

# **Stroke**

Information for patients, their carers, families and friends



Name:

# Introduction

- This handbook provides useful information about stroke. The aim is to help you understand and manage your health and wellbeing following a stroke.
- This is for you to keep.
- There are sections in the handbook where you may want to add your own notes or ask others to provide information.
- You may find it useful to share your handbook with people involved in your care.
- You can ask health and social care staff to record information in it whenever you feel it would help.
- You can bring it to any meetings and appointments and use it to help you prepare for these.
- It contains contact details of useful organisations that may be able to help you.

You can access an electronic version of this handbook on our UHD intranet (www.uhd.nhs.uk - search for stroke under 'our services'. If you are using a computer or tablet this will allow you to access the handbook in different ways (in different languages or spoken text - this is not currently available if using a phone). To access this version please scan the code below.



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# **About Stroke**

A stroke happens when there is a disruption to the blood flow to the brain. This means that blood and oxygen cannot reach a particular part of the brain, causing damage. When this happens, it causes symptoms telling us which part of the brain is not working normally.

Stroke symptoms that quickly and completely resolve (within 24 hours), are classified as a Transient Ischaemic Attack (TIA). If symptoms persist and last longer than 24 hours, it is classified as a stroke.

# **Types of Stroke**

There are two main types of stroke. These are described below – the boxes can be ticked to record what type of stroke you experienced.



#### **Ischaemic Stroke**



This happens due to a blockage in a blood vessel in the brain. About 70% of strokes are Ischaemic.



# **Haemorrhagic Stroke**



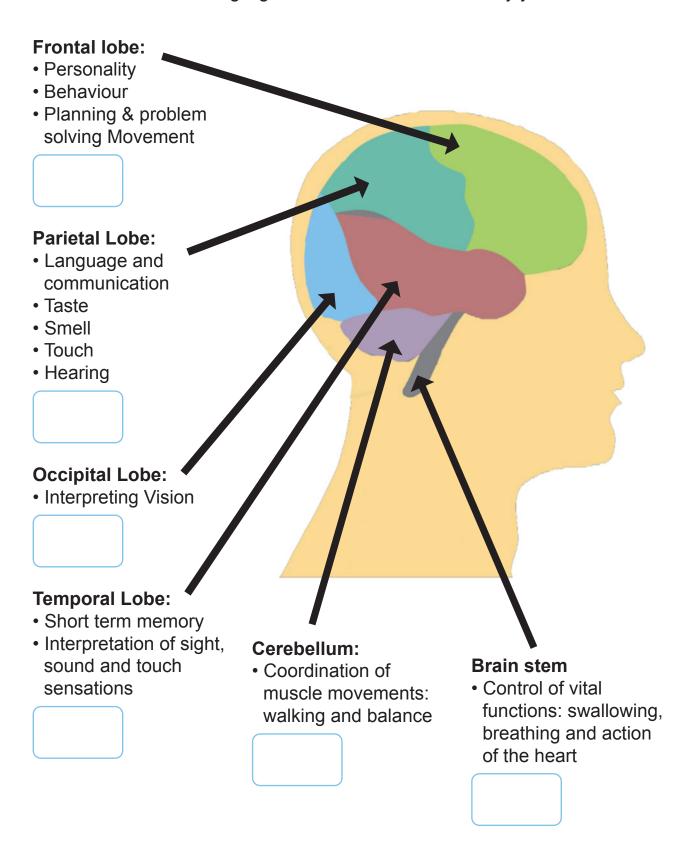
This happens when there is leakage and bleeding from a blood vessel inside the brain.

# **Details about my stroke & early treatment:**

# About the brain

The brain is divided into different areas, the lobes, the brain stem and cerebellum. Each of these areas is responsible for different functions.

The diagram below shows some of the different functions of these areas. The boxes can be used to highlight areas that were affected by your stroke.



# **Common Investigations**

# CT Brain Scan (computerised tomography):

Most people who are suspected of having a stroke will have this type of scan early on arrival at the hospital. This scan uses x-rays to take pictures of the brain.

CT brain scans are particularly useful to look for bleeding within the brain (haemorrhagic stroke).

However, it is very common for CT scans not to show evidence of ischaemic stroke (caused by a blood clot) when we scan people very early. It is important to do this test to help rule out or confirm haemorrhagic stroke and to ensure people get the right type of treatment from the beginning. It can sometimes help to rule out other causes of symptoms.

We often do not repeat CT scans if the symptoms you have are typical for stroke. If people are given clot-bursting treatment (thrombolysis) then CT scans are repeated after 24 hours as part of routine monitoring.

If the consultant overseeing your care thinks additional brain imaging may be useful, other types of scans may be carried out.

#### MRI scan:

This can be helpful when there is any uncertainty about the diagnosis or location of the stroke within the brain and when information may help us make decisions about your treatment. MRI scans use powerful magnets, so it is important to check people are suitable to have this type of scan. Some people (for example people with certain pacemakers) may not be suitable for this test.

# **CT or MRI Angiogram:**

This type of brain scan focuses on the blood vessels within the head and neck. The scan is used to look for signs of a clot sitting in the blood vessels, to look for damage, abnormalities or blockage within the blood vessels.

