Guideline Summary NGC-9712

Guideline Title


Bibliographic Source(s)


Guideline Status

This is the current release of the guideline.


Scope

Disease/Condition(s)

- Excessive sleepiness (also called excessive daytime sleepiness, hypersomnia, subjective sleepiness, and somnolence)
- Sleep disorders (obstructive sleep apnea, insomnia, restless leg syndrome)

Guideline Category

Evaluation
Management

Clinical Specialty

Family Practice
Geriatrics
Intended Users

Advanced Practice Nurses  
Allied Health Personnel  
Health Care Providers  
Hospitals  
Nurses  
Physician Assistants  
Physicians

Guideline Objective(s)

To provide a standard of practice protocol for assisting older adults in maintaining an optimal state of alertness while awake and optimal quality and quantity of sleep during their preferred sleep interval

Target Population

Older adults

Interventions and Practices Considered

Assessment/Evaluation

1. Sleep history  
2. Use of the Epworth Sleepiness Scale or Pittsburgh Sleep Quality Index

Management

1. Management of medical conditions, psychological disorders and symptoms that can interfere with sleep  
2. Treatment with continuous positive airway pressure (CPAP)  
3. Instruction and reinforcement of prescriptions for sleep hygiene, medications, and/or devices to support respiration during sleep  
4. Review and adjustment of medications if necessary  
5. Referral to sleep specialists  
6. Ongoing assessment of adherence to medications and devices  
7. Assessment of obesity as a complicating factor and lifestyle changes
8. Follow-up monitoring including long-term reinforcement of the original interventions; adjustment or refitting of CPAP masks, if indicated; ongoing assessment of napping habits and sleepiness; and regular exercise

**Major Outcomes Considered**

- Alertness while awake
- Sleep quality score
- Sleep quantity
- Weight loss in obese patients

**Methodology**

**Methods Used to Collect/Select the Evidence**

- Hand-searches of Published Literature (Primary Sources)
- Hand-searches of Published Literature (Secondary Sources)
- Searches of Electronic Databases

**Description of Methods Used to Collect/Select the Evidence**

Although the Appraisal of Guidelines for Research and Evaluation (AGREE) instrument (described in Chapter 1 of the original guideline document, *Evidence-based Geriatric Nursing Protocols for Best Practice*, 4th ed.) was created to critically appraise clinical practice guidelines, the process and criteria can also be applied to the development and evaluation of clinical practice protocols. Thus, the AGREE instrument has been expanded (i.e., AGREE II) for that purpose to standardize the creation and revision of the geriatric nursing practice guidelines.

**The Search for Evidence Process**

Locating the best evidence in the published research is dependent on framing a focused, searchable clinical question. The PICO format—an acronym for population, intervention (or occurrence or risk factor), comparison (or control), and outcome—can frame an effective literature search. The editors enlisted the assistance of the New York University Health Sciences librarian to ensure a standardized and efficient approach to collecting evidence on clinical topics. A literature search was conducted to find the best available evidence for each clinical question addressed. The results were rated for level of evidence and sent to the
respective chapter author(s) to provide possible substantiation for the nursing practice protocol being developed.

In addition to rating each literature citation as to its level of evidence, each citation was given a general classification, coded as "Risks," "Assessment," "Prevention," "Management," "Evaluation/Follow-up," or "Comprehensive." The citations were organized in a searchable database for later retrieval and output to chapter authors. All authors had to review the evidence and decide on its quality and relevance for inclusion in their chapter or protocol. They had the option, of course, to reject or not use the evidence provided as a result of the search or to dispute the applied level of evidence.

**Developing a Search Strategy**

Development of a search strategy to capture best evidence begins with database selection and translation of search terms into the controlled vocabulary of the database, if possible. In descending order of importance, the three major databases for finding the best primary evidence for most clinical nursing questions are the Cochrane Database of Systematic Reviews, Cumulative Index to Nursing and Allied Health Literature (CINAHL), and Medline or PubMed. In addition, the PsycINFO database was used to ensure capture of relevant evidence in the psychology and behavioral sciences literature for many of the topics. Synthesis sources such as UpToDate® and British Medical Journal (BMJ) Clinical Evidence and abstract journals such as Evidence Based Nursing supplemented the initial searches. Searching of other specialty databases may have to be warranted depending on the clinical question.

