Greater Glasgow and Clyde Stroke MCN

Annual Report

2009-2010

Table of contents

Introduction

Stroke remains the third commonest cause of death in Scotland and the most common cause of physical disability amongst adults. It is estimated that about 15,000 people in Scotland have a stroke each year. Hospital care for these patients accounts for 7% of all NHS beds and 5% of the entire NHS budget. Not surprisingly, the Scottish Executive continues to identify stroke as a priority for the Health Service in Scotland. This report updates the progress made by the Managed Clinical Network in stroke care in Greater Glasgow and Clyde (GG&C)

Stroke Epidemiology in Greater Glasgow and Clyde

NHS Greater Glasgow and Clyde covers a catchment population of 1.2 million. The most recent Scottish Stroke Care Audit data tells us that in 2008 2,914 people were admitted into the GG&C hospitals having suffered a stroke.

A recent report on Locally Enhanced Services for stroke in Greater Glasgow shows that there are 15,909 patients on the stroke registers.

To reduce the burden of stroke within NHS Greater Glasgow and Clyde, the Stroke MCN is addressing the needs of patients and their families throughout the stroke care pathway; from stroke prevention through acute care, rehabilitation, secondary prevention and long-term support in the community.

MCN Subgroups and Meetings

Executive Group
This group is responsible for developing and carrying forward proposals on behalf of the larger Steering Group. The group has a degree of autonomy but is answerable to the Steering Group. The Executive Group has good representation of MCN constituencies but the primary aim is to have a small functional Executive Group with wider representation being achieved through the Steering Group. The group meets every 3 months, approximately 3 weeks prior to the Steering Group meetings.

Steering Group
This is the larger stakeholder group with representation from all main hospital sites, services, professions and other stakeholders, including Local Authorities and independent sector organizations, working within NHSGGC. This group acts as an advisory and Steering Group for the Executive Group. The members are expected to represent the views of and feedback to their constituencies. The Steering Group meets every 3 months and receives feedback from all the MCN working groups. The group has been

reconstituted following the management restructuring in Glasgow health services. See Appendix 1 for membership.

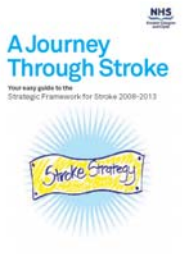
PFPI Group

Patient Focus & Public Involvement (PFPI) Group

The remit of this group is to provide strategic support and guidance to the MCN, its working groups and projects that require and would benefit from the involvement of stroke survivors, carers and members of the public. The group meets every 8 weeks and reports to the MCN Steering Group quarterly.

The PFPI sub-group have directed and supported a number of key projects over the last year, including:

- Procurement of an 'easy read' version of 'A Journey Through Stroke – Strategic Framework for Stroke 2008 – 2013. This concluded a 2 year process involving stroke survivors and carers in shaping the content of the Framework and producing the 'easy read' version



- Involvement of stroke survivors and carers in discussing the My Stroke Book with a view to shaping the reprinted version
- Purchase of 'Photosymbols 2'- a graphics package to make MCN information (e.g. minutes, papers etc) more Aphasia friendly. This will begin to be used in 2010.
- Introduction of the library information project. Rolled out in Summer 09, this project ensures that every library in Greater Glasgow and Clyde now has a comprehensive Stroke Information Pack.
- Work with the stroke AHP consultant to capture some 'Digital Stories' involving stroke survivors in the Glasgow Royal Infirmary and Lightburn Hospitals.

Sadly, Alison Anderson, one of the founding members of the Speech and Language Therapy PFPI Group, passed away in December 09. Although Alison had many health issues, including aphasia, she and her husband Robert devoted much time and energy to raising awareness of the difficulties faced by people living with aphasia. As well as

substantial involvement in the PFPI group Alison was involved in running the local Speakability group, regularly contributed to consultation events and gave presentations to a variety of groups on the impact of aphasia. Alison's contribution was highly valued and she will be sadly missed by all who worked with her.

Heart, Stroke & Diabetes (HSD) Forum

The HSD Forum continues to support patients, carers and the public to get involved in the business of the Heart, Stroke and Diabetes MCNs. The Forum is linked to the MCNs to ensure a broad range of opinion and involvement. It also gives members the opportunity to get involved in a variety of ways, including focus groups, patient journey sessions, improving patient information, attending MCN meetings and digital story telling. The Forum has a core group of 18 members and a wider network of approximately 140 people. The Forum plan to produce 2 newsletters per year to communicate key information happening within heart, stroke and diabetes services and to encourage more people to get involved.

Research and Clinical Audit Group

This group reviews the latest evidence relating to stroke and acts as an advisory panel to the other working groups in how the latest evidence could impact on their sector. The group meets every 3 months and reports to the MCN Steering group quarterly

This group supervises Glasgow's participation in the Scottish Stroke Care Audit (SSCA).

Community and Primary Care Group

This group reviews the patient journey from hospital discharge, including rehabilitation and chronic disease management programmes, looking at issues such as protocol/guideline development and performance assessment of new projects. This group looks at how the MCN for stroke relates to the Community Health and Care Partnerships and supports integrated working between Local Authorities and the NHS. This Group is also responsible for ensuring that the Local Enhanced Service Screens, used by practice nurses when carrying out annual reviews, are kept up to date.

The group meets every 3 months and reports to the MCN Steering group quarterly.

Education Group

This group looks at stroke educational needs across Greater Glasgow and Clyde. They look at the work plan of the CHSS Trainer and offer advice on additional training needs across the NHS board. The group meets every 3 months.

Measuring how we are doing

One important function of MCNs is to measure how we are performing against the many standards and targets which relate to Stroke and TIA services.

Scottish Stroke Care Audit (SSCA)

All health boards in Scotland contribute data to the Scottish Stroke Care Audit. This is monitored by a centrally funded group of co-ordinators and tracks the performance of various aspects of stroke services. There are audit co-ordinators based in North and South Glasgow, Paisley and Inverclyde who identify all inpatients admitted with a stroke or TIA. They then fill out a data collection form which is entered into a database.

During 2009 there have been major changes to the central organisation of SSCA which include how data will be submitted to Information Services Division (ISD) in the future.

Data entered locally via the SSCA System will now be submitted directly to ISD on a more regular basis using SWIFT (Submission With Internet File Transfer).

In order to provide inpatient units with current, comparable national data, prospective collection of data relating to the patients' first 24 hours in acute care, began in January 2010. This will allow monthly reports to be distributed to the stroke teams at each hospital. These monthly reports will reflect activity for the previous month and will show how each unit is performing allowing clinicians to review processes of care, measure performance against targets and identify areas where further work is required. Clinicians can then plan to implement changes and will have the ability to monitor the outcomes of these changes in subsequent months.

New NHSQIS Standards

In June 2009 Quality Improvement Scotland (QIS) published updated stroke standards. http://www.nhshealthquality.org/nhsqis/6354.html

The new NHSQIS standards express some levels of performance in a different way (see table below) so data collection in the SSCA has been adjusted to enable hospitals to assess their performance against both the current and new versions of the NHS QIS standards.

Table 1

Standard	Current standards 2004 - 2008	New standards 2009
Access to stroke unit services	70% enter stroke unit within 1 day of admission (Day 0 or 1)	60% on day 0 and 90% by day 1
CT scanning	80% within 2 days of admission (days 0,1 or 2)	80% on day of admission (day 0)
Swallow screening	100% on day of admission (day 0)	no change
Aspirin	100% of ischaemic strokes within 2 days of admission (days 0, 1 or 2)	100% of ischaemic strokes within 1 day of admission (days 0 or 1)
Delay from receipt of referral to neurovascular clinic	< 14 days	< 7 days

There are also two new standards which will require new data to be collected by SSCA.