#### Other tests:

You may have other tests to help look for causes of stroke, including:

# **Electrocardiogram (ECG):**

This tells us about the electrical activity of the heart; the heart rate and rhythm that it beats in. In particular, following a stroke we are looking for signs of an irregular rhythm called Atrial Fibrillation (AF) which is known to increase risk of ischaemic stroke.

# **Ambulatory ECG monitor (72 hour tape):**

This is a continuous ECG carried out over 3 days using a small monitor that sticks to the front of your chest. These monitors look for a type of AF that comes and goes (called Paroxysmal AF). These monitors can be used in hospital or fitted for you to wear at home.

# **Carotid Doppler:**

This is an ultrasound scan of your carotid arteries (large blood vessels in the front of your neck which take the blood up to the eyes and front of the brain). The test looks for blockage or damage to the carotid arteries which may have contributed to your stroke. If a blockage is identified surgery may be considered in some circumstances.

# **Echocardiogram:**

This is an ultrasound which looks at the structure of your heart. This gives information about the size of the heart and its chambers, looking for damage to the heart valves and signs of clot sitting within the heart.

### **Blood tests:**

It is common to do a number of blood tests in hospital; this will include your cholesterol and blood sugar (as these are common stroke risk factors and the results will help us support you to manage them).

# Common medicines used in stroke care

# **Antiplatelets**

Antiplatelets work by preventing platelets in the blood from sticking together. These are commonly used in *Ischaemic Stroke* to slow the natural clotting process and reduce risk of clots forming that may go on to cause future stroke.

Commonly prescribed antiplatelets include *Clopidogrel, Aspirin* and *Ticagrelor*.

You may initially be given 300mg of aspirin or be prescribed a combination of *Aspirin and Clopidogrel* for a short period of time immediately following your stroke. For longer-term treatment you will usually be prescribed 75mg of Clopidogrel, this would continue indefinitely.

Clopidogrel should be taken at the same time every day. If you are unable to take Clopidogrel, you may be prescribed Aspirin or Ticagrelor.

The most common side effect of antiplatelet therapy is unwanted bleeding. More rarely nausea, vomiting, headache, dizziness and constipation can occur. Antiplatelets can irritate the lining of the stomach and should be taken with food. It is important you speak to your doctor if you experience any side effects.

## **Anticoagulants**

Anticoagulants are a different type of blood thinning medication and are used to help reduce risk of Ischaemic stroke for people who have an irregular heart rhythm called atrial fibrillation (AF). Commonly prescribed anticoagulation medicines are *Warfarin* (a vitamin K antagonist - VKA), and *Dabigatran*, *Rivaroxaban*, *Edoxaban and Apixaban* (known as Direct Oral Anticoagulants (DOACs)).

People taking these medications will require intermittent blood tests (every few months) to check their kidney function or in the case of those taking Warfarin (more regular blood tests). This helps to calculate the dose of treatment.

People who take anticoagulants are issued with an alert card which they should carry in case they experience any health problems. This can help quickly identify they are taking this treatment.

## **Antihypertensives**

Antihypertensives are a group of medicines which can be used to help lower blood pressure. Different antihypertensives work in different ways and often a combination of more than one blood pressure tablet is most effective. Blood pressure medication is started in low doses and can be increased as needed over time. It is most important that your blood pressure is checked regularly, as high blood pressure is the most common stroke risk factor. By lowering blood pressure, we lower the risk of future stroke.

# Lipid regulators and statins

Following an Ischaemic Stroke statins are commonly prescribed to help reduce your risk of having another stroke or a heart attack. They do this by reducing your cholesterol level, as this is another common stroke risk factor. Research has shown that statins are beneficial following an ischaemic stroke, even for those with only slightly elevated cholesterol.

It is thought that statins may have other beneficial effects on the blood vessels themselves, slowing down the progression of fatty deposits and stabilising any plaque build-up. Commonly used Statins include: Atorvastatin, Rosuvastatin. Sometimes other complimentary treatments are used to boast the effect of statins such as Ezetimibe.

# **About your medication**

Following a stroke your medication may change (although not everyone will require new medication). We will discuss which medication is most appropriate for you and any changes to your usual medications.

When you leave the hospital, you will receive a month's supply of your up-todate medication along with a list outlining what to take and when.

These are some useful things to consider regarding your medication:

- It is important that you take medication as prescribed, following the prescriber's instructions.
- Always read the label.
- Keep all medicines in a safe place, out of reach of children.
- Never take medicines from unlabelled containers.
- Never share prescribed medication with others.
- Never transfer medication from one container to another.
- Do not stop taking your medication without discussing with your doctor first.
- We advise that you or your carer contact your GP surgery to arrange for a repeat prescription as soon as you return home.
   Please remember that your GP surgery will probably need up to 72 hours' notice to provide a repeat prescription.

You may also be advised to contact your GP/Community Pharmacist to assess your suitability for a medication box or blister pack to help you manage your medication at home. These boxes/packs are prepared by the pharmacy and contain the drugs you need to take every day for a week.

You may find it helpful to bring a list of your medications to any appointments.

# The Effects of Stroke

The effects of stroke depend on which part of the brain has been affected and how much damage has occurred. No two people are affected by stroke in the same way. As a result, recovery from stroke varies from person to person.

