Semi-Structured Sleep-Wake Interview for Older Adults

**Instructions:** The CogSleep Semi-Structured Interview is designed to be used in conjunction with training provided by the Dementia Training Australia (DTA) Sleep Matters course. Questions should ideally be asked of the patient/client but file notes, care staff, family and other health professionals may provide input, particularly if the client has cognitive impairment, dementia and/or communication difficulties.

### PART 1: BACKGROUND INFORMATION (from file, or interview)

<table>
<thead>
<tr>
<th>Field</th>
<th>Details</th>
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<tbody>
<tr>
<td>Client name:</td>
<td></td>
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<tr>
<td>DOB:</td>
<td></td>
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<tr>
<td>MRN:</td>
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</table>

**Gender**
- [ ] Male
- [ ] Female

**BMI:**

**Height:**

**Weight:**

**Cognitive or dementia diagnosis?**
- [ ] No
- [ ] Yes

If yes, please specify:
- [ ] Mild cognitive impairment
- [ ] Vascular cognitive impairment
- [ ] Alzheimer’s disease
- [ ] Dementia with Lewy Bodies
- [ ] Parkinson’s Disease Dementia
- [ ] Frontotemporal dementia
- [ ] Stroke-related cognitive impairment
- [ ] Other, please specify: ………..........

**Cognitive screen scores if known:**
- [ ] MMSE: ……………….
- [ ] MoCA: ……………….
- [ ] ACE-R: ……………….

**Prior history of major depression**
- [ ] No
- [ ] Yes

If yes, when was this? …………… year

If yes, was it treated with antidepressants? …..….. N/Y

**Assessment for current depression?**
- [ ] No
- [ ] Yes

If yes, please provide details including score:
- [ ] Geriatric Depression Scale 15 item score = ………………….
- [ ] Cornell Scale for Depression in Dementia score = ………………
- [ ] PHQ-9 score = ……………………….
- [ ] Other: ………….. score = ……………..
PART 2: SLEEP HISTORY

1. Have you ever been diagnosed with insomnia?  
   - [ ] No  
   - [ ] Yes  
   If yes,  
   - How long did it last? …………….  
   - How was it treated? …………….  
   - Was the treatment successful? ……… N/Y

2. Have you ever been diagnosed with obstructive sleep apnoea?  
   - [ ] No  
   - [ ] Yes  
   If yes,  
   - Was this diagnosed via a formal sleep study (PSG)? N/Y …… If yes, date if known: …………….  
   - What treatment was given (e.g. CPAP, dental splint)? ………………
   - Was the treatment successful? ……… N/Y  
   - How long was it used? …………….  
   - Is it still being used? N/Y If no, how long have you stopped for? ……………

3. Have you ever been diagnosed with other sleep disorders?  
   - [ ] No  
   - [ ] Yes  
   If yes, please specify: ……………………………………………….

4. Have you ever received treatment for another sleep disorder?  
   - [ ] No  
   - [ ] Yes  
   If yes, please specify: ……………………………………………….

5. Have you used sleep medications in the past?  
   - [ ] No  
   - [ ] Yes  
   If yes,  
   - What medication was used? …………….  
   - Was the treatment successful? ……… N/Y
### PART 3: NOCTURNAL SLEEP

6. Could you rate the quality of your sleep? (1 is best, 10 is worst)  
   ![Rating Scale](image)

   - If the sleep quality rating is > 5, and the patient has difficulties getting to sleep, staying asleep, or waking early, and the patient has daytime sleepiness, the patient should be formally screened for insomnia. Suggested tool **Insomnia Severity Index**.

### SLEEP TIMING

7. Over the last week, on average what time have you gone to bed at night?  
   Time: .......... pm

   - Consider early bed-times may contribute to circadian disturbance, nocturnal awakening and late insomnia.

8. Over the last week how long does it take you to get to sleep once in bed?  
   Time: .......... mins

   - If longer than 20 mins, are there distractions such as noise, lights, or other (e.g. residents, uncomfortable bedding).
   - No
   - Yes, specify……………………

9. What time do you get up in the morning?  
   Time: .......... am

   - If needing to be woken every morning, consider impacts on night-time sleep quality including medications, napping, excessive time in bed, lack of exercise, initial insomnia, depression, light, other disruptions.