Stroke MCNs will monitor the use of thrombolysis for acute ischaemic stroke and will administer this according to current SIGN guidelines to at least five patients per 100 000 population each year. Glasgow already exceeds that treatment target. MCNs will also monitor the delay between arrival at the first hospital and administration of the bolus of recombinant plasminogen activator.

All patients with carotid artery territory TIA or ischaemic stroke who are candidates for carotid endarterectomy should have carotid duplex (or other non-invasive imaging technique) unless there is a documented contraindication, and 80% of patients undergoing carotid endarterectomy for symptomatic carotid stenosis should have the operation within 14 days of the stroke or TIA event.

In 2007 national data was collected for the first time to allow us to assess delays to carotid surgery.

Table 2: Number of patients who had carotid intervention performed in 2007

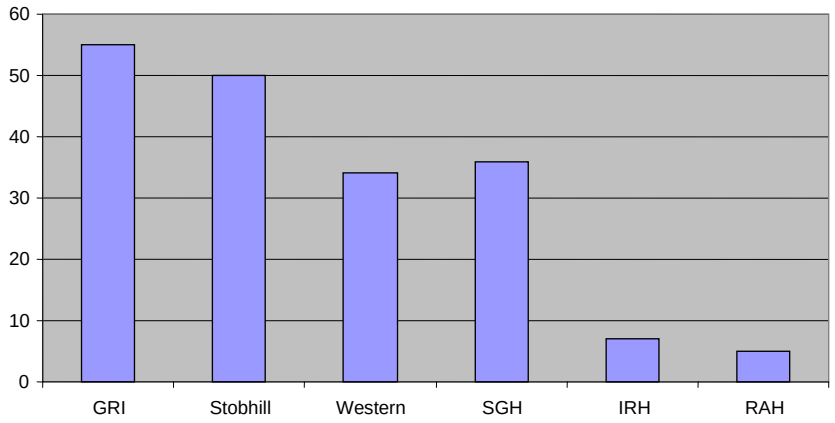
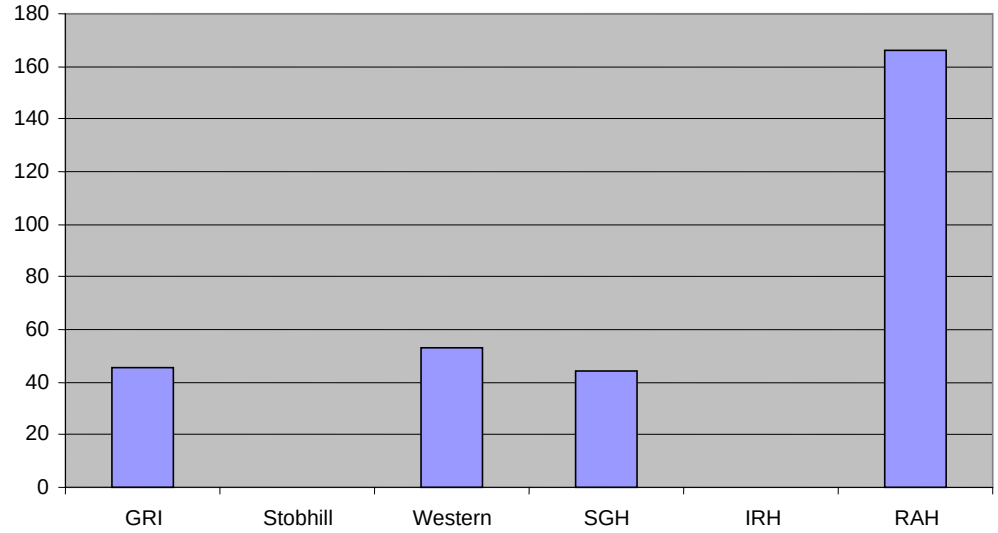
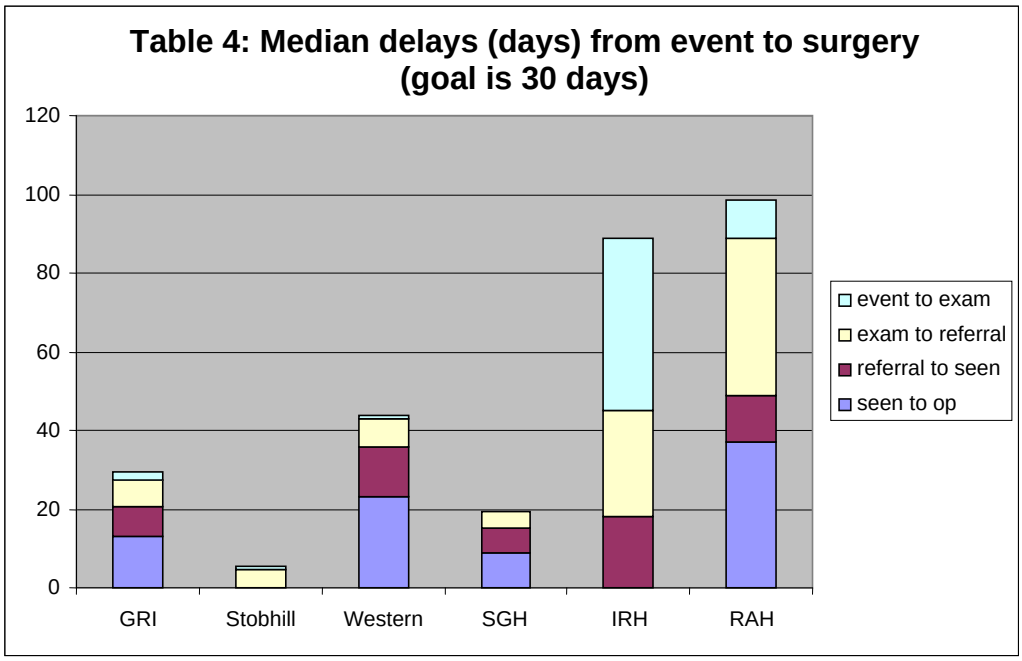


Table 3:Mean number of days from event to carotid surgery





The MCN is currently undertaking a local audit of the CEA pathway to update the data on the carotid pathway and to help address any delays.

Performance against QIS standards

This data relates to performance against the **previous** NHS QIS standards.

All areas are currently reviewing local practice to improve and speed up the pathway to admission to a stroke unit. In particular work is currently ongoing at GRI between the stroke unit, A&E department and bed managers. The stroke unit in Stobhill is due to move to GRI in 2011 as part of the GRI/Stobhill merge of inpatient services.

