Lack of sleep is associated with impaired quality of life, increased risk of depression and impaired cognitive performance among other issues. Insomnia is a “psychophysiological” disorder in which mental and behavioural factors play predisposing, precipitating and perpetuating roles.

Most guidance on treating insomnia and sleep disorders promotes sleep hygiene or cognitive behavioural therapy (CBT) before treatment with medications, which should only be used short term to reintroduce a healthier sleep cycle. Long term outcomes are optimised when a patient’s medication is discontinued. Although benzodiazepines and “Z” drugs are the most effective drugs for short-term management of sleep issues, hypnotic use should only be one aspect of general management of induction of sleep. Long term use introduces risks such as dependence, abuse, cognitive effects (sedation, drowsiness and mental slowing are common) and impaired psychomotor function. This is a particular risk in the elderly with insomnia – a group more likely to suffer adverse events than benefit from improved sleep quality.

“Many health professionals have been dissatisfied with previous guidance that benzodiazepines should be used for short-term treatment only and no longer than four weeks in regular dosage. All patients should be made aware of the risks of dependence if they continue benzodiazepines in regular dosages over a longer period. A clinical judgement has to be made as to whether alternatives may be more suitable, for each patient, and each proposed medication”

It is often overlooked that benzodiazepines and benzodiazepine receptor agonists (BZAs) are licensed for anxiety and insomnia for short term use only – to a usual limit of 2-4 weeks. Use of medications outside the product license means the prescriber is taking on more responsibilities for risks to the patient. It is also important to remember that continued use of benzodiazepines reduces the efficacy of the medication. Sedation and drowsiness will become less prominent with continued use – undermining the initial reason for treatment. Paradoxically, ceasing treatment with these medications often triggers withdrawal symptoms predominantly characterised by anxiety and insomnia – a strong deterrent for patients persisting through planned discontinuation.

Prescriptions of benzodiazepines should be subject to regular review. Many patients are able to take short courses of benzodiazepines (or to use them on an ‘as required’ basis) quite safely and to stop them when no longer needed. If treatment courses lasting longer than four weeks are required, this should not necessarily be regarded as a deviation from good clinical practice, although continuing vigilance of potential hazards is needed throughout treatment. There are occasions where long term treatment is appropriate, however insomnia and anxiety are not.

Ultimately best practice dictates that long term treatment poses risks to the patient, and the licensing of the medications discourages treatment past 4 weeks. The medication should be used short term in conjunction with improved sleep hygiene and cognitive behaviour therapy (CBT) in an effort to help patients amend their own behaviour effectively.

Objectives of this document

Best practice with benzodiazepines (and z drugs as an extension) dictates all patients receiving the medication for an extended period should be reviewed on a regular basis so their suitability for long term prescribing can be assessed. Although it is accepted that a minority of patients may be appropriate for long term use of the medications, there is a large cohort of patients that are being exposed to more risks than benefits through continued use.

This document will provide a framework for reviewing patients, guiding prescribers (and patients) on assessing the continued need for these medications, and then through reduction or withdrawal of the medications. Every patient is an individual. Gradual, individualised and well supported de-prescribing will improve patient outcomes.
Sleep hygiene
A good booklet on “Managing Insomnia and Sleep Problems” is available [here](https://mindedforfamilies.org.uk/older-people).

The booklet includes “10 Rules for Improved Sleep Hygiene”:

1. Products containing caffeine (tea, coffee, cocoa, chocolate, soft drinks, etc.) should be discontinued at least 4 hours before bedtime. Caffeine is a stimulant and can keep you awake.
2. Avoid nicotine (including nicotine patches or chewing gum, etc.) an hour before bedtime and when waking at night. Nicotine is also a stimulant.
3. Avoid alcohol around bedtime because although it can promote sleep at first, it can disrupt sleep later in the night.
4. Avoid eating a large meal immediately before bedtime, although a light snack may be beneficial.
5. Try to do regular (even mild) physical exercise if you are able, but avoid doing this in the 2 hours before bedtime.
6. Keep the bedroom calm and tidy. Select a mattress, sheets, and pillows that are comfortable.
7. Avoid extreme room temperature in the bedroom.
8. Keep the bedroom quiet and darkened during the night, but try to spend some time in daylight (or bright artificial light) during the day.
9. Keep your bedroom mainly for sleeping; try to avoid watching television, listening to the radio, or eating in your bedroom.
10. Try to keep regular times of going to bed and getting up.

Useful information for older patients can also be found here – [https://mindedforfamilies.org.uk/older-people](https://mindedforfamilies.org.uk/older-people). This is a free learning resource about mental health. The section on insomnia is useful in describing what normal sleep looks like, and how this changes as people age.

Cognitive Behavioural Therapy (“Talking Therapy”)
Treating issues around sleep is a process that cannot be addressed by the use of medications alone. There are several “talking therapy” services across Nottinghamshire that patients can refer themselves to, or with consent healthcare providers can refer them to.