Rehabilitation focuses on supporting people to regain as much independence as possible, and to live well with any longer term impact of their stroke. Rehabilitation begins when you are admitted to hospital and continues after you have left.

The following section gives a brief overview of the types of difficulties that someone with a stroke may have. You can ask a member of the stroke team to highlight which ones are relevant to you, or to provide more information.

We use a standardised measure called the National Institute for Health Stroke Scale (NIHSS) for everyone admitted with Stroke. This categorises the severity of a stroke by measuring the degree of disability or dependence, based on physical examination. The score can help inform care and treatment and it can be repeated to show change over time.

0-5 - minor stroke 5-15 - moderate stroke 16-20 - moderate/severe stroke 21-42 - severe stroke.

# **Physical**

Your ability to move after a stroke can be affected in different ways. Common problems can include:

- weakness of one side of the body
- difficulty maintaining normal posture
- tightness and stiffness in muscles (called increased tone or spasticity)
- reduced balance
- impaired co-ordination and dexterity

Where possible, repeated use of the affected part(s) of your body is important for recovery and re-training the brain. Your therapist will advise you on appropriate exercises, and also how to best care for and position your body.

## Sensory

Stroke can also affect your senses. It can cause reduced, abnormal or loss of sensation. This can include altered sensation to touch, pain or temperature (such as pins and needles or numbness).

Sensory problems can impact on movement and awareness of your body (sensory inattention), sometimes occurring on one side more than the other.

#### Visual

Stroke can affect vision in a number of different ways. How you are affected depends on where the stroke occurred in the brain. Common types of visual problem include:

#### Visual field loss

This is when you are unable to see objects in one part of your visual field (usually your peripheral vision). The term **Hemianopia** is used when people are unable to see half of their visual field. Often in stroke this affects both eyes (for example the right half of the visual field in each eye is affected).

#### Visual neglect (inattention)

This occurs when your brain is not able to fully interpret what the eye sees. As a result, it causes you to ignore objects in a certain area of vision.

• Other problems such as double vision, tunnel vision, hallucinations and failure to recognise common objects (agnosia) can also occur.

# Cognitive and perceptual

Stroke can affect thought processes and understanding, including:

**Concentration** This could be due to the effect of both the stroke and tiredness related to stroke recovery. It may be helpful to set yourself little goals you hope to achieve, or to set short time limits for any activities you hope to perform. It helps to break down the task into smaller, more manageable steps.

**Memory** problems are common after stroke e.g. not remembering facts from the recent and distant past, as well as forgetting how to do certain tasks. It may be useful to try and establish a regular routine for your daily activities. Try writing things down - use a diary or place reminders in prominent places, so that you don't forget important appointments.

Awareness of your own body e.g. where your arm is in relation to objects. You may bump into things, especially on the affected side.

**Dyspraxia** affects planning and ordering of tasks – this may be related to movement of the body or completing tasks.

Recognising and using everyday objects people may have forgotten how to use objects or find they are less coordinated.

Planning, organising and multi-tasking more complex tasks

#### **Communication Disorders**

#### Aphasia/Dysphasia

Both of these terms are used to describe a language disorder. You may have difficulty finding the right words, or may struggle to understand what others are saying to you. Listening and talking, reading, writing and using numbers can all be affected in different ways.

There are many ways to help someone with aphasia and these can be discussed with the Speech and Language Therapist. It is often helpful to give the person time and a quiet environment. Pictures, photos, gestures, drawing and writing can be used to support speech and understanding.

#### **Dysarthria**

Dysarthria is used to describe slurred speech, which may be difficult for others to understand. Weak, stiff or uncoordinated muscles around the mouth and facial area can result in slurring of words.

# **Swallowing Problems**

#### **Dysphagia**

This is where the swallow reflex is affected by stroke. Coughing or choking when eating or drinking can be warning signs of swallowing difficulties. Everyone admitted with stroke symptoms is screened for swallow difficulties before being offered anything to eat or drink.

Food may need to be modified to different consistencies. Thickener may be added to drinks to make them easier to swallow safely. A Speech and Language Therapist may advise consistencies that are safer to swallow. If the problem is severe, you may need to receive food via a tube in your nose (nasogastric tube) or directly into your stomach (PEG tube).

#### Pain after stroke

There are many reasons why people experience pain or discomfort following a stroke. In most cases, pain results from reduced or altered movement. Less commonly, pain can be a direct consequence of stroke – this is called central post-stroke pain (CPSP). People with CPSP often describe the pain as icy/burning, throbbing or shooting pain. Medications and other therapies or strategies can be used to help.

#### **Continence**

It is common to experience problems regulating and controlling your bowels and bladder after a stroke. This may be due to damage in the area of the brain which controls the bowels and bladder, or due to lack of mobility. Constipation is common and may be avoided by drinking at least 8 glasses of fluid each day and increasing your intake of fibre in the form of fruit, vegetables, cereals and whole meal bread.

Catheters may be used in the short term if you are struggling to pass urine. Some people may need to go home with a catheter and district nurses will review at home.

# **Tiredness and Fatigue**

Tiredness is very common after a stroke and can have a significant impact on wellbeing. Your brain is working very hard to compensate for the damage caused by the stroke, and this tiredness is normal. A key part of management is learning to listen to your body, pace yourself and plan how you use your energy.

