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Alosa Health

Balanced information for better care

Getting a good night's rest

Managing insomnia in older patients

Sleep concerns are common in primary care

About 1 in 3 adults in the U.S. report difficulty sleeping, and 10% report daytime consequences of poor sleep, such as fatigue.[1]

INSOMNIA is defined by persistent difficulty with sleep initiation, duration, and/or quality despite adequate sleep opportunity, leading to daytime concern.[2]

Sleep needs change with age.

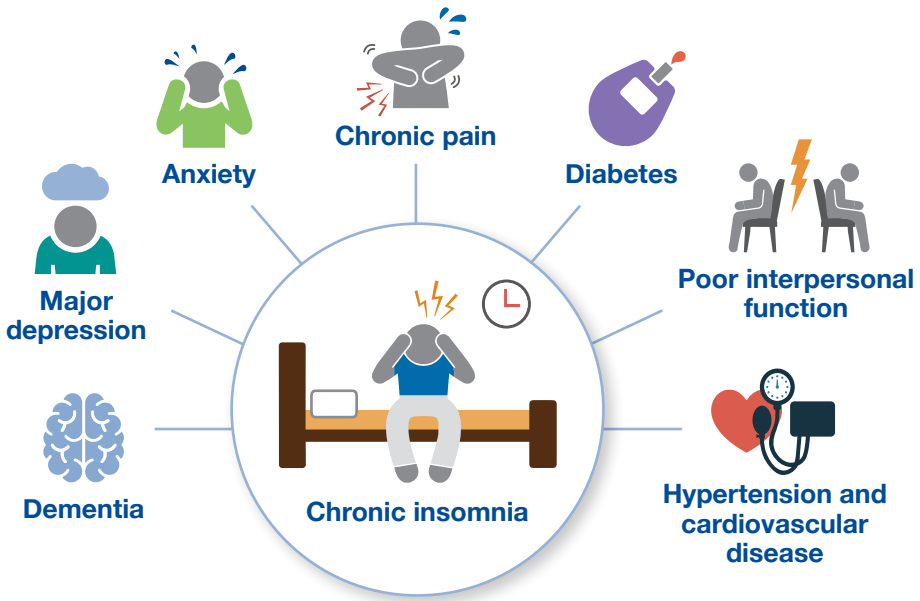
Some older adults may have incorrect expectations about what normal sleep is.

TABLE 1. Older adults are more likely to report problems staying asleep than falling asleep.[3]

Measurement	Definition	Normal range	Change in older age
Sleep latency	Time to fall asleep	< 20 minutes	Unchanged or reduced
Total sleep time	Total time asleep	7-9 hours	Reduced
Sleep efficiency	Proportion of time in bed asleep	> 85%	Reduced
Wake after sleep onset	Time spent awake in bed after initially falling asleep	< 15% of time in bed	Increased

Not getting enough sleep impacts health.

FIGURE 1. Chronic insomnia may exacerbate many medical conditions and impact social relationships.[4]



Evaluating patients with sleep concerns

1 Identify and address issues that can contribute to sleep problems.

- **Medical and mental health conditions** (e.g., heart failure, pain, anxiety, depression)
- **Medication effects** (e.g., diuretic, stimulant or corticosteroid given before bed)
- **Other sleep disorders** (e.g., sleep apnea, circadian rhythm disorder, restless leg syndrome)
- **Use of substances** (e.g., caffeine, cannabis, alcohol, nicotine)

2 Evaluate the sleep difficulty.

Ask about the nature of the sleep problem, frequency, duration, and current sleep habits.

Use duration of symptoms to guide treatment.

Acute insomnia:
Sleep problems occur for **< 3 months with an identifiable trigger** (e.g., death of spouse, life transition).

See page 10 for treatment.

Chronic insomnia:
Sleep problems occur for **≥ 3 days per week for ≥ 3 months.**

The focus of this document.