10. Do you wake up during the night?  
    - No
    - Sometimes (at least 3 nights per week)
    - Yes

    - If yes or sometimes,
      a) How many times? .................
      b) How long would you be awake for typically? .................
      c) Do you primarily wake to use the bathroom? N/Y
      d) Do you wake up with pain? N/Y
      e) What do you do once you wake up?  
         - Stay in bed
### NHMRC Centre of Research Excellence to Optimise Sleep in Brain Ageing and Neurodegeneration (CogSleep CRE)

**Semi-Structured Sleep-Wake Interview for Older Adults**

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>Sometimes (at least 3 nights per week)</th>
<th>No</th>
<th>Other, please specify: ................................</th>
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<tbody>
<tr>
<td>f) What do you do to try and get back to sleep?</td>
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<td></td>
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<tr>
<td>g) Are there any instances of night-time wondering/confusion? N/Y</td>
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11. Do you feel refreshed in the morning after sleep?  
- No  
- Sometimes (at least 3 nights per week)  
- Yes  
- Consider impacts on night-time sleep including sleep apnoea, benzodiazepine or sedative hypnotic medications, napping, insomnia, depression, light, other disruptions.

12. Do you think you are getting enough sleep?  
- No  
- Sometimes (at least 3 nights per week)  
- Yes

### SLEEP APNOEA (NOTE: If interviewee already has a diagnosis of sleep apnoea, proceed to Question 15)

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>13. Do you snore or have family or caregivers ever told you that you snore?</td>
<td></td>
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<tr>
<td>14. Has anyone ever noticed that you gasp for air or stop breathing while you sleep?</td>
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### ACTIONS

- Consider sleep apnoea questionnaire including STOP-BANG, overnight oximetry or consider discussion with GP regarding polysomnography.

### DAYTIME FUNCTIONING

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
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<td>15. Do you sleep in the daytime?</td>
<td></td>
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<tr>
<td>16. Are you really sleepy and tired during the daytime?</td>
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### ACTIONS

- Consider impacts of daytime napping on night-time sleep quality including ability to fall asleep, length of sleep, timing of sleep, and depth of sleep.

- Consider activities, medical conditions and medications causing daytime sleepiness, such as light levels, inactivity, meals or poor night-time sleep quality.
### Semi-Structured Sleep-Wake Interview for Older Adults

<table>
<thead>
<tr>
<th>17. Do you get restless/irritable/agitated in the afternoon/early evening</th>
<th>☐ No</th>
<th>☐ Yes</th>
</tr>
</thead>
</table>

**REM SLEEP BEHAVIOUR DISORDER**

| 18. Have you ever been told or suspected yourself that you seem to act out your dreams while asleep? (for example, punching, kicking, knocking down furniture, running movements). | ☐ No | ☐ Yes |

- If yes, suggested tool **REM Sleep Behaviour Disorder questionnaire**.
- If yes, review with GP – clonazepam may be helpful and modification of environment for safety.

**RESTLESS LEGS SYNDROME**

| 19. When you try to relax in the evening or sleep at night do you ever have unpleasant restless feelings in your legs that can be relieved by walking or movement? | ☐ No | ☐ Yes |

- If yes, a)
  - Is there an urge to move legs, with uncomfortable or unpleasant sensations?
  - Do the feelings begin or worsen during periods of rest or inactivity?
  - Are the feelings partially or totally relieved by movement?
  - Are the feelings worse in evening or night, compared to night?

- If yes, consider using the **International Restless Legs Syndrome Rating Scale** (Walter AS, Sleep Med 2013) and, also consider restless legs causing medications and other medical conditions (e.g. venous stasis, oedema, other factors such as arthritis).

**MEDICATION AND ENVIRONMENTAL FACTORS**

| 20. Are you taking sleeping medications? | ☐ No | ☐ Yes |

- If yes, which ones: 

- If yes, benzodiazepines, antipsychotics, and sedative hypnotics should only be used for up to 2 weeks. Review with GP and consider melatonin.
21. Are you taking a combination of more than 5 medications?  
- No  
- Yes  
If yes, have you had your medication reviewed by a pharmacist? N/Y  
- Consider pharmacy or GP medication review.

