



Scottish Stroke Care Audit

PUBLIC SUMMARY
of 2014 National Report
Stroke Services in Scottish Hospitals

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STROKE?

Think **FAST** & save a life
CALL 999

F ace – Can they smile?
Does one side droop?

A rm – Can they lift both
arms? Is one weak?

S peech – Is their speech
slurred or muddled?

T ime – To call 999.

If you see these signs call 999 **FAST**.

Chest Heart & Stroke Scotland www.chss.org.uk healthier scotland SCOTTISH GOVERNMENT

Chest Heart & Stroke Scotland and CHSS are operating names of The Chest Heart & Stroke Association Scotland, a registered Charity No. SC018761



Think **FAST!**

Chest Heart & Stroke Scotland have worked in partnership with NHS Grampian to implement a Scotland-wide public awareness campaign to promote the signs and symptoms of stroke incorporating FAST messages.

A short one-minute sketch has been produced using well known actors from the popular Scottish comedy, Still Game. The sketch has been promoted via social and online media including YouTube, Facebook, Twitter and STV iPlayer, and can be accessed at www.thinkFAST.org.uk

This booklet is a shorter version of the full-length report:

Scottish Stroke Care Audit
2014 National Report
Stroke Services in Scottish Hospitals

It gives you some of the information in the full report but in much less detail.

It aims to help people with communication difficulties, for example difficulty concentrating, remembering, reading small print or understanding what you are reading.

Fewer and shorter words are used with larger print and spacing. We have also used **bold** text to highlight important words.

If you have aphasia you may like to have someone with you to support you and help you understand the information in the booklet.

We are grateful to Chest Heart & Stroke Scotland patient/ carer groups and health professionals that provided feedback on the 2013 Public Summary and those involved in viewing the drafts of the 2014 Public Summary.

If you would like to print more copies of this booklet or look at the full-length report you can find both at <http://www.strokeaudit.scot.nhs.uk/Reports.html>.

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This section tells you about the **Scottish Stroke Care Audit** and how the **information is collected and stored**.

What is the Scottish Stroke Care Audit?

The Scottish Stroke Care Audit **checks the quality of stroke care in hospitals** in Scotland.

The Scottish Stroke Care Audit **monitors the quality of care** of over **13,000 people seen in hospitals** in Scotland each year. There is strong evidence that **well organised stroke care improves the outcome** for stroke patients.

Hospitals across Scotland routinely collect information about stroke.



How many people have a new stroke?

How quickly do people go to hospital?

Do they go to a Stroke Unit?

When do they have a brain scan?

When do they start on medical treatment (for example aspirin)?

Who keeps the information?



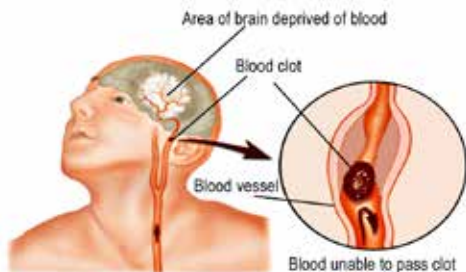
Each hospital in Scotland **gives the information to the health information service**.

The information is stored **in keeping with the law** (Data Protection Act 1998).

People can ask to have their information removed from the audit.

This section tells you about **Stroke** and **Transient Ischaemic Attack**.

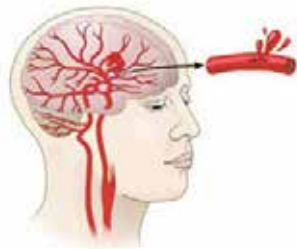
What is a stroke?



A stroke happens when **blood flow** to part of the **brain** is **stopped**.

This can be caused by

- a **blocked** blood vessel (a **blood clot - ischaemic stroke**)



- or a **burst** blood vessel which leads to bleeding into the brain (**a bleed - haemorrhagic stroke**)

Stroke can affect people in different ways.



