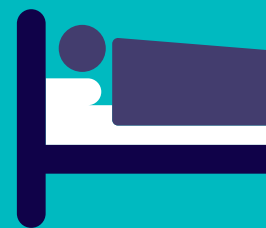


# Sleep

## Standardised care process



### Objective

To promote evidence-based practice in the assessment and management of insomnia for older people who live in residential aged care settings.

### Why good-quality sleep is important

Sleep is necessary for good health. Sleep rhythms change throughout life, but sleep disturbances become more common as people age and can become problematic for older people and those with dementia living in residential aged care (Bloom et al. 2009).

The impact of insomnia includes hypertension, depression and increased mortality. Resulting daytime dysfunction increases the risk of cognitive impairment and functional impairments such as decline in balance and mobility, leading to falls, long-term prescription of hypnotics and poorer quality of life (Bloom et al. 2009; Therapeutic Guidelines Limited 2017).

It is important that insomnia in older people and those with dementia is recognised and managed appropriately.

### Definitions

**Chronic insomnia:** when a person has been experiencing insomnia for one month or more (Wilson & Nutt 2013).

**Insomnia:** not enough sleep or sleep of poor quality that causes impairment of daytime functioning. The person may have difficulty getting asleep, staying asleep or waking early and not being able to get back to sleep. Insomnia can be a primary sleep disorder or comorbid (Wilson & Nutt 2013).

Risk factors for insomnia include:

- increasing age
- comorbid (medical, psychiatric, sleep and substance use) disorders
- stressful life events
- changes to the sleep pattern
- poor sleep habits or beliefs
- the environment.

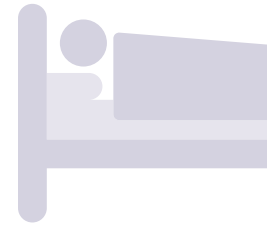
**Sleep hygiene:** healthy sleep-wake habits (Veterans' MATES 2009).

### Team

Manager, registered nurses (RNs), enrolled nurses (ENs), personal care attendants (PCAs), leisure and lifestyle staff, general practitioner (GP), allied health professionals (such as a physiotherapist, occupational therapist, exercise physiologist), residents and/or family/carers.

### Acknowledgement

This standardised care process (SCP) has been developed for public sector residential aged care services (PSRACS) by the Australian Centre for Evidence Based Care (ACEBAC) at La Trobe University through the Department of Health and Human Services Strengthening Care Outcomes for Residents with Evidence (SCORE) initiatives. This SCP is one of a series of priority risk areas reviewed based on the best available evidence in 2017.



# Brief standardised care process

## Recognition and assessment

Residential care staff should remain alert to insomnia in residents. Where signs and symptoms of sleep disturbance are self-reported by the resident or recognised by family or staff, a comprehensive sleep assessment should be undertaken.

## Interventions

Non-pharmacological interventions should be used as the first-line treatment response. The choice of intervention will be guided by the assessment outcome and adapted to suit the resident's previous effective sleep routines and preferred outcomes, age, physical and cognitive functioning. Interventions include:

- sleep hygiene strategies
  - adapting the sleep environment and influences
  - establishing sleep–wake routines and using effective sleep rituals
- behavioural and cognitive therapies
  - cognitive behavioural therapy for insomnia (CBTi)
  - sleep restriction therapy
  - stimulus control therapy
  - relaxation therapies
  - activity and exercise
- management of comorbidities.

Pharmacological interventions for insomnia should be used with caution and only considered when non-pharmacological interventions have been trialled and found to be ineffective.

## Referral

- GP
- Physiotherapist
- Sleep psychologist
- Sleep specialist/sleep centre

## Evaluation and reassessment

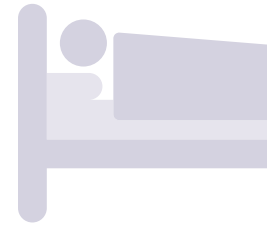
- Monitor the resident's use of non-pharmacological sleep strategies.
- Evaluate the effectiveness of interventions.
- Reassess the resident at six-monthly intervals due to the high risk of relapse.

## Resident involvement

- Maintain a sleep diary.
- Work in partnership with staff to establish a preferred sleep routine.
- Learn about good sleep hygiene strategies.

## Staff knowledge and education

- Staff education on the causes of insomnia in residential aged care environments
- Staff education on noise reduction during night-time care delivery
- Staff education on sleep hygiene
- Conduct night-time surveys for the environmental and care practices that can affect a resident's sleep quality



# Full standardised care process

## Recognition

A large number of residents experience insomnia. Residential care staff should remain alert to this issue. Signs and symptoms of sleep disturbance can be self-reported by the resident or recognised by their family, and through regular screening of residents for the following:

- difficulty falling asleep
- difficulty staying asleep
- daytime sleepiness and functional impairment
- difficulties in sleeping for a duration of one month or more.

