



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. A high percentage of residents in aged care facilities experience disruptions in their sleep patterns (Marin 2018).

There is evidence the stress response in insomniacs is a risk factor for heart disease, diabetes, depression, and anxiety (Sleep Disorders Australia 2019). Sleep problems are associated with detrimental effects such as functional and cognitive impairments leading to poorer quality of life and even death among the elderly (Podder 2019).

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

Definitions

Insomnia: a complaint of unsatisfactory sleep manifested as problems with sleep onset, sleep maintenance, or early waking. It is associated with impaired daytime functioning or wellbeing (Wilson et al. 2019). It may be a symptom of other disorders, due to somatic symptoms such as pain, or a primary disorder in itself (Therapeutic Guidelines Limited 2019).

Risk factors for insomnia include:

- increasing age
- comorbid (medical, psychiatric, sleep and substance use) disorders
- stressful life events
- use of alcohol, caffeine or nicotine
- some medicines
- the environment (NPS Medicine Wise 2017).

Chronic insomnia: when a person has been experiencing insomnia at least three nights a week for three months or more (Sleep Health Foundation 2020; Wilson et al. 2019).

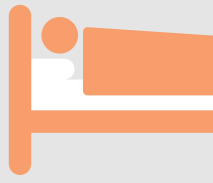
Sleep hygiene: good sleep habits (Sleep Health Foundation 2020).

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 2020.



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

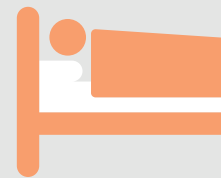
- Monitor the resident's use of non-pharmacological sleep strategies.
- Evaluate the effectiveness of interventions.
- Reassess the resident at six-monthly intervals due to the high risk of relapse.

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

Many 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/carers, 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/carers 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

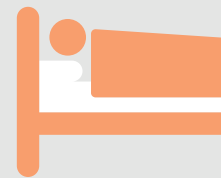
- Negative thoughts, attitudes and beliefs about sleep
- Limited social interaction with the community
- Limited participation in daytime activities and exercise
- Quality of life

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 at night
- Pets on the bed or in the bedroom
- Restless or noisy bed partners or roommates (in shared or nearby 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 dominant wrist and be regularly checked to ensure it has not been displaced.
- Sleep charting and symptom observations – 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.
- Sleep diary – ask the person experiencing insomnia to keep a sleep diary. This is simply a written record by the resident, kept over seven to ten days, that describes the person's perception of the pattern and quality of their sleep.
- The Sleep Condition Indicator – is a clinical rating scale that may be useful in addition to a sleep diary. There is a simplified version that may be used by clinical staff. It consists of two questions that are scored. The total score reflects the quality of sleep for that person (Wilson et al. 2019).

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

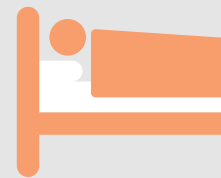
Healthy sleep-wake habits should be encouraged in all residents with insomnia. However, for the best effect they should be combined with other non-pharmacological interventions.

Sleep environment and influences

- Encourage exposure to bright light after rising but avoid it in the late evening or night.
- 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.
- If possible, in shared rooms, consider trying to match people with similar sleeping patterns.
- 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 10–15 minutes and not in the late afternoon.
- 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 by associating the bed with sleep and limiting 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 of 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.

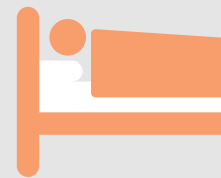
Management of comorbidities

- 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 an accredited sleep service go to National Association of Testing Authorities (NATA), type Sleep in the keyword box <<https://nata.com.au/find-organisation/>>.

Evaluation and reassessment

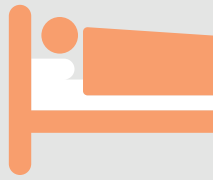
- Ongoing sleep assessment will help establish sleep hygiene strategies and evaluate their effectiveness.
- Some rebound sleepiness may be experienced early in the intervention phase; reassurance should be given that this will subside.
- Once the insomnia has been minimised or resolved, reassessment 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

Australasian and New Zealand Society for Geriatric Medicine 2015, 'Position Statement-Sleep in the older person', *Australasian Journal on Ageing*, vol. 34(3), pp. 203–12.

Australasian Sleep Association 2020, *Useful sleep links*, <<https://www.sleep.org.au/Search?InitialText=useful%20sleep%20links>>

Chu, W 2017, *Evidence Summary. Residents: (High-Level Aged Care): Sleep Management*, The Joanna Briggs Institute EBP Database, JBI@Ovid. JB1677.

Department of Health 2012, *Strengthening care outcomes for residents with evidence (SCORE)*, Ageing and Aged Care Branch, State Government of Victoria, Melbourne.

Li, Y 2018, *Evidence Summary. Sleep problems (Adults 60+): Physical exercise*, The Joanna Briggs Institute EBP Database, JBI@Ovid. JBI1145.

Marin, T 2018, *Evidence Summary. Wrist actigraphy: Older people in residential aged care*, The Joanna Briggs Institute EBP Database, JBI@Ovid. JBI8146.

NPS Medicinewise 2017, *How to sleep right*, <<https://www.nps.org.au/consumers/how-to-sleep-right>>.

Podder, V 2019, *Evidence Summary. Sleep problems (Older people): Cognitive behavioural Interventions*, The Joanna Briggs Institute EBP Database, JBI@Ovid. JBI1369.

Sleep Disorders Australia 2019, *Insomnia factsheet*, <<https://www.sleepoz.org.au/insomnia>>.

Sleep Health Foundation 2020, *Preventing chronic insomnia*, <<https://www.sleephealthfoundation.org.au/>>.

Therapeutic Guidelines Limited 2019, *Insomnia, parasomnias and jet lag*, <<https://tgldcdp.tg.org.au/etgAccess>>.

Wilson, S, Anderson, K, Baldwin, D, Dijk, D, Espie, A, Espie, C, Gringas, P, Krystal, A, Nutt, D, Selsick, H & Sharpley, A 2019, 'British Association for Psychopharmacology consensus statement on evidence-based treatment of Insomnia, parasomnias and circadian rhythm disorders: an update', *Journal of Psychopharmacology*, vol. 33(8), pp. 923–47.

Important note: This standardised care process (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 the State of Victoria disclaim all liability for any loss or damage that arises from any use of this SCP.

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