Stroke can cause

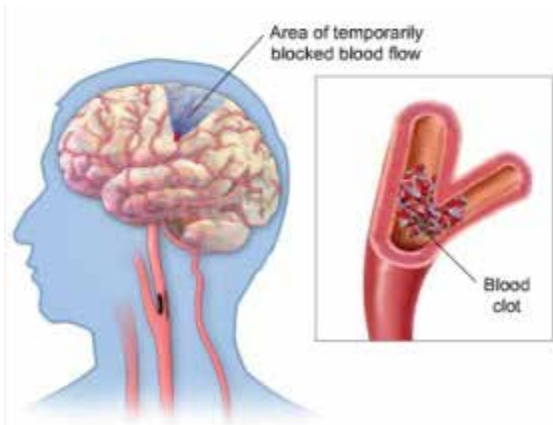
- **paralysis** and/ or **muscle weakness**, causing
 - **difficulty in getting around;**
 - **lack of movement;** and
 - **mobility problems.**

- **difficulty** with:

- **speech** and **communication;**
- **eating** and **drinking;**
- **vision;** and
- **thinking** and **planning.**



Transient Ischaemic Attack (TIA)



Some people have a **TIA**, sometimes called a **mini stroke**.

A TIA is **like a stroke** except that in a TIA the **symptoms last less than a day** and then the person is **back to normal**.

People who have TIAs are **at risk of having a full stroke** and they should be **referred to a specialist neurovascular (stroke) clinic** immediately.

This section tells you about the **standards for stroke care in Scotland** and how **hospitals in Scotland** performed in 2013 compared to 2012.

Current guidelines on the management of patients with stroke or TIA emphasise the **importance of getting patients to specialist stroke services quickly** to allow prompt diagnosis and treatment.






NHS Quality Improvement Scotland (NHS QIS) was part of the National Health Service. It set **standards of care** for NHS hospitals to meet.

Until recently, NHS QIS set the standards for stroke care, last updating them in June 2009. Healthcare Improvement Scotland took over the responsibilities of NHS QIS on 1st April 2011.

The Scottish Stroke Care Audit Steering Committee in collaboration with stroke colleagues across Scotland and the National Advisory Committee for Stroke at the Scottish Government **reviewed and updated the stroke standards in 2012**. The updated **Scottish Stroke Care Standards** were **launched in January 2013**. Detail of the new Scottish Stroke Care Standards can be found at http://www.strokeaudit.scot.nhs.uk/Quality/Scottish_Stroke_Care_Standards.html.

The tables in this section of the report show **how hospitals in Scotland performed in 2013 compared to 2012 against the Scottish Stroke Care Standards (2013)**.

	There has been statistically significant improvement in performance since 2012
	There has been no statistically significant change in performance since 2012
	There has been a statistically significant decline in performance since 2012

For more **detailed information** on the contents of any of the tables please refer to the 2014 Scottish Stroke Care Audit National Report which can be found at

<http://www.strokeaudit.scot.nhs.uk/Reports.html>.

Standard 1 : Admission to Stroke Unit



Stroke Unit care can **reduce the risk of dying and disability** after a stroke.

1. **At least 90%** of all patients who come to hospital with a stroke should be **admitted to the Stroke Unit on the day they come in, or the day after.**

The table below details hospitals who have achieved standard 1 in 2013.

Galloway Community Hospital, Stranraer (100%)
Belford Hospital, Fort William (100%)
Caithness General Hospital, Wick (100%)
Gilbert Bain Hospital, Shetland (100%)
Borders General Hospital, Melrose (97%)
Western Isles Hospital, Stornoway (95%)
Southern General Hospital, Glasgow (93%)
Crosshouse Hospital, Kilmarnock (93%)
Monklands Hospital, Coatbridge (91%)
Ayr Hospital (91%)
Victoria Hospital, Kirkcaldy (90%)
Wishaw General Hospital (90%)

The table below details hospitals who have **not achieved** standard 1 in 2013 indicating if they have **improved** (😊), **stayed the same** (😐) or **declined** (😞) (see key on page 7)

Hairmyres Hospital, East Kilbride (88%)	😐
Royal Alexandra Hospital, Paisley (88%)	😊
Ninewells Hospital, Dundee (87%)	😐
Inverclyde Royal Hospital, Greenock (85%)	😐
Western Infirmary Glasgow (84%)	😊
Perth Royal Infirmary (84%)	😐
Dumfries & Galloway Royal Infirmary (83%)	😐
Aberdeen Royal Infirmary (78%)	😐
Glasgow Royal Infirmary (77%)	😐
St John's Hospital, Livingston (77%)	😐
Forth Valley Royal Hospital, Larbert (73%)	😞
Royal Infirmary of Edinburgh (69%)	😐
Raigmore Hospital, Inverness (68%)	😐
Balfour Hospital, Orkney (65%)	😐
Western General Hospital, Edinburgh (64%)	😐
Lorn & Islands Hospital, Oban (57%)	😐
Dr Gray's Hospital, Elgin (56%)	😐

