



## Complete Summary

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### GUIDELINE TITLE

Evidence-based practice guideline. Exercise promotion: walking in elders.

### BIBLIOGRAPHIC SOURCE(S)

Jitramontree N. Evidence-based practice guideline. Exercise promotion: walking in elders. Iowa City (IA): University of Iowa Gerontological Nursing Interventions Research Center, Research Dissemination Core; 2007 Jun. 57 p. [95 references]

### GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: Jitramontree N. Evidence-based protocol. Exercise promotion: walking in elders. Iowa City (IA): University of Iowa Gerontological Nursing Interventions Research Center, Research Dissemination Core; 2001 Feb. 53 p.

## COMPLETE SUMMARY CONTENT

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## SCOPE

### DISEASE/CONDITION(S)

- Conditions or diseases that may be aggravated by a sedentary lifestyle, including coronary artery disease, hypertension, colon cancer, diabetes, and depression
- General health and fitness

### GUIDELINE CATEGORY

Counseling  
Prevention

### **CLINICAL SPECIALTY**

Geriatrics  
Nursing  
Preventive Medicine

### **INTENDED USERS**

Advanced Practice Nurses  
Health Care Providers  
Nurses  
Physician Assistants  
Physicians

### **GUIDELINE OBJECTIVE(S)**

To help health care providers in all settings initiate or maintain a walking program for elders

### **TARGET POPULATION**

Elders (ages 65 and older)

### **INTERVENTIONS AND PRACTICES CONSIDERED**

#### **Exercise Promotion Assessment Tools**

1. Physical Activity Stage of Change Questionnaire
2. Physical Activity Readiness Questionnaire
3. Balance Scale
4. Borg Scale

#### **Exercise Promotion Measures**

1. Counseling and education based on psychosocial and physiological considerations and each of the following stages: precontemplation, contemplation, preparation, action, maintenance, and relapse
2. Implementation Tools and Educational Material
  - Exercise Manual
  - Barriers to Being Active Quiz
  - Exercise Self-Efficacy Scale
  - Pedestrian Safety Materials
  - Weight Bearing Exercise
  - How to Walk and Tips for Safety
  - Graph Representing Duration of Daily Walk
  - Walking Speed Assessment
3. Identifying and preventing relapses in walking program

## **MAJOR OUTCOMES CONSIDERED**

- Overall physical and mental health and quality of life
- Risk of premature death
- Behavior changes in relation to physical activity
- Sensitivity and specificity of screening and assessment instruments

## **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**

#### **Databases**

The initial search strategy included the CINAHL, PubMed, and OVID databases, using broad search terms and later narrowed to specific focus areas. Reference lists of all relevant research and review articles were reviewed to locate additional resources.

#### **Keywords**

The following search terms were used: walking and elders, walking and safety, walking and motivation, tips for walking.

#### **Inclusion and Exclusion Criteria**

Because this was an update of an original guideline published on 2001, the focus was primarily on research published after 2001. The search was limited to research and review articles, age 65 and older population, English only, and full text available articles.

### **NUMBER OF SOURCE DOCUMENTS**

One hundred sixteen were reviewed and 27 articles were selected for use in updating this guideline.

### **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**

#### **Evidence Grading**

A1: Evidence from well-designed meta-analysis or well-done systematic review with results that consistently support a specific action (e.g., assessment, intervention, or treatment)

A2: Evidence from one or more randomized controlled trials with consistent results

B1: Evidence from high quality evidence-based practice guidelines

B2: Evidence from one or more quasi experimental studies with consistent results

C1: Evidence from observational studies with consistent results (e.g., correlational descriptive studies)

C2: Inconsistent evidence from observational studies or controlled trials

D: Evidence from expert opinion, multiple case reports, or national consensus reports

#### **METHODS USED TO ANALYZE THE EVIDENCE**

Systematic Review

#### **DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE**

Not stated

#### **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**

Internal review was performed at Research Translation and Dissemination Core (RTDC) and by two external expert content reviewers.

This guideline was reviewed by experts knowledgeable of research on exercise promotion in elders and development of guidelines. The reviewers suggested additional evidence for selected actions, inclusion of additional practice recommendations, and changes in the guideline presentation to enhance its clinical utility.

## RECOMMENDATIONS

### MAJOR RECOMMENDATIONS

The grades of evidence (A1, A2, B1, B2, C1, C2, D) are defined at the end of the "Major Recommendations" field.