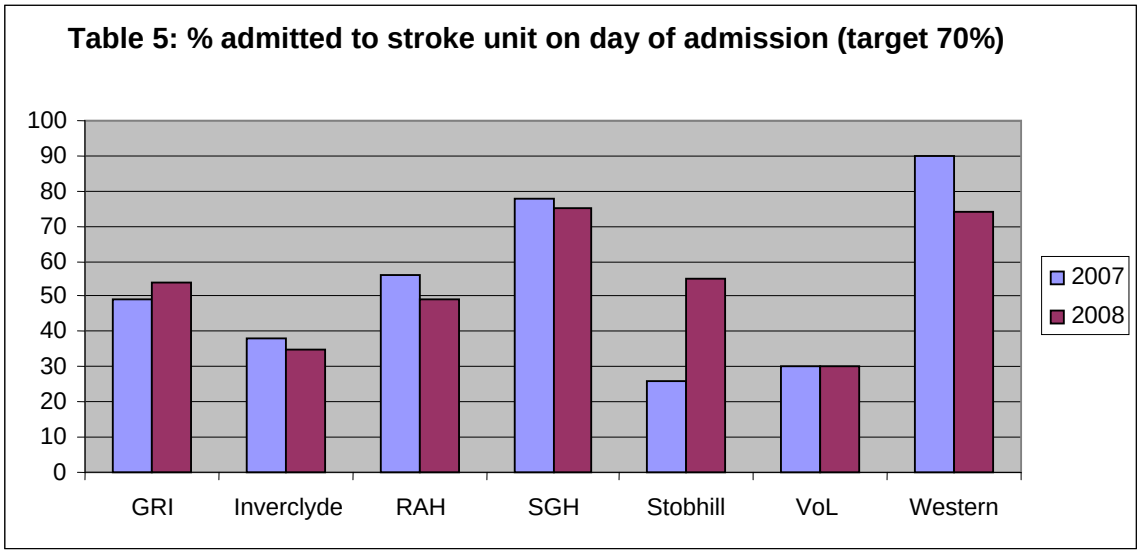


Table 6 shows the swallowing screening results. There have been significant problems with data collection of this standard and it was felt the data did not reflect actual local practice, therefore data was not submitted to SSCA in 2008 and 2009. Our knowledge of local practice indicates that most patients are screened by a standardised assessment method to identify any difficulty in swallowing safely due to low conscious level and/or the presence of signs of dysphagia. This is carried out on the day of admission and before giving food/drink and oral medication and is clearly documented. Within recent months dedicated awareness raising session have been delivered across GGC and work is now being taken forward to ensure water swallow test is undertaken on day of admission within stroke wards.

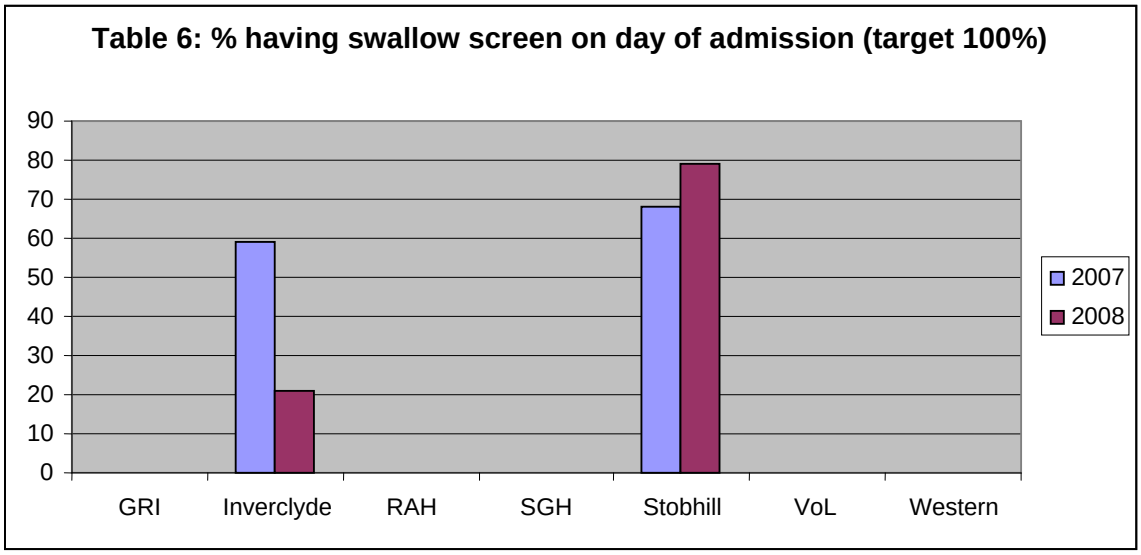


Table 7 demonstrates the success of the significant work that has been taken forward by stroke services and imaging departments to ensure that people admitted to hospital with a suspected stroke are scanned within 2 days of admission.

From 2009 the NHS QIS standard is for 80% of patients to be scanned on day of admission. Currently most hospitals across the NHS board are reaching this target. Further work will be taken forward in this are during 2010/11.

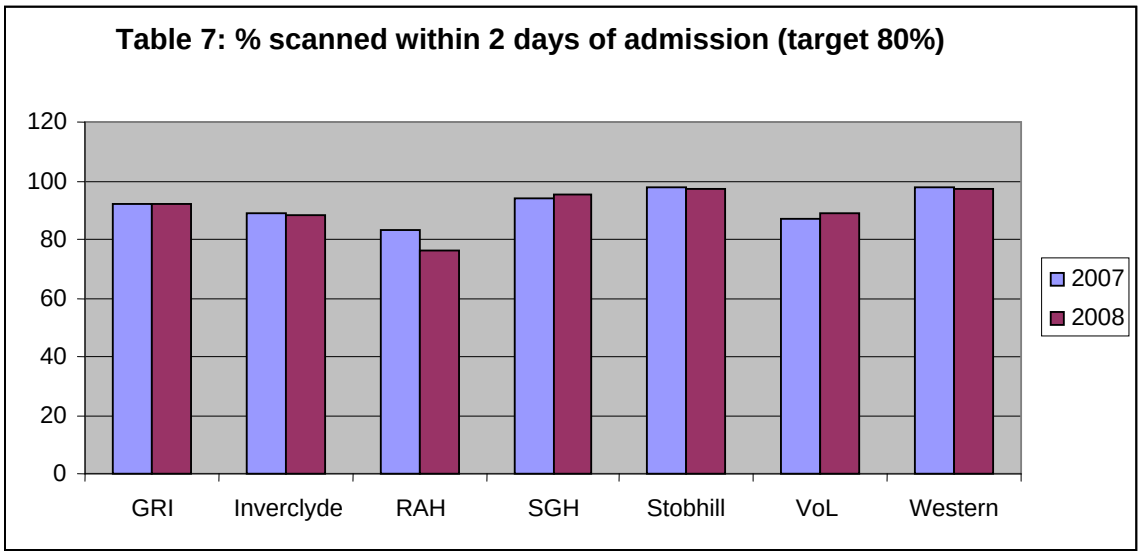
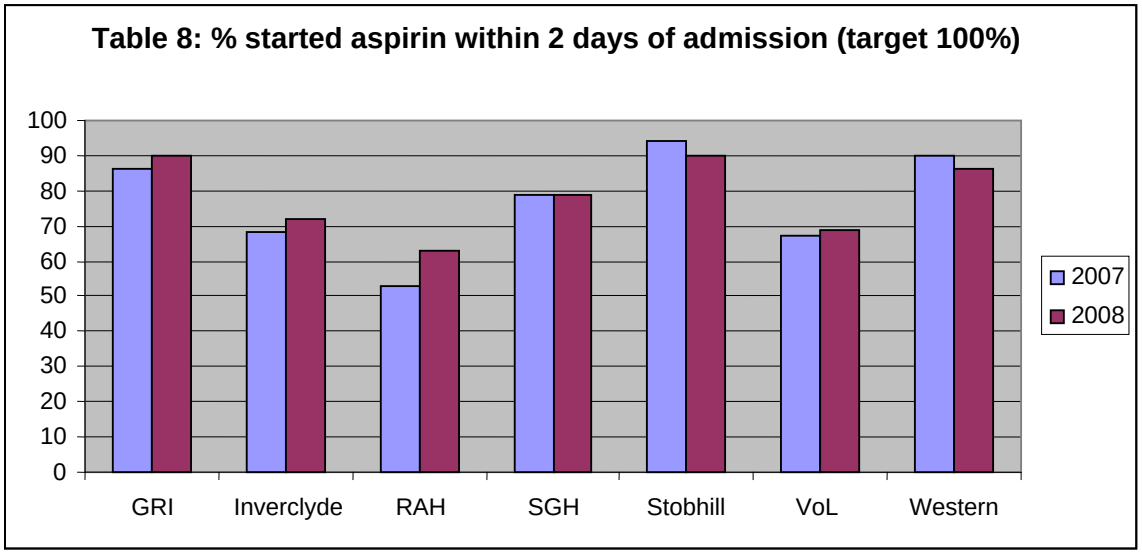
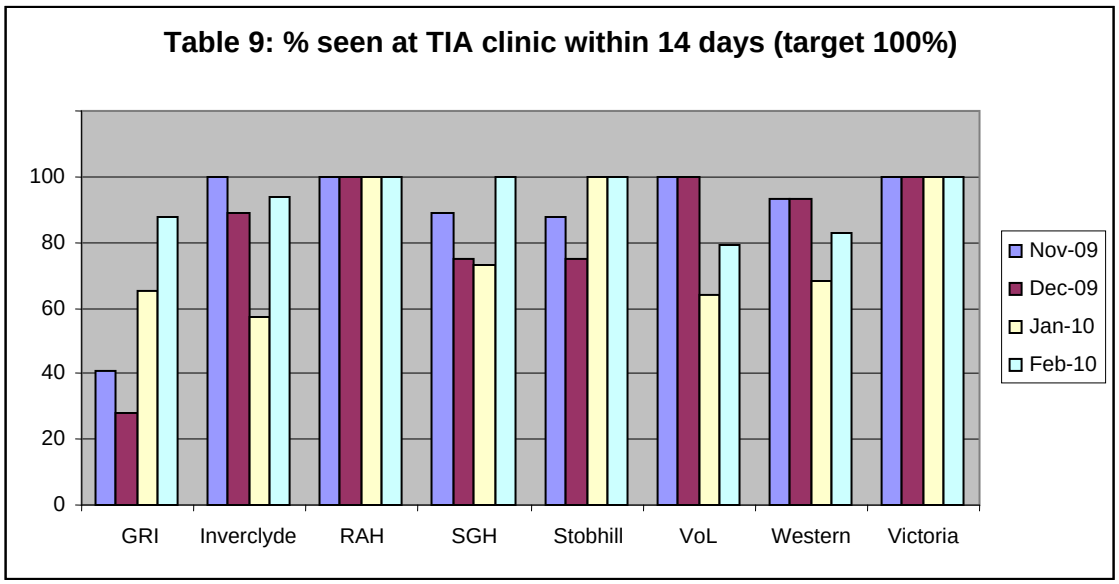