Uist & Barra Hospital (50%)	
Victoria Infirmary, Glasgow (38%)	

Standard 2: Swallow Screen and/ or Test



2. At least 90% of all patients should be checked to **see if they can swallow safely.**

This check should be carried out **on the day the person comes into hospital.** Note that all patients (100%) should have their swallowing checked **before** they are given **food, drink or medicines.**




The **results** of the swallow check should be **clearly written** in the **patient's notes.**



About half of all stroke patients **can't swallow safely** when they come to hospital.




















If they have food or drink it may go 'down the wrong way' and **cause a chest infection** or they may **become dehydrated** if they cannot eat or drink.

The table below details hospitals who have achieved standard 2 in 2013.

Lorn & Islands Hospital, Oban (98%)
Belford Hospital, Fort William (94%)
Wishaw General Hospital (91%)

The table below details hospitals who have **not achieved** standard 2 indicating if they have **improved** () , **stayed the same** () or **declined** () (see key on page 7)

Gilbert Bain Hospital, Shetland (89%)	
Borders General Hospital, Melrose (88%)	

Monklands Hospital, Coatbridge (86%)	
Galloway Community Hospital, Stranraer (86%)	
Balfour Hospital, Orkney (86%)	
Dumfries & Galloway Royal Infirmary (86%)	
Caithness General Hospital, Wick (84%)	
Hairmyres Hospital, East Kilbride (82%)	
Southern General Hospital, Glasgow (81%)	
Perth Royal Infirmary (80%)	
Ninewells Hospital, Dundee (80%)	
Raigmore Hospital, Inverness (79%)	
Western Isles Hospital, Stornoway (78%)	
Crosshouse Hospital, Kilmarnock (77%)	
St John's Hospital, Livingston (77%)	
Ayr Hospital (77%)	
Victoria Hospital, Kirkcaldy (76%)	
Forth Valley Royal Hospital, Larbert (75%)	
Aberdeen Royal Infirmary (74%)	
Western General Hospital, Edinburgh (64%)	
Royal Infirmary of Edinburgh (63%)	

Inverclyde Royal Hospital, Greenock (62%)	☹️
Western Infirmary Glasgow (58%)	☹️
Royal Alexandra Hospital, Paisley (54%)	😊
Glasgow Royal Infirmary (51%)	☹️
Dr Gray's Hospital, Elgin (51%)	☹️
Victoria Infirmary Glasgow (40%)	☹️
Uist & Barra Hospital (33%)	☹️

Standard 3: Brain Scan



3. **At least 90%** of patients should have a **brain scan** within 24 hours **of when they come into hospital.**

A **brain scan** shows whether the stroke is due to a **blocked blood vessel** or a **burst blood vessel** (see page 5).

This is important so that the person can have the **correct medication** as soon as possible.

Standard 3 – Hospitals that have **achieved** standard 3

Belford Hospital, Fort William (97%)
Dr Gray's Hospital, Elgin (95%)
Borders General Hospital, Melrose (94%)
Wishaw General Hospital (94%)
Victoria Hospital, Kirkcaldy (94%)
Perth Royal Infirmary (94%)
Western Infirmary Glasgow (93%)

St John's Hospital, Livingston (93%)
Southern General Hospital, Glasgow (93%)
Western Isles Hospital, Stornoway (93%)
Forth Valley Royal Hospital, Larbert (92%)
Royal Infirmary of Edinburgh (91%)
Galloway Community Hospital (90%)

The table below details hospitals who have **not achieved** standard 3 indicating if they have **improved** (😊), **stayed the same** (😐) or **declined** (😞) (see key on page 7)

