



Complete Summary

GUIDELINE TITLE

Stroke management and prevention in the long-term care setting.

BIBLIOGRAPHIC SOURCE(S)

American Medical Directors Association (AMDA). Stroke management and prevention in the long-term care setting. Columbia (MD): American Medical Directors Association (AMDA); 2005. 42 p. [83 references]

GUIDELINE STATUS

This is the current release of the guideline.

** REGULATORY ALERT **

FDA WARNING/REGULATORY ALERT

Note from the National Guideline Clearinghouse: This guideline references a drug(s) for which important revised regulatory and/or warning information has been released.

- [August 16, 2007, Coumadin \(Warfarin\)](#): Updates to the labeling for Coumadin to include pharmacogenomics information to explain that people's genetic makeup may influence how they respond to the drug.
- [October 6, 2006, Coumadin \(warfarin sodium\)](#): Revisions to the labeling for Coumadin to include a new patient Medication Guide as well as a reorganization and highlighting of the current safety information to better inform providers and patients.

COMPLETE SUMMARY CONTENT

** REGULATORY ALERT **

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INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT

CATEGORIES

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SCOPE

DISEASE/CONDITION(S)

- Acute stroke
 - Ischemic stroke
 - Hemorrhagic stroke
- Post-stroke complications

GUIDELINE CATEGORY

Diagnosis
Evaluation
Management
Prevention
Rehabilitation
Risk Assessment
Treatment

CLINICAL SPECIALTY

Emergency Medicine
Geriatrics
Internal Medicine
Neurology
Nursing
Pharmacology
Physical Medicine and Rehabilitation
Preventive Medicine
Psychiatry
Speech-Language Pathology

INTENDED USERS

Advanced Practice Nurses
Allied Health Personnel
Dietitians
Health Care Providers
Nurses
Occupational Therapists
Pharmacists
Physical Therapists
Physician Assistants
Physicians
Social Workers
Speech-Language Pathologists

GUIDELINE OBJECTIVE(S)

- To improve the quality of care for patients with stroke in long-term care settings

- To guide care decisions and to define roles and responsibilities of appropriate care staff
- To reduce the risk of recurrent strokes

TARGET POPULATION

Residents of long-term care facilities

INTERVENTIONS AND PRACTICES CONSIDERED

Prevention/Risk Assessment

1. Assessment of risk factors for stroke
2. Preventive measures
3. Monitoring physical, functional, and psychological progress

Evaluation/Diagnosis

1. Assessment and description of resident's signs and symptoms
2. Medical history
3. Assessment for conditions that mimic stroke
4. Assessment of appropriateness of transferring the patient to a hospital
5. Diagnostic evaluation
6. Multidisciplinary functional assessment
7. Summarizing the patient's condition

Treatment/Rehabilitation/Management

1. Treatment of medical conditions that may accompany or mimic an acute stroke
2. Multidisciplinary care plan and treatment for stroke complications, including appropriate curative, restorative, or palliative measures
3. Rehabilitation plan and follow up

MAJOR OUTCOMES CONSIDERED

- Cause of death among stroke survivors
- Risk for stroke or stroke recurrence
- Risk and incidence of stroke complications, such as pneumonia, urinary tract infection, urinary incontinence and bladder dysfunction, dementia, deep vein thrombosis, depression, pressure ulcers
- Stroke-related mortality
- Effect of antiplatelet therapy
- Benefits and risks of interventions used to prevent/treat strokes

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

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

Quality of Published Evidence

I Evidence from at least one properly randomized controlled trial

II-1 Evidence from well-designed controlled trials without randomization

II-2 Evidence from well-designed cohort or case-control analytic studies, preferably from more than one center or research group

II-3 Evidence from comparisons between times or places with or without the intervention. Dramatic results in uncontrolled experiments could also be included here.

III Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees

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

Interdisciplinary workgroups developed the guidelines, using a process that combined evidence and consensus-based approaches. Workgroups included practitioners and others involved in patient care in long-term care facilities.

Beginning with a general guideline developed by an agency, association, or organization such as the Agency for Healthcare Research and Quality (AHRQ), pertinent articles and information, and a draft outline, each group worked to make a concise, usable guideline tailored to the long-term care setting. Because scientific research in the long-term care population is limited, many recommendations were based on the expert opinion of practitioners in the field.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

- A. Good evidence to support the recommendation
- B. Fair evidence to support the recommendation
- C. Poor evidence, but recommendations may be made on other grounds

COST ANALYSIS

The guideline developers reviewed a published cost analysis.

METHOD OF GUIDELINE VALIDATION

External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

All American Medical Director Association (AMDA) clinical practice guidelines undergo external review. The draft guideline is sent to approximately 175+ reviewers. These reviewers include American Medical Director Association physician members and independent physicians, specialists, and organizations that are knowledgeable of the guideline topic and the long-term care setting.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

The algorithm [Stroke Management and Prevention in the Long-Term Care Setting](#) is to be used in conjunction with the clinical practice guideline. The numbers next to the different components of the algorithm correspond with the steps in the text. Refer to the "Guideline Availability" field for information on obtaining the full text guideline.