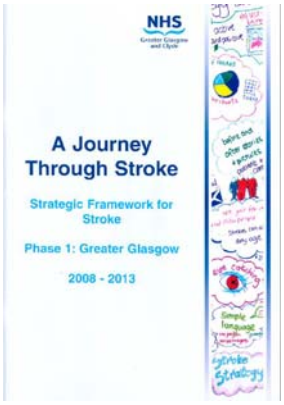
Table 8 shows the percentage of patients started on aspirin within 2 days of admission. It should been noted that the current audit is not set up to capture when another appropriate drug is used instead of aspirin and that artificially deflates performance levels at all sites. However, following some focused work between pharmacy and stroke clinicians performance at the RAH is now at 86%.



Previously NHSGGC has not recorded outpatient data for submission under SSCAS, however Table 9 highlights that locally collected data across recent months has shown that 87% of patients are seen within 14 days of referral to a neurovascular clinic, with the RAH consistently hitting 100%. However performance against the new revised target of 7 days is significantly lower in most of our hospitals. Ensuring that patients are seen at a neurovascular clinic within 7 days will require significant service redesign across the board area and to assist this, it is planned to move towards electronic referral and e-vetting of referrals to minimise delays in offering appointments.



Stroke Strategy



The Stroke MCN, in consultation with the MCN patient forum, staff from the NHS and local authorities and representatives from the voluntary sector, has produced a strategy to take us forward to 2013.

The document outlines the clinical and policy back ground to what we need to do and includes a review of the elements of a comprehensive stroke service. There are key recommendations for work on stroke awareness and prevention, emergency care, inpatient rehabilitation and discharge planning, early rehabilitation in the community and support in the longer term as well as a review of the research, learning and development needs of the stroke community.

The framework now guides the work of the MCN over the next few years and individual elements will be taken forward by the MCN working groups. Progress will be monitored by the MCN steering group as well as the Rehabilitation and Assessment Directorate.

Appendix 2 shows the work plan of the MCN against the recommendations laid out in the strategy.

Better Health Better Care

July 2009 saw the launch of the Better Heart Disease and Stroke Care Action Plan. This action plan updates the 2004 document and coordinates well with the local stroke strategy mentioned above.

http://www.scotland.gov.uk/Publications/2009/06/29102453/0

Appendix 3 contains NHSGGCs response to the actions set out in this document.

Key MCN work over 2009

Urinary incontinence project

Audits of the care of 70 individual patients in 3 hospital sites across Glasgow have been completed. All data has now been analysed by the Robertson Centre for Biostatistics (Weir). Ethics approval was secured for focus groups with nurses (n=30), physios (n=8) and doctors (n=10). Interviews have been completed and data has been analysed. It is hoped to have the study finalised by the end of May 2010 with a report made available at that time. In the meantime preliminary audit data was presented at the UK Stroke Forum 2009 and a seminar to Nursing & Health Care in February 2010.

Best Practice Statements for “Managing Pain” and “End of Life”

For both statements, stakeholders and a virtual reading group have been established. A formal link has been established with NHS QIS (R Hector NHS QIS Project Officer] and the project is working to its project management principles.

Currently work is ongoing in relation to the "End of Life" best practice statement which will support improvements in the palliative care of stroke patients. A best practice statement on "Managing Pain" will follow.

Local Enhanced Service

The MCN continues to be heavily involved in the primary care LES Review: The MCN is involved in supplying information on the Stroke LES, including a 6 monthly review of the 3 screens used during the patients annual stroke review.

The LES ensures a systematic approach, not only to the medical model of secondary prevention, but also to the other risk factors which can contribute around half of potential risk reduction, and to new or deteriorating functional problems associated with previous stroke.

The MCN has been involved in drafting a job description and supporting the appointment of a change control officer (in post December 2009) to co-ordinate the review and changes required to the LES templates, a process to ensure consistency between guidelines, service developments, the templates, the payment and business rules, nurse training, the QoF and other Scottish Enhanced Services, patient literature and required timescales.

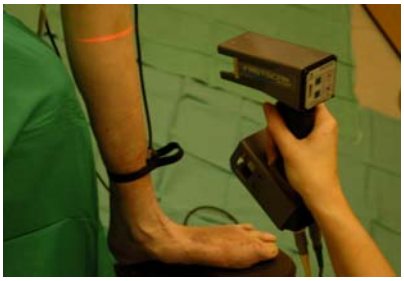
AFO Scanner

NHS GG&C Orthotic service were given funding last year by the Stroke MCN to purchase a handheld laser body segment scanner which captures a 3-d image of the patient to allow custom made orthoses to be produced. The use of this scanner is currently being rolled out across all stroke units in Greater Glasgow as well as some pilot community sites.