Western General Hospital, Edinburgh (89%)	😐
Hairmyres Hospital, East Kilbride (88%)	😐
Lorn & Islands Hospital, Oban (88%)	😐
Aberdeen Royal Infirmary (88%)	😊
Raigmore Hospital, Inverness (87%)	😊
Glasgow Royal Infirmary (86%)	😐
Dumfries & Galloway Royal Infirmary (86%)	😐
Caithness General Hospital, Wick (86%)	😐
Monklands Hospital, Coatbridge (85%)	😐
Inverclyde Royal Hospital, Greenock (83%)	😐
Victoria Infirmary Glasgow (82%)	😐
Ninewells Hospital, Dundee (81%)	😐
Ayr Hospital (79%)	😊

Crosshouse Hospital, Kilmarnock (77%)	☹️
Royal Alexandra Hospital, Paisley (68%)	😊
Gilbert Bain Hospital, Shetland (63%)	☹️
Balfour Hospital, Orkney (31%) (Do not have a CT scanner)	☹️
Uist & Barra Hospital (0%) (Do not have a CT scanner)	

Standard 4: Medication



4. All patients with **blocked blood vessels** should have **aspirin** on the **day they come into hospital or the day after**.

If people have **aspirin as soon as possible** after a stroke this can **reduce the risk of another stroke and reduce disability**.

Aspirin is only given to people who have a stroke due to a blocked blood vessel, not a burst one (see page 5).















People who have had a stroke **should only take aspirin on the advice of a doctor** since it is not always appropriate.

Some people **can't have aspirin** but may be able to have an **alternative medication**.

Standard 4 – No hospitals have **achieved** standard 4

The table below details hospitals who have **not achieved** standard 4 indicating if they have **improved** (😊), **stayed the same** (😐) or **declined** (😞) (see key on page 7)

Wishaw General Hospital (97%)	😊
Raigmore Hospital, Inverness (95%)	😊
Caithness General Hospital, Wick (93%)	😐
Dumfries & Galloway Royal Infirmary (92%)	😊
Forth Valley Royal Hospital, Larbert (91%)	😐
Hairmyres Hospital, East Kilbride (91%)	😐
Aberdeen Royal Infirmary (91%)	😊
St John's Hospital, Livingston (91%)	😐
Borders General Hospital, Melrose (90%)	😐
Ninewells Hospital, Dundee (90%)	😐
Perth Royal Infirmary (90%)	😐
Lorn & Islands Hospital, Oban (89%)	😐
Victoria Hospital, Kirkcaldy (88%)	😊
Belford Hospital, Fort William (88%)	😐
Monklands Hospital, Coatbridge (87%)	😐
Southern General Hospital, Glasgow (87%)	😐
Gilbert Bain Hospital, Shetland (83%)	😐

Balfour Hospital, Orkney (83%)	
Glasgow Royal Infirmary (83%)	
Inverclyde Royal Hospital, Greenock (80%)	
Royal Infirmary of Edinburgh (80%)	
Galloway Community Hospital, Stranraer (79%)	
Western General Hospital, Edinburgh (79%)	
Ayr Hospital (79%)	
Western Infirmary Glasgow (79%)	
Western Isles Hospital, Stornoway (77%)	
Victoria Infirmary Glasgow (76%)	
Dr Gray's Hospital, Elgin (75%)	
Crosshouse Hospital, Kilmarnock (74%)	
Royal Alexandra Hospital, Paisley (62%)	
Uist & Barra Hospital (0%)	

Standard 5: Specialist neurovascular (stroke) clinic



5. **At least 80%** of new patients with a stroke or **TIA** should be seen **within 4 days** from when the referral is received by the clinic.

If people with a **TIA don't need to be admitted into hospital**, they should be seen at a specialist neurovascular (stroke) clinic as soon as possible.

There is a **10% risk of having another stroke** in the first week following a TIA.

Early treatment can reduce this risk by half.

Standard 5 – Hospitals who have achieved standard 5

Ninewells Hospital, Dundee (96%)
Western General Hospital, Edinburgh (96%)
Borders General Hospital, Melrose (92%)
Ayr Hospital (89%)
Hairmyres Hospital, East Kilbride (88%)
Wishaw General Hospital (85%)
Raigmore Hospital, Inverness (83%)
Monklands Hospital, Coatbridge (82%)
Lorn & Islands Hospital, Oban (81%)
Forth Valley Royal Hospital, Larbert (81%)
Dumfries & Galloway Royal Infirmary (80%)

The table below details hospitals who have **not achieved** standard 5 indicating if they have **improved** (😊), **stayed the same** (😐) or **declined** (😞) (see key on page 7)