A number of factors can impact on tiredness including: quality of sleep and some medication. Older people who experience stroke and those who felt tired prior to having a stroke may notice this more.

Fatigue, a common symptom after stroke or TIA, is different from normal tiredness, as it doesn't seem to get better with rest. Fatigue can show itself in different ways: lack of energy or strength, feeling constantly tired physically and mentally.

Sleep is important for your recovery. Ideally you will get the right balance between rest and activity. In hospital eye masks, earplugs and headphones are available on the ward should you need them.

## **Emotional changes**

Emotional changes are very common after stroke, with most people noticing changes.

#### **Adjustment after Stroke**

Adjustment is the process of understanding, coming to terms with and hopefully learning to accept the effects of stroke or any other life changing event. People who have experienced a stroke often describe a period of adjustment like the stages experienced during grief. Initially, people may feel shocked, confused and anxious after finding out that they have had a stroke. For most people, these feelings don't tend to last too long. They may then begin to feel hopeful about their recovery whilst participating in rehabilitation. However, it is normal to experience emotions such as anger, grief, despair, frustration and depression during recovery journey. Most people start feeling more able to adjust to their new life after stroke. However, some people may have emotional changes above and beyond those associated with adjustment, which is explored below.

#### **Emotional Lability**

Emotional lability is when you have an unprompted and uncontrollable tendency to cry or laugh at things whether it seems appropriate or not.

Emotional lability can be caused by structural damage to certain parts of the brain because of the stroke. It often settles over time but if not, antidepressant medication can help. Some people find distraction helpful (e.g. counting backwards from 10, naming things).

#### **Depression and anxiety**

Depression and anxiety are common after stroke in all age groups. It is estimated that around half of those who have a stroke experience depression at some point within the first year. Mood changes can begin soon after the stroke or many years later, ranging from mild to severe.

It can be related to physical damage to the parts of the brain that control emotions, perception and thoughts. Depression and anxiety may also stem from a variety of emotional reactions to the stroke itself, such as the effect of any disability and the impact on your life. For many, it results from a combination of these.

#### Symptoms of depression can include:

- Low mood
- · Loss of interest in activities you previously enjoyed
- · Feelings of guilt, worthlessness, hopelessness and low self-esteem
- · Suicidal ideas or other morbid thoughts
- · Change in appetite and sleep
- Difficulties in thinking and concentration
- Increased agitation or anxiety
- · Low energy or fatigue

\*(The symptoms highlighted in green may also be symptoms of stroke and do not necessarily mean you are depressed)

Depression and anxiety can delay your recovery. Speak to the stroke team (or your GP) about any symptoms you have noticed so that support can be discussed. Treatment may include talking therapies and/or taking medications. Maintaining social connections, routines and physical activity can help.

# Support Services for depression and anxiety:

The NHS offers free talking therapies to support people to manage depression and anxiety. You can refer yourself directly (details below) or be referred by a healthcare professional. Steps2Wellbeing offers a 7-week "Wellbeing with a stroke" virtual group. This group can help you develop coping strategies to manage symptoms of low mood, anxiety, and frustration post-stroke.

Dorset Talking Therapies service: Steps2Wellbeing



Website: www.steps2wellbeing.co.uk



Tel: 0800 484 0500

Hampshire Talking Therapies service: iTalk



Website: www.italk.org.uk/



Tel: 023 8038 3920

# **Behavioural changes**

Some people who have had a stroke show some change in personality or behaviour. They may become less sociable, more introverted, angry or aggressive.

If you do have problems with behavioural and personality changes which are causing problems with your relationships, you may be able to get help from a number of professionals, for example clinical psychology, psychiatry or counselling. Talk to your GP or a member of the team for a referral.

# Relationships and Sex

To return home after a period in hospital requires adjustment for all concerned. The stroke can affect all members of the family, try to allow yourselves time to adjust and talk about how you are feeling.

Physical and emotional issues can be difficult to deal with after a stroke. As you recover, you may begin to consider starting or renewing sexual relationships. A common fear following a stroke is that having sex will bring on another stroke. There is no reason why after a couple of weeks you cannot begin to have sex if you feel ready to do so. Medical evidence supports this.

Medication to treat blood pressure may cause men to have difficulty getting an erection, and this may be further enhanced by fatigue and anxiety. Doctors may advise a period of time off medications such as Viagra. Physical obstacles such as having a catheter may also cause problems, as can physical disabilities such as a weakness down one side of the body.

You can express your feelings in many different ways, through talking but also with body language and physical contact such as kissing and cuddling. Taking the first step may be the biggest hurdle to overcome your anxiety and shyness about resuming sexual contact.

# Neuroplasticity: rewiring and recovery

Your brain is amazing! It has the ability to re-wire itself, allowing you to improve skills such as walking, talking and using your affected arm following a stroke. This process is known as neuroplasticity. It begins after a stroke occurs, and it can continue for years.

# How does it happen?



 Signals go from one cell to another forming a connection in the brain.



2. When a stroke kills brain cells, it damages the connection.



3. Brain cells can sometimes form new connections, and start sending signals again.

Brain cells send messages around the brain. A stroke damages some of the connections inside the brain, and between the brain and the body.