CLINICAL ALGORITHM(S)

An algorithm is provided for [Stroke Management and Prevention in the Long-Term Care Setting](#)

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The guideline was developed by an interdisciplinary work group using a process that combined evidence- and consensus-based thinking.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Timely recognition of acute stroke
- Improved monitoring for and recognition of acute complications of stroke
- Minimization of acute stroke complications
- Improved control of modifiable risk factors for stroke
- Improved utilization of appropriate anticoagulant and antithrombotic therapies
- Improved quality of life for patients with stroke
- Improved documentation of patient choices about assessments and treatments

POTENTIAL HARMS

- Hospital transfer of long-term care stroke patients is associated with the following risks:
 - Deconditioning
 - Delirium
 - Pressure ulcers
 - Use of restraints
 - Use of indwelling urinary catheters
 - Inappropriate medications for frail elderly, causing adverse drug effects
 - Other adverse iatrogenic events
- Common compensatory strategies, such as chin-tuck, positioning, dietary modifications, and thickened liquids, may improve some symptoms or findings on videofluoroscopy, but these intermediate outcomes do not necessarily translate into reductions in the incidence of aspiration pneumonia. In addition, modified diets and thickened liquids have potential adverse effects including weight loss, dehydration, and reduced quality of life

Adverse Effects of Medications

- Baclofen and dantrolene may be associated with somnolence.
- Aspirin is associated with gastrointestinal toxicity and bleeding.
- Aspirin plus extended-release dipyridamole (ER-DP) is superior to aspirin alone but is more expensive, requires twice-daily dosing, and has an adverse-effect profile that combines the side effects of both aspirin and ER-DP.
- Severe gastrointestinal bleeding occurred less frequently among patients on clopidogrel than among those taking aspirin. Combining aspirin and clopidogrel produces no additional benefit and increases serious adverse effects.

CONTRAINDICATIONS

CONTRAINDICATIONS

Refer to Table 13 in the original guideline document for absolute and relative contraindications to warfarin use in older persons with atrial fibrillation.

QUALIFYING STATEMENTS

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- This clinical practice guideline is provided for discussion and educational purposes only and should not be used or in any way relied upon without consultation with and supervision of a qualified physician based on the case history and medical condition of a particular patient. The American Medical Directors Association and the American Health Care Association, their heirs, executors, administrators, successors, and assigns hereby disclaim any and all liability for damages of whatever kind resulting from the use, negligent or otherwise, of this clinical practice guideline.
- The utilization of the American Medical Director Association's Clinical Practice Guideline does not preclude compliance with State and Federal regulation as well as facility policies and procedures. They are not substitutes for the experience and judgment of clinicians and care-givers. The Clinical Practice Guidelines are not to be considered as standards of care but are developed to enhance the clinician's ability to practice.
- Long-term care facilities care for a variety of individuals, including younger patients with chronic diseases and disabilities, short-stay patients needing postacute care, and very old and frail individuals suffering from multiple comorbidities. When a workup or treatment is suggested, it is crucial to consider if such a step is appropriate for a specific individual. A workup may not be indicated if the patient has a terminal or end-stage condition, if it would not change the management course, if the burden of the workup is greater than the potential benefit, or if the patient or his or her proxy would refuse treatment. It is important to carefully document in the patient's medical record the reasons for decisions not to treat or perform a workup or for choosing one treatment approach over another.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

The implementation of this clinical practice guideline (CPG) is outlined in four phases. Each phase presents a series of steps, which should be carried out in the process of implementing the practices presented in this guideline. Each phase is summarized below.

- I. **Recognition**
 - Define the area of improvement and determine if there is a CPG available for the defined area. Then evaluate the pertinence and feasibility of implementing the CPG.
- II. **Assessment**
 - Define the functions necessary for implementation and then educate and train staff. Assess and document performance and outcome indicators and then develop a system to measure outcomes.
- III. **Implementation**

- Identify and document how each step of the CPG will be carried out and develop an implementation timetable.
- Identify individual responsible for each step of the CPG.
- Identify support systems that impact the direct care.
- Educate and train appropriate individuals in specific CPG implementation and then implement the CPG.

IV. **Monitoring**

- Evaluate performance based on relevant indicators and identify areas for improvement.
- Evaluate the predefined performance measures and obtain and provide feedback.

IMPLEMENTATION TOOLS

Clinical Algorithm
Tool Kits

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

Living with Illness
Staying Healthy

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

American Medical Directors Association (AMDA). Stroke management and prevention in the long-term care setting. Columbia (MD): American Medical Directors Association (AMDA); 2005. 42 p. [83 references]

ADAPTATION

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

DATE RELEASED

2005

GUIDELINE DEVELOPER(S)

American Medical Directors Association - Professional Association

GUIDELINE DEVELOPER COMMENT

Organizational participants included:

- American Association of Homes and Services for the Aging
- American College of Health Care Administrators
- American Geriatrics Society
- American Health Care Association
- American Society of Consultant Pharmacists
- National Association of Directors of Nursing Administration in Long-Term Care
- National Association of Geriatric Nursing Assistants
- National Conference of Gerontological Nurse Practitioners

SOURCE(S) OF FUNDING

American Medical Directors Association

GUIDELINE COMMITTEE

Steering Committee

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: None available.

Print copies: Available from the American Medical Directors Association, 10480 Little Patuxent Pkwy, Suite 760, Columbia, MD 21044. Telephone: (800) 876-2632 or (410) 740-9743; Fax (410) 740-4572. Web site: www.amda.com

AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Guideline implementation: clinical practice guidelines. Columbia, MD: American Medical Directors Association, 1998, 28 p.
- We care: implementing clinical practice guidelines tool kit. Columbia, MD: American Medical Directors Association, 2003.

Electronic copies: None available

Print copies: Available from the American Medical Directors Association, 10480 Little Patuxent Pkwy, Suite 760, Columbia, MD 21044. Telephone: (800) 876-2632 or (410) 740-9743; Fax (410) 740-4572. Web site: www.amda.com

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on June 29, 2005. The information was verified by the guideline developer on August 8, 2005. This summary was updated by ECRI on March 6, 2007 following the U.S. Food and Drug Administration (FDA) advisory on Coumadin (warfarin sodium). This summary was updated by ECRI Institute on September 7, 2007 following the revised U.S. Food and Drug Administration (FDA) advisory on Coumadin (warfarin).

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