#### Individuals/Patients at Risk for Needing Exercise Promotion

- Adults older than 45 years (Woods et al., 2005) (*Evidence Grade = C2*)
- Female adults, especially women of low educational attainment or low incomes
- African American and Hispanic adults
- Adults in northeastern and southern states (United States Department of Health and Human Services [USDHHS]) (*Evidence Grade = D*)
- Adults with sedentary life styles (participating in fewer than three 20-minute sessions of leisure-time physical activity per week excluding their usual job-related physical activity) (Wells, 1999) (*Evidence Grade = D*)
- Postmenopausal women (Ciliska, 2003; North American Menopause Society, 2006) (*Evidence Grade = C1*)
- People with disability
- Healthy adults or adults with health problems that are cleared by their physicians to exercise

#### Assessment Criteria

The following assessment criteria indicate patients who are likely to benefit the most from use of this evidence-based guideline:

- **Physical Activity Stage of Change Questionnaire** (Ingledeiv, Markland, & Medley, 1998; Nigg & Courneya, 1998) (*Evidence Grade = B2*) (see Appendix A.1 in the original guideline document)
- **Physical Activity Readiness Questionnaire** (American College of Sports Medicine [ACMS], 1991) (*Evidence Grade = B1*) (see Appendix A.2 in the original guideline document)
- **Balance Scale** (Berg et al., 1989) (*Evidence Grade = B2*) (see Appendix A.3 in the original guideline document)
- **Borg Scale** (Borg, 1998; Centers for Disease Control and Prevention [CDC], 1998) (*Evidence Grade = A2*) (see Appendix A.4 in the original guideline document)

#### Description of the Practice

Exercise promotion should be based on psychosocial as well as physiological considerations (Quinney, Gauvin, & TedWall, 1994) (*Evidence Grade = D*).

Interventions for enhancing exercise behavior should be developed for individuals in each stage of change (Ingledeiv, Markland, & Medley, 1998; Marcus & Simkin, 1994; Nigg & Courneya, 1998) (*Evidence Grade = B1*) as follows:

### Precontemplation Stage

Precontemplators include those who are not active and currently have no intentions of being active. These people do not think about starting exercise within the next 6 months. Actions for elders in this stage include:

- Increasing awareness of their activity level by assessing activity in daily life. For example, ask them to record their activities in a diary and discuss their activity level.
- Helping them understand how their current behavior influences them personally and others. For example, inactive parents model unhealthy behaviors to their children and grandchildren (USDHHS, 1999) (*Evidence Grade = D*).
- Increasing awareness of what they might miss if they continue to be sedentary (Burbank, Padula, & Nigg, 2000) (*Evidence Grade = D*), providing information about benefits of exercise (Resnick & Spellbring, 2000) (*Evidence Grade = C1*), and clarifying the misconceptions of myths associated with exercise such as injury, excessive muscle hypertrophy, and fatigue (USDHHS, 1999) (*Evidence Grade = D*). For example, provide them with an exercise manual from the National Institute on Aging (to request the manual see Appendix E.1 in the original guideline document), and/or have them talk to those who enjoy exercising.
- Emphasizing the short-term benefits such as enjoyment, feeling better about oneself, sleeping better.
- Linking benefits of a physically active lifestyle to valued people (White & Maloney, 1990) (*Evidence Grade = C2*). Have the elder identify who are the most significant people in their life and discuss important events ahead, such as attending their grandchild's graduation ceremony.
- Emphasize that by staying healthy, they will be able to improve their quality of life, for example living independently for a long time and avoiding falls.

### Contemplation Stage

Contemplators are individuals who do not exercise but intend to start exercising within the next 6 months. They are not ready to initiate the action because they are in the process of weighing the pros and cons. Consequently, they are ambivalent about engaging in exercise behavior. Actions for contemplators are:

- Assessing their barriers to exercise (see Appendix E.2 in the original guideline document), then discussing how to overcome those problems (Cooper et al., 2001; Whetstone & Reid, 1991) (*Evidence Grade = C2*).
- Assessing their exercise efficacy (see Appendix E.3 in the original guideline document) and providing motivating messages such as "good job" or "you're doing great" to enhance self-confidence (USDHHS, 1999) (*Evidence Grade = D*).
- Providing awareness about walking options such as taking the stairs, walking to church, or shopping (U.S. Department of Transportation [USDOT], 1994) (*Evidence Grade = C1*). Encourage them to choose to walk and view these