When you do rehabilitation activities, it encourages the brain to start making new connections in the healthy parts of the brain. Building up those connections makes your brain better at controlling your body, and lets you do more things you want to do.

You can help this process by practising rehabilitation activities. There is no time limit on neuroplasticity, and it doesn't only happen during therapy. Every time you take an extra step, say a new word, or do a hand exercise, it helps the brain make new connections.

# What does this mean for recovery?

Every stroke is different. Not everyone can make a complete recovery, but many people make progress with their individual goals like getting stronger, more mobile or more independent. With the right support, many people can gain confidence, and find new ways of doing things.

# **Useful Information & Support**

#### Financial help and support

Where the effects of stroke are long-lasting, you may be able to claim financial benefits to help with the costs of sickness and disability. For the most up to date information, see www.gov.uk department for work and pensions or contact your local job centre.

There are a number of organisations that can help you with information about benefits. The Citizens Advice Bureau will be able to signpost you to relevant organisations in your area. You may also be able to request a visit from your local council's Welfare Benefits Officer. Ask a member of the team if this service is available in your area.

#### **Employment and Support Allowance (ESA)**

If you cannot work in the longer term, or are not entitled to SSP (Statutory Sick Pay), you may be able to claim Employment and Support Allowance (previously called Incapacity Benefit). Personalised support will be available to help you return to work when you are able to.

#### **Personal Independence Payments (PIP)**

Personal Independence Payment (PIP) helps with some of the extra costs caused by long-term ill-health or a disability if you're aged 16 to 64.

The PIP rate depends on how your condition affects you, not the condition itself. You'll need an assessment to work out the level of help you get. Your rate will be regularly reassessed to make sure you're getting the right support.

#### **Attendance Allowance (AA)**

This is a weekly cash benefit payable at two different rates for people aged 65 and over who need help with personal care. It is not means- tested so can be claimed whether you are working or not, and may be paid at the same time as other benefits.

#### Carer's Allowance (CA)

If the person you care for is receiving either the lower or higher rate of Attendance Allowance or the middle or higher component of Disability Living Allowance (or waiting for a decision about these benefits) you may be able to claim Carer's Allowance.

#### **Advice for Carers**

Sometimes following a stroke family and friends can take on responsibilities as a carer. Not everybody who provides this support recognises themselves as a carer. However, it is important that carers feel supported too, with their needs and health given equal priority.

As a carer you are entitled to an assessment of your needs, this may lead to additional support to reduce the risk of carer strain. It is often helpful to talk about your carer role, how you feel you are managing and any concerns you may have.

To arrange a carers assessment talk to a health professional or contact your local social services helpdesk to request a carers assessment. This would be completed out of hospital when longer term needs are often better understood.

#### The Stroke Association

The Stroke Association is a national charity for people with stroke. You can access the Stroke Association in a number of ways:



Ask the Stroke team to refer to the Stroke Association



Call the Stroke Helpline on 0303 303 3100 (Monday to Friday 9am to 5pm or Saturday 10am-1pm)



Email helpline@stroke.org.uk

- · My Stroke Guide is a useful resource www.mystrokeguide.org.uk
- Stroke Association factsheets are available to take away from the Stroke Unit or available electronically on their website www.stroke.org.uk/our-publications
- Visit the Stroke Association online activities Hub for a programme of free virtual groups and activities
   www.stroke.org.uk/webform/online-stroke-activities-hub
- Here for You is an online Stroke Association befriending service to meet people with experience of stroke for peer support

# **Driving after Stroke or TIA**

You **must not drive** for **at least one month** following a stroke or TIA. This may be longer depending on your symptoms.

There are many factors that may affect your ability to drive after a stroke such as vision, thinking skills, concentration and memory, as well as, your physical ability. By law, you are required to inform the DVLA if you have any on-going limb weakness, visual impairment, or problems with co-ordination, memory or understanding. You should also notify your vehicle insurance company, even if your symptoms have completely resolved.

If you experienced any seizures after the first 24 hours following your stroke or required any brain surgery you much also notify the DVLA. You must therefore be deemed fit to drive by a healthcare professional after the initial month off the road.

If after a month you are **not** considered well enough to drive, the DVLA must be notified. Once the DVLA has been notified, you are not allowed to drive until an assessment is made that allows you to return to driving.

If you drive as part of your job or hold a license for non-standard vehicles (e.g. Large Goods Vehicle or Passenger Carrying Vehicle) then you must tell the DVLA immediately that you have had a stroke, and you are not allowed to drive this type of vehicle for a year.

#### For more information:



Visit the DVLA website:

www.gov.uk/health-conditions-and-driving



Telephone the DVLA: 0300 790 6806.

# **Secondary Prevention**

If you have had a stroke, your risk of further stroke is higher (compared to someone who has never had a stroke). However, if we manage stroke risk factors, we can proactively reduce that risk. This process of addressing risk factors following a stroke is called secondary prevention.

#### Non Modifiable Risk Factors

Some risk factors for stroke <u>cannot be controlled</u>. However, knowing what they are is still important in determining your overall risk for stroke:

- Age a stroke can happen to anyone, at any time and any age. However, stroke risk increases as you get older.
- Gender women experience more strokes each year than men; mainly because women live for longer. However, stroke incidence is higher in men at younger ages.
- Race and Ethnicity stroke is more common in people of African-Caribbean and Asian descent when compared to other ethnic groups. This is linked to groups who are more prone to high blood pressure, diabetes and obesity.
- Family History your stroke risk increases if a family member (parent, grandparent or sibling) has had a stroke or heart attack at an early age.