The use of the scanner can potentially cut time taken from initial assessment of AFO to delivery to 24 hours, although in most cases AFO's are delivered within a week.

An additional benefit to the patient is that the scanner is non invasive and produces an accurately custom fitted device, which can be reproduced or altered at any future point in the rehabilitation process.

An Orthosis is an external device fitted to the body to change the structural or functional characteristic of body segments or joints.



The use of appropriate Orthoses can maintain quality of life, function and activity for individuals who may otherwise become housebound, in need of carers and support. In many cases they can allow individuals to remain in employment.

There is emerging evidence that the use of Ankle Foot Orthoses (AFO's) earlier in stroke rehab can speed up the rate of rehab. The use of an AFO can enable a patient to return home and be independently mobile around their own home. The better fitting and appropriately prescribed this is, the better the outcome for the patient.

NHS QIS have recently published a best practice statement for the use of AFO's in early stroke.

Outcomes of this project

There is now an organised and equitable dedicated orthotic service at each stroke unit

Average delivery times of AFOs have been reduced by 65%

Maximum Delivery times have been reduced by 76%

The delivery time for all AFOs has become more consistent with the use of the scanners.

AFOs can be delivered quicker when needed.

Another audit is currently underway to compare the speed of scanning versus casting which has increased capacity and reduced time taken to see patients therefore allowing more throughput of patients per orthotist.

Income benefit maximisation

Stroke survivors and their carers involved in the development of the local Stroke Strategy in 2006/7 highlighted that in the early stages after a stroke money advice, for example maximising income, making benefit claims and re-ordering finance, would be beneficial.

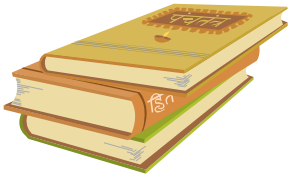
Following a successful bid for resource by the NHSGGC Acute Planning Health Improvement Team, a project was established to respond to the issues raised by participants at the event. Discussion groups were held with 37 recent service users to explore what type of money advice / financial inclusion service they thought should be available for service users, and at what point in the patient pathway this service was required. Following this, a 6 month pilot was designed to provide signposting and money

advice services within inpatient stroke wards across Glasgow. The pilot commenced in November 2008 and ran for 6 months.

Evaluation of the pilot has shown that over the 6 month period, 93 patients and carers used the money advice service. A total of 112 benefit applications were processed and from 52 successfully completed applications a total of £176,837 was generated. It is envisaged that the end benefits awarded total will be in excess of £300,000

Following the outcomes and recommendations from this pilot Glasgow City Council has led a partnership approach to recommence and extend this service to include COPD and Heart Failure patients and carers. Funding has subsequently been secured, by a range of partners to deliver this service for an additional 3 years. The service commenced on the 1st February 2010.

Library pack information project



In order to make stroke information readily available to all members of the public across NHSGGC the MCN undertook a library information project in the summer of 2009. Packs contained a variety of stroke information obtained from CHSS and The Stroke Association as well as a copy of the newly edited My Stroke Book and information about the Heart, Stroke and Diabetes Forum.

2 copies of the packs were sent to all libraries across the board area, one copy as a reference resource, and the other copy as part of the lending library. Copies are also available at the Patient Information Centres at the New Stobhill and New Victoria hospitals.

An audit will take place in 2010 looking at the uptake of this resource.

Community Stroke Service redesign

During 2009 a service redesign project took place to bring together the 2 early supported discharge teams, the stroke specialist nurses and the Community Stroke Team into a single community stroke service.

The new service provides multi-disciplinary early intervention, assessment, treatment & signposting for all stroke patients either as an out patient e.g. TIA clinics, Day Hospital, out patient departments, community settings or within the patient's home following discharge. The service links with the range of community based services, and works with patients and their families or carers to agree clear exit strategies that maximise independence and avoid unnecessary handovers to other services.

The service is now delivered by three teams clustered around existing Stroke Units & Rehabilitation facilities

- South based at the SGH
- N/E based in Lightburn
- West based at Drumchapel.

An evaluation of the new service is currently being undertaken looking at opinions and experiences of both staff members and patients and carers. A report is due Summer 2010.

AHP consultant

During 2009 the Stroke MCN said farewell to Claire Ritchie our first AHP consultant, and in November 2009 the MCN were pleased to announce Gillian Alexander as the new Greater Glasgow and Clyde Stroke AHP consultant. Gill has worked at the Vale of Leven for the last 15 years as a senior physiotherapist and was already an active member of the Stroke MCN.

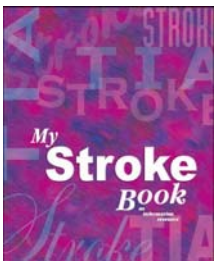
Gill has already started to undertake key pieces of work in relation to the Glasgow Stroke Strategy, with 2 audits due to get underway over the coming months.

- 'Attendance and Goal Planning at MDT Meetings'
- 'Time Elapsed from Admission to Assessment of Rehabilitation Needs by a Member of MDT'.

Gill will also be looking at AHP training needs across the board.

The MCN looks forward to working closely with Gill over the coming years.

My Stroke Book



The “My Stroke Book” resource was fully updated and republished in 2009.

The MCN is very grateful to all those staff members who assisted in the republication of the My Stroke Book information resource. Thanks is also extended to all those patients and carers who participated in the focus groups looking at the old My Stroke Book and helping us with the content of the new edition.

The updated My Stroke Book is now available across the entire NHSGGC catchment area and is also available in audio and large print form, and in a number of other languages. (Urdu, Punjabi, Mandarin, Hindi). The My Stroke Book is also available on the MCN website www.nhsggc.org.uk/myhsd

Stroke Voices

NHSGGC is currently taking part in a pilot of the Stroke Voices programme being developed by CHSS.

The project aims to equip patients and carers and empower them to become meaningfully involved in health care planning and delivery.

A carer training course took place in January 2010, and a patient training course took place in February 2010. The key issues and ideas raised within these sessions will now be discussed within the PFPI subgroup of the MCN.

The MCN looks forward to working closely with CHSS over the coming year on the further development of this project.

More information can be found at www.chss.org.uk

FAST Campaign

Together CHSS and the GGC Stroke MCN launched a local FAST campaign in November 2009. The Campaign included a mail drop to all residential properties across GGC together with a mail drop to all large single site employers in the area.

The campaign featured on the STV Show "The Hour" and there was also an extensive article in the Herald newspaper. http://www.heraldscotland.com/news/health/the-message-is-simple-think-fast-and-you-could-save-a-life-1.929851

For the next 12 months there will also be a Glasgow taxi on the streets branded with the FAST logo.

