment to diagnosis. http://www.topalbertadoctors.org/PDF/complete%20set/Insomnia%20Assessment/insomnia_assessment_guideline.pdf (accessed 04 Oct 2009).
6. Australian Government Department of Veterans' Affairs (DVA). Insomnia Management: Effective approaches for a common problem. Veterans' MATES Therapeutic Brief 2009:18:1–4 https://www.veteransmates.net.au/VeteransMATES/documents/module_materials/M18_TherBrief.pdf (accessed 15 September 2009).
7. Kamel NS, Gammack JK. Insomnia in the elderly: cause, approach, and treatment. *Am J Med* 2006;119:463–9.
8. Desai A, Bartlett D. Insomnia. *Australian Doctor* 2008;29–36. (Available at http://www.australiandoctor.com.au/http/pdf/AD_029_36_APR04_08.pdf).
9. Riemann D, Perlis ML. The treatments of chronic insomnia: A review of benzodiazepine receptor agonists and psychological and behavioural therapies. *Sleep Med Rev* 2009;13:205–14.
10. Harsora P, Kessmann J. Nonpharmacologic management of chronic insomnia. *Am Fam Physician* 2009;79:125–30.
11. Petit L, Azad N, Byszewski A, et al. Non-pharmacological management of primary and secondary insomnia among older people: review of assessment tools and treatments. *Age Ageing* 2003;32:19–25.
12. Morin CM, Bootzin RR, Buysse DJ, et al. Psychological and behavioral treatment of insomnia: update of the recent evidence (1998-2004). *Sleep* 2006;29:1398–414.
13. Dunder Y, Boland A, Strobl J, et al. Newer hypnotic drugs for the short-term management of insomnia: a systematic review and economic evaluation. *Health Technol Assess* 2004;8(24):1–125.
14. Australian Medicines Handbook, 2010.
15. Anonymous. Ambien CR for Insomnia. *Med Lett Drugs Ther* 2005;47:97–8.
16. Glass J, Lancelôt KL, Hermann N, et al. Sedative hypnotics in older people with insomnia: meta-analysis of risks and benefits. *BMJ* 2005;331:1169.
17. Australian medicines handbook drug choice companion aged care. 2nd ed. Adelaide, Australian Medicines Handbook Pty Ltd, 2006.
18. Royal Australian College of General Practitioners. Guidelines: Benzodiazepines. Melbourne: Royal Australian College of General Practitioners, 2000. <http://www.racgp.org.au/guidelines/benzodiazepines> (accessed 15 September 2009).
19. Clinical Knowledge Summaries. Benzodiazepine and z-drug withdrawal. 2009. http://www.cks.nhs.uk/benzodiazepine_and_z_drug_withdrawal#368592001 (accessed 12 August 2009).
20. Parr JM, Kavanagh DJ, Cahill L, et al. Effectiveness of current treatment approaches for benzodiazepine discontinuation: a meta-analysis. *Addiction* 2009;104:13–24.
21. Lader M, Tylee A, Donoghue J. Withdrawing benzodiazepines in primary care. *CNS Drugs* 2009;23:19–34.

February 2010

This information is derived from a critical analysis of a wide range of authoritative evidence. NPS has taken reasonable care to ensure that the information is accurate and up-to-date at the time of creation. NPS does not warrant its completeness and excludes liability where permitted by law. Health care professionals must continue to rely upon their own skill, care and inquiries taking into account the individual circumstances of each patient when providing medical advice.

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Sleep right Sleep tight

Natural sleep before medicines

A full suite of patient materials on sleep is available to order or download from www.nps.org.au/sleep.

These include:

- *Sleep right. Sleep tight* factsheet
- A reduction plan for your sleeping tablets
- Door hanger with good sleep practices
- Sleep diary to track sleep habits

There is also an online *Sleep quiz* for patients to want to learn more about sleep.

www.nps.org.au/sleep



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Your patient code: Do not use patient name.
Use this to identify your patients for the Review Phase.

Use a **black biro** to mark a **cross (X)** in the box beside your response. If you make a mistake, use white correction fluid.



NPS office use only

Patient details and history

1. Age range:

- < 45 years
- 45–59 years
- 60–74 years
- ≥ 75 years

Only include adult patients (> 18 years) using a benzodiazepine, zolpidem or zopiclone for INSOMNIA (either a new prescription or ongoing therapy).

2. Gender:

- male
- female

3. Insomnia symptoms are:

- acute (< 4 weeks)
- chronic (≥ 4 weeks)

4. Has the patient been assessed for factors contributing to sleep difficulties?

- yes no not known

| Specify any factors contributing to sleep difficulties (see Guide p. 2) | Are these factors being managed? | | | |
|---|----------------------------------|--------------------------|--------------------------|--------------------------|
| | Yes | No | Not known | Not possible |
| <input type="checkbox"/> none | | | | |
| <input type="checkbox"/> coexisting conditions | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> other medicines / substance use | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> environmental factors | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> behavioural factors | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> situational factors | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Management of insomnia

5. Has the patient been given advice on good sleep practices?

- yes no not known

6. Which other non-drug therapies have been advised/used (see Guide p. 3)? (Mark all that apply)

- none
- cognitive therapy
- sleep restriction
- stimulus control therapy
- relaxation strategies
- paradoxical intention
- bright light exposure
- exercise
- not known
- other _____