#### **Modifiable Risk Factors**

These are risk factors that <u>can be controlled</u> with medications and/or lifestyle changes:

- High blood pressure this is the most common risk factor for stroke.
   Lowering blood pressure through healthy eating, physical activity and medications significantly reduces the risk of stroke.
- Atrial Fibrillation having this type of irregular heartbeat increases stroke
  risk as it can cause clots to form in the heart which can then travel to the
  brain, causing stroke. Medications (anticoagulation) can be used to thin the
  blood, prevent the formation of clots and reduce stroke risk.
- High cholesterol cholesterol is the fatty substance in the blood. High
  cholesterol can block normal blood flow through the arteries, which in turn
  can cause blood clots and stroke. Medications (statins) have been shown
  to reduce risk of further stroke, even when cholesterol is only slightly
  elevated.
- Diabetes people with diabetes are more likely to have a stroke than people who don't. Managing diabetes effectively is important for stroke prevention.

# Lifestyle Risk Factors (modifiable)

Lifestyle risk factors are habits or behaviours that people choose to engage in. If changed, they can reduce the risk of stroke.

- **Diet** a healthy diet (low in saturated fats, sugars and salt) can help to reduce the risk of high blood pressure, high cholesterol and diabetes, in turn reducing stroke risk.
- Physical Activity regular exercise will improve your overall fitness and reduce the risk for chronic diseases, including stroke.
- **Smoking** smoking increases clot formation, thickens blood and increases plaque build-up in the arteries. It doubles the risk of stroke, when compared to a non-smoker.
- Alcohol drinking too much alcohol can increase blood pressure and the risk of stroke. Aim to drink within recommended guidance.

If you would like more information on any of these risk factors, speak to a member of the healthcare team.

# My risk factors

You may wish to take time talking with a member of the stroke team about your stroke risk factors. The benefit of this is that awareness can help you to identify proactive changes you can make to reduce your risk.

Ask a member of the team if you would like them to work through this with you.

My stroke risk factors are:
Changes I can make to reduce my risk are:

# My blood pressure and cholesterol

Monitoring blood pressure is important after any stroke to help reduce the risk of further events. This can be done at home using your own monitor or via a health care professional. This space is for you to record your blood pressure readings as it can be helpful to look at trends over time, rather than one-off results.

My target blood pressure is:/mmHg							
Blood pressu	ıre moni	toring:					
Date:							
Blood Pressure:							
Date:							
Blood Pressure:							
Cholesterol monitoring: Cholesterol moves through the body on proteins called lipoproteins. Lowdensity lipoprotein (LDL) is often referred to as 'bad' cholesterol. High levels of LDL increase the risk for stroke, lowering LDL can therefore lower risk.  My target cholesterol is: LDL less than 1.8 mmol/L							
Date:							
LDL:							

# **About you**

- The following section is for you or your family to write information about you and the things that are important to you.
- It is up to you whether you wish to complete this and how much information you want to include.
- This can help us to get to know you better and to think about how we can work with you to shape rehabilitation and support to best meet your needs.
- Some people have found this helpful after a stroke, particularly when meeting new staff and professionals in the hospital and community.
- You may also like to include information on your dislikes and what is important to you for the people supporting you to understand.



# **About you**

Name:	Relationship to you:
Things that are important to you	
(this may be routines, interests, and thi	ings you value)

Places you have lived or visited (include holidays, favourite local places)
Your daily routine (what you do each day, where you go regularly, TV programmes you watch, newspapers and books you read)

Things	you dislike or topics to av	oid		
Your fo	ood preferences			
Likes		Dislikes		
Youw	ould describe yourself as:			
Talkat			A worrier	
Outgo			Proud	
			Reserved	
A joke				
	my own company		Quiet	
Enjoy	being with other people		Other (please state)	

How to best support y	OU:		
Things you would like	to focus on in your str	oke recovery:	
Your goal:	What you will do:	What others will do:	Achieved?
Your goal:	What you will do:	What others will do:	Achieved?

# Questions you would like to ask:

Sometimes it can be helpful to think about any questions you have before any appointments with the stroke. Use this space to make notes of questions you would like to discuss.

Your Questions:	Notes and answers:

# The Stroke Multidisciplinary Team

These are the core members of the Multi-Disciplinary Team that will help you following your stroke. You may not need to see all the team, but they work together to provide assessment, diagnosis and treatment following your stroke.

> The medical team is responsible for

the overall care

of the patient,

supporting

diagnosis of

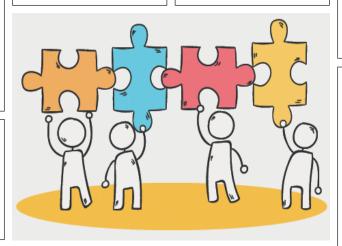
stroke and

aftercare.

#### The physiotherapist

aims to reeducate movement, sensation and balance in order to promote independence.

The dietician assesses nutritional requirements after stroke.