It bears noting that the database architecture can be exploited to limit the search to articles tagged with the publication type "meta-analysis" in Medline or "systematic review" in CINAHL. Filtering by standard age groups such as "65 and over" is another standard categorical limit for narrowing for relevance. A literature search retrieves the initial citations that begin to provide evidence. Appraisal of the initial literature retrieved may lead the searcher to other cited articles, triggering new ideas for expanding or narrowing the literature search with related descriptors or terms in the article abstract.

**Number of Source Documents**

Not stated

**Methods Used to Assess the Quality and Strength of the Evidence**

Weighting According to a Rating Scheme (Scheme Given)
Rating Scheme for the Strength of the Evidence

Levels of Evidence

**Level I**: Systematic reviews (integrative/meta-analyses/clinical practice guidelines based on systematic reviews)

**Level II**: Single experimental study (randomized controlled trials [RCTs])

**Level III**: Quasi-experimental studies

**Level IV**: Non-experimental studies

**Level V**: Care report/program evaluation/narrative literature reviews

**Level VI**: Opinions of respected authorities/consensus panels


Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review

Description of the Methods Used to Analyze the Evidence

Not stated

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Not stated

Rating Scheme for the Strength of the Recommendations

Not applicable

Cost Analysis
A formal cost analysis was not performed and published cost analyses were not reviewed.

**Method of Guideline Validation**

External Peer Review
Internal Peer Review

**Description of Method of Guideline Validation**

Not stated

**Recommendations**

**Major Recommendations**

Levels of evidence (I–VI) are defined at the end of the "Major Recommendations" field.

**Parameters of Assessment**

- A sleep history (see Table 5.1 in the original guideline document) should include information from both the patient and family members. People who share living and sleeping spaces can provide important information about sleep behavior that the patient may not be able to convey.
- The Epworth Sleepiness Scale (Johns, 1991 [Level II]) is a brief instrument to screen for severity of daytime sleepiness in the community setting (see Try This ® – issue 6.2. The Epworth Sleepiness Scale; see the "Availability of Companion Documents" field).
- The Pittsburgh Sleep Quality Index (Buysse et al., 1989 [Level IV]) is useful to screen for sleep problems in the home environment and to monitor changes in sleep quality (see Try This ® – issue 6.1. The Pittsburgh Sleep Quality Index [PSQI]; see the "Availability of Companion Documents" field).

**Nursing Care Strategies**

- Vigilance by nursing staff in observing patients for snoring, apneas during sleep, excessive leg movements during sleep, and difficulty staying awake during normal daytime activities (Ancoli-Israel & Martin, 2006 [Level IV]; Avidan, 2005 [Level I]).
- Management of medical conditions, psychological disorders, and symptoms that interfere with sleep such as depression, pain, hot flashes, anemia, or uremia (Ancoli-Israel & Martin, 2006 [Level IV]; Avidan, 2005 [Level I]).
• For patients with a current diagnosis of a sleep disorder, ongoing treatments such as continuous positive airway pressure (CPAP) should be documented, maintained, and reinforced through patient and family education (Avidan, 2005 [Level I]). Nursing staff should reinforce patient instruction in cleaning and maintaining positive airway pressure equipment and masks.

• Instruction for patients and families regarding sleep hygiene techniques to protect and promote sleep among all family members (see Table 5.3 in the original guideline document) (Avidan, 2005 [Level I]).

• Review and, if necessary, adjustment of medications that interact with one another or whose side effects include drowsiness or sleep impairment (Ancoli-Israel & Martin, 2006 [Level IV]).

• Referral to a sleep specialist for moderate or severe sleepiness or a clinical profile consistent with major sleep disorders such as obstructive sleep apnea (OSA) or restless legs syndrome (Avidan, 2005 [Level I]).

• Aggressive planning, monitoring, and management of patients with OSA when sedative medications or anesthesia are given (Avidan, 2005 [Level I]).