New spasticity management pathway for patients

A new pathway has been set up to improve the care of patients being treated for post-stroke spasticity. The community stroke teams are given details a month in advance of stroke patients who will be attending the spasticity clinic at the Physical Disability Rehabilitation unit in the SGH for nerve blocks. Immediately after the treatment the PDRU physiotherapist faxes the appropriate programme of exercises for the patient to their CST therapist and the patient is given a copy. The patient is then treated 2-3 times each week by the CST until their review at the spasticity clinic. At this review standard measurements to assess effectiveness of intervention are recorded

All physiotherapy, occupational therapy and therapy assistant staff in the CST have been trained in the techniques required to maximise the number of staff available to carry out treatments. It is anticipated that the service to patients will be better co-ordinated and ensure efficient service delivery without excess demand on therapist time. Outcomes will be audited by Karen Marshall, acting PDRU AHP team lead, and June Lawrie, physiotherapy team leader stroke services

Thrombolysis

The MCN is currently undertaking an extensive piece of work around the provision of thrombolysis both at a local level and across the West of Scotland. Working with our partners in Lanarkshire and Ayrshire and Arran we are looking at the implications on service delivery for the provision of thrombolysis within the new 4.5 hour time of onset of stroke symptoms.

Locally work is ongoing to redesign protocols across the board, and discussions are underway within Inverclyde to address how best to support thrombolysis provision for their clients.

CHSS Training

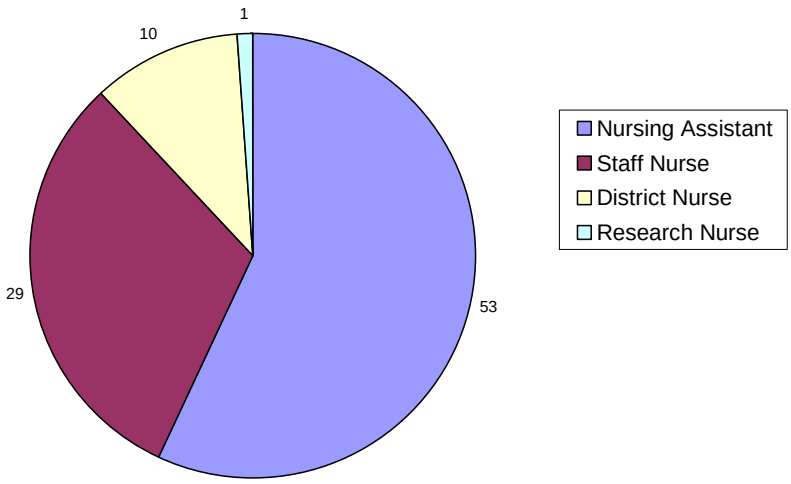
Over the last twelve months health and social care workers within Greater Glasgow and Clyde have had the continued opportunity to update their practice in stroke care by attending a range of courses offered by Chest Heart & Stroke Scotland in partnership with the Greater Glasgow & Clyde Stroke Managed Clinical Network.

The programmes come in various levels and range from one day to three day courses. They are a mixture of information giving, sharing of knowledge, interactive talks and workshops. The courses are all delivered by local clinicians who practice in the area of stroke care.

This year has seen an increase in the demand for carer training and partnerships have developed with the Royal Princess Carers Trust and Renfrewshire Carers Centre. There has also been an increase in activity for in-service training in the stroke sites around Glasgow.

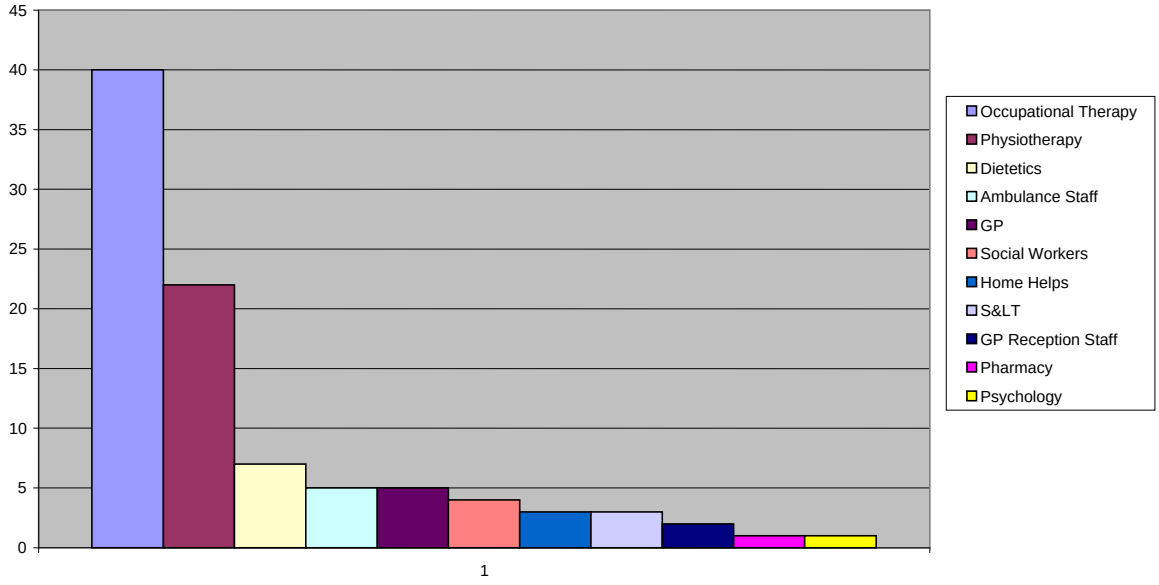
Overall the activity this year has been encouraging with **186 staff** attending the various stroke training courses. The participant details can be broken down into the following:

Nursing Staff Trained 2009 - 2010



93 Nursing staff have attended the CHSS Stroke Training Programmes this year, which accounts for **50%** of the participants.

Table 10: Other Staff Trained 2009 - 2010



Overall this accounts **for 22 days training**. The advanced topics were on FAST Campaign and Thrombolysis and Advances in Stroke Management.

The CHSS training courses continue to be evaluated, monitoring the increase in participant's knowledge, skills and confidence. Feedback this year continues to be encouraging showing marked increases in these areas.

INSERVICE SESSIONS

This year, in addition to the stroke training programmes, in services were offered to the stroke sites within Glasgow.

Following on from these organised in-service sessions, CHSS, jointly with the Stroke MDT at Glasgow Royal Infirmary developed a stroke in-service model called ***"Stroke Team Topics".*** Rather than one - off in - service sessions, each month a particular topic/theme is presented in a variety of ways at different times of the day to suit all members of the team. Staff have the opportunity to see displays, speak to key members of staff, attend presentations and receive literature on the subject for the month. Sheets for reflective practice and CPD are available at the end of each month. This is still in the early stages of evaluation, however it is hoped that in the future this could be offered to other sites.

Primary Care Training

Study evening

In October 2009 the stroke MCN hosted another popular Primary Care Study Evening. The programme included talk on acute care, TIA clinics, thrombolysis and medication.

40 delegates attended and the evening evaluated very well.

A number of delegates made comments on their evaluation sheets saying how much they had enjoyed the event.

Practice Nurse training

The MCN continues to be heavily involved in practice nurse training in relation to the Stroke Local Enhanced Services. All practice nurses across Glasgow receive an initial 1.5 days intensive training, with annual update training there after. Over 2009 to early 2010 4 update training sessions were held.

Protected learning events

In March 2010, the MCN held a Stroke Study afternoon in collaboration with the Inverclyde CHP Protected Learning Time organisers. It is hoped that this will lead to further Protected Learning Times events across the other NHSGGC CHPs. The afternoon covered acute stroke care, thrombolysis, medication, psychological impacts of stroke and long term support for stroke survivors.

Guidelines update event

In June 2009 the MCN held a Guidelines update afternoon at the Beardmore conference centre. This was aimed primarily at hospital staff. The afternoon was well attended and the programme covered the new NHSQIS and SSCA targets, the evidence base around antiplatelet and statin use and guidelines, information around the implications of the 4.5 hour time window for thrombolysis delivery, details of the new stroke community services and information around carotid endarterectomy interventions.