**Nurses** provide 24 hour inpatient care: administer treatments and carry out regular monitoring.

The **speech** and language therapist supports people with communication and swallowing difficulties.

#### A pharmacist

will assess vour recent medication history, ensuring that the medications prescribed are right for you.

The occupational therapist's (OT) role is to assess daily activities such as personal care, kitchen tasks and managing in the home environment. They support both physical and

cognitive (thinking) difficulties.

The clinical neuropsychologist

sees people who are having problems with their thinking, emotions or behaviour after a stroke.

#### **Orthoptists**

assess and advise on strategies to help with visual problems.

### **Health Care Assistants**

assist with inpatient care and support needs (such as personal care, toileting and assistance with meals).

#### **Therapy Assistants**

work closely with physiotherapists, OTs and speech and language therapists to support people with rehabilitation activities in hospital or home.

# **Useful Contact Numbers:**

If you need to reach the Stroke team to discuss your care, these are the easiest routes to reach us on:



#### **Stroke Ward at Bournemouth Hospital**

(for inpatient enquiries)

Tel: 0300 019 4001/2



#### **Stroke Secretaries**

(for all outpatient enquiries following discharge)

Tel: 0300 019 6406/9



#### Stroke Early Supported Discharge (ESD) Team

(for enquiries related to ESD support)

Tel: 0300 019 4473



You can access an electronic version of this handbook on our UHD intranet (www.uhd.nhs.uk - search for stroke under 'our services'. If you are using a computer or tablet this will allow you to access the handbook in different ways (in different languages or spoken text - this is not currently available if using a phone). To access this version please scan the code below.



# The Stroke Unit at the Royal Bournemouth Hospital

#### **Visiting**

Visitors are welcome between the hours 11-8pm, with exceptions by agreement. Protected meal times are between 12-1pm and 5-6pm, ideally avoid these times unless you are the patient's carer.

#### **Support**

We have multi-faith chaplains who are happy to talk in confidence to any patients. Please ask a member of staff if you would like to have a visit.

#### Stroke admission

On admission you will likely be admitted to the hyper acute bay for assessment purposes, and once stable you may then be moved to the less acute area of the unit. The stroke service extends across other wards as required. During your admission you may move beds several times depending on clinical needs.

#### The team caring for you

The stroke consultants carry out a ward round twice a day for all new admissions. The rest of the medical team is present throughout normal working hours.

If you would like a medical update please first liaise with the nurse who is looking after you.

#### **Discharge**

Upon discharge you will be given a copy of your discharge summary which has the reason for admission and results of investigations as well as details of your new medications and actions to be followed up by the GP. A copy of this discharge summary will also be sent to your GP. After discharge a follow up appointment will be offered with a member of the stroke team.

For those identified as needing continued rehabilitation or care in the community, there are therapy and care teams who can provide this at home. The ward therapist will assess clinical need and refer as appropriate.

#### Feedback/Raising concerns

If you have any concerns or questions about your care or treatment please speak to a member of the team looking after you. You can request to speak to the ward sister. If you have on-going concerns you can contact the Patient Advice and Liaison service (PALS) on 0300 019 4886.

We welcome your views on the quality of your care. Please give any written or verbal feedback to the ward staff.

# **Glossary**

An explanation of some words you may hear regarding stroke.

#### A

Atrial Fibrillation (AF)	A heart condition that causes an irregular and often abnormally fast heart rate.
Antihypertensive	Medicine to lower blood pressure.
Anticoagulation	This is a process of thinning the blood so that it is less likely to clot and cause a stroke.
Anti-platelet	Medicine to stop the platelets in the blood sticking to one another and forming clots.
Aphasia	Problems with understanding, talking, reading and writing.
Aspiration	Can be caused by an unsafe swallow, where fluid or food enters the lungs. May lead to lung infection or pneumonia.
Ataxia	Uncoordinated movement that can affect arm and leg movements. It can cause unsteady walking.

#### B

Blood Pressure	A typical blood pressure is written as 120/70. The top figure is when the heart muscle contracts and the bottom figure is when the heart muscle is at rest.
Brain Stem	The stem-like part at the base of the brain, which links the two halves of the brain to the spinal cord. It contains some vital nerve cells involved with breathing and many other important functions including controlling the heart and eyes.

#### C

Care	A description of the 'journey' through the health services. Each care pathway is based on the patient's individual needs.
Care Package	Arranged by the ward team if you need support at home. This may involve carers coming to your home to assist with personal care, meals and medication.

Carotid artery	There are two carotid arteries, one on each side of the neck. They carry blood from the heart to the eyes and head, notable to the face and front of the brain. Disease of a carotid artery is a common cause of stroke.
Carotid Endarterectomy	Surgical operation to remove obstructions (usually fatty tissue or a blood clot) from inside an artery.
Cerebrum	The largest part of the brain, made up of the left and right hemispheres.
Cholesterol	A fatty substance made in the liver and also present in some foods, which is vital to the body's normal functioning. If present in excess, it can be deposited in the wall of the arteries to produce atheroma (fatty lumps or plaques).
CT Scan	Computerised Tomography – a scan of the brain which can show the type of stroke that has occurred and its location in the brain.
Cognition	This is a way to describe a person's thinking processes including concentration, memory and planning skills.
Cerebrovascular accident (CVA)	Another name for stroke.