• Ongoing assessment of adherence to prescriptions for sleep hygiene, medications, and devices to support respiration during sleep (Avidan, 2005 [Level I]).

Follow-up Monitoring

• Depending on the diagnosis, follow-up may include long-term reinforcement of the original interventions along with support for adhering to treatments prescribed by a sleep specialist. For example, patient compliance with CPAP therapy for OSA is critical to its efficacy and should be assessed during the first week of treatment (Weaver et al., 1997 [Level IV]). All patients benefit from positive reinforcement while trying to acclimate to nightly use of a positive airway pressure device.

• CPAP masks may require minor adjustments or refitting to find the most comfortable fit. Most such changes are needed during the acclimation period, but patients should be encouraged to seek assistance if mask problems develop (Weaver et al., 1997 [Level IV]). In the acute care setting, respiratory care technicians are valuable in-house resources when staff from a sleep center is not readily available.

• During the initial treatment phase of insomnia, sleep deprivation may cause rebound sleepiness, which should subside over time. Follow-up should include ongoing assessment of napping habits and sleepiness to track treatment effectiveness (Avidan, 2005 [Level I]).
• If obesity has been a complicating health factor, weight loss is a desirable long-term goal. With reduction in daytime sleepiness, the timing is ripe for increasing the activity level. Treatment of sleep disorders should include planning for strategic changes in lifestyle that include regular exercise, which is also consistent with cardiovascular health and long-term diabetes control (Ancoli-Israel & Ayalon, 2006 [Level I]).

Definitions:

Levels of Evidence

Level I: Systematic reviews (integrative/meta-analyses/clinical practice guidelines based on systematic reviews)

Level II: Single experimental study (randomized controlled trials [RCTs])

Level III: Quasi-experimental studies

Level IV: Non-experimental studies

Level V: Care report/program evaluation/narrative literature reviews

Level VI: Opinions of respected authorities/consensus panels


Clinical Algorithm(s)

None provided

Evidence Supporting the Recommendations

References Supporting the Recommendations


Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for selected recommendations (see the "Availability of Companion Documents" field).

Benefits/Harms of Implementing the Guideline Recommendations

**Potential Benefits**

Improved quality and/or quantity of sleep during normal sleep intervals, as reported by patients and staff, through quality assurance actions such as staff education, environmental surveys regarding noise level, strategies to reduce sleep disruption, etc.

**Potential Harms**

Not stated
Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Implementation Tools

Chart Documentation/Checklists/Forms
Mobile Device Resources
Resources

For information about availability, see the Availability of Companion Documents and Patient Resources fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better
Living with Illness
Staying Healthy

IOM Domain

Effectiveness
Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)


Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2003 (revised 2012)
**Guideline Developer(s)**
Hartford Institute for Geriatric Nursing - Academic Institution

**Guideline Developer Comment**
The guidelines were developed by a group of nursing experts from across the country as part of the Nurses Improving Care for Health System Elders (NICHE) project, under sponsorship of the Hartford Institute for Geriatric Nursing, New York University, College of Nursing.

**Source(s) of Funding**
Hartford Institute for Geriatric Nursing

**Guideline Committee**
Not stated

**Composition of Group That Authored the Guideline**
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**Financial Disclosures/Conflicts of Interest**
Not stated

**Guideline Status**
This is the current release of the guideline.


**Guideline Availability**
Electronic copies: Available from the Hartford Institute for Geriatric Nursing Web site.
Copies of the book *Evidence-Based Geriatric Nursing Protocols for Best Practice*, 4th edition: Available from Springer Publishing Company, 536 Broadway, New York, NY 10012; Phone: (212) 431-4370; Fax: (212) 941-7842; Web: [www.springerpub.com](http://www.springerpub.com).

**Availability of Companion Documents**

The following are available:


- The Pittsburgh Sleep Quality Index (PSQI). How to Try This video. Available from the [Hartford Institute for Geriatric Nursing Web site](http://www.hartfordinstitute.org).

The ConsultGeriRN app for mobile devices is available from the [Hartford Institute for Geriatric Nursing Web site](http://www.hartfordinstitute.org).

**Patient Resources**

None available

**NGC Status**

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