3 Discuss healthy sleep behaviors.

Try to get up at the same time every day

Get regular physical activity

Limit nicotine, alcohol, or coffee after mid-afternoon

Reduce stimulation and screen use before bedtime

Avoid having visible clocks that can distract from sleep

Get in bed only when tired; don't *try* to fall asleep

Cognitive behavioral therapy for insomnia (CBT-I) is the best first-line treatment

Yet many clinicians don't know enough about it.

A survey of primary care clinicians found 59% did not know what CBT-I was or how it worked.[5]

What is CBT-I?

- **CBT-I is a series of behavioral interventions** that targets the root causes of sleep problems by addressing sleep-related thoughts, emotions, and behaviors.
- **It is a time limited program.** For most people, it takes 4-8 hours of in-person or online training over several weeks to learn and implement the strategies in CBT-I.
- **The components of CBT-I are most effective in combination.** A comprehensive CBT-I program works better than the individual components on their own.[6]

FIGURE 2. The central elements of CBT-I[7-9]

Cognitive therapy

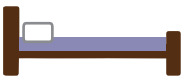
Addresses dysfunctional attitudes and reframes negative beliefs about sleep.

Sleep restriction

Sets strict limits on the time spent in bed with adjustments over time.

Stimulus control

Creates a positive, relaxing response to going to bed each night.



Sleep habits

Improves or corrects habits that disturb sleep.

Relaxation techniques

Teaches how to relax mind and body through muscle relaxation and deep breathing.

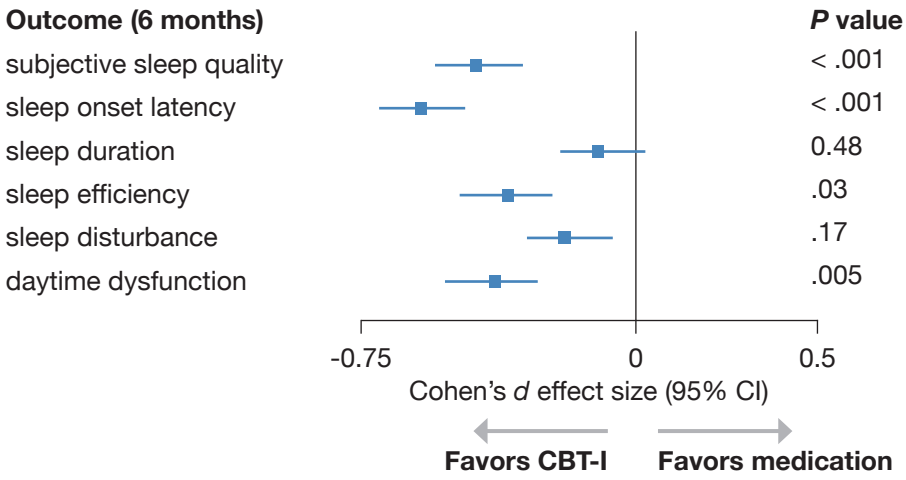
CBT-I can be used at any time

Patients can use CBT-I by itself or in combination with medication. Those who take sleep medications can use CBT-I to help them reduce and then discontinue these medications.[10-13]

The effects of CBT-I are long-lasting, unlike medications

The benefits from CBT-I endure even after sessions end.

FIGURE 3. In a cohort of 4,052 patients, six months after the intervention ended, CBT-I provided on a digital app outperformed medication across most measures.[14]



Help patients find the best option to access CBT-I.

FIGURE 4. CBT-I is effective when delivered across a variety of formats.[15] Patients can pick the one that is most accessible or convenient for them.

In-person (group or individual)

Most insurance plans cover in-person CBT-I. Resources to find a local therapist or group:

- cbti.directory
- findatherapist.com
- mentalhealthmatch.com
- helloalma.com
- headway.co

Telehealth

- Some insurance plans cover online platforms, such as:
  - TalkSpace
  - Thriveworks
  - Brightside
- Some therapists offer virtual appointments

Digital apps

CBT-I Coach is a free app best used along with another format.

Stand-alone apps that patients can purchase:

- Sleep Reset
- Night Owl

Online modules

Self-directed options may work for some patients but are usually not covered by insurance.