Perth Royal Infirmary (77%)	😐
Crosshouse Hospital, Kilmarnock (76%)	😐
Victoria Hospital, Kirkcaldy (71%)	😐
Dr Gray's Hospital, Elgin (70%)	😊
Aberdeen Royal Infirmary (69%)	😊
St John's Hospital, Livingston (68%)	😊
Stracathro Hospital, Brechin (45%)	😐
Queen Margaret Hospital, Dunfermline (44%)	😐
Western Isles Hospital, Stornoway (36%)	😞

The following hospitals either do not provide specialist neurovascular (stroke) clinics or do not currently collect or submit data to the Scottish Stroke Care Audit.

Balfour Hospital, Orkney
Belford Hospital, Fort William
Caithness General Hospital, Wick
Galloway Community Hospital, Stranraer
Gilbert Bain Hospital, Shetland
Glasgow Royal Infirmary
Inverclyde Royal Hospital, Greenock
Royal Alexandra Hospital, Paisley
Royal Infirmary of Edinburgh
Southern General Hospital, Glasgow

Uist & Barra Hospital
Victoria Infirmary Glasgow
Western Infirmary Glasgow

Standard 6: Thrombolysis



Hospitals should use **thrombolysis** in line with **current guidelines**.

6. **At least 80%** of patients should receive the first dose of the drug **within 1 hour** of **arrival at hospital**.

Thrombolysis is a drug that **breaks up clots** in blood vessels.

It **works if given within 4½ hours** of the first signs of stroke.

It can only be **used** in people who have had a **stroke due to a blood clot**.

It is not a cure but can **reduce disability** in some people.

Standard 6

All hospitals providing a thrombolysis service continue to strive to meet the 1 hour door to needle time of standard 6. Due to the small numbers of patients included in these data it is recommended not to use the statistical calculations to demonstrate improvement as in the tables above.

Instead the table below details hospitals performance for standard 6 for 2012 and 2013.

Hospital	2012	2013
Crosshouse Hospital, Kilmarnock	69%	74%
Ninewells Hospital, Dundee	70%	69%
Ayr Hospital	36%	65%
Aberdeen Royal Infirmary	37%	56%
Hairmyres Hospital, East Kilbride	47%	45%
Monklands Hospital, Coatbridge	29%	43%
Lorn & Islands Hospital, Oban	50%	43%
Perth Royal Infirmary	52%	41%
St John's Hospital, Livingston	20%	40%
Dumfries & Galloway Royal Infirmary	24%	39%
Victoria Hospital, Kirkcaldy	24%	39%
Wishaw General Hospital	36%	37%
Forth Valley Royal Hospital, Larbert	5%	35%
Western Isles Hospital, Stornoway	60%	33%
Dr Gray's Hospital, Elgin	0%	29%
Western General Hospital, Edinburgh	33%	27%
Royal Infirmary of Edinburgh	15%	26%
Borders General Hospital, Melrose	0%	8%
Western Infirmary Glasgow	15%	8%
Southern General Hospital, Glasgow	0%	6%
Raigmore Hospital, Inverness	22%	6%

The following hospitals thrombolysed a very small number of patients none of whom received the treatment within one hour: Galloway Community Hospital, Glasgow Royal Infirmary, Royal Alexandra Hospital, Victoria Infirmary, Belford Hospital, Caithness General Hospital, Balfour Hospital and Gilbert Bain Hospital.

For further details of thrombolysis services please refer to the tables and charts in the Scottish Stroke Care Audit National Report which can be accessed on the audit website (www.strokeaudit.scot.nhs.uk).

Standard 7: Carotid Endarterectomy



If people need to have a carotid endarterectomy

7. **At least 80% of patients should have the operation within 14 days of their stroke event.**

Carotid endarterectomy is an **operation to clear a narrowing of the blood vessels in the neck** that could cause a further stroke.

Standard 7

All hospitals providing a carotid intervention service continue to strive to meet standard 7. Due to the small numbers of patients included in these data it is recommended not to use the statistical calculations to demonstrate improvement as in the tables above.

Instead the table below details hospitals performance for standard 7 for 2012 and 2013 (*Note: 2012 data was collected for six months only and Aberdeen Royal Infirmary data was not included. Data from Raigmore Hospital, Inverness is not included for 2013*).

