

Primary Care of Adult Patients After Stroke

About the Guideline

- The goal of this guideline is to offer primary care providers guidance in the assessment, care, and management of patients after stroke, including the prevention of recurrent stroke, identifying risk factors and treating stroke complications, and providing support to patients in the performance of activities of daily living to the best of their functional abilities.
- The content was developed through a systematic review of the literature and professional guidelines, and by consensus of the writing group.
- The emphasis of this guideline is the ambulatory care setting, and addresses screening, care, and treatment, and the need for referral services to obtain optimal outcomes.

Key Clinical Considerations

Become familiar with the recommendations and best-practice statements provided in this guideline if you care for individuals with stroke in ambulatory, acute care, and rehabilitation settings.

Overall Strategy

- Poststroke care objectives include the following:
 - Deliver patient-centered care
 - Prevent recurrent brain injury
 - Optimize functionality
 - Prevent late complications
 - Improve quality of life
- Poststroke patients should be seen for their first follow-up visit between 1 to 3 weeks after discharge from an inpatient setting, hospital, or rehabilitation center.

Foundation of Care

- Establish the patient's knowledge of the stroke event and any concerns the patient might have.
- Determine the cause of the stroke whenever possible, and initiate interventions to prevent recurrence (optimal blood pressure control, proper anticoagulation, etc.).
- Any assessments that were postponed in the inpatient setting should be addressed in the outpatient arena.
- Determine the need for continued dual antiplatelet therapy.
- Obtain and document the following information at the initial poststroke visit:
 - Pre-stroke risk factors
 - Symptoms
 - Diagnostic results
 - Anatomical location of stroke
 - Emergency therapies administered or performed, if relevant
 - Hospital course
 - Presumed pathogenesis
 - Subsequent rehabilitative progress

- To improve long-term management and outcome, maintain an open line of communication between the primary care physician and neurologist.

The Patient and the Family

- Promote an environment in which patients feel comfortable communicating their goals, fears, needs, and concerns.
- Coordinating care with caregivers and the family, with the patient's permission, leads to improved outcomes.

Screen for Complications and Unmet Needs

- Interventions to reduce early readmission include screenings, such as for depression, and referrals for outside therapies, such as speech, physical, or occupational therapy.

Determine Stroke Risk Factors

- Identify the stroke pathology (when feasible) and risk factors that may cause a recurrent stroke.
- Assess for medication nonadherence.
- Determine social factors that may contribute to a poor patient outcome, such as lack of transportation to follow-up care, food insecurity, lack of education, and lack of accessible care.
- To improve outcomes, consider the addition of a social worker to the multidisciplinary team.

Plan

- A plan of care should be established between the patient and health care provider to set priorities and define realistic goals.

Implementation and Follow-Up

- Self-management is the key to chronic disease management, therefore scheduling a follow-up visit to reassess goals and accomplishments is essential.
- The timing of follow-up visits should be based on the patient's state of health and ability to meet the goals set.

Preventing Recurrent Stroke

- In approximately 30% of all strokes the cause is unknown; for all other stroke patients the assessment, management, and treatment of the cause of the stroke remains a major factor in preventing future recurrence.

Maximizing Function and Independence

- Motor strength and limb mobility improves quickly in the first 30 days after a stroke, and with rehabilitation, strength and mobility reaches maximum recovery within 4 months (total reestablishment of function may take years).
- Initial rapid gains are also seen early on after stroke in areas of cognition, communication, pain, swallowing, incontinence, sensory impairment, spasticity, balance, and strength.
- Assessing the patient's ability to perform activities of daily living is essential in both the inpatient setting and then again during the patient's poststroke office visit.

- Functionality should be assessed after a stroke and compared to pre-stroke competence, along with determining if the patient has reached his or her maximum ability.
- Evaluate the patient for fall risk utilizing structured assessment tools such as Berg Balance Scale or Morse Scale.
- Evaluate the patient's cognition utilizing structured assessment tools such as the Mini-Mental State Examination or Montreal Cognitive Assessment test.
- Encourage aerobic exercise, such as walking or other aerobic exercise, and connect the patient to community resources available to improve their cardiovascular health and lower the risk of secondary stroke.
 - The average U.S. citizen is encouraged to participate in 150 minutes of moderate exercise weekly, or 75 minutes of vigorous exercise/weekly. The minimum amount of exercise needed for worthwhile benefit for patients after a stroke has not been determined.

Practice Quality Improvement

- Identify and develop achievable patient goals. Evaluate the outcomes and create new goals to challenge the patient. Continue this improvement process until an adequate level of health and function has been attained. Assess the improvement plan periodically.
- Using an interdisciplinary team approach has been shown to control stroke risk factors.

Reference:

Kernan, W. N., Viera, A. J., Billinger, S. A., Bravata, D. M., Stark, S. L., Kasner, S. E., Kuritzky, L., Towfighi, A., & American Heart Association Stroke Council; Council on Arteriosclerosis, Thrombosis and Vascular Biology; Council on Cardiovascular Radiology and Intervention; and Council on Peripheral Vascular Disease (2021). Primary Care of Adult Patients After Stroke: A Scientific Statement From the American Heart Association/American Stroke Association. *Stroke*, 52(9), e558–e571.

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