- options as personally and socially desirable. Provide them information about pedestrian safety (see Appendix E.4 in the original guideline document).
- Providing choices (Mullan & Markland, 1997) (*Evidence Grade = C2*) of home-based exercise programs, such as stretching exercises, range of motion exercises, and weight bearing exercises (King et al., 1991) (*Evidence Grade = B2*) (see Appendix E.5 in the original guideline document).
  - Providing community resources lists (Sallis et al., 1990) (*Evidence Grade = C2*) so that the elderly has an option to participate with others. Lists may include senior centers, recreation centers, parks, physical activity-related clubs, organizations, and amenities such as benches, signs, and fountains.
  - Helping them with basic skills such as selecting appropriate shoes, socks, and clothing (USDHHS, 1999) (*Evidence Grade = D*).

### Preparation Stage

Individuals in the preparation stage include those who intend to exercise in the near future, usually within the next month. They may begin exercise, but less often and with less intensity than recommended. They may be uncertain about the outcomes of their activity, Interventions include:

- Providing information about how to walk and safety considerations (Pucher & Dijkstra, 2003) (*Evidence Grade = B2*) (see Appendix E.6 in the original guideline document), including the time and distance one should walk (Howze, Smith, & DiGilio, 1989) (*Evidence Grade = C2*).
- Strengthening their exercise efficacy (Chau et al., 2005; Conn, 1997, 1998; Gary, 2006; Resnick & Spellbring, 2000) (*Evidence Grade = B2*) by:
  1. Facilitating a progressive walking program and reinforcing successes (Long & Haney, 1988) (*Evidence Grade = C1*). Providing self-monitoring methods that help them visualize progress. They may record time spent walking each day in a graph or chart (see Appendix E.8 in the original guideline document), or record steps walked each day by using a pedometer (step counter). There are computerized tracking systems which record time spent participating in walking clubs. Participants may watch their weight as a criterion for success. Experiencing physiological changes such as decreased fatigue also strengthens their self-efficacy (Stretcher et al., 1986) (*Evidence Grade = C1*).
  2. Emphasizing individual competence and accomplishment by employing recognition of exercise participation and mastery rather than using extrinsically focused traditional awards based on fitness assessment (Fitness Canada, 1992; Prudential FITNESSGRAM, 1992) (*Evidence Grades = D*).
  3. Promoting competence perceptions by reinforcing the personal progress that has been made (Whitehead & Corbin, 1991) (*Evidence Grade = C2*).
  4. Providing a video showing older adult role models who walk (Reeve, 1996) (*Evidence Grade = D*). (optional)
  5. Establishing a group field trip to visit an elder walking program (Reeve, 1996) (*Evidence Grade = D*). (optional)
  6. For group exercise, assign individuals to groups on the basis of their confidence and ability levels (Howze, Smith, & DiGilio, 1989) (*Evidence Grade = D*).