#### D

Deep Vein Thrombosis (DVT)	This is a blood clot, usually in the leg. The signs of a DVT are pain, redness, tightness and swelling in the leg. The lower leg often feels hot to touch.
Dysarthria	Weakness of muscles involved in speech resulting in slurred speech.
Dysphagia	Swallowing problems.
Dyspraxia	Difficulty coordinating the force, direction and speed of movements. Can affect hand, arm and speech function.

#### E

Electrocardiogram (ECG)	A simple heart test, which measures the electrical activity and rhythm of the heart.
<b>Emotional Lability</b>	The inability to control emotions e.g., laughing or crying for no apparent reason.
Echocardiogram	An ultrasound scan of the heart which shows blood flow.

#### G

	The process of identifying tasks which are important to you.
Goal setting	Goals are often broken down into stages and members of the team will work with you to help you achieve your goals.

# H

Hemorrhagic stroke	A stroke caused by a burst blood vessel bleeding into the brain (intracerebral haemorrhage).
Hemianopia	Loss of one half of the normal field of vision. Homonymous hemianopia is the loss of the same half (either left or right) of the visual field in both eyes.
Hemiplegia	Total loss of movement and/or sensation of one side of the body.
Hemiparesis	Partial loss of movement and/or sensation of one side of the body.
Hypertension	High blood pressure.
Hypotension	Low blood pressure.

Ischaemia	An interruption of the blood supply to a part of the body, causing cell death.
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#### L

Lacunar Stroke	This type of stroke is due to individual clots affecting small areas of the brain resulting in loss of movement and/or sensation.
Low Density Lipoprotein (LDL)	Often referred to as bad cholesterol. If elevated this can increase risk of Ischaemic stroke.

# M

MRI Scan (Magnetic Resonance Imaging)	An MRI scan gives a cross-sectional image of soft tissues and gives a more detailed picture of the brain.
Multi-Disciplinary Team (MDT)	A team of professionals working together to help you in your recovery.
Muscle Tone	This refers to the amount of tension in the muscles. After a stroke muscles can sometime become hypertonic i.e. very tense or stiff (sometimes called spasticity), or hypotonic, i.e. very floppy or flaccid.

#### P

Partial Anterior Circulation Stroke (PACS)	This type of stroke results in loss of movement/sensation in upper and/or lower limbs and may include cognitive (thinking), speech and language or visual difficulties.
Posterior Circulation Stroke (POCS)	A stroke affecting the posterior (rear) artery of the brain, which can result in visual and balance difficulties.
PEG (Percutaneous endoscopic gastrostomy)	Feeding Tube inserted into the stomach as a method of feeding when nutritional needs cannot be met orally.

# R

Risk factors	The possible underlying causes such as smoking, high blood pressure, family history of stroke, weight, alcohol excess, ethnicity, and diabetes.
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#### S

Statins	Medication used to lower cholesterol levels.
Stenosis	A narrowing (often used in reference to an artery)
Subarachnoid Haemorrhage	Bleeding between the brain and one of the covering membranes, often due to a leaking aneurysm (bulge in the wall of a blood vessel).

#### T

Thrombolysis	The use of drugs to break up a blood clot. A treatment which can be given to a minority of patients in the very acute state if ischaemic stroke.
Thrombosis	The formation of a blood clot.
Thrombectomy	Treatment to remove a clot early after some ischaemic strokes
Trans Oesophageal Echocardiogram	A technique using ultrasound to monitor and visualise the functions of the heart.
Total Anterior Circulation Stroke (TACS)	A blockage of the blood vessels supplying the front (anterior) part of the brain. All the areas supplied by this blood supply are affected.
Transient Ischaemic Attack (TIA)	Describes a stroke where symptoms quickly and completely resolve (within 24 hours)



Videofluoroscopy	X-ray of the mouth and throat to assess the swallowing using liquids of different consistencies.
Visual Neglect	Where a person is unable to see on the affected side.

This pack is funded through generous donations to Bournemouth Hospital Charity. Thank you to everyone who has supported the stroke unit through donations and fundraisers. Thanks to you the Charity can continue to support its staff and patients, such as providing insightful new information pamphlets for patients and their families, or fundraising for state-of-the-art technology to assist rehabilitation.

Bournemouth Hospital Charity aims to enhance the care and treatment of patients accessing NHS services at the Royal Bournemouth and Christchurch Hospitals by fundraising to provide additional facilities, state of the art equipment and supporting NHS staff development to enable the Trust to provide the excellent care we would expect for our own families.

We aim to make a difference to every patient and every condition that is treated at our hospitals above and beyond that which can be provided through NHS funding.

Your support can help us to:

- Enhance patient care and comfort
- Provide state of the art and extra equipment and facilities
- Invest in our experienced staff to support improved patient health and wellbeing

Through supporting the Charity you can help your local hospitals speed up patient treatment, reduce patient anxiety, aid quicker recovery, provide less intrusive treatment and improve the health and wellbeing of both patients and staff.

You can help in a number of ways:

- Fundraise for us by taking on a challenge or participating in one of our events throughout the year and get your family and friends to sponsor you
- Make a one-off donation or become a regular giver
- Consider making us your Charity of the Year if you are part of a local organisation or run alocal company

Thank you for supporting your local hospital.