Hospital	2012	2013
Ninewells Hospital, Dundee	40%	68%
Ayr Hospital	37%	52%
Aberdeen Royal Infirmary	~	50%
Royal Infirmary of Edinburgh	33%	45%
Western Infirmary/Southern General Glasgow	48%	45%
Hairmyres Hospital, East Kilbride	44%	41%
Forth Valley Royal Hospital, Larbert	83%	27%
Victoria Hospital, Kirkcaldy	40%	14%
Dumfries & Galloway Royal Infirmary	13%	7%

For further details of carotid intervention performance please refer to the table and chart in the Scottish Stroke Care Audit National Report which can be accessed on the audit website (www.strokeaudit.scot.nhs.uk).

This section tells you how hospitals in Scotland have performed against the Scottish Stroke Care Standards (2013).

There have been **notable improvements** year on year in the delivery of stroke care in Scotland since audit data was first published in 2005. For more information please refer to previously published reports on our website at

<http://www.strokeaudit.scot.nhs.uk/Reports/Reports.html>

There are **improvements in all of the stroke care standards** since publication of last year's report.

	2012	2013
Standard 1: More patients are admitted to a Stroke Unit by the day following admission to hospital.	78%	82%
Standard 2: More patients have a swallow screen on the day they come into hospital.	67%	72%
Standard 3: More patients have a brain scan within 24 hours of when they come into hospital. <i>(Note: this standard changed from day of admission to within 24 hours in January 2013).</i>	83%	87%
Standard 4: More patients with a blocked blood vessel have aspirin by the day after they come into hospital.	76%	85%
Standard 5: More patients are seen within 4 days from referral at a specialist neurovascular (stroke) clinic.	67%	79%
Standard 6: More patients receive the first dose of the drug within 1 hour of arrival at hospital.	29%	34%
Standard 7: More patients have the operation within 14 days of their stroke event.	41%	42%

The **standards for stroke care** are based on **evidence** that **certain treatments improve outcomes.**

Hospitals are expected to:

- **improve their stroke services as quickly** as possible; and
- meet as **many** of these **standards** as possible.

Some of the standards require **all patients** to receive the care (for example, aspirin). This is possible but it is important to also **look for improvements** each year.

This section tells you how **Stroke Managed Clinical Networks (MCNs)** are working to **improve stroke services across Scotland**.



Every region in Scotland has a **Stroke Managed Clinical Network (MCN)**.

Stroke MCNs are **groups of staff and people who have had a stroke who work together to improve stroke services** in their **local area**.

For further details about the work of your **local Stroke MCN** contact your local MCN manager/co-ordinator (page 33).

MCNs use the Scottish Stroke Care Audit data to **monitor performance** in their local area against the stroke care standards. They are able to identify individual patients who have not been treated in line with the standards and the reasons why. This allows them to **implement change in the stroke care pathway leading to improvement** in the delivery of stroke care locally.

Below are **listed some examples of changes Stroke MCNs** across Scotland are making to **improve stroke care** in their local areas in general and against the various standards.

General improvements

- **sharing of the data with staff** in the Stroke Unit and other related wards and units;
- actively **reviewing individual patient pathways** to identify why some patients have not received the required standard of care;
- **identifying areas requiring change to drive improvement** in stroke care; and
- use of **Incident Forms** to highlight when appropriate standards of patient care are not being delivered.

Stroke Unit admission

- **rapid identification** of stroke patients in emergency and admission units instigating early transfer to the Stroke Unit; and
- **daily meetings** to ensure that all stroke patients are admitted to the Stroke Unit and appropriate patients are discharged or moved to rehabilitation beds to allow Stroke Unit beds to become available.

Swallow Screen/ Test

- **developing** an ‘**outreach service**’ – nurses from the Stroke Unit contact admitting/other wards with stroke patients that cannot be moved to the Stroke Unit and either prompt a swallow screen or attend the ward to swallow screen the patients; and
- **training of colleagues in emergency and admission units** to perform swallow screening earlier in the patient pathway.

Brain scan

- **increasing the amount of time** the brain scanner is **available** to include out of hours time and access to the scanner when needed, not at fixed times; and
- **examining how patients are referred** for brain scans and **identifying delays** in this referral process.

