Conceptual model: Sleep Disturbance

### Sleep window issues

- **Not able to fall (back) asleep**
  - Active/restless in the sleep window
  - Airway/respiratory
  - Fluid status/vascular
  - Gastrointestinal
  - Psychophysiologic
  - Sensory

- **Insufficient sleep**
  - Delayed sleep onset latency
  - Not sleeping/achieving restorative sleep

- **Sleep continuity issues**
  - Hypnagogic hallucinations
  - Waking up during sleep window

- **Impact on others**
  - Bed/carepartner sleep disruption
  - Bed/care partner sleep window anxiety
  - Noisy breathing & snoring

### Non-sleep window issues (Proximal impacts)

#### Difficulties upon waking
- Appearance on waking
- Getting up/out of bed
- Hypnagogic hallucinations
- Oversleeping
- Sleep inertia
- Sleep paralysis

#### Difficulties during the day
- Daytime sleepiness & tiredness
- Emotional & mood issues
- Impaired or reduced cognitive function
- Increased risk of driving accidents
- Mistakes at work & with daily activities
- Physical symptoms
- Unplanned daytime sleeping

#### Coping behaviors
- Caffeination
- Purposeful daytime sleeping
- Cognitive fatigue
- Trouble concentrating
- Memory difficulties
- Impaired function & ability to conduct activities of daily living

### Long-term issues (Distal impacts)

#### Perpetuating factors
- Behavioral sleep restriction
- Acceptance & hopelessness
- Depression, anxiety, stress
- Long-term cognitive impairment & neurodegeneration
- Fear & anxiety surrounding sleep
- Avoidance of social functions
- Failing to meet personal goals
- Long-term health issues
- Internal turmoil impacting sleep
- Basing life decisions on sleep
- Impaired professional life/productivity
- Long-term guilt & frustration
- Negative emotions about sleeping
- Coping mechanisms
- Loneliness/altered social behavior
- Others’ perceptions & behaviors
- Reduced engagement in life
- Sleep position/location
- Worry & concern
- Strain on relationships

Source: [https://datacc.dimesociety.org/core-measures-sleep/](https://datacc.dimesociety.org/core-measures-sleep/)
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Long-term issues (Distal impacts)

Perpetuating factors
- Long-term issues which can lead to maladaptive behavior & thought patterns which further impact sleep
  - Behavioral sleep restriction
  - Fear & anxiety surrounding sleep
  - Internal turmoil impacting sleep
  - Sleep position/location
  - Worry & concern

Negative emotions about sleeping
- Long-term issues which can lead to maladaptive behavior & thought patterns which further impact sleep

Other distal impacts
- Long-term issues which impact people's daily life
  - Acceptance & hopelessness
  - Depression, anxiety, stress
  - Long-term cognitive impairment & neurodegeneration
  - Long-term health issues
  - Reduced engagement in life
  - Avoidance of social functions
  - Failing to meet personal goals
  - Long-term guilt & frustration
  - Social stigma
  - Basing life decisions on sleep
  - Impaired professional life/productivity
  - Others' perceptions & behaviors
  - Strain on relationships
  - Coping mechanisms
  - Loneliness/altered social behavior