7. Improving balance to enhance their confidence to walk (Jansson & Soderlund, 2004) (*Evidence Grade = C2*)
- Helping them establish short-term goals and emphasize small, specific, and realistic goals (Resnick & Spellbring, 2000) (*Evidence Grade = C1*) such as "I will walk for 10 minutes every day." To help them set goals, pedometers, step logs, and email reminders are recommended (Heesch et al., 2005) (*Evidence Grade = C2*)
  - Encouraging them to make a commitment by sharing their intention with another person to confirm their decision. For example, ask them to sign a behavioral contract following a discussion of potential barriers, strategies to achieve walking goals including rewards for success, and motivating methods to be used (Williams et al., 2005) (*Evidence Grade = C2*)
  - Promoting exercise as an enjoyable activity (Corbin & Pangrazi, 1999; USDHHS, 1999) (*Evidence Grade = D*).
  - Fostering social support from spouse, family members, friends, neighbors, and co-workers (O'Brien Cousins, 1993) (*Evidence Grade = C1*). Involve spouses and family members by assessing their attitudes, discussing progress elders have made, and giving examples of reinforcing constructive feedback. Encourage them to walk with family, friends, neighbors, coworkers, or significant others.
  - Discussing barriers to regular activity and elicit ways to overcome those obstacles The recommended nursing interventions for overcoming various barriers are as follows (Cooper et al., 2001) (*Evidence Grade = D*):
    1. **Pain:** Take medications to reduce pain 1 to 2 hours before beginning to walk. Warm up by stretching at least 5 to 10 minutes before and after walking. Begin at a usual walking speed and increase gradually as tolerated. Prevent pain by slowing down or stopping as needed. Let joints/muscles recover by walking every other day.
    2. **Fatigue:** Improve sense of well-being by arranging a work schedule to keep balance of rest and activities, getting a quality sleep by avoiding caffeine/alcoholic beverages, and increasing energy level with proper exercise.
    3. **Mobility:** Improve range of motion and blood flow to joints and muscles by doing exercises slowly, smoothly, and gently, and avoid overstretching of the joints. Walk on a smooth and even floor with a comfortable pace and use walking aids as needed.
    4. **Sensory impairments:** Inspect feet and legs regularly for lesions on the skin. Walk in a well-lit area with friends and wear proper-fitting shoes with good support.
  - Informing them about the temporary nature of unpleasant sensations (Resnick & Spellbring, 2000) (*Evidence Grade = C2*) such as muscle aches, joint pain, shortness of breath, fear of falling, and feeling bored. Help them to decrease or eliminate these unpleasant symptoms (Resnick, 1998; Schneider, 1997) (*Evidence Grade = C1*) by taking medication prior to exercise, applying ice to areas of pain, or wearing better socks and support shoes to relieve pain. Individuals apprehensive about falling should be encouraged to walk with their usual assistive devices, walk on a treadmill while holding the handrails, or to walk with a partner.

#### Action Stage

This stage includes individuals who currently exercise regularly, but have started doing so recently (within the past 6 months). Individuals in the action stage are prone to relapse to old patterns of behavior. Interventions for people in the action stage are:

- Continuing to provide positive, constructive feedback to enhance their self-efficacy (Whitehead & Corbin, 1991) (*Evidence Grade = C2*). For example, outstanding participants can be acknowledged in the newsletters or monthly lists.
- Increasing walking speed, distance, or time (Ottenbacher et al., 2005; Purser et al., 2005) (*Evidence Grade = C2*) with:
  1. A portable progressive resistance exercise machine (Mangione et al., 2005) (*Evidence Grade = C2*)
  2. A virtual obstacle training (for post-stroke elders) (Jaffe et al., 2004) (*Evidence Grade = C2*)
- Assisting them in developing a long-term goal for exercise (Resnick & Spellbring, 2000) (*Evidence Grade = C2*) such as "I will participate in a two-mile walk this Spring."
- Assisting in identifying potential reasons to relapse (Forkan et al., 2006) (*Evidence Grade = C1*) such as risk of injury, boredom, and failure to meet goals (e.g., bad weather, occasional illness, out-of town visitors). Discuss solutions for anticipated barriers and develop alternative plans for missing events. For example, try a new time, partner, or place for walking. Inform them that a relapse does not mean failure, but is a normal part of the change process. Decrease potential excuses by planning for convenience by keeping walking shoes and clothes within easy reach, and posting motivating messages on the refrigerator or mirror.
- Encouraging them to foster group cohesion by developing a buddy system (Quinney, Gauvin, & TedWall, 1994) (*Evidence Grade = D*). For example, enhance relationships by establishing monthly socials.
- For elders exercising at home, visiting their home to help them organize and maintain their activity, applying motivational interviewing including problem-solving techniques and behavior change strategies, such as biweekly phone conversations to discuss their progress and how people change their behavior, and offering support and guidance for relapse prevention (Bodie & Inoue, 2005) (*Evidence Grade = C2*).
- Reminding them to reward themselves for success. For instance, buy a new pair of walking shoes or a new audio tape, or take a short trip (USDHHS, 1999) (*Evidence Grade = D*).

Walking speed in older adults should be greater than 1 meter per second or at least 1.22 meters per second to cross the street safely (Hoxie & Rubenstein, 1994; Nelson et al., 1991) (*Evidence Grade = C1*) and live independently (Guralnik et al., 1994; Langlois et al., 1997; Leiper & Craik, 1991; Potter, Evan, & Duncan, 1995) (*Evidence Grade = C1*). The average walking speed in the older adult is between 0.9 and 1.3 meters per second (Nelson et al., 1991; Duncan et al., 1992) (*Evidence Grade = C1*) (See Appendix E.9 in the original guideline document for Walking Speed Assessment to measure walking speed). However, older adults should not walk too fast in order to avoid risk of cardiovascular and orthopedic injury.