Medication

- ensuring that patients are **prescribed aspirin as soon as the scan result is known** (rather than the next day); and
- **ensuring** that the **correct protocol** for prescribing aspirin and other related medications **is followed**.

Specialist neurovascular (stroke) clinic

- increasing the number of available **appointments** at clinics to ensure that **clinics do not run on only one day of the week**;
- reviewing how appointments are issued **ensuring patients are told of the importance of early attendance** at the clinic; and
- **reviewing referral processes from General Practitioners (GPs – family doctors)** and **setting up a hotline** for GPs to contact stroke doctors directly.

Thrombolysis

- **agreeing pre-hospital procedures** with the Scottish Ambulance Service (SAS). This has involved a review of the SAS protocol for the management of stroke patients;
- **ambulance crews alert the hospital** when a stroke patient is being admitted to allow early access to brain scanning and the stroke doctors; and
- using **Telemedicine** (see page 29) when local stroke doctors are not available to give advice.

Carotid Endarterectomy

- **development of pathways** to support **rapid access** for brain scanning and carotid artery imaging; and
- **increased and quicker access** to surgical assessment and operating theatres.

Summary

There has been **an improvement in stroke services** across Scotland in the past year.








Hospitals are **making progress towards meeting the stroke care standards**.


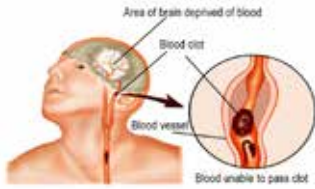





The **quality** of stroke services **still varies** across Scotland.

No hospital meets **all of the Scottish Stroke Care Standards (2013)**, so **all** need to **try to improve stroke services**.

The **Scottish Stroke Care Audit team** are **working closely** with the **Scottish Stroke Improvement Plan** and the **Stroke Managed Clinical Networks** across Scotland to identify areas where changes could be made to **improve performance** against the **standards** and **improve stroke care**.

This section gives a brief **explanation** of some of the **key words** used in this booklet.

	<p>Antiplatelets - A medicine which reduces the risk of clots forming in your blood. This reduces your risk of having a stroke or heart attack.</p>
	<p>Aphasia - When people have problems with talking, understanding, reading and writing.</p>
	<p>Blood Clot - Cause of ischaemic stroke. The other cause of stroke is bleeding in the brain (haemorrhagic stroke).</p>
	<p>Brain Scan - Sometimes referred to as CT scan or imaging (Computerised Tomography). It is an x-ray to look at someone's brain to help diagnose any problems. (Sometimes an MRI scan is also mentioned – Magnetic Resonance Imaging)</p>
	<p>Carotid Endarterectomy - An operation to clear narrowing of the blood vessels in the neck that could cause a further stroke.</p>
	<p>Data Protection - If you handle personal information about people, you have a number of legal obligations to protect that information under the Data Protection Act 1998. This is a United Kingdom Act of Parliament which defines UK law on the processing of data on identifiable living people.</p>
	<p>Managed Clinical Network (MCN) - Groups of staff and people with stroke who work together to improve stroke services in their local area.</p>

	<p>Specialist neurovascular (stroke) clinic - An outpatient clinic for patients with TIA (mini stroke) to investigate causes and help prevent stroke.</p>
	<p>Stroke - A condition that happens when blood flow to part of the brain is stopped.</p>
	<p>Stroke Units - hospital wards where the doctors, nurses, and other staff have been trained specifically to provide care for acute stroke patients. Care in Stroke Units has been shown to improve a patient's chance of recovery and independent living.</p>
	<p>Swallow Screen/ Test - An assessment carried out to check if a person can swallow safely.</p>
	<p>Telemedicine - Stroke doctors use computers and telephone links. They discuss results and treatment with local doctors. This means that patients can have treatment more quickly.</p>
	<p>Thrombolysis - Treatment with a drug that breaks down blood clots (sometimes referred to as a clot busting drug).</p>
	<p>Transient Ischaemic Attack (TIA) – a less serious or mini stroke, where the effects pass quickly and leave no damage.</p>

This section tells you **who** was involved in the **development** of **this booklet**.

Many people have helped to write this report:

- patients who have suffered a stroke who have given medical information to the audit;
- staff at all hospitals involved in the audit;
- the Audit Team; and
- the Report Writing Group.