22. Has there been a recent change in residential environment?  
- No  
- Yes  
If yes, when? …………………

23. Do you share the room environment with other house or residential facility members  
- No  
- Yes  
If yes, how many? …………………  
- Consider noise/disruptions/comfort.

24. Are you exposed to natural light during the daytime?  
- No  
- Yes  
If yes, when:  
- Early morning 2-3 hours after waking, for how long ………………… mins  
- Mid-morning to lunch, for how long ………………… mins  
- After lunch to early afternoon, for how long ………………… mins  
- Early afternoon to early sunset, for how long ………………… mins  
If no, do you get a dose of strong (greater than normal house lights, e.g. > 100 watt) light at any stage throughout the day?  
If no, does your residence have any built circadian lighting (e.g. blue light enriched)  
How long on average? …….. hours/day  
- Consider bright light exposure in morning and daytime.  
- Consider dimming lights in evening, including screens.

25. Do you engage in exercise/physical activity?  
- No  
- Yes  
Specify: …………………………………  
- Consider daytime physical activity.

26. Do you engage in cognitive activity?  
- No  
- Yes  
Specify: …………………………………  
- Consider active cognitive engagement activity (not passive activity such as TV).
<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
<td>27. What time do you have meals/snacks?</td>
<td>Breakfast, Lunch, Dinner, Night eating?</td>
<td>Consider sedating foods around lunchtime (e.g. pasta, carbohydrates, alcohol), and dinner foods that interfere with melatonin or are alerting (e.g. bananas, tomatoes, turkey, chocolate).</td>
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<tr>
<td>28. Caffeine/alcohol</td>
<td>No, Yes</td>
<td>Consider limiting caffeine from 4pm.</td>
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<tr>
<td></td>
<td>Caffeine, times: ………… units/day: …………</td>
<td>Consider limiting daytime alcohol and excessive evening alcohol.</td>
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<tr>
<td></td>
<td>Alcohol, times: ………… units/day: …………</td>
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<td>29. Is your sleep at night affected by noise or light?</td>
<td>No, Yes</td>
<td>Consider location of room, and whether nearby lights can be censored or dimmed, earplugs.</td>
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<td></td>
<td>Specify: ……………………………………</td>
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<td>30. Night-time fluid</td>
<td>No, Yes</td>
<td>Consider reducing evening fluids/other medications for incontinence?</td>
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<td>If yes, does your night-time fluid prevent you from falling asleep and wake you during the night or early morning? …………</td>
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<td>31. Do you have pain at night?</td>
<td>No, Yes</td>
<td>Consider Brief Chronic Pain scale and DTA pain module.</td>
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<td></td>
<td>If yes, does your pain prevent you from falling asleep and wake you during the night or early morning? …………</td>
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<td>32. Tell me about your mood?</td>
<td>Rate on scale from 1 to 10: …………</td>
<td>If rating &lt; 6 or cardinal depression symptoms for at least two weeks, consider, Geriatric Depression Scale 15 item score = ………… (scores ≥ 6 may be suggestive of depression).</td>
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<td></td>
<td>(1 = very low mood, 10 = best)</td>
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<td></td>
<td>Lack of interest or pleasure in usual activities?</td>
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<td>Low mood, sad, hopeless?</td>
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<td>Poor appetite</td>
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<td>Low energy levels</td>
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<td>Withdrawn from social activities</td>
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<td></td>
<td>Somatic symptoms</td>
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<td>Feeling worthless</td>
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<td></td>
<td>Thoughts of death, suicide</td>
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<td>33. Do you have any worries or concerns that are on your mind that stop you from sleeping?</td>
<td>Rate on scale from 1 to 10: …………</td>
<td>If rating &lt; 6, explore stress, anxiety and other factors and need for relaxation strategies prior to bedtime.</td>
</tr>
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<td></td>
<td>(10 = no concerns, 1 = nightly worry impacting sleep)</td>
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