## Assessment

In partnership with the resident, establish their preferred sleep routine and desired outcomes.

Collect information from the resident, their spouse or family and from residential care staff to establish the factors that disrupt sleep.

### Sleep changes

- Sleep-wake patterns (difficulty falling asleep or staying asleep, frequency and duration of waking, barriers to resuming sleep)
- Sleep-related symptoms (snoring, apnoea, movement)
- Daytime sleepiness, napping or reduced functioning

### Comorbidities

- Medical disorders and symptoms: nocturia, pain, reflux, heart or lung disease
- Neurological disorders: dementia, Parkinson's disease
- Primary sleep disorders: restless leg syndrome, obstructive sleep apnoea, rapid eye movement (REM) sleep disorders
- Psychiatric history: depression, anxiety, bipolar disorder, delirium, post-traumatic stress disorder

### Drug use

- Medicines (prescribed and over-the-counter): adverse effects, interactions, hypnotic/sedative withdrawal
- Social: caffeine, nicotine, alcohol

### Psychosocial

- Negative thoughts, attitudes and beliefs about sleep
- Limited social interaction with the community
- Limited participation in daytime activities and exercise
- Quality of life

### Behavioural (habits, routines)

- Daytime napping
- Spending too much time in bed
- Not enough activity during the day
- Exercising late in the day
- Late heavy dinner
- Watching television or engaging in other stimulating activities at night
- Clock watching or time spent awake in bed

### Environmental (review of the sleep environment)

- Not enough exposure to bright light during the day
- Room being too warm
- Too much noise (call bells, voices, TVs)
- Too much light
- Pets on the bed or in the bedroom
- Restless or noisy bed partners or roommates (in shared rooms)
- Intrusive nursing care practices, routines and procedures

### Assessment tools

- Wrist actigraphy is a monitoring device that measures intensity and frequency of body movement, noise and light levels to assess sleep patterns and the sleep environment. Actigraphy should be used where possible to provide an accurate and objective assessment. The device should be worn on the resident's non-dominant wrist and be regularly checked to ensure it has not been displaced.
- Staff can undertake sleep charting and symptom observations for snoring, apnoea, excessive leg movements during sleep and sleepiness during normal daytime activities. Observations are only effective if conducted more frequently than once an hour.
- While use of questionnaires are of questionable benefit, the Neuropsychiatric Inventory – Nursing Home (NPI-NH) sleep subscale should be considered.

## Interventions

### Non-pharmacological interventions

Non-pharmacological interventions are effective for residents with insomnia and should be used as a first-line treatment response. More than one intervention may be required, the choice of which should be determined from the assessment outcomes and adapted to suit the resident's previous effective sleep routines and preferred outcomes, age, physical and cognitive functioning.

### Sleep hygiene

Healthy sleep–wake habits should be encouraged in all residents with insomnia. However, for the best effect they should be combined with other non-pharmacological interventions.

### Sleep environment and influences

- Encourage exposure to bright light after rising, but avoid it in the late evening or night (refer to bright light therapy section for more information).
- Avoid heavy meals within three hours of bedtime. A light snack or a warm milk drink should be made available before bed if the resident is hungry.
- Caffeine, nicotine and alcohol should be avoided late in the day.
- Encourage daily exercise but not close to bedtime.
- The bed is for sleep and intimacy.
- The bedroom should be kept quiet, dark and comfortable, with the use of the television, phone and other electronic devices discouraged or removed.
- The presence of pets in the bedroom at night should be avoided.
- The room temperature should be kept at a constant level.
- The mattress and pillows should be supportive and comfortable.
- Provide opportunities for the resident to address worrying thoughts or issues causing stress earlier in the day.
- Nursing care routines should be adapted to minimise disturbances associated with continence and pressure area care.

### Sleep–wake routines

- Napping should be avoided during the day. If a nap is required, it should be limited to 15–30 minutes and not after 3 pm.

- A sleep routine should be developed and maintained by going to bed and getting up about the same time every day, regardless of the amount of sleep achieved.
- Include time for relaxation or a hot bath before bedtime, particularly if the resident remains tense.
- If the resident has difficulty falling asleep, advise them to get out of bed and to return once they feel sleepy.