Some options include:

- cbtforinsomnia.com
- drugfreesleep.com

Medications for insomnia

TABLE 2. Medications used to treat insomnia

	Treatment (brand)*	Half life	Evidence quality	Safe in older adults	Factors for selection
Dual orexin receptor agonists (DORAs)	daridorexant (Quviviq)	short	Strong	●	• work by decreasing wake drive rather than inducing sedation • somnolence common • better tolerated than Z-drugs[16] • expensive
	lemborexant (Dayvigo)	inter-mediate	Strong	●	
	suvorexant (Belsomra)	inter-mediate	Strong	●	
Melatonin receptor agonists	ramelteon (Rozerem)	short	Moderate	●	• no residual daytime impairment[17] • do not take with or after high-fat meal
	melatonin (OTC)	short	Weak	●	• limited efficacy data • concerns about dose and purity
Sedating antidepres-sants	low-dose doxepin (Silenor)	inter-mediate	Strong	●	• most effective for sleep maintenance • 1-6 mg dose avoids anticholinergic side effects and QTc prolongation[18]
	trazodone (Desyrel)	inter-mediate	Weak	●	• unclear efficacy data • few side effects at low dose (<50 mg); higher dose ⬆ anticholinergic risk
Benzodia-zepine receptor agonists ("Z-drugs")	zolpidem (Intermezzo)	short	Strong	○	• not recommended in older adults, particularly those with cognitive impairment[19] as they can cause daytime sedation or confusion • do not combine with other sedating medications (e.g., opioids, benzodiazepines)
	(Ambien)	inter-mediate			
	(Ambien CR)	long			
	eszopiclone (Lunesta)	short	Strong	○	
	zaleplon (Sonata)	short	Strong	○	
Benzodia-zepines	alprazolam (Xanax)	inter-mediate	Weak	✕	• not recommended in older adults[19] • use only for short periods (< 1 month); longer-term use is not effective • risk of physiologic dependence, tolerance, cognitive impairment, driving problems
	temazepam (Restoril)	inter-mediate	Moderate	✕	
	clonazepam (Klonopin)	long	Weak	✕	
Antihista-mines	diphen-hydramine (Benadryl)	long	Weak	✕	• not recommended in older adults due to anticholinergic side effects (e.g., dry mouth, constipation) • included in multiple OTC products (e.g., Tylenol PM, ZzzQuil)

*Generics available for all classes except the DORAs, as of April 2024.

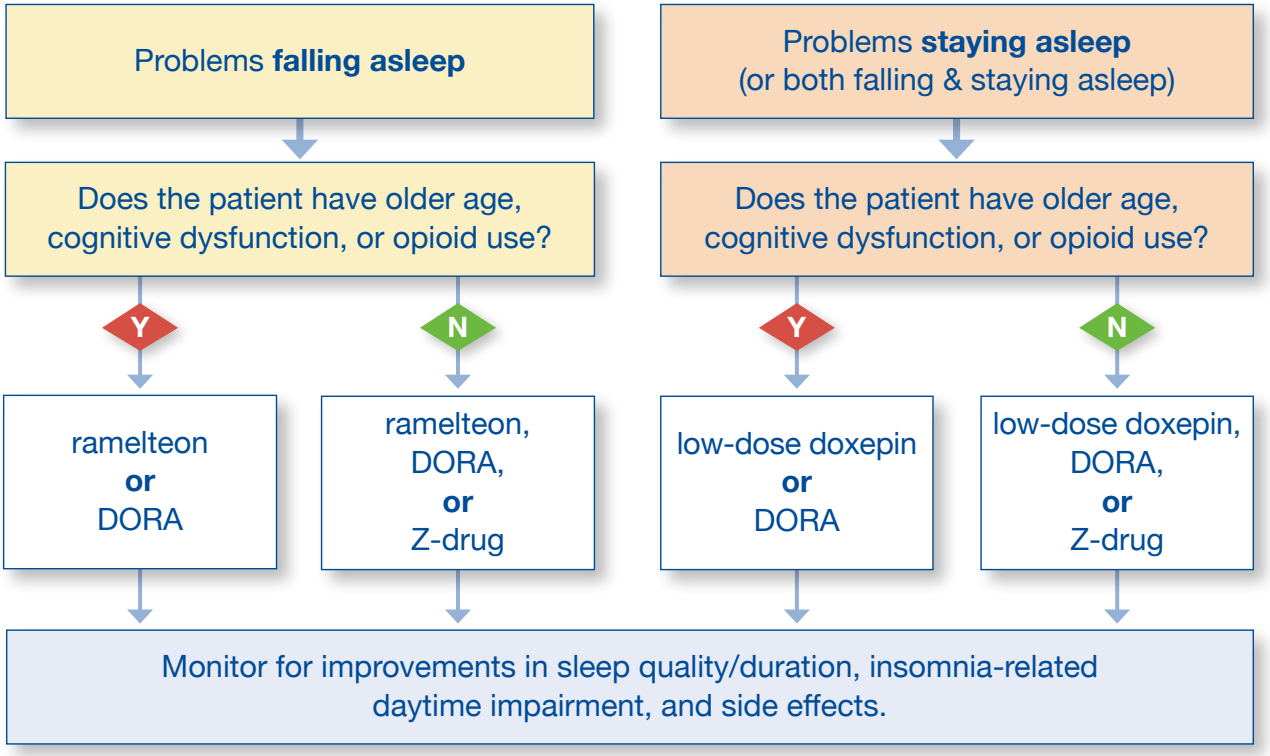
✕ avoid long-term use; ○ use with caution and monitor for treatment limiting side effects; ● not known to be unsafe in older adults, although all sleep medications can cause daytime drowsiness.

