



## Complete Summary

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### GUIDELINE TITLE

Dementia. In: Evidence-based geriatric nursing protocols for best practice.

### BIBLIOGRAPHIC SOURCE(S)

Fletcher K. Dementia. In: Capezuti E, Zwicker D, Mezey M, Fulmer T, editor(s). Evidence-based geriatric nursing protocols for best practice. 3rd ed. New York (NY): Springer Publishing Company; 2008. p. 83-109. [93 references]

### GUIDELINE STATUS

This is the current release of the guideline.

## COMPLETE SUMMARY CONTENT

SCOPE  
METHODOLOGY - including Rating Scheme and Cost Analysis  
RECOMMENDATIONS  
EVIDENCE SUPPORTING THE RECOMMENDATIONS  
BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS  
IMPLEMENTATION OF THE GUIDELINE  
INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT  
CATEGORIES  
IDENTIFYING INFORMATION AND AVAILABILITY  
DISCLAIMER

## SCOPE

### DISEASE/CONDITION(S)

Dementia, including:

- Alzheimer's disease
- Vascular dementia
- Dementia with Lewy bodies

### GUIDELINE CATEGORY

Evaluation  
Management  
Screening

### CLINICAL SPECIALTY

Geriatrics  
Nursing

## **INTENDED USERS**

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

## **GUIDELINE OBJECTIVE(S)**

To provide a standard of practice protocol for early recognition and appropriate management of individuals with dementia

## **TARGET POPULATION**

Older patients with dementia

## **INTERVENTIONS AND PRACTICES CONSIDERED**

### **Assessment**

1. Cognitive parameters
2. Mental status screening tools
  - Folstein Mini-Mental State Examination
  - Clock Drawing Test
  - Mini-Cognitive
3. Functional assessment
4. Behavioral changes and depression
5. Physical assessment
  - Physical examination
  - Medications and nutrition
  - Laboratory tests
  - Diagnostic tests
6. Caregiver and environment
  - Zarit Burden Interview
  - Caregiver Strain Index tool

### **Management**

1. Medications
2. Cognitive-enhancement techniques
3. Rest, sleep, nutrition, and pain control
4. Physical and pharmacologic restraints
5. Functional capacity
6. Behavioral issues
7. Environment
8. Advance-care planning and end-of-life care

9. Education, support and community resources
10. Follow-up

## **MAJOR OUTCOMES CONSIDERED**

- Functional status/decline
- Cognitive changes/decline
- Depression

## **METHODOLOGY**

### **METHODS USED TO COLLECT/SELECT 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 AGREE instrument (which is described in Chapter 1 of the original guideline document) 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 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 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

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## **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**

No formal recommendations for cognitive screening are indicated in asymptomatic individuals. Clinicians are advised to be alert for cognitive and functional decline in older adults to detect dementia and dementia-like presentation in early stages.

Assessment domains include cognitive, functional, behavioral, physical, caregiver, and environment.

- Cognitive Parameters
  - Orientation: person, place, time
  - Memory: ability to register, retain, recall information
  - Attention: ability to attend and concentrate on stimuli
  - Thinking: ability to organize and communicate ideas
  - Language: ability to receive and express a message
  - Praxis: ability to direct and coordinate movements
  - Executive function: ability to abstract, plan, sequence, and use feedback to guide performance
- Mental Status Screening Tools
  - Folstein Mini-Mental State Examination (MMSE) (Folstein, Folstein & McHugh, 1975 **[Level IV]**): the most commonly used test to assess serial cognitive change. On average, the MMSE declines 3 points per year in those with Alzheimer's disease (AD) (Han et al., 2000 **[Level I]**). It is composed of items assessing orientation, attention, concentration, memory, language, and construction ability. Age, education, cultural background, and perceptual and physical abilities can affect performance. The MMSE might not detect mild cognitive loss and, as well, it is not diagnostic of decision-making capacity (Parker & Philp, 2004 **[Level VI]**).
  - Clock Drawing Test (CDT) (Royall et al., 1999 **[Level IV]**): a useful measure of cognitive function that correlates with executive-control functions (i.e., the cognitive process necessary to plan and carry out goal-directed behaviors). The patient is asked to draw a clock free-hand, put in all the numbers, and set a time asked for by the examiner. Physical ability and dexterity can influence performance.
  - Mini-Cognitive (Mini-Cog) (Borson et al., 2003 **[Level IV]**) combines the Clock Drawing Test with the three-word recall. The patient is asked to remember three unrelated words and later is asked to recall the three words. This clinically useful tool, rapidly administered, has a high level of sensitivity and specificity and less bias than some other instruments (e.g., the MMSE) (Borson et al., 2003 **[Level IV]**). See Resources section in [www.ConsultGerRN.org](http://www.ConsultGerRN.org) Mini-Cog tool.
  - When the diagnosis remains unclear, the patient may be referred for more extensive screening and neuropsychological testing, which might provide more direction and support for the patient and the caregivers.
- Functional Assessment
  - Tests that assess functional limitations such as the Functional Activities Questionnaire (FAQ) (Pfeffer et al., 1982 **[Level IV]**) can detect dementia with sensitivity and specificity comparable to mental-status testing. They are also useful in monitoring the progression of functional decline.
  - The severity of disease progression in dementia can be demonstrated by performance decline in activities of daily living (ADL) and instrumental ADL (IADL) tasks and is closely correlated with mental-status scores (Galasko et al., 1997 **[Level IV]**).