This Summary was written by Hazel Dodds, Professor Martin Dennis, Professor Peter Langhorne, Moranne MacGillivray, Dr Mary-Joan Macleod, Dr Christine McAlpine, David Murphy and Neil Perkins with contributions from NHS Boards and voluntary organisations.

Some of the material used in this report was from the National Advisory Committee for Stroke documents:

Royal College of Physicians National Stroke Audit 2008 – Organisation of Care

What's new in stroke and aphasia?

Easy Access Version of Better Heart Disease and Stroke Action Plan (2009)

These were written by Annette Cameron, Speech & Language Therapist with help from a group of people with aphasia across Scotland and designed by Medical Illustration Department, Aberdeen University.

The various images throughout the document have come from the following websites:

www.bing.com

www.chss.org.uk/

www.medicimage.co.uk/Index.asp

Chest Heart & Stroke Scotland provided the Swallow Screen/Test photograph.

This section tells you **who you can contact to find out more** about stroke and organisations that can provide you with further information.



Chest Heart & Stroke Scotland

3rd Floor, Rosebury House
9 Haymarket Terrace, Edinburgh, EH12 5EZ
telephone: 0131 225 6963
advice line: 0808 801 0899
email: admin@chss.org.uk
website: www.chss.org.uk



The Stroke Association

Links House, 15 Links Place
Edinburgh, EH6 7EZ
telephone: 0131 555 7240
stroke helpline: 0303 3033 100
email: scotland@stroke.org.uk
website: www.stroke.org.uk



Different Strokes

9 Canon Harnett Court
Wolverton Mill
Milton Keynes, MK12 5NF
telephone: 0845 130 7172
email: webcontact@differentstrokes.co.uk
website: www.differentstrokes.co.uk



Speakability

1 Royal Street

London, SE1 7LL

telephone: 080 8808 9572

(Helpline Monday to Friday 10am - 4pm)

email: speakability@spekability.org.uk

website: www.spekability.org.uk



Aphasia Help

Explains about stroke and aphasia

www.aphasiahelp.org

AphasiaNow

For people with aphasia

www.aphasianow.org

This section tells you who you can contact to find out more about the Scottish Stroke Care Audit, stroke care in general and stroke care in your local area.

If you have any general questions about stroke care in your local area please contact your local Stroke Managed Clinical Network.

Health Board	Contact Name	Phone Number	Email Address
Ayrshire & Arran	Denise Brown	01563 825818	denise.brown@aaaht.scot.nhs.uk
Borders	Sandi Haines	01896 831869	sandi.haines@borders.scot.nhs.uk
Dumfries & Galloway	Christine Cartner	01387 244227	christine.cartner@nhs.net
Fife	Morag Maillie	01592 226841	moragmaillie@nhs.net
Forth Valley	David Munro	01786 457220	david.munro@nhs.net
Grampian	Lorraine Cowie	01224 558654	lorrainecowie@nhs.net
Greater Glasgow & Clyde	Camilla Young	0141 232 7789	camilla.young@nhs.net
Highland	Christian Goskirk	01408 664078	christian.goskirk@nhs.net
Lanarkshire	Katrina Brennan	01236 707724	katrina.brennan@lanarkshire.scot.nhs.uk
Lothian	Morag Medwin	0131 537 9208	morag.medwin@nhslothian.scot.nhs.uk
Orkney	Nickie Milne	01856 888023	nichola.milne@nhs.net
Tayside	Gail Smith	01307 474157	gailsmith@nhs.net
Shetland	Sally Hall	01595 743630	sally.hall5@nhs.net
Western Isles	Chrisanne Campbell	01851 704704	chrisanne.campbell@nhs.net

Please refer questions on this report to **Hazel Dodds** and questions relating to data included in the report to **David Murphy**.

For general questions about the Scottish Stroke Care Audit contact **Hazel Dodds**.

Hazel Dodds

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email: david.murphy2@nhs.net	Edinburgh, EH12 9EB

If you have general questions about stroke care in Scotland please contact **Professor Martin Dennis**, Chair of the Scottish Stroke Care Audit and the National Advisory Committee for Stroke.

Professor Martin Dennis

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email: martin.dennis@ed.ac.uk	Bramwell Dott Building, Western General Hospital, Crewe Road, Edinburgh, EH4 2XU



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