



American
Stroke
Association.
A division of the
American Heart Association.

Adult Stroke Rehabilitation & Recovery Guideline

PREVENTION AND MEDICAL MANAGEMENT OF COMORBIDITIES



The effects of stroke often extend beyond the initial injury and may include a range of secondary impairments, comorbidities and psychosocial consequences.

Residual deficits from a stroke include reduced mobility, weakness, sensory changes, cognitive impairment, communication challenges, fatigue, and emotional or behavioral variability. These impairments can contribute to the development of a wide range of secondary complications and comorbidities that may affect recovery and long-term well-being of stroke survivors.

The 2026 guideline includes new sections on sleep and post-stroke fatigue, and expanded recommendations for central post-stroke central pain and fall prevention.

Stroke comorbidities can significantly impact functional outcomes, participation in home, community, vocational and social roles and overall quality of life. Therefore, ongoing assessment, prevention and management are critical components of comprehensive stroke care.

Here are key recommendations from the American Heart Association and American Stroke Association's 2026 Guideline for Adult Stroke Rehabilitation and Recovery. The comprehensive guideline details the best clinical practices in providing care for adults recovering from stroke. For more information about these recommendations, please refer to the full guideline at [Heart.org/StrokeRehabGuideline](https://heart.org/stroke-rehab-guideline).

The recommendations highlighted here address one of six major topics covered within the guideline:

- ☐ The Rehabilitation Program
- ☒ **Prevention and Medical Management of Comorbidities**
- ☐ Assessment
- ☐ Sensorimotor Impairments and Activities
- ☐ Cognition and Communication
- ☐ Transitions in Care and Community Rehabilitation

PREVENTION OF SKIN BREAKDOWN AND CONTRACTURES

- Regular skin assessments are recommended during acute hospitalization and post-acute care using valid measurement instruments (e.g., the Braden Scale) to monitor for skin breakdown.
- In stroke survivors with limited mobility, implement strategies to minimize or eliminate skin friction, redistribute pressure, manage moisture and optimize nutritional and hydration status to support skin integrity and reduce the risk of pressure injury.
- Stroke survivors, caregivers and clinical staff should be educated about the prevention of skin breakdown in patients with limited mobility.
- In survivors with post-stroke spasticity of upper or lower limbs, programs encouraging stretching are reasonable to improve neural, mechanical and structural changes in involved muscle regions and to prevent contracture.

PREVENTION OF DEEP VENOUS THROMBOSIS IN ISCHEMIC STROKE PATIENTS

- For stroke survivors who have moderate to severe mobility limitations, intermittent pneumatic compression is recommended to reduce the risk of venous thromboembolism (VTE).
- The use of elastic compression stockings is not effective for the prevention of VTE.

TREATMENT OF BOWEL AND BLADDER INCONTINENCE

- Comprehensive assessment of bladder function, including a detailed history of pre-existing and current urinary symptoms, comorbidities and medications, is essential for developing a bladder care plan.
- Assessment of urinary retention through bladder scanning or intermittent catheterizations post-voiding while recording volumes is recommended for patients with urinary incontinence or retention.
- Removal of indwelling catheter (if any) within 24 hours after admission for acute stroke is recommended.

ASSESSMENT, PREVENTION AND TREATMENT OF HEMIPLEGIC SHOULDER PAIN

- A clinical assessment of the shoulder region to determine the presence of shoulder subluxation, spasticity, range-of-motion (ROM) restrictions and regional sensory changes, and an assessment to determine the presence of spatial neglect, are recommended to guide treatment planning focused on the prevention of shoulder pain.
- Providing patient and caregiver education for hemiplegic shoulder care, particularly before discharge or transition in care, is recommended to increase confidence with shoulder care and to prevent shoulder injury.
- For stroke survivors who have glenohumeral joint subluxation, shoulder weakness or shoulder pain, the use of overhead pulley exercises is not recommended to increase ROM or reduce shoulder pain.

CENTRAL POST-STROKE PAIN

- In patients with post-stroke pain, a diagnosis of central post-stroke pain (CPSP) should be based on proposed diagnostic criteria to improve validity and consistency and to help plan treatment.
- In patients with CPSP, a choice of pharmacological treatments individualized to the person's needs, response and any adverse effects is recommended to try to reduce pain.

PREVENTION OF FALLS

- A formal fall prevention program is recommended to decrease fall risk.
- Stroke survivors and their caregivers should receive information targeted at home and environmental modifications designed to decrease fall risk.

MENTAL HEALTH ASSESSMENT AND TREATMENT OF POST-STROKE DEPRESSION AND ANXIETY, INCLUDING EMOTIONAL AND BEHAVIORAL STATE

- Early screening using a valid screening instrument for post-stroke depression, from three days to three months post-stroke, is recommended to identify patients in need of further evaluation and treatment.
- Periodic screening for depression, anxiety and other psychiatric symptoms using valid measurement instruments (at three and six months, and throughout the lifespan) should be performed to improve detection and access to treatment.
- In stroke survivors who experience impaired communication, screening for depression, anxiety and other psychiatric symptoms should be performed using a valid measurement instrument or appropriate supported communication strategies designed to improve detection and access to treatment.
- In survivors who screen positive for possible depression, a comprehensive evaluation should be conducted by a healthcare professional with expertise in depression to improve mental health, functional and quality-of-life outcomes.
- In survivors with pseudobulbar affect (PBA) causing distress, the use of dextromethorphan/quinidine is recommended to reduce the frequency of episodes.

POST-STROKE OSTEOPOROSIS

- In people with ischemic stroke, assessment using the Fracture Risk after Ischemic Stroke (FRAC-Stroke) score can be useful to predict fracture risk.
- Increasing physical activity (aerobic, resistance and balance training) can be useful for improving bone mineral density and reducing the risk of fractures.

SLEEP AND POST-STROKE FATIGUE

- Cognitive behavioral therapy can be beneficial in improving fatigue and sleep quality in stroke survivors.
- Fluoxetine is not recommended to treat post-stroke fatigue.

Stroke rehabilitation requires a sustained and coordinated effort from a large team, with the patient and the patient's goals at the center. In addition to the patient, the team includes family and friends, other caregivers (e.g., personal care attendants), physicians, nurses, physical and occupational therapists, speech-language pathologists, recreation therapists, psychologists, nutritionists, social workers and others.

Among these team members, communication and coordination are paramount in maximizing the effectiveness and efficiency of rehabilitation and underlie the entire stroke rehabilitation and recovery guideline.