STARS

The MCN continues to promote the use of the STARS training resource to all staff. Access to the STARS website is at www.stroketraining.org

The **S**troke **T**raining and **A**wareness **R**esources (STARs) Project was commissioned by the Scottish Government to produce an e-learning resource which would enhance the educational opportunities for health and social care staff working with people affected by stroke.

The website aims to provide an interactive way of learning and uses quizzes, animations, video clips and case scenarios. There are assessments which the learner may opt to undertake and which, if passed, gives a certificate of completion.

The project is being led by Chest, Heart & Stroke Scotland, NHS Education for Scotland and the University of Edinburgh and is supported by a national steering group of expert stroke clinicians.

As well as the original site that covers all 20 core skill competencies there is now STARS 2 which cover 5 more advancing modules:

- Thrombolysis
- Physiological Monitoring Following Stroke
- Feeding Nutrition & Hydration
- Continence management following Stroke
- Management of Physical Complications Following Stroke

STARS 3 will be launching in September of this year and will cover:

- Emotional Impact Following Stroke
- Cognition & Perception
- Physical Rehabilitation
- Reducing the Risk of Stroke
- Resuming Daily Activities Following Stroke

STARS 4 is still in the development stages, but will be specifically directed towards carers.

Other training

Over the last few years the Stroke MCN has funded a number of members of staff to undertake further education courses to enhance their knowledge and skills in stroke care and rehabilitation.

- 3 of our stroke nurses are due to complete their MSc in Health Care in December 2010.
- 4 AHP staff members to take part in the new Stroke management course being run at Glasgow University.
- 12 members of staff were funded to attend the recent UK stroke Forum held in December 2009.

There has also been staff attendance at a number of other courses.

Appendix 1: MCN Steering Group Membership

Name	Title
Christine McAlpine	Lead Clinician
Camilla Young	Network Co-ordinator
Elaine Burt	Head of nursing, RAD
Fiona Moffat	Academic AHP
Lorraine Smith	Professor of Nursing
Kennedy Lees	Professor of Cerebrovascular Medicine
Jacqueline Torrens	Head of Health and Community Care, SE CHP
Val Campbell	Speech and Language Therapist
June Lawrie	Lead Physiotherapist for stroke
Elaine McKinlay	Dietician
Hilary Bell	OT
Marie Farrell	RAD General Manager with responsibility for Stroke
Gill Alexander	AHP consultant
Bev Hondebrink	Stroke Specialist Nurse
Iain Young	A&E Consultant
	Radiologist
Kirsten Forbes	Neuroradiologist
David Clark	Chief executive CHSS
Kathleen Molloy	Patient representation
Anne Cochrane	Practice Nurse
Helene Irvine	Consultant in Public Health
Niall Broomfeld	Consultant Clinical Psychologist
Heather Bryceland	CHSS Trainer
Fiona Wright	Lead Stroke consultant NE Glasgow
Tracey Baird	Lead Stroke consultant South Glasgow
Pamela Seenan	Stroke consultant West Glasgow
Keith Muir	Consultant Neurologist
Ian Gordon	Lead CHP Clinical Director for Stroke
Pamela Ralphs	Planning manager with responsibility for Stroke
Ann Gibson	Stroke Specialist Nurse, Clyde
Lindsay Erwin	Lead Stroke Clinician Clyde
Pauline Fletcher	Health Improvement Senior (Acute Planning)
Murdoch MacDonald	RAD Head of Finance
Nikki Munro	Advanced Specialist Orthotist

Appendix 2

2008 – 2013 Strategic Framework for Stroke – Greater Glasgow
Action Plan November 2009

Note *italics* = action completed

Strategy Recommendation	Actions	Lead/ Subgroup	Timescale	Report to MCN	Update
1. Awareness and Prevention of Stroke					
1.1 Training in stroke recognition and immediate management - for staff and general public	- Education Gp to develop workplan	Education Gp	Mar. 2010	Mar 2010	Workplan to be developed.
	- Hold annual primary care study evening	Primary Care Gp	Ongoing	Dec 2010	Meeting held Oct 09. Report to MCN Nov 09
	- Identify and agree future programme for study evenings/other events	Primary Care Gp	Ongoing		Update event held June 09
	- Launch FAST campaign across GG&C	FAST Gp	Nov 09	Nov 09	Campaign launched Nov 09`
1.2 Review of stroke information	- Undertake stroke information audit	MCN Coord.			Completed
	- Agree action plan from audit	PFPI Gp			Completed
	- Publish user friendly version of strategy	PFPI Gp			Completed

Strategy Recommendation	Actions	Lead/ Subgroup	Timescale	Report to MCN	Update
	- Update My Stroke book	MCN Co-ordinator	June 09	June 09	Updated and reprinted.
	- Issue information packs to all libraries across GG&C	MCN Co-ordinator	June 09	June 09	Evaluation due Jan 2010
1.3 Support work to develop volunteer opportunities	- Link stroke ward activity with wider RAD work on Patient Day and volunteering	Planning Manager	Ongoing	Dec 09	Rehab wards involved thro' Lead Nurse & AHP
	- Explore opportunities in volunteering, to include links with existing stroke projects - map current opportunities and identify gaps	PFPI Gp	Ongoing	Mar 10	CHSS exploring inpt opportunities around befriending/buddying
1.4 Smoking cessation targeted at stroke survivors	- With Smokefree Services (SFS) establish possible monitoring of uptake of SFS by Stroke survivors	HIT	June 2010	June 2010	Reviewing LES data to inform future work
	- Plan user involvement process to explore barriers (e.g. communication difficulties) to access/uptake of SFS by stroke survivors	HIT/PFPI Gp	June 2010	June 2010	See above
1.5 Pathways into community health imp. services	- Identify key NHS services & enable access to HI service training & brief intervention training.	HIT	Ongoing	March 2010	PNs undertake annual training New training prog. recently developed for other staff gps
1.6 Strengthen links	- Monitor implementation of key	MCN	March	March	Key message document in

Strategy Recommendation	Actions	Lead/ Subgroup	Timescale	Report to MCN	Update
between MCN and CHCPs	message document/minutes circ. to CHPs	Coord.	2010	2010	use
	- Support active involvement of CHCPs in MCN and circulation of relevant papers	MCN Coord. and MCN CHCP reps	Ongoing		See above. Reports available as required for local joint planning groups
1.7 Workplan to address NHSQIS outpt standards	- revise workplan	Stroke CSM	March 2010		Prospective data collection for SSCA due to begin Jan 2010. Monthly reports will help guide service delivery.
	- Monitor implementation of workplan	Stroke CSM	Ongoing		
1.8 Planning for outpatient and day hospital services in ACH	- Stroke service involvement in ACH planning – link with redesign at 4.1	Stroke CD/			Completed
	- Define future development of TIA services	Stroke GM MCN	March 2010	March 2010	SGH project report due end of 09
2. Prioritise Emergency Care					
2.1 Work with SAS to speed up ambulance transfers to ASUs	- Review of current ambulance/thrombolysis protocols	Thromb. Gp	March 2010	March 2010	NHS24 and SAS initiated training progs. & monitoring response rates
2.2 Develop scanning capacity	- Establish links with radiology and identify initial areas of work - explore need for short life working group	Imaging Subgroup			Completed
	- Develop GG&C Imaging Strategy		Jan 2010	Mar 2010	Work underway
2.3 Ensure capacity in	- See rec. 6.4				