QTc = corrected QT interval; OTC = over-the-counter

Selecting and managing medications

Not all patients need medications for insomnia, particularly if they can use CBT-I instead. If a medication is needed, the choice of medication should be tailored to the patient.

FIGURE 5. Choosing the best medication in older adults, based on primary complaint



Balance known benefits and risks.

- Many medications work in the short term, but data on long-term effectiveness are lacking.
- Most can cause daytime drowsiness, somnolence, dizziness, and driving impairment.
- Some have risks that increase with long-term use, particularly benzodiazepines and Z-drugs.

Use caution with over-the-counter (OTC) medications.

- Always ask patients about any OTC medications they use to help with sleep.
- Be aware of Benadryl and other diphenhydramine or doxylamine formulations like ZzzQuil, Tylenol PM, Unisom, Nyquil, and more. These are ineffective drugs for sleep and can cause significant side effects in older adults.
- Inquire about herbals or supplements such as melatonin.

Evaluating the risks of benzodiazepines or Z-drugs for insomnia

Short-term use may be appropriate in specific situations.

FIGURE 6. Patient factors that may affect the decision to use benzodiazepines or Z-drugs

NOT appropriate

- underlying cognitive impairment
- high fall risk
- high risk of suicide
- substance use disorder

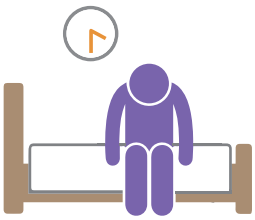
POSSIBLY appropriate

- insomnia symptoms due to an acute change (e.g., death of a spouse, life transition such as retirement or divorce)
- rapid eye movement (REM) behavior disorder (or dream enactment)

The risks of long-term use warrant discussion of discontinuation.

FIGURE 7. Risks from long-term benzodiazepine use

Worsening sleep



The effectiveness of benzodiazepines wanes after 28 days.

Increased tolerance, dependence, or misuse

There is increasing need for a higher dose and side effects when the drug is withdrawn.

Driving impairment

Long-acting benzodiazepines have been associated with traffic accidents.

Suicide risk

Screen for suicide risk, especially prior to starting a benzodiazepine.

In patients at risk of benzodiazepine or other substance use disorder, discuss the merits of discontinuing benzodiazepines.

Z-drug risks include next day somnolence, cognitive impairment, falls or fractures, and sleep-related behavior disturbances (e.g., sleep-eating, sleep-walking).

