Sleep

Standardised care process

Objective
To promote evidence-based practice in the detection and non-pharmacological response to insomnia experienced by older people living in residential aged care facilities.

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 living in residential aged care and people with dementia (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, as well as long term prescription of hypnotics and poorer quality of life (Bloom et al. 2009; Gaikwad, 2014; Psychotropic Expert Groups, 2013).

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

Definitions

**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).

**Chronic insomnia:** When a person has been experiencing insomnia for one month or more, it is described as chronic (Wilson & Nutt, 2013).

**Sleep hygiene:** healthy sleep-wake habits (Veterans’ Mates, 2009)

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

**Standardised care process (SCP):** This has been developed for the Department’s Strengthening Care Outcomes for Residents with Evidence (SCORE) initiative through comprehensive review of evidence and consultation with public sector residential aged care stakeholders and experts to mitigate significant clinical risk in residential aged care services.

**Clinical risk:** is where action or inaction on the part of the organisation results in potential or actual adverse health outcome on consumers of health care (Department of Health, 2012, p5).

Care team
Manager, registered nurses (RNs), enrolled nurses (ENs), Leisure and Lifestyle, personal care attendants (PCAs), residents and/or family/carers, general practitioner (GP), physiotherapist.

Acknowledgement
This SCP has been developed by the Australian Centre for Evidence Based Care, La Trobe University for the Department of Health and Human Services based on the best available evidence.
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### Screening 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. 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:
- **Sleep hygiene strategies:**
  - adapt sleep environment and influences
  - establish sleep-wake routines and use of effective sleep rituals.
- **Behavioural and cognitive therapies**
  - cognitive behaviour therapy for insomnia (CBTi)
  - sleep restriction therapy
  - stimulus control therapy
  - relaxation therapies
  - bright light exposure
  - 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 (exercise plan)
- 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 at six monthly intervals due to high risk of relapse

### Resident involvement
- Maintain sleep diary.
- Work in partnership with staff to establish preferred sleep routine.
- Education on good sleep hygiene strategies.
# Sleep: 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 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 and their spouse or family and from residential care staff to establish the factors that disrupt sleep:

1. **Sleep changes**
   - Sleep-wake patterns
   - Sleep-related symptoms (snoring, movement)
   - Day-time functioning and sleepiness

2. **Comorbidities**
   - Medical disorders and symptoms: nocturia, pain, heart or lung disease
   - Neurological disorders: such as dementia, Parkinson’s disease
   - Primary sleep disorders: restless leg syndrome, obstructive sleep apnoea, rapid eye movement sleep disorders
   - Psychiatric history: depression, anxiety, bipolar disorder, delirium, post-traumatic stress disorder

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

4. **Psychosocial**
   - Negative thoughts, attitudes and beliefs around sleep
   - Limited social interaction with the community
   - Limited participation in day time activities and exercise
   - Quality of life

5. **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 / time spent awake in bed
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### 6. Environmental (review of the sleep environment)
- a. Not enough exposure to bright light during the day
- b. Room being too warm
- c. Too much noise (call bells, voices, TVs)
- d. Too much light
- e. Pets on the bed or in the bedroom
- f. Restless or noisy bed partners or roommates (in shared rooms)
- g. 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.
- Resident to self-monitor sleep/wake patterns by maintaining a sleep diary for two weeks.
- Bed or room partner interviews.
- Staff to undertake sleep charting and symptom observation for snoring, apnoea, excessive leg movements during sleep, and difficulty staying awake during normal daytime activities. Observations are only effective if conducted more frequently than once an hour.
- Questionnaires are of questionable benefit, however consider using the Neuropsychiatric Inventory – Nursing Home (NPI-NH) sleep subscale. A sleep study (polysomnography) is typically conducted in a sleep clinic. The procedure is poorly tolerated by people with dementia. Indicators for use are primary insomnia, hypersomnia and parasomnia. It is not indicated for the assessment of chronic insomnia or sleep disorders secondary to psychiatric and neuropsychiatric disorders.

### 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: full standardised care process

<table>
<thead>
<tr>
<th>Sleep hygiene</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleep environment and influences:</td>
<td>- Exposure to bright light after rising, but avoided in late evening or night (refer to bright light therapy section for more information);</td>
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<td>- Avoid heavy meals within three hours of bedtime. A light snack or a warm milk drink is available before bed if the resident is hungry;</td>
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<td>- Fluid intake should be limited in the evening;</td>
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<td>- Caffeine, nicotine, and alcohol should be avoided later in the day;</td>
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<td>- Encourage daily exercise, but not close to bedtime;</td>
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<td>- The bedroom function is for sleep and intimacy;</td>
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<td>- The bedroom is kept quiet, dark and comfortable; with the use of the television, phone and other electronic devices discouraged.</td>
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<td>- The presence of pets in the bedroom at night should be avoided;</td>
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<td>- The room temperature is kept at a constant level;</td>
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<td>- The mattress and pillows are supportive and comfortable;</td>
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<td>- There are opportunities for the resident to address worrying thoughts or issues causing stress earlier in the evening;</td>
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<td>- Nursing care routines are adapted to minimise disturbances associated with continence and pressure area care. Individualised night time care routines based on skin break down risk assessment are followed.</td>
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<td>Sleep-wake routines:</td>
<td>- Napping should be avoided during the day. If a nap is required, it should be limited to 30 minutes and not after 3pm.</td>
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<td>- A sleep routine is developed and maintained by going to bed and getting up about the same time every day, regardless of the amount of sleep achieved.</td>
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<td>- Include time for relaxation or a hot bath before bedtime, particularly if the resident remains tense.</td>
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<td>- If the resident has difficulty falling asleep, advise them to leave the bedroom and return once they feel sleepy.</td>
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</tbody>
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#### Behavioural and cognitive therapies

Cognitive behaviour therapy for insomnia (CBTı) improves sleep by changing the negative thoughts, attitudes and beliefs around 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 to six hours but not for those for whom 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 bed and bedroom 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 unable to sleep within 20 minutes they must get up, only returning to bed once they feel tired. This is repeated until sleep is established.

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 bed time and when they wake at night to reduce the overall level of anxiety.

Bright light exposure is helpful for restoring the sleep/wake cycle (circadian rhythm) for residents. This can be achieved through exposure to sunlight or the use of light boxes. It is the most appropriate therapy for residents who fall asleep early in the evening but wake in the early hours of the morning. For these residents light exposure should be for one hour later in the day or early evening, but avoided within one to two hours of waking.

Activity and exercise should be used with the aim to decrease 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 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 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.
- Promote strategies to support cardiovascular health, diabetes control and weight loss.
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#### Pharmacological intervention
Pharmacological treatment of insomnia should be used with caution and only considered when non-pharmacological interventions are ineffective.

Hypnotic drugs or melatonin are only indicated for short-term management (two weeks or less), and should be used intermittently and at the lowest possible dose.

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.

Where pharmacological treatment is prescribed, it is recommended that non-pharmacological interventions are continued.

#### Referral
Insomnia can be managed by the general practitioner in the first instance.

A registered psychologist can be accessed under the Medicare Mental Health Care Program through 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: www.sleep.org.au/servicesdirectory

#### Evaluation and reassessment
- Ongoing sleep assessment will help establish the use of 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 preferred sleep routine.
- Education on good sleep hygiene.

#### Staff knowledge and education
- Staff education on 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 impact on resident sleep quality.
Evidence base for this SCP


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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