### Behavioural and cognitive therapies

**Cognitive behavioural therapy for insomnia (CBTi)** improves sleep by changing the negative thoughts, attitudes and beliefs about sleep into a more positive way of thinking and behaving. It is the most appropriate therapy for residents who experience sleep maintenance insomnia or have unrealistic expectations about sleep.

**Sleep restriction therapy** aims to increase the amount of time in bed and asleep (sleep efficiency). It is the most appropriate therapy for residents who have difficulty staying asleep for more than five or six hours but not for those where anxiety is the leading factor for sleeplessness. The time spent in bed is established by the amount of sleep that the resident estimates they have (as recorded in a sleep diary).

**Stimulus control therapy** aims to establish a regular sleep pattern through associating the bed with sleep and to limit the time spent there. It is the most appropriate therapy for residents who have difficulty falling asleep. The resident must only go to bed when tired. If they are unable to sleep within 20 minutes they must get up, only returning to bed once they feel tired. This is repeated until they fall sleep.

**Relaxation therapies** aim to reduce physical tension and troubling thoughts. Therapy options include progressive muscle relaxation, hypnosis, meditation, deep breathing and mental imagery. Residents need to do these relaxation strategies during the day, at bedtime and when they wake at night to reduce the overall level of anxiety.

**Activity and exercise should be used with the aim** decreasing the amount of time the resident spends in bed or asleep during the day and to improve sleep quality. These strategies are most effective when combined with other non-pharmacological sleep interventions. Yoga, tai chi and resistance training should be considered.

## Management of comorbidities

- Manage the medical and psychological conditions and symptoms that affect sleep quality.
- Review medicines for interactions and side effects that can cause daytime drowsiness or sleep impairment.
- For residents with a known sleep disorder (for example, sleep apnoea), the existing treatment plan should be maintained (for example, continuous positive airway pressure) and incorporated into the resident's care plan.
- Strategies to support the resident's cardiovascular health, diabetes control and weight loss (where required) should be supported.

## Pharmacological intervention

These should be used with caution and only considered when non-pharmacological interventions have been trialled and found to be ineffective. The resident's type of insomnia, impairment of daytime functioning and distress caused by lack of sleep should be evaluated when pharmacological interventions are considered.

- Hypnotic drugs or melatonin are only indicated for short-term management (two weeks or less), should be used intermittently and at the lowest possible dose.
- Fall prevention strategies should be instigated where a benzodiazepine class of hypnotic are prescribed.
- Where pharmacological treatment is prescribed, it is recommended that non-pharmacological interventions are continued.

## Referral

- General practitioner for initial management of insomnia
- Physiotherapist for exercise prescription
- Registered psychologist, accessed under the Medicare Mental Health Care Program through a GP referral

Referral to a sleep specialist or sleep centre should be considered when:

- a primary sleep disorder is suspected
- obstructive sleep apnoea is suspected in a resident with comorbid coronary heart failure or respiratory disease
- non-pharmacological interventions have failed
- the resident has a long history of sleep disorders.

The resident's ability to tolerate a sleep study (particularly those with dementia) should be considered.

To find a sleep service go to <<http://www.sleep.org.au/servicesdirectory>>.

## Evaluation and reassessment

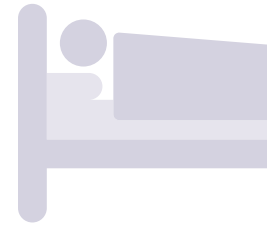
- Ongoing sleep assessment will help establish sleep hygiene strategies and evaluate their effectiveness.
- Some rebound sleepiness may be experienced early in the intervention phase; reassurance should be given that this will subside.
- Once the insomnia has been minimised or resolved, reassessment should be planned at six-monthly intervals due to the high risk of relapse.
- If the initial intervention plan is ineffective, other combinations of non-pharmacological approaches should be considered.

## Resident involvement

- Maintain a sleep diary to self-monitor the sleep-wake cycle.
- Work in partnership with staff to establish a preferred sleep routine.
- Learn about good sleep hygiene.

## Staff knowledge and education

- Staff education on the causes of insomnia in residential aged care environments
- Staff education on noise reduction during night-time care delivery
- Staff education on sleep hygiene
- Conduct night-time surveys for the environmental and care practices that can affect a resident's sleep quality.



# Evidence base for this standardised care process

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**Important note:** This SCP is a general resource only and should not be relied upon as an exhaustive or determinative clinical decision-making tool. It is just one element of good clinical care decision making, which also takes into account resident/patient preferences and values. All decisions in relation to resident/patient care should be made by appropriately qualified personnel in each case. To the extent allowed by law, the Department of Health and Human Services and the State of Victoria disclaim all liability for any loss or damage that arises from any use of this SCP.

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