



# VA/DoD Clinical Practice Guideline

## Stroke Rehabilitation Patient Summary

### What is a Stroke?

A stroke is sometimes called a “brain attack.” It occurs when blood flow to part of the brain is blocked or reduced. This means that less oxygen reaches the brain and brain cells can get damaged. Stroke is an emergency because delay in medical treatment can result in permanent brain damage or death.

Factors that can contribute to the risk of having a stroke include high blood pressure, heart conditions, diabetes, cholesterol, or smoking. Stroke can cause loss of function in parts of your body.

### Common Symptoms That Happen With A Stroke

Common symptoms or conditions you may experience following stroke are listed below. One or more of these symptoms can occur suddenly at the time of a stroke. Symptoms can range from mild to severe. [1] Some symptoms may get better over time, but others may not. You should talk with your healthcare team about your stroke and what you can expect during recovery.

- Weakness or paralysis of the face, arm, or leg
- Numbness of the face, arm, or leg
- Trouble walking or loss of balance or coordination
- Confusion
- Trouble speaking or understanding what others are saying
- Difficulties swallowing foods, liquids, or medications
- Trouble seeing in one or both eyes
- Severe headache of unknown cause.

## Depression After A Stroke

Depression is common after a stroke. Many people feel overwhelmed and frustrated. They can feel down, isolated, or hopeless. This can impact what they do every day and the quality of their lives. Anyone can develop depression after a stroke; even those who never had depression before.

Here are some warning signs:

- Not being interested in doing anything
- Feeling helpless, hopeless, or worthless
- Low energy
- No appetite or weight loss
- Feeling blue or irritable
- Problems sleeping or feeling tired
- Thoughts that you would be better off dead
- If you have any or all of these signs, please discuss with your rehabilitation team.

## Stroke Rehabilitation Goals

Rehabilitation after stroke helps to recover strength, skills, and confidence. It can help you find ways to do difficult things in different ways. You and your rehabilitation team will set realistic goals. Often, these goals focus on decreasing the impact of your stroke. Your treatment plan may include various types of treatments.

The goal of recovery after stroke is to boost your independence and participation in life activities. Stroke rehabilitation works better when it addresses both your physical and emotional needs. You may feel that these programs help you become more independent and live a better life.

Many professionals can be part of your rehabilitation team: physicians, nurses, physical therapists, occupational therapists, speech therapists, psychologists, social workers, and others. You and your caregivers are the most important members of this team.

## Frequent Goals of Stroke Rehabilitation

- Improve and maintain your physical function (your ability to move, eat, speak, and participate in life activities)
- Enhance communication and language skills after your stroke
- Improve your emotional function (mood and satisfaction with life)
- Improve your social function (activities and connections with others)
- Improve your quality of life
- Focus on what is important to you
- Maintain a healthy lifestyle
- Gain understanding of the nature of your stroke
- Take care of other health issues that can prevent another stroke (quitting smoking, manage high blood pressure and/or cholesterol, improve diet, or improve fitness level)

## Questions To Ask Your Care Team

You should discuss any questions you may have with your healthcare providers. Ask about anything that seems unclear to you. Some examples may include:

Shortly following stroke:

- What caused my stroke?
- How can I reduce my risk of another stroke?
- What resources are available to help me recover from my stroke?
- How can my family be involved in my treatment after stroke?

In the weeks following stroke:

- When should I expect to transition to a less intensive treatment setting?
- What will be my next treatment setting?
- What can I do to help improve my recovery?
- How active should I be? Are there particular activities that I should engage in or avoid?
- What will change in the way I live when I go back home?
- What help will I need to go home? How long will I need it?
- What can I do to improve my ability to return to work?
- Is it safe for me to drive?
- Can patients fully recover from stroke?

In the months following stroke:

- What treatments will continue to help me with my recovery?
- What can I do at home to help me recover?
- Are there resources available for my family?  
Are resources available that could help provide more support?

## Treatments During Stroke Rehabilitation

There are many treatments for you after a stroke, such as physical therapy, occupational therapy, speech therapy, or other services. Each patient treatment program is unique. It depends on the patient's goals and what he or she can do. However, in general, treatment is aimed at improving quality of life.

- A rehabilitation provider directs and supervises treatment.
- Physical therapy helps with muscle control, balance, coordination, and strength. It can improve your ability to move, walk, and participate in life. Sometimes, using equipment can improve mobility.
- Occupational therapy helps those who have had a stroke do every day activities when they go home. These may include, for example, how to use the bathroom, bathe, groom, dress, pay bills, clean, and do laundry. Occupational therapy also helps you to concentrate, understand, and get around safely. Your occupational therapist may also provide equipment to help with these tasks.
- Speech therapy helps you re-learn how to communicate, speak, listen, read, and write. It also helps with thinking, attention, concentration, memory, and problem-solving. Additionally, speech therapy helps you with swallowing foods and liquids after stroke.
- Mental and behavioral health treatment helps you adjust to life after stroke. It can help you cope with emotions or changes in behavior following stroke. It can also help you participate in rehabilitation.
- Social work or nurse case management helps to coordinate your treatments, appointments, and resources. They also help plan your discharge.
- Nurses evaluate changes in your condition, give medications, care for skin and wounds, and provide support and education.
- Additional services may include dietetics, recreation therapy, optometry/visual rehabilitation, ophthalmology, clinical pharmacy, vocational rehabilitation, and driver rehabilitation.

Active participation in therapies and self-care is important for recovery. Self-care means actively working to maintain or improve your health. This can include eating a balanced diet, getting adequate rest, exercising, and reducing stress. It can also mean stopping smoking or drinking less alcohol. Talk with your providers about ways you can practice self-care.

## Treatment Settings

You can receive therapy in different places, such as a hospital, a rehabilitation facility, a long-term care facility, or an outpatient program. You could also receive therapy in your home through a computer or a smart phone. Where you receive care depends on the severity of the stroke and your individual needs.

Stroke affects each person differently. Therefore, progress and improvement are not the same for all patients. As you progress, you may move from one setting to another to help you be as independent as possible. You should discuss with your doctor when it is the right time to move to a new place for treatment.

## Use Of New Technologies

There are many new technologies to help you recover from stroke. However, research has not shown that these technologies help patients recover more than they would without using them. Ask your providers which technology may be helpful for you.

## More information for patients with stroke and their caregivers can be found here:

- Centers for Disease Control and Prevention Stroke Patient Education Handouts: [https://www.cdc.gov/stroke/materials\\_for\\_patients.htm](https://www.cdc.gov/stroke/materials_for_patients.htm)
- National Stroke Association (part of the American Heart Association): <https://www.strokeassociation.org/>
- Department of Veterans Affairs Resources and Education for Stroke Caregivers' Understanding and Empowerment: <https://www.cidrr8.research.va.gov/rescue/library.cfm>

References: 1. American Stroke Association. Learn more stroke warning signs and symptoms. 2017; <https://www.strokeassociation.org/en/about-stroke/stroke-symptoms/learn-more-stroke-warning-signs-and-symptoms>.

Accessed June 28, 2019.

*Access to the full guideline and additional resources are available at the following link: <https://www.healthquality.va.gov/guidelines/Rehab/stroke/>*