

Chest  
Heart &  
Stroke  
Scotland



# STROKE

## RECOVERY IN HOSPITAL



ESSENTIAL GUIDE

# This Essential Guide is about recovering in hospital after a stroke.

## It explains:

- What a stroke is.
- How a stroke might be treated, and what tests you might need.
- Who will be involved in your care.
- What rehabilitation services might look like in hospital.
- What to expect when you are discharged from hospital.

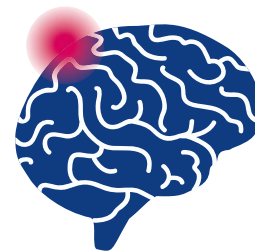
For information on what to expect after you leave hospital, see our booklet on **Stroke Recovery at Home.**

## What is a stroke?

A stroke is a medical event where blood circulation in your brain is interrupted. This starves your brain of oxygen, and the longer it goes on, the more your brain will be damaged.

A stroke can be **ischaemic** (where a clot or plaque blocks a blood vessel in your brain) or **haemorrhagic** (where a blood vessel bursts in your brain, causing bleeding).

For more detailed information on stroke, see the Essential Guide on **Stroke**, available at [www.chss.org.uk/resources-hub](http://www.chss.org.uk/resources-hub)



# Symptoms of a stroke

Your brain affects all kinds of systems in your body, so the damage caused by a stroke can also be far-reaching.

The symptoms of a stroke are different for every person and every stroke. They depend on several factors:

- What part(s) of your brain were affected.
- The extent of the damage.
- What your health was like before the stroke, and any existing health issues.
- How your stroke was treated.

Some of these symptoms may improve or heal over time, as your brain and body adapt. However, other symptoms may last longer.

Some common symptoms of stroke include:

**Loss of strength or movement.** This can make it difficult to walk or do other day-to-day tasks.

**Communication difficulties.** These include aphasia (affecting your brain's ability to process language), speech apraxia (affecting your ability to form words), and dysarthria (muscle weakness in the mouth and throat).

**Tiredness and fatigue.**

**Pain or discomfort,** particularly central post-stroke pain (CPSP) which is caused by damage to the pain centres of your brain.

**Changes to vision, hearing, or other senses.**

**Changes to how you think or feel.**

**Difficulty controlling your bowel and bladder.**

# What happens when I first get to hospital?

If you think you have had a stroke, or that someone else is having a stroke, **call 999 immediately and ask for the ambulance.**

You should be brought to hospital in an emergency ambulance. This allows the ambulance staff to treat and support you on the way to the hospital, and can improve access to treatment.

Once you arrive at hospital, you may be taken to a specialist stroke ward. However, you might also find yourself in A&E or in another assessment ward.

You will be given a series of tests to find out what kind of stroke you have had, where in your brain the stroke is, and what the best treatment will be.

A stroke is a medical emergency. Your initial hospital experience is likely to be fast-paced, confusing, and things may happen very quickly.

Some people lose consciousness or become less alert during their stroke. If this happens to you, you might recover consciousness in hospital without remembering how you got there.

It is normal to be frightened and confused. Remember you always have the right to ask questions, both during and after treatment.

However, when you are first hospitalised, the priority is to find out the details of your stroke and get you into treatment as quickly as possible. The longer it takes for you to be treated, the more damage your brain will sustain. This time pressure can make it more difficult to ask questions and get explanations

# FAST

Before you arrive at hospital, the paramedics will look to see whether you meet the **FAST** criteria. This means they will look at your:

- **Face**, to see whether it is lopsided or slack on one side.
- **Arm** strength and mobility.
- **Speech**, to see whether you slur or struggle to form words.

The T stands for **“Time”**, which is the crucial factor. The paramedics will get you to hospital as soon as possible if they think you have had a stroke.

FAST is also the main way for people to recognise a stroke in the people around them. If you see someone whose **face, arm,** and **speech** are suddenly showing symptoms of a stroke, it is **time** to call 999.

# What tests will I have?

When you reach hospital, you will need tests to see if you have had a stroke, what kind of stroke, and what treatment is appropriate.

A brain scan will usually be done immediately to see what has happened.

**Computed tomography (CT)** is an X-ray scan of the brain. It will show doctors whether your stroke was caused by a clot or a bleed. It is quicker than an MRI, but MRI gives a more detailed result. CT is only recommended if there is an alternative diagnosis to rule out, or if MRI is not available.