See Resources section in [www.ConsultGerRN.org](http://www.ConsultGerRN.org) for Functional Assessment tools.

- Behavioral Assessment
  - Assess and monitor for behavioral changes; in particular, the presence of agitation, aggression, anxiety, disinhibitions, delusions, and hallucinations.
  - Evaluate for depression because it commonly coexists in individuals with dementia (Zubenko et al., 2003 **[Level IV]**). Symptoms and signs may include the presence of neurovegetative signs (e.g., hypersomnia, insomnia, increased or decreased appetite, decreased energy, weight loss or gain, psychomotor agitation or slowing) or mood changes (e.g., depressed mood, feelings of worthlessness or helplessness, suicidal ideation). Determine if there is a diminished level of interest in life. Is there a lack of motivation, decreased initiation, or a poor ability to sustain effort? See [www.consultgeriRN.org](http://www.consultgeriRN.org) for Depression assessment tools.
- Physical Assessment
  - A comprehensive physical examination with a focus on the neurological and cardiovascular system is indicated in individuals with dementia to identify the potential cause and/or the existence of a reversible form of cognitive impairment.
  - A thorough evaluation of all prescribed, over-the-counter, homeopathic, herbal, and nutritional products taken is done to determine the potential impact on cognitive status.
  - Laboratory tests are valuable in differentiating irreversible from reversible forms of dementia. Structural neuroimaging with noncontrast computed tomography (CT) or magnetic resonance imaging (MRI) scans are appropriate in the routine initial evaluation of patients with dementia.
- Caregiver/Environment
  - The caregiver of the patient with dementia often has as many needs as the patient with dementia; therefore, a detailed assessment of the caregiver and the caregiving environment is essential.
    - Elicit the caregiver perspective of patient function and the level of support provided.
    - Evaluate the impact that the patient's cognitive impairment and problem behaviors have on the caregiver (mastery, satisfaction, and burden). Two useful tools include the Zarit Burden Interview (ZBI) (Bedard et al., 2001 **[Level IV]**) and the Caregiver Strain Index (CSI) Tool (Robinson, 1983 **[Level IV]**). For CSI see [www.ConsultGeriRN.org](http://www.ConsultGeriRN.org), Caregiving Topic.
    - Evaluate the caregiver experience and patient-caregiver relationship. The caregiving experience is a stressful one and the potential for elder mistreatment and caregiver illness exists.

### **Nursing Care Strategies**

Based on evidence provided under the Interventions and Care Strategies in the guideline document, specifically, use of the PLST that provides a framework for the nursing care of individuals with dementia (Smith et al., 2006 **[Level V]**).

- Monitor the effectiveness and potential side effects of medications given to improve cognitive function or delay cognitive decline.