7. Drug(s) used for INSOMNIA:* (Mark all that apply)

| Which drug? | What is the dosing schedule? | | | Mark any additional indication(s) for benzodiazepine use: |
|--|------------------------------|-------------------------------|--------------------------|---|
| | Regular use | Intermittent use [†] | Not known | |
| <input type="checkbox"/> alprazolam | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> acute behavioural disturbances |
| <input type="checkbox"/> bromazepam | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| <input type="checkbox"/> clobazam | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> anxiety disorder |
| <input type="checkbox"/> clonazepam | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| <input type="checkbox"/> diazepam | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> epilepsy/seizures |
| <input type="checkbox"/> flunitrazepam | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| <input type="checkbox"/> lorazepam | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> other _____ |
| <input type="checkbox"/> nitrazepam | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| <input type="checkbox"/> oxazepam | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> no other indication |
| <input type="checkbox"/> temazepam | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| <input type="checkbox"/> triazolam | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| <input type="checkbox"/> zopiclone | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| <input type="checkbox"/> zolpidem | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

* This table includes benzodiazepines that do not have a licensed indication for insomnia.

† Intermittent use i.e. NOT regular nightly therapy.

8. Who initiated the benzodiazepine, zolpidem or zopiclone? (Mark all that apply)

- myself
- other medical specialist
- not known
- another GP
- following hospital stay

9. Which of the following potential risks has the patient been advised of? (Mark all that apply)

- no advice on risks given
- adverse effects
- tolerance with long-term use
- other _____
- rebound insomnia
- dependence with long-term use
- not known

10. Patient contraindications/precautions: (Mark all that apply)

| Contraindications | Precautions |
|--|--|
| <input type="checkbox"/> none | <input type="checkbox"/> none |
| <input type="checkbox"/> respiratory depression | <input type="checkbox"/> renal impairment |
| <input type="checkbox"/> sleep apnoea | <input type="checkbox"/> mild–moderate hepatic impairment |
| <input type="checkbox"/> myasthenia gravis | <input type="checkbox"/> pregnancy/breastfeeding |
| <input type="checkbox"/> severe hepatic impairment | <input type="checkbox"/> drug, alcohol abuse history |
| <input type="checkbox"/> other _____ | <input type="checkbox"/> older patient (particularly if history of falls, confusion, oversedation, cognitive impairment) |
| (zolpidem and zopiclone only) | <input type="checkbox"/> other _____ |
| <input type="checkbox"/> concomitant alcohol use | |

This is a general list of contraindications and precautions, and is not exhaustive. See individual product information for full list of precautions/contraindications for each medicine and appropriate management.

Patient review and planned actions

11. Was the prescription:

a new prescription
(i.e. initial supply)

How many weeks treatment was prescribed?

- < 2 weeks
 2–4 weeks
 > 4 weeks

Was a definite duration of treatment agreed with the patient?

- yes no not known

Planned action(s):

- address/review factors contributing to sleep difficulties
- implement non-drug therapies
- optimise use of non-drug therapies
- no further supply of hypnotic medicine(s) planned
- cease hypnotic medicine(s) at next review
- other (specify) _____

Box 1 – For Review Phase

OR

ongoing supply
(i.e. continuing therapy)

How long has the patient been using a benzodiazepine, zopiclone or zolpidem (for this current treatment)?

- < 1 month 1–2 months 2–4 months 4–6 months > 6 months not known

Has the patient been advised that they may now become dependent with continued use?

- yes no not known

Has the patient been assessed for adverse effects (e.g. psychomotor, cognitive, paradoxical effects)?

- yes no not known

Has discontinuation been discussed with patient?

- yes no not known

Has discontinuation previously been attempted?

- yes currently attempting no not known

Was it successful?
(i.e. patient successfully reduced dose or discontinued)

- yes no

Planned actions(s):

- retry discontinuation
- reduce dose or frequency / discontinue hypnotic medicine(s)
- address/review factors contributing to sleep difficulties
- implement non-drug therapies
- optimise use of non-drug therapies
- continue current management
 - discontinuation against patient wishes at this time
 - discontinuation not appropriate at this time (give details) _____
- other (specify) _____

Box 2 – For Review Phase

Planned action(s):

- discuss patient's willingness to discontinue hypnotic medicine(s)
- reduce dose or frequency / discontinue hypnotic medicine(s)
- address/review factors contributing to sleep difficulties
- implement non-drug therapies
- optimise use of non-drug therapies
- continue current management i.e. discontinuation not appropriate at this time (give details) _____
- other (specify) _____

Box 3 – For Review Phase

i Review regularly and offer non-drug therapies
 Consider suitability for gradual discontinuation at a later date.
 Discuss benefits of stopping
 Assess patient's willingness to discontinue hypnotic medicine(s).

12. Which of the following referrals have been planned or completed?

| Planned or completed referral(s): | Completed | Planned |
|--|---|--------------------------|
| | Consider referral to a sleep clinic, sleep physician, psychiatrist or psychologist for non-drug therapies, or if insomnia does not improve. | <input type="checkbox"/> |
| Refer to specialist for further management for suspected sleep apnoea or restless legs syndrome, or for difficult-to-control psychiatric problems. | <input type="checkbox"/> | <input type="checkbox"/> |
| Refer to specialist if complex hypnotic withdrawal is anticipated e.g. patient using very high doses or patient has a history of seizures, psychosis or alcohol/substance abuse. | <input type="checkbox"/> | <input type="checkbox"/> |

Box 4 – For Review Phase