**Magnetic resonance imaging (MRI)** gives a detailed image of the brain. The scan is taken in a large, tunnel-shaped scanner. You may not be able to have this scan if you have a pacemaker or hip replacement, as these can be affected by the magnetic fields. Not all hospitals have access to an MRI scanner.

The brain scan is the most important test, but not the only one. Other tests you might have when you come into hospital include:

### **CT angiogram**

Computed tomography can be used to look into your blood vessels and see where the blockage is. This is vital for thrombectomy.

### **Carotid doppler scan**

An ultrasound scan of the arteries in your neck may show any narrowing or blockages which might have contributed to your stroke.

### **Electrocardiogram (ECG)**

This scan measures the rhythm of your heart and may show up heart problems.

### **Blood pressure check**

To check for high blood pressure, which is the biggest risk factor for stroke.

### **Oxygen saturation**

The levels of oxygen in your blood will be assessed using a monitor on your fingertip.

### **Blood tests**

Blood tests for cholesterol, blood sugar, or clot issues can help find the cause of stroke.

### **Chest X-ray or echocardiogram**

A chest X-ray or an echocardiogram (an ultrasound scan of your heart) can identify any underlying heart or breathing problems.



# Hyperacute treatment

If your stroke was caused by a blood clot blocking your circulation, and if the doctors think it is appropriate, there are some treatments you may receive in the first hours of your hospital stay.

These are called **hyperacute treatments**, because they need to be done as soon as possible.

**Thrombolysis** is a treatment where “clot-busting” medication will be given to you through a needle, usually in your arm. This medication will break down the blood clot in your brain, clearing the blockage and letting the blood flow back to your brain.

While the medication is in your system, your blood will not clot properly. This means you need to be monitored closely for any injuries or bleeding.

**Thrombectomy** is a procedure where the blood clot is physically removed. This is usually done by inserting a catheter (hollow tube) into an artery, usually in your groin. Using a small camera, the doctors can then guide the catheter through your system to remove the clot from the blood vessel.

This is only done in very serious cases. It is an invasive procedure and you may find that there is bruising, swelling, or (rarely) infection at the place where the catheter was put in. There is also a small risk of internal bleeding in very rare cases (four or five out of every hundred people).

Hyperacute treatment prevents more damage to your brain, but it does not heal any damage that has already happened. This is why time is crucial - the longer the blockage lasts, the worse your symptoms will become.

# The “stroke bundle”

Many people who have had a stroke will not be eligible for hyperacute treatment. In this case, the focus will be on providing you with four things, which together make up the “stroke bundle” of care:

## 1. A swallowing screen.

This is to check that you can swallow food, drink, and medication - it will be done as soon as possible, since it can reduce your risk of complications.

## 2. Brain imaging.

This will also be done as soon as possible after you reach hospital, to find out where your stroke is and help the team to plan the best way to manage it.

## 3. Medication.

If you have had an ischaemic stroke, you will be given **aspirin**. If you are unable to have aspirin, you might be given another **antiplatelet medication**. This makes it easier for your body to break down the blockage. You will need to keep taking these medications for at least two weeks.

If you have had a haemorrhagic stroke, you will not be given these medications. However, if you were taking anticoagulants (“blood thinners”) before your stroke, you will need to stop taking them, and may be given medication to reverse their effects.

## 4. Admission to the stroke unit.

As soon as possible, you will be moved to a specialist stroke unit. This allows you to have a range of specialist treatments and care.



# Other immediate treatments

Depending on the nature of your stroke, you might need other treatments soon after coming to hospital, either to manage the stroke itself, or to deal with its symptoms.

For example, you might need one or more of:

**Surgery** to remove an arterial blockage that cannot be removed by thrombectomy, or to deal with a haemorrhage. This is only needed if other treatments are ineffective.

**A feeding tube and/or intravenous fluids** to keep you fed and hydrated if you cannot swallow safely.

**Oxygen** given through a mask or nasal tube.

**Compression stockings** to prevent a clot forming in your legs.

**Blood pressure medication.**

# Assessment

You may also have other assessments, like:

## **Nutrition (food) assessment**

To see if you need extra fluids or supplements.

## **Motor assessment**

Checks for any difficulty moving your limbs, hands, and feet after your stroke.

## **Communication assessment**

You will be asked questions to check if your speech or understanding are affected.

## **Skin care assessment**

Your skin will be checked for any wounds and a plan made to avoid pressure sores.

## **Continence assessment**

Checks your bladder and bowel function.

