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A division of the American Heart Association.

Top Take-Home Messages
for Physical Therapists

Adapted from: 2026 AHA/ASA Guideline for Adult Stroke Rehabilitation and Recovery

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The guideline sections listed under each take-home message provide the relevant content that supports the corresponding key takeaway.

1. **Use gradual progression of position changes and mobilization within the acute stage of stroke (24-48 hours). High dose therapy that includes *very intense* exertion should be avoided within the hyper-acute stage (<24 hours), especially in higher-risk patients with more severe impairments, intracerebral hemorrhage, or altered mental status.**

   Physical activity is known to improve functional recovery and is recommended to prevent medical complications during the acute hospital stay. However, very early intense physical activity that includes multiple sessions for a long duration at a high exertion, can challenge hemodynamic stability causing further neurological deterioration and worse clinical outcomes *(section 2.2)*.

2. **A fall-risk evaluation should be performed as soon as possible after stroke with annual follow-ups to determine a prevention program that can include patient/caregiver education, environment modifications, assistive device and orthotic prescription, and balance exercise programs such as Tai Chi, dual-task training, and exergaming.**

   Individuals post-stroke are at a greater risk of falls throughout their lifetime due to potential mobility and sensory impairments as well as visual/cerebellar involvement. An initial evaluation and treatment plan with continued follow-up evaluations are needed to decrease fall-related injuries and reduce the fear of falling, which can create a vicious cycle of physical inactivity and deconditioning *(section 3.6 and 5.4)*.

3. **Physical assessments in both clinical and real-world settings provide diverse data that when used in established predictive algorithms, may inform post-stroke treatment and recovery trajectories.**

   Objective measures such as isokinetic dynamometry (when available) and standardized assessments of limb movement (i.e. Fugl Meyer Motor Assessment, Action Research Arm Test), muscle tone (i.e. Modified Ashworth Scale), walking (i.e. 10 meter walk test, 6-minute walk test, kinematic motion analysis), and balance (i.e. Berg Balance Scale, Timed Up and Go, Functional Reach Test) should be performed in the clinic to monitor stroke recovery. In addition, wearable sensors that monitor daily physical activity (i.e. step count, accelerometer) can be useful in determining stroke recovery during everyday life *(section 4.2)*.

4. **Structured and individually tailored exercise programs should be developed during rehabilitation and continued within the home/community upon discharge. Additionally, individuals should engage in daily physical activity that increases time spent standing, walking, and participating in everyday household tasks.**

   To ensure lifelong motivation and active participation, patients should work closely with clinicians to determine an exercise program. While the goal is at least 150 minutes per week of moderate intensity aerobic training and 2–3 days per week of strength and balance training, a progression in intensity, frequency, and duration should be consistently evaluated and considered *(section 5.1 and 5.8)*.

5. **High dose, task-specific walking training performed early in the subacute stage and maintained during the chronic stage improves walking outcomes without increasing the risk of serious adverse events.**

   Additionally, adjunct therapies such as resistance exercise, rhythmic auditory cueing, constraint induced movement therapy, motor imagery, mirror therapy, exergaming, electrical stimulation (functional and sensory), aquatic therapy, acupuncture, and visual biofeedback support an increase in walking function *(sections 5.5 and 5.7)*.

6. **Use of body-weight supported treadmills and robot-assisted technology have not shown improvements in walking outcomes greater than task-specific training and incur greater financial risk.**

   The cost-to-benefit ratio for the clinic should be considered as the use of robot-assisted gait training may also be used to alleviate physical burden on clinicians (i.e. assisted stepping while guarding patients) *(section 5.5)*.

7. **Functional electrical stimulation systems used for orthotic management of foot drop show similar improvements in walking function comparable to those achieved with traditional ankle-foot orthoses (AFOs).**

   Functional electrical stimulation (FES) systems stimulate the dorsiflexor muscles to assist ankle dorsiflexion during walking, whereas traditional ankle-foot orthoses (AFOs) provide mechanical support *(section 5.7)*.

8. **When access to an outpatient rehabilitation clinic is limited or absent (i.e. rural areas, limited transportation), home-health based rehabilitation and telerehabilitation are reasonable alternatives to improve clinical outcomes.**

   Although both home health and telerehabilitation involve the use of portable, home-based equipment, home health is delivered through in-person interactions, whereas telerehabilitation relies on communication via telephone, internet-based platforms, virtual reality, or wearable device monitoring *(section 7.4)*.

9. **Supporting safe engagement in leisurely recreational activities is essential for promoting social participation among individuals with stroke across the lifespan.**

   Physical recreational activities are important for improving and maintaining physical, cognitive, social and psychological health *(section 7.6)*.