This trial is funded by The Stroke Association
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Thank you for reading this booklet

Recovery after Stroke
An information booklet for participants in the ‘usual care’ group of the ‘Reach to Grasp’ study.

Images on pages 3, 4, 5 and 6 of the booklet courtesy of Jo Hutton and re-printed with kind permission.
About this booklet

You have agreed to take part in a pilot study of home based reach to grasp training for people after stroke. You have been allocated to the ‘intervention’ group.

This booklet explains how recovery occurs after stroke and how you can try to guide this recovery.

The booklet will cover:

What is a stroke?

Recovery after a stroke

How the brain can ‘re-wire’

Why practice is important

Study participation

Bristol Area Stroke Foundation (BASF)

BASF is a local organisation providing social, emotional and practical support to stroke affected individuals and their family. They provide a number of services including:

- Individual counselling and support for stroke affected people and their carers
- Young stroke groups
- Stroke groups

Stroke groups are run weekly in:

- Fishponds
- Horfield
- Longwell Green
- Yate

For further advice and information, please ring on:

0117 964 7657

Further information is also available on their website at:

www.basf.uk.com

The BASF also run a ‘Garden for the Disabled’ group in a specially adapted glasshouse at Frenchay Hospital every Monday, Wednesday and Friday afternoon.
The Stroke Association

The Stroke Association’s main focus is to support people who have had a stroke and their families. They do this by providing information and community services.

Information about services in your area, local contacts, news of local activities, details about stroke clubs and much more are available on:

The Stroke helpline: 0303 3033 100
Or on their website: www.stroke.org.uk

If you would like to talk to your local Stroke Association Information and Advice coordinator please call 0117 953 1200 Monday-Friday 9am-5pm.

Disabled Adult Resource Team (DART)

The DART service is a community multi-disciplinary team of healthcare staff who work with disabled adults with primarily physical impairments.

You can access this service by speaking to your GP.

What is a Stroke?

The brain is an important organ that does many things including controlling movement.

The brain is made up of lots of brain cells called neurons. These need oxygen from blood to work. Stroke is caused by something that stops the blood getting to parts of the brain and damages some of the cells in this part of the brain. This stops them from carrying out the jobs they would normally do and causes the symptoms of stroke.

Although these cells can’t be repaired, other parts of the brain can learn to take over their jobs.
What is a Stroke?

There are 2 main types of stroke:

Ischaemic stroke
- Caused by a blood clot in an artery which blocks the flow of blood
- Cause of more than 8 out of 10 strokes

Haemorrhagic stroke
- Caused by a weak or damaged blood vessel bursting and bleeding into the brain

Available Services

If the physiotherapist thinks you could benefit from further therapy input they may refer you.

Alternatively, you can refer yourself at any time to the community services detailed over the next few pages:

Occupational Therapy

The Occupational Therapy team provide specialist advice to adults to promote independence, goal orientated rehabilitation, provision of specialist equipment and adaptations, to support services users to live as independently as possible, in the community.

You may be referred by your GP or may contact the service directly on 01454 868007.

Further information is also available at their website:

www.nbt.nhs.uk/our_services/a-z_of_services/s/south_gloucestershire_communit/rehabilitation.aspx
Study Participation

A researcher will visit you when you first consent to the study to complete a number of assessments. They will then visit you again six weeks, 3 months and 6 months later to repeat these assessments.

Once these assessments have been completed, if you are not already receiving therapy services, you will be offered a 1 hour visit from a physiotherapist.

At this visit the physiotherapist may:

- **Discuss** with you what you are currently finding difficult as a result of weakness in your arm or hand, and what you would like to be able to do
- **Assess** the movement and function of your arm which has been affected by stroke
- Provide you with advice, exercises or activities to continue to practice by yourself

Within the session, the physiotherapist will supervise you doing any exercises that they recommend to ensure you are happy with them.

Recovery after Stroke

After your stroke, you will need time to heal and get back abilities you have lost. This takes time, practice, determination and patience. Your recovery will be unique to you. Even if your symptoms are similar to someone else’s, your ability to recover may be very different.

After an early burst of recovery in the first few weeks, progress tends to slow down. This is normal. Some people however continue to notice changes and improvements many months and even years after their stroke.
How the brain can ‘re-wire’

Improvements after stroke can be attributed to a process called neuroplasticity. The word neuroplasticity comes from:

- neuro – meaning ‘nerves’ and,
- plasticity – meaning ‘mouldable’ or ‘adaptable’.

Neuroplasticity means therefore that nerves, which make up the brain, are adaptable. If one area of the brain gets damaged, nearby areas can learn to take over the job of that area. This means that if a stroke disrupts one area, the brain can re-route signals along different paths. This is like redirecting traffic if there is an accident on a major road.

Why is practice important?

The nerves in our brains are constantly ‘re-wiring’ through our lives in response to our experiences. For example, practice of something, e.g. driving, sport or musical instruments, usually leads to improvement. These improvements are due in part to neuroplasticity in the brain. Neuroplasticity is especially important after a stroke.

You have been allocated to the control group of this study. As such, you will continue to receive your usual care. This may or may not include community therapy services.

You should continue to practice any exercises or activities that have been recommended to you. Through repetition of these you can try to ‘re-wire’ the brain to re-gain as much of your previous abilities as possible.

The more you practice, the more recovery that is likely.