## **Activities of Daily Living assessment**

Finds out which day-to-day tasks you might struggle with due to your symptoms.

# What to expect from the stroke unit

The stroke unit is usually a dedicated ward, but in small hospitals this may not be available. However, regardless of hospital, you should be treated by a specialist stroke team, who are trained to manage stroke and any common problems arising after a stroke.

This team will have access to information and support for you, and for your family or carers.

There will be continuous access to a consultant specialising in stroke treatment.

If necessary, the stroke unit can provide end of life treatment and support. This is only needed in a minority of cases.

The stroke unit will also have access to rehabilitation services, which are discussed later in this booklet.

# Who are the stroke team?

The stroke team is a range of stroke specialists who work together on your case. They will manage your care from the moment you enter the stroke unit, until you leave hospital. They will also make follow-up appointments with you after you go home.

Who is in the team varies from hospital to hospital, but it will include some or all of:

Specialist stroke consultants and neurologists.

- Stroke nurses.
- Occupational Therapists, physiotherapists.
- Speech and Language Therapists (SLTs).
- Psychologists, psychotherapists.
- Social workers.
- Dietitians.

# Symptoms after stroke

It is difficult to predict what symptoms a stroke will cause. The outcome depends on a lot of factors and is different for everyone.

Some common symptoms after a stroke include:

**Loss of mobility and/or strength.**

**Difficulty speaking, writing, and/or understanding** what is said to you.

**Severe fatigue.**

**Pain or discomfort.**

**Loss of control of your bladder or bowels.**

**Thinking** or **feeling emotions** differently.

Changes to your **vision, hearing,** or **other senses.**

**Menstrual changes** or **changes to fertility.**

# Will I get better?

The immediate symptoms of a stroke often take a few weeks to stabilise. While new symptoms may become apparent while you are recovering in hospital, other symptoms may start to improve.

It is hard to know what your recovery will look like. Most people find that they are able to either recover lost function or to find ways to manage their new limitations over time.

While you are in hospital, the stroke team will help you to understand and manage your symptoms. They may be able to offer you tools to manage changes in your abilities, or to give you exercises to improve your chances of recovering lost ability.

For more general information on stroke symptoms and management, see our Essential Guide on **Stroke**.

# Rehabilitation services

While you are in the care of the stroke unit, your team will work with you to develop a recovery plan.

What services you are offered will depend on:

- The symptoms of your stroke.
- Your priorities in recovering.
- What you are capable of.
- Any ongoing treatment you need.
- What specialists are on the team.

Rehabilitation takes a lot of work, and some aspects of it may be uncomfortable or difficult.

You have the right to refuse any of these services, but putting in the work now can make your life easier for years to come.

Common rehabilitation services in hospital might include:

- Occupational Therapy or physiotherapy.
- Speech and Language Therapy.
- Bladder and bowel rehabilitation.
- Pain management.
- Dietary management.
- Counselling.

You will only be offered services which the stroke team think will benefit you.

This booklet does not cover all these services in detail. More information can be found in other CHSS documents, including:

**Physical Activity**

**Communication after a Stroke**

**Bladder and Bowel after a Stroke**

**Chronic Pain**

## Occupational therapy and physiotherapy

Keeping yourself moving after a stroke is a crucial part of your recovery, and occupational therapy or physiotherapy can help with this. There are three main types of rehabilitation work which an occupational therapist or a physiotherapist might help with:

### Balance, walking, and mobility

Once your condition is stable and you are capable of it, a physiotherapist will work with you to help you move around safely.

This may mean you are helped to walk around the ward or on a treadmill. If that is not possible for you, you may be given exercises while lying down or sitting which will help to build strength and control in your lower body. If you need aids to walk (like a stick or walking frame) you should be supported to use them properly.

### Arm function

Losing strength or mobility in your arm can affect your life a lot. A physiotherapist can help you with exercises to build strength and mobility, setting goals for your recovery, and learning to use your affected arm safely.

### Activities of Daily Living (ADL)

ADL rehabilitation focuses on the daily tasks which may be affected by a stroke - things like washing, dressing yourself, cooking, housework, and leisure activities.

Your occupational therapist will discuss what activities you are used to doing regularly, and work with you on strategies to manage these activities. You may also be given exercises to build the strength and balance you need to do these tasks.



## **Speech and language therapy**

Many people find that their communication is damaged after a stroke. This could be because of damage to the parts of your brain that deal with language, or because you can no longer easily control the physical movements of speech. Changes to your vision or hearing can also affect your communication.