Planning a successful benzodiazepine taper

1 Use the same benzodiazepine the patient has been taking.

Switching to a longer-acting benzodiazepine does not improve withdrawal symptoms during the taper.[22]

2 Support the taper with another strategy to treat insomnia.

- Prescribe CBT-I
- Switch to a less risky medication (DORA, low-dose doxepin, ramelteon)

3 Select a taper strategy.

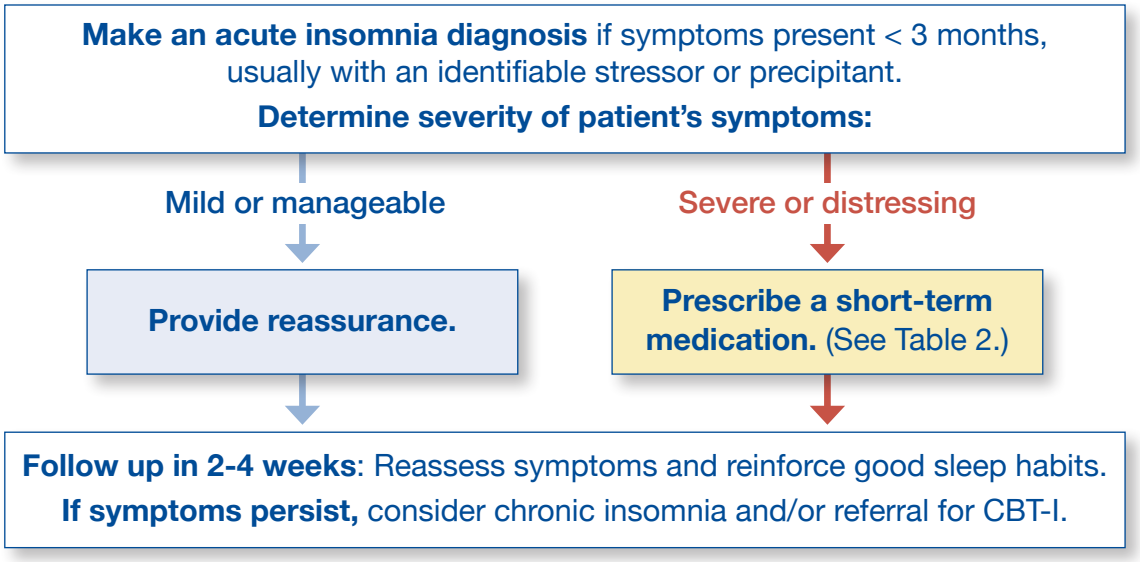
Strategy	Benefits	Challenges
Abrupt taper	None	**Not recommended;** may result in withdrawal symptoms
Fast taper[23] (reduce dose by 25% of original dose each week)	• Shorter taper schedule (i.e., 1 month) • **Reasonable success** (46% stopped benzodiazepines)	Some people may have withdrawal symptoms
Symptom-guided taper[24] (variable taper duration based on patient factors)	• Minimizes withdrawal symptoms • **Most successful taper** (70% stopped benzodiazepines)	• Requires more frequent assessments of symptoms • Variable taper duration based on patient factors (may be weeks to months)

Z-drugs can be stopped more rapidly than benzodiazepines.

Patients taking a high dose or who have long-time chronic use of Z-drugs should be tapered (e.g., 25% decrease every 7 days). Therapeutic doses of Z-drugs do not require a taper. When these drugs are stopped, patients should be instructed to expect worse sleep on the first night, with improvements quickly thereafter.[25]