- Provide appropriate cognitive-enhancement techniques and social engagement.
- Ensure adequate rest, sleep, fluid, nutrition, elimination, pain control, and comfort measures.
- Avoid the use of physical and pharmacologic restraints.
- Maximize functional capacity: Maintain mobility and encourage independence as long as possible, provide graded assistance as needed with ADLs and IADLs, provide scheduled toileting and prompted voiding to reduce urinary incontinence, encourage an exercise routine that expends energy and promotes fatigue at bedtime, establish bedtime routine and rituals.
- Address behavioral issues: Identify environmental triggers, medical conditions, caregiver-patient conflict that may be causing the behavior, define the target symptom (i.e., agitation, aggression, wandering) and pharmacological (psychotropics) and nonpharmacological (manage affect, limit stimuli, respect space, distract, redirect) approaches, provide reassurance; refer to appropriate mental-health care professionals as indicated.
- Ensure a therapeutic and safe environment: Provide an environment that is modestly stimulating, avoiding overstimulation that can cause agitation and increase confusion, and understimulation that can cause sensory deprivation and withdrawal. Utilize patient identifiers (name tags), medic alert systems and bracelets, locks, wander guard; eliminate any environmental hazards and modify the environment to enhance safety; provide environmental cues or sensory aides that facilitate cognition; maintain consistency in caregivers and approaches.
- Encourage and support advance-care planning: Explain trajectory of progressive dementia, treatment options, and advance directives.
- Provide appropriate end-of-life care in terminal phase: Provide comfort measures including adequate pain management; weigh the benefits/risks of the use of aggressive treatment (tube feeding, antibiotic therapy).
- Provide caregiver education and support: Respect family systems/dynamics and avoid making judgments, encourage open dialogue, emphasize the patient's residual strengths, provide access to experienced professionals, teach caregivers the skills of caregiving.
- Integrate community resources into the plan of care to meet the needs for patient and caregiver information; identify and facilitate both formal (i.e., Alzheimer's Association, Respite Care, Specialized Long Term Care) and informal (i.e., churches, neighbors, extended family/friends) support systems.

### **Follow-up to Monitor Condition**

- Follow-up appointments are regularly scheduled; frequency depends on the patient's physical, mental, and emotional status and caregiver needs.
- Determine the continued efficacy of pharmacological/nonpharmacological approaches to the care plan and modify as appropriate.
- Identify and treat any underlying or contributing conditions.
- Community resources for education and support are accessed and utilized by the patient and/or caregivers.

### **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

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## **CLINICAL ALGORITHM(S)**

None provided

## **EVIDENCE SUPPORTING THE RECOMMENDATIONS**

### **REFERENCES SUPPORTING THE RECOMMENDATIONS**

[References open in a new window](#)

### **TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS**

The type of supporting evidence is identified and graded for selected recommendations.

## **BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS**

### **POTENTIAL BENEFITS**

- The patient will remain as independent and functional in the environment of choice for as long as possible, the co-morbid conditions the patient may experience will be well managed, and the distressing symptoms that may occur at end of life will be minimized or controlled adequately.
- Lay and professional caregivers will demonstrate effective caregiving skills; verbalize satisfaction with caregiving; report minimal caregiver burden; and will be familiar with, have access to, and utilize available resources.
- Institutions will reflect a safe and enabling environment for delivering care to individuals with progressive dementia; and quality improvement plans will address high-risk problem-prone areas for individuals with dementia, such as falls and the use of restraints.

### **POTENTIAL HARMS**

Not stated

## IMPLEMENTATION OF THE GUIDELINE

### DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

Living with Illness

### IOM DOMAIN

Effectiveness  
Patient-centeredness

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

Fletcher K. Dementia. In: Capezuti E, Zwicker D, Mezey M, Fulmer T, editor(s). Evidence-based geriatric nursing protocols for best practice. 3rd ed. New York (NY): Springer Publishing Company; 2008. p. 83-109. [93 references]

### ADAPTATION

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

### DATE RELEASED

2008

### GUIDELINE DEVELOPER(S)

Hartford Institute for Geriatric Nursing - Academic Institution

### SOURCE(S) OF FUNDING

Hartford Institute for Geriatric Nursing

### GUIDELINE COMMITTEE

Not stated

## **COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE**

*Primary Author:* Kathleen Fletcher

## **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 of Geriatric Nursing Web site](#).

Copies of the book *Geriatric Nursing Protocols for Best Practice*, 3rd 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 followings are available:

- Assessing and managing delirium in older adults with dementia. Try this: best practices in nursing care to in hospitalized older adults. 2007. Electronic copies available from the [Hartford Institute for Geriatric Nursing Web site](#).
- Avoiding restraints in older adults with dementia. Try this: best practices in nursing care for hospitalized older adults with dementia. 2007. Electronic copies available from the [Hartford Institute for Geriatric Nursing Web site](#).

## **PATIENT RESOURCES**

None available

## **NGC STATUS**

This NGC summary was completed by ECRI Institute on June 16, 2008. The information was verified by the guideline developer on August 4, 2008.

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