A speech and language therapist (SLT) can help you to develop ways to communicate. They may also be able to help with other issues with the muscles of your mouth and throat, such as dysphagia (swallowing problems).

## **Bladder and bowel rehabilitation**

If you are having trouble controlling your bladder and/or bowels, you will have a continence assessment with a specialist nurse, who will help you to set goals and use exercises to improve your continence.

## **Pain management**

If you are struggling with pain, you may have an assessment with a pain specialist, who will work with you on strategies to manage pain. This assessment might also highlight physical causes of pain, which other parts of your rehabilitation plan can address.

## **Diet management**

Your diet can be an important part of your recovery, especially if you are having trouble with chewing or swallowing. A dietitian can make sure that you continue to safely get enough nutrition and are not dehydrated.

## **Cognitive and psychological help**

A stroke can affect your thinking. Being in hospital, and experiencing the trauma of a stroke, can also impact your mental and emotional state. A counsellor or psychologist may be able to support you in managing these changes.

# Leaving hospital

There is no set length of time that you will stay in hospital. However, it is generally better to leave hospital as soon as you can safely be cared for at home (or in a home-like environment, such as supported housing).

You should be told well in advance when your team are planning to discharge you from hospital. They should work with you and your family or other people in your life, to make sure that everyone knows what is happening and what comes next.

You may be given a referral to support services after you go home, and follow-up appointments with your stroke team.

Leaving hospital is only the start of your recovery journey. You will continue your rehabilitation after you are discharged. For more information, see our companion booklet on **Stroke: Recovery at Home**.

Before leaving hospital, make sure that you (and anyone who will be supporting you at home) understand:

- Who will pick you up from the hospital, and when.
- Who to contact if you have questions or concerns after you leave hospital.
- What medications or treatments you will take at home, how often, and how to use them (including any side effects).
- Changes or warning signs to watch for.
- Whether you need to arrange a carer or other home support.
- What aids or adaptations you might need in your home.
- When you need to return to the hospital for a follow-up appointment.
- Where you can find more information about your symptoms and treatment.

# Advice and support

Besides your health team, friends and family, you can ask a hospital chaplain for emotional and spiritual support (regardless of your faith).

You can also find advice and support through:

## **Chest Heart and Stroke Scotland**

Call 0808 801 0899 to speak to one of our trained Advice Line practitioners.

**[www.chss.org.uk](http://www.chss.org.uk)**

**Email: [adviceline@chss.org.uk](mailto:adviceline@chss.org.uk)**

You can also find a wide range of information, including easy-read and non-English language versions, on our Resources Hub:

**[www.chss.org.uk/resources-hub](http://www.chss.org.uk/resources-hub)**

CHSS have stroke services throughout Scotland, including stroke nurses and the Community Health Support Service. Call the Advice Line to find out more about support services in your area.

## **NHS Inform**

The central information hub for NHS Scotland, which has lots of information on stroke as well as many other conditions.

**[www.nhsinform.scot](http://www.nhsinform.scot)**

## **Patient Advice and Support Scotland (PASS)**

A patients' rights organisation who can help you to know what to expect in hospital and what to do if you are unhappy with your care.

**[www.pass-scotland.org.uk](http://www.pass-scotland.org.uk)**

**Tel: 0800 917 2127**

## **Different Strokes**

A charity specialising in helping younger people who have had a stroke.

**[www.differentstrokes.co.uk](http://www.differentstrokes.co.uk)**

**Information line: 0345 130 7172**

**Email: [info@differentstrokes.co.uk](mailto:info@differentstrokes.co.uk)**



Our publications are available for free to anyone in Scotland who needs them. Go to [www.chss.org.uk/resources-hub](http://www.chss.org.uk/resources-hub) for all our resources, including other Essential Guides in this series.

For free, confidential advice and support from our **Advice Line nurses**, call: 0808 801 0899 (Mon-Fri 9.30am-4pm), text: NURSE to 66777 or email: [adviceline@chss.org.uk](mailto:adviceline@chss.org.uk).

Across Scotland, over one million people – that's one in five of us – are living with the effects of a chest, heart or stroke condition. We are here to help everyone who needs us. But we need your support to do this. Go to [www.chss.org.uk/supportus](http://www.chss.org.uk/supportus) to find out how you can help more people in Scotland.

**If you would like this resource in an alternative format, please contact our Advice Line nurses.**

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