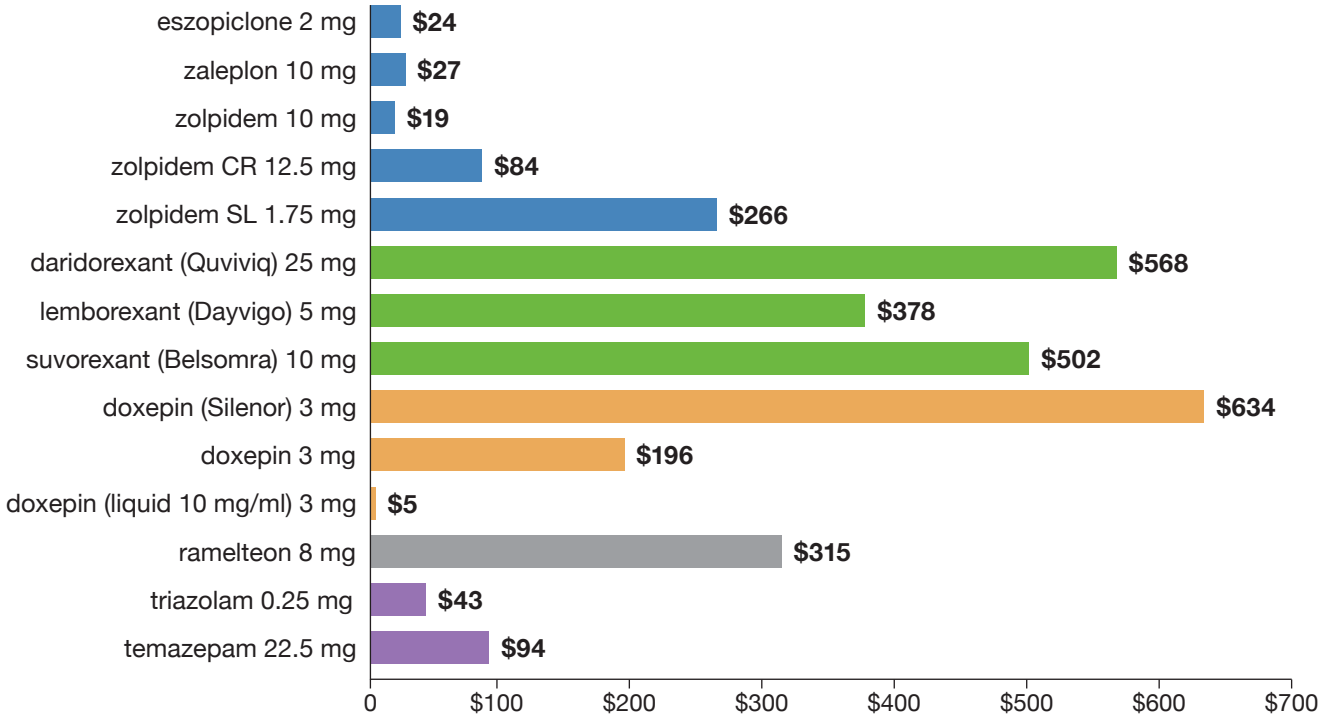
Managing acute insomnia is different from managing chronic insomnia

FIGURE 8. The strategy varies based on symptom severity.[2]



Cost of medications

FIGURE 9. The 30-day cost of selected insomnia medications



CR = controlled release; SL = sublingual

Prices from goodrx.com, January 2024. Listed doses are based on Defined Daily Doses by the World Health Organization, when available, or package inserts; they should not be used for dosing in all patients. All doses shown are generics when available, unless otherwise noted. These prices are a guide; patient costs will be subject to copays, rebates, and other incentives.

Key points

- Before diagnosing insomnia, **assess for medical/psychiatric causes** of poor sleep, such as co-occurring conditions and medication side effects.
- **Coach patients about healthy sleep habits** that can improve sleep quality.
- **Cognitive behavioral therapy for insomnia (CBT-I) is the preferred treatment** for chronic insomnia. It is more effective and longer-lasting than medications and has no side effects.
- **If needed, use medications short-term and monitor for side effects.** Safer options for older adults include dual orexin receptor agonists, doxepin, and ramelteon.
- **Avoid benzodiazepines or benzodiazepine receptor agonists** (Z-drugs) in most older adults, especially in those with cognitive dysfunction.
- Taper and discontinue benzodiazepines or Z-drugs in patients who have **concerning side effects**.

Visit AlosaHealth.org/Insomnia
for links to a comprehensive evidence document and other resources.

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About this publication

These are general recommendations only; specific clinical decisions should be made by the treating clinician based on an individual patient's clinical condition. More detailed information on this topic is provided in a longer evidence document at AlosaHealth.org.

Alosa Health

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