Tel: 0115 956 0888  Tel: 0300 555 5582  Tel: 0115 896 3160

Nick Sherwood – Mental Health Efficiencies Pharmacist  
Withdrawal of BZA and BZRAs – V1.2  
Review due – August 2021
Steps to take in reviewing patients

Record all actions taken in the patient’s notes.

1. Find the patients in your practice using benzodiazepines or z drugs frequently.
2. Enter the information into the provided audit sheet.
3. Use the provided algorithm to decide the appropriate course of action for each patient.
4. Send out the approved letter (Appendix 1) to facilitate medication withdrawal. Also share information on sleep hygiene or CBT services.
5. Discuss the potential change to medication with the patient (Appendix 4). Take this opportunity to optimise treatment for related issues first – i.e. anxiety, depression. The patient should be motivated otherwise treatment is unlikely to be successful.
6. Review patient’s dosing schedule (Appendix 2), and create a schedule for amending the prescription (Appendix 3). Weekly prescriptions are recommended in order to control the available supply of the medication.
7. Organise a date to next consult with the patient & plan the next step (Appendix2/3)
8. On next review, refer back to point 5 and continue withdrawal regime.

Algorithm for patients prescribed benzodiazepines or “Z” drugs (BZRAs)

Identify patients prescribed benzodiazepine/Z drug

Determine indication, duration of use

<4 weeks

>4 weeks

Advise review at 2-4 weeks

Appropriate for long-term use?
(i.e. other sleep disorders, epilepsy, drug/alcohol withdrawal, palliative care, evidence withdrawal has failed)

NO – (insomnia, anxiety)
- Recommend gradual reduction of BZA/BZRA (Appendix 2).
- Optimise treatment for residual issues.
- Offer sleep hygiene advice
- Offer referral to CBT

YES
Advise regular review of therapy

Dallas Area Prescribing Committee

Nick Sherwood – Mental Health Efficiencies Pharmacist
Withdrawal of BZA and BZRAs – V1.2
Review due – August 2021
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Excel review: hypnotics.xlsx

Nick Sherwood – Mental Health Efficiencies Pharmacist
Withdrawal of BZA and BZRAs – V1.2
Review due – August 2021
Withdrawal effects

It is important to communicate frequently and review frequently with the patient when amending long term benzodiazepines or benzodiazepine receptor agonists. Encouragement and reassurance during and after drug withdrawal are important. It is important to note that an incremental dosage reduction will minimise the occurrence of withdrawal symptoms. Withdrawal effects can manifest as insomnia, anxiety, loss of appetite or body weight, tremor, perspiration, tinnitus and perceptual disturbances. These symptoms are often similar to the original complaint and may encourage further prescribing.

Specifically related to sleep, implementation of good sleep hygiene will help the patient take control of the issue themselves. CBT is sometimes recommended in those with long term insomnia, and can aid in the withdrawal period. Extra medications are not generally recommended to manage the process.

As mentioned in “steps to take”, it is important to manage related issues, and these may arise during withdrawal;

**Anxiety** is the most common withdrawal symptom. This is likely to be temporary, and severity will be reduced by an incremental reduction. Consider slowing or suspending withdrawal until symptoms become manageable.

**Depression** can emerge or coexist with withdrawal symptoms. Optimise management, consider suspending withdrawal until this is resolved.

**Insomnia** should not worsen if the withdrawal is managed appropriately. Long term insomnia has been shown to diminish with appropriate sleep hygiene, and in severe insomnia, CBT.

References


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Glass et al (2005), Sedative hypnotics in older people with insomnia: meta-analysis of risks and benefits, BMJ, doi:10.1136/bmj.38623.768588.47


MHRA (April 2009); Off-label or unlicensed use of medicines: prescribers’ responsibilities [link]

NICE Clinical Knowledge Summaries (CKS); [https://cks.nice.org.uk/insomnia](https://cks.nice.org.uk/insomnia), accessed 9/5/18
Withdrawal of BZA and BZRAs

NICE Clinical Knowledge Summaries (CKS); https://cks.nice.org.uk/benzodiazepine-and-z-drug-withdrawal#!scenario, accessed 11/5/18


Ramakrishnan & Dewey (2007); Treatment Options for Insomnia; American Family Physician Volume 76, Number 4 August 15, 2007


Summary of Product Characteristics (SPC) for diazepam 5mg tablets (link), accessed 9/5/18


UKMi Medicines Q&A, (June 2016), “What are the equivalent doses of oral benzodiazepine?”, Q&A293.5

Appendix 1 – Patient Letter

Practice header

«TITLE» «FORENAME1» «SURNAME»,
«ADDRESS_1»
«ADDRESS_2»
«ADDRESS_3»
«POSTCODE»
PRIVATE AND CONFIDENTIAL

Date

Dear «TITLE» «SURNAME»

We have been looking at your medicines to ensure you have the most appropriate treatment available. Our records show that you have been using MEDICATION for some time to help you sleep.

Nottinghamshire CCGs are currently trying to improve practice with medications used to treat insomnia. Evidence suggests that these medications are not effective after a few weeks of regular use. They lose their efficacy and many users will be suffering side effects of the medication and “withdrawal” as their body develops tolerance. The manufacturers of these medications recommend their use for short term treatment because long-term use can give rise to many unwanted effects, both physical and mental.