Special attention should be given to careful wording of exercise instructions since older adults might increase exercise intensity unnecessarily high in an effort to achieve physiological benefit (Fitzsimons et al., 2005) (*Evidence Grade = C2*). ACSM recommends brisk walking at 40-60% of maximum oxygen consumption ( $VO_{2max}$ ) Furthermore, age-related gait changes may result in slip-induced falls (Lockheart, Woldstad, & Smith, 2003) (*Evidence Grade = C2*), particularly in elders with dizziness (Hansson, Mansson, & Hakansson, 2005) (*Evidence Grade = C2*) or Parkinson's Disease (Martin et al., 2002) (*Evidence Grade = C2*).

### Maintenance Stage

Individuals in this stage have successfully exercised for more than 6 months. They still continue to exercise regularly. Interventions should be tailored to:

- Reminding them to recognize and appreciate their successes (Resnick & Spellbring, 2000) (*Evidence Grade = C2*). Continue to provide them positive reinforcement.
- Providing opportunities to serve as a role model for other elders. This will motivate them to continue their exercise program (USDHHS, 1999) (*Evidence Grade = D*).
- Continuing to make it fun and entertaining such as walking with favorite music or having conversations with friends before, during, and after walking (Corbin & Pangrazi, 1999; USDHHS, 1999) (*Evidence Grade = D*).
- Maintaining a supportive environment by reminding family members to continue in providing encouragement (O'Brien Cousins, 1993) (*Evidence Grade = C2*).
- Helping them set realistic goals to prevent discouragement (Resnick & Spellbring, 2000) (*Evidence Grade = C2*).

### Relapse

Individuals engaging in an active lifestyle may go back to an earlier stage of change. Interventions for people in the relapse stage are not the same as those for people just beginning to change their behavior. Individuals in this stage are more likely to start their activity again. Actions include:

- Assessing their stage of relapse with a question- "Was there a time in the recent past when you were regularly active for at least 3 months?" (USDHHS, 1999) (*Evidence Grade = D*).
- Learning from them how they overcame barriers to exercise and sustained their activity in the past (USDHHS, 1999) (*Evidence Grade = D*).
- Identifying causes of relapse and discussing ways to overcome and prevent it. Identify factors that can help and hinder program maintenance (USDHHS, 1999). (*Evidence Grade = D*). For example, inclement weather may prevent elders from regular exercise. Alternatives may include walking in a mall, a gym, on a home treadmill, or other places with warmer temperatures.

### **Definitions:**

### **Evidence Grading**

A1: Evidence from well-designed meta-analysis or well-done systematic review with results that consistently support a specific action (e.g., assessment, intervention or treatment)

A2: Evidence from one or more randomized controlled trials with consistent results

B1: Evidence from high quality evidence-based practice guidelines

B2: Evidence from one or more quasi experimental studies with consistent results

C1: Evidence from observational studies with consistent results (e.g., correlational descriptive studies)

C2: Inconsistent evidence from observational studies or controlled trials

D: Evidence from expert opinion, multiple case reports, or national consensus reports

### **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 each recommendation (see "Major Recommendations").

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

### **POTENTIAL BENEFITS**

Regular walking in elders can improve health, enhance independent living, decrease depression, increase overall quality of life and reduce the risk of premature death in the following ways as it:

- Lowers the risk of developing hypertension (or reduces blood pressure), Type II diabetes mellitus, colon cancer, and coronary heart disease (or second heart attack)
- Lowers blood cholesterol and triglycerides and may increase high-density lipoproteins (HDL)
- Maintains healthy body weight (increase lean muscle and decrease body fat)
- Increases muscle and bone strength

- Lowers risk of disability
- Slows bone loss from the spine in postmenopausal women
- Helps older adults become stronger and better able to be active without falling or becoming excessively fatigued, and improve fall-related outcomes (balance, gait, and fear of falling)
- Enhances psychological well-being and reduces depressive symptoms

## POTENTIAL HARMS

- Age-related gait changes may result in slip-induced falls, particularly in elders with dizziness Parkinson's Disease.
- Walking too fast may increase the risk for cardiovascular and orthopedic injury.

## QUALIFYING STATEMENTS

### QUALIFYING STATEMENTS

This is a general evidence-based practice guideline. Patient care continues to require individualization based on patient needs and requests.