Although stopping the medication suddenly may lead to unpleasant withdrawal effects, reducing slowly will help alleviate these issues. The best start you can make is taking the medication only when you feel it is absolutely necessary. It may be that you need them less frequently than you originally thought.

There are safer, more effective methods of managing insomnia than medications such as sleep hygiene, and “talking therapies” which help to address some of the main causes of insomnia.

We hope that you will support us in making this small change. Our aim is to help you become less reliant on the tablets and to reduce the amount you are taking, with the possibility of stopping them completely at a future date. We are confident that this is the right choice and we will support you in this adjustment. If you would like to talk further about the change, please do not hesitate to contact the practice.

Yours sincerely,

Dr. X
Appendix 2 – How to approach reducing dose

Discontinuation of benzodiazepines and related drugs should be done gradually to minimise the risk of withdrawal effects. The following offers a general outline to amending regular benzodiazepine or z drug treatment schedules, and is interpreted from BNF, NICE and Maudsley advice. These recommendations are appropriate for the adults and the elderly alike.

**STEP 1 – SWITCH TO DIAZEPAM**

Transfer the patient onto an equivalent daily dose of diazepam, ideally as a single dose taken at night. This is a long acting benzodiazepine (t ½ of at least 30 hours) which will allow a smooth reduction in blood levels. Diazepam is also fairly flexible due to the range of available dosages.

The switch should be stepwise, one dose at a time over about a week until the equivalent dose of diazepam is achieved.

5mg of diazepam is equivalent to;

- Chlordiazepoxide 12.5mg
- Clonazepam 0.5-1mg
- Lorazepam 0.5mg
- Lormetazepam 0.5mg
- Oxazepam 15mg
- Nitrazepam 5mg
- Temazepam 10mg
- Zopiclone 7.5mg
- Zolpidem 10mg

**STEP 2 – REDUCE DIAZEPAM DOSE**

Withdrawal should be gradual, usually as 5–10% reduction every 1–2 weeks, or an eighth of the dose fortnightly, with a slower reduction at lower doses, and titrated according to the severity of withdrawal symptoms (if they occur maintain the dose until symptoms improve). This may take several months.

**STEP 3 – REDUCE THE DOSE FURTHER**

Reduce the dose further if necessary in smaller fortnightly steps; it is better to reduce slowly rather than too quickly; Steps of 500micrograms may be appropriate towards the end of withdrawal.

**STEP 4 – STOP COMPLETELY**

Time needed for withdrawal can vary from about 4 weeks to a year or more.

Alternative medications should not be used.

**ZOPICLONE**

It is preferred not to convert “Z drugs” to diazepam – reduction can be managed by the following actions (for zopiclone);

1. Reduce the daily dose by half a 3.75mg tablet every 2 weeks
2. The patient should stop taking when they are using only half of a 3.75mg tablet

Nick Sherwood – Mental Health Efficiencies Pharmacist
Withdrawal of BZA and BZRAs – V1.2
Review due – August 2021
Appendix 3 – Reducing dosage chart

| Name……………………………………………………………………… | DOB…………………………………… |

| Original medication & dose……………………………………………………………………………………………………………… |

| Tablet/liquid for gradual reduction………………………………………………………………………………………………… |

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Appendix 4 – Discussion points

- Explain these medications become less effective and induce dependence after several weeks.
- Long-term use of benzodiazepines can give rise to many unwanted effects, including poor memory and cognition, emotional blunting, depression, increasing anxiety, physical symptoms and dependence. All benzodiazepines can produce these effects whether taken as sleeping pills or anti-anxiety drugs.
- Some of the drugs were marketed as safe and non-addictive (‘z’ drugs), but after several years of use, we now know that they have the addictive potential of benzodiazepines.
- Some withdrawal symptoms may be similar to the original symptoms (insomnia, anxiety, loss of appetite), and some may persist for weeks after stopping.
- The reducing chart does not need to be drawn up through to the end. It is flexible, and it is better to be ready to adjust to a faster or slower pace at any time. Share this with them, discuss flexibility in approach.
- Never go backwards. You can stay at a certain point until the difficulty passes, but try not to increase the dosage again. You will be covering the same ground twice.
- Avoid taking extra tablets in times of stress. Learn to gain control over your symptoms. This will give you extra confidence that you can cope without benzodiazepines/z drugs.
- Avoid compensating for benzodiazepines by increasing your intake of alcohol, cannabis or non-prescription drugs. Sleep hygiene and CBT will help you take control yourself.
- Ask if they have missed a dose or tried to stop previously. It is likely they experienced withdrawal effects and assumed it was insomnia returning. Withdrawal should only last 7-10 days and then sleep should return to normal.
- It is more natural and refreshing to sleep without a medication.
- Agree to discuss progress with the patient. They will often require only reassurance. It may be helpful to organise a follow up appointment.
- Provide a reduced script so the patient does not have sufficient to continue at full dose.