## IMPLEMENTATION OF THE GUIDELINE

### DESCRIPTION OF IMPLEMENTATION STRATEGY

In order to evaluate the use of this protocol among elders at risk and in need of exercise promotion, both process and outcome factors should be evaluated.

#### Process Indicators

Process indicators are those interpersonal and environmental factors that can facilitate the use of a guideline. One process indicator that can be assessed with a group of healthcare providers is their knowledge about Exercise Promotion. The **Exercise Promotion Knowledge Assessment Test** (see Appendix B in the original guideline document) should be used before and following the education of staff for use of this guideline.

The same group of healthcare providers to whom the Knowledge Assessment Test was given should also be given the **Process Evaluation Monitor** (see Appendix C in the original guideline document) approximately one month following their use of the guideline. The purpose of this monitoring device is to determine their understanding of the guideline, and to assess their support of utilizing the protocol.

#### Outcome Indicators

Outcome indicators are those expected to change or improve from consistent use of the guideline. The major outcome indicators that should be monitored over time are:

- Intensity of walking (very light – very hard)
- Duration of walking (minute/day)
- Frequency of walking (day/week)

The **Exercise Promotion Outcomes Indicators** described in Appendix D in the original guideline document are to be used for monitoring and evaluating the usefulness of the exercise promotion guideline in improving exercise behavior of elders. Please use this monitor on a weekly basis throughout the exercise promotion program for each elder. Adapt this outcome monitor to your organization or unit and add outcomes you believe are important. For example, effectiveness of walking: physiological outcomes (e.g., resting heart rate, weight, and perceived exertion) and psychological outcomes (mood) or adoption of other physical activities (e.g., gardening, strength training, yoga, biking, Tai Chi) or even negative indicators, such as reduced time spent watching television.

## IMPLEMENTATION TOOLS

Audit Criteria/Indicators  
 Chart Documentation/Checklists/Forms  
 Patient Resources  
 Resources  
 Staff Training/Competency Material

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

Staying Healthy

### IOM DOMAIN

Effectiveness  
 Patient-centeredness

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

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### ADAPTATION

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

**DATE RELEASED**

2001 Feb (revised 2007 Jun)

**GUIDELINE DEVELOPER(S)**

University of Iowa Gerontological Nursing Interventions Research Center,  
Research Translation and Dissemination Core - Academic Institution

**SOURCE(S) OF FUNDING**

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**GUIDELINE COMMITTEE**

University of Iowa Gerontological Nursing Interventions Research Center Research  
Dissemination Core

**COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE**

*Author(s)*: Narirat Jitramontree, PhD, MSN, RN

*Series Editor*: Marita G. Titler, PhD, RN, FAAN

**FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST**

Not stated

**GUIDELINE STATUS**

This is the current release of the guideline.

This guideline updates a previous version: Jitramontree N. Evidence-based protocol. Exercise promotion: walking in elders. Iowa City (IA): University of Iowa Gerontological Nursing Interventions Research Center, Research Dissemination Core; 2001 Feb. 53 p.

**GUIDELINE AVAILABILITY**

Electronic copies: Not available at this time.

Print and CD-ROM copies: Available from the University of Iowa Gerontological Nursing Interventions Research Center, Research Dissemination Core, 4118 Westlawn, Iowa City, IA 52242. For more information, please see the [University of Iowa Gerontological Nursing Interventions Research Center Web site](#).

**AVAILABILITY OF COMPANION DOCUMENTS**

A variety of implementation tools, including assessment tools, knowledge assessment tests, and process and outcomes indicators, are available in the original guideline document.

## **PATIENT RESOURCES**

The following is available:

- Exercise promotion: consumer information. University of Iowa College of Nursing, Research Dissemination Core. 2007 Jun. 2 p.

Print and CD-ROM copies: Maria Titler, PhD, RN, FAAN, University of Iowa, College of Nursing, Director, Research Translation & Dissemination Core, 4118 Westlawn, Iowa City, IA 52242-1100; telephone: (319) 384-4429; fax: (319) 353-5843; e-mail: [research-dissemination-core@uiowa.edu](mailto:research-dissemination-core@uiowa.edu).

## **NGC STATUS**

This summary was completed by ECRI on February 6, 2002. The information was verified by the guideline developer as of March 13, 2002. This NGC summary was updated by ECRI Institute on August 29, 2007. The updated information was verified by the guideline developer on September 17, 2007.

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