Strategy Recommendation	Actions	Lead/ Subgroup	Timescale	Report to MCN	Update
the medical workforce					
2.4 Planning for ASR	- Stage 1: Engage in bed modelling work	Stroke CD/GM/ Plann. Mgr	ongoing		Initial work completed
2.5 Agree GG&C and WOS approach to telemedicine	- Undertake regional thrombolysis audit to assess current demand and informal future plans - Agree West of Scotland Model - Develop local Clyde protocol and advertise to GPs, and explore provision in North in light of Stroke ASR	Regional Gp MCN	Dec 2010 Dec 2010	Dec 2010 Dec 2010	Completed Discussions initiated
3. Inpatient rehabilitation and Discharge Planning:					
3.1 Promotion of person centred assessment and rehab.	- Review current practice around goal planning	AHP Consultant	March 2010		New AHP consultant in post Nov 09
3.2 Explore staffing levels and 6/7 day working for AHPs	- Review outcomes of Lightburn project for implications on future service delivery	Stroke CSM/AHP Consultant	March 2010	March 2010	Report awaited
3.3 Establish generic assistants in inpatient services	- Ensure Stroke MCN links to work on the development of Generic Healthcare Assistant role	Elaine Burt	Ongoing		Initial work completed and reported to RAD Mgmt team
3.4 Provide earlier inpatient information	- Complete pilot to improve access to income maximisation advice in acute	Claire Shields	Ongoing	June 10	Completed – informing broader acute planning

Strategy Recommendation	Actions	Lead/ Subgroup	Timescale	Report to MCN	Update
from SWS and ensure robust discharge planning is in place	stroke - Undertake assessment of any discharge planning issues requiring action including impact of inequalities agenda ▪ See recommendation 4.4 ▪ Recognise community support provided pre-stroke in discharge planning	Lead Nurse/ CSM/ HIT for inequalities	Ongoing		around income max.
3.5 Consistent use of specialist services	- Ensure clear protocols for referral/action	Stroke CD	Ongoing		
3.6 Establish GG&C wide psychology services	- Agree Psychology structure across NHSGG&C - Recruit to consultant psychologist and post in Clyde area				Completed Joanne Robertson in post
4. Early Rehabilitation in the Community					
4.1 Redesign of stroke community services	- Agree service model with RAD mgmt team - Implement agreed service model - Review redesign of community teams	Stroke GM Stroke GM Fiona Wright	 March 2010	 March 2010	Completed Completed Evaluation underway
4.2 Improve links between specialist stroke services and	- Address through 4.1 redesign programme	Stroke GM			See 4.1

Strategy Recommendation	Actions	Lead/ Subgroup	Timescale	Report to MCN	Update
generic community services					
4.3 Address SLT and dietetic community service staffing levels	- Undertake inpatient dysphagia audit - Implement water swallow screen across GG&C - Identify gaps in community SLT and dietetic services	Elaine Burt AHP Consultant	2010	2010	*Ask Elaine Burt* New AHP Cons in post from Nov 09
4.4 Explore need for 7 day community service in stroke	- review as part of discharge planning rec 3.4 to inform redesign at 4.1 and workforce planning at 6.4	Workforce Planning Gp /Stroke GM	Ongoing		See 3.4, 4.1 and 6.4
4.5 Ensure needs of carers are addressed	- Establish links with CHCP Carer Support groups (not stroke specific) and acute division carers info activity - Establish links to LTC strategy planning group	Hillary Bell / Planning Mgr Heather Jarvie	Ongoing Ongoing		Stroke wards included in generic carers info work Links est. with supported self care work
4.6 Develop links between stroke services and employability agenda	- Establish links between stroke services and developing employability bridging service/CHCP employability groups	Hillary Bell /Health Imp Team	Ongoing		*EMAIL HILARY FOR UPDATE*
5. Support in the Longer Term: improving quality of life					
5.1 Monitor referral pathways into community based health imp. initiatives	- Review of LES screens and ensure links to activity of LES data group - Link to recs. 1.5, 5.2 & 5,5	MCN Coord/Prim Care Gp	Jan 2010	Jan 2010	Ongoing activity to review screens and data

Strategy Recommendation	Actions	Lead/ Subgroup	Timescale	Report to MCN	Update
via LES					
5.2 Raise awareness of community based health imp. and social care services	- See 1.5 and 3.4 - Provide written information for staff, patients/carers	Health Imp. Team	2010	2010	Training programme in place and will be expanded to stroke teams
5.3 Reduce barriers for participation in general community programmes	- tba				
5.4 Develop approach to supported self care in stroke	- Undertake mapping of existing supported self care initiatives in line with the LTC supported self care framework	HIT	Dec 09	Dec 09	Mapping of current position undertaken
5.5 Use data from CDM prog. to inform planning	- Undertake annual review of LES data and report to MCN	Primary Care Gp	Ongoing	March 2010	Tom Clackson attending Dec 09 meeting to present interim LES data
5.6 Explore role of HSD website	- Continue website development	MCN Coord.	Ongoing		Continued refinement of website underway
5.7 Through CHCPs engage in relevant comm. planning & housing agenda	- Ensure CHCPs are fully informed of priorities/workplan of the MCN - Link with CHCP planning Officer (Housing and Homelessness)	MCN Coord. / CHCP rep. MCN Coord. / CHCP reps	Ongoing		See 1.6. CHCP reps on subgps as appropriate *ASK HILARY*
5.8 Maximise use of voluntary sector service opportunities	- Report on evaluation of voluntary organisations to go MCN to inform future actions	Planning Mgr	Dec 09	Dec 09	Evaluation completed. Regular reporting proforma being agreed

Strategy Recommendation	Actions	Lead/ Subgroup	Timescale	Report to MCN	Update
	- Ensure links with 1.3 and 5.4	CHSS	Ongoing		
6. Research, learning and development					
6.1 Enhance career pathways for AHPs and nurses into research	- Agreed work plan for R&D group - Implement work plan	Research Gp	Ongoing	March 2010	Completed Work underway
6.2 Encourage and support research into stroke	- Agreed work plan for R&D group - Implement work plan	Research Gp	Ongoing	March 2010	See 6.1
6.3 Develop stroke MCN education strategy	- See 1.1	Education Gp	Mar 10	Mar 10	See 1.1
6.4 Complete stroke workforce plan	- Implement workforce action plan	Stroke W'force Plan	Ongoing	March 2010	?
7. Information Technology					
7.1 Complete implementation of EHR in stroke	- Launch live EHR in Stobhill - Assess impact of EHR to inform roll out of EHR	IT Group IT Group			Project halted
7.2 Establish performance framework for stroke services	- Identify stroke data sources - Agree performance management standards for reporting to MCN	MCN Exec Group MCN Exec Gp	March 2010	March 2010	Work required in 2010

Appendix 3

Greater Glasgow and Clyde Stroke MCN: Better Heart Disease and Stroke Care Action Plan Response

Number	Issue	Action	Comments/Local Impacts?
1.	Promoting healthy lifestyles	All GPs and practice nurses should undertake training in brief intervention/health behaviours and inequalities change, to help them support their patients to make positive changes.	All PNs in GG receive Health Related Behaviour Change training through the Local Enhanced Service programme. Due to the Diabetes LES being rolled out in Clyde, all Clyde PNs will also receive this training.
2.	Promoting healthy lifestyles	NHS Boards, through their cardiac and stroke MCNs, should ensure appropriate referral to community advice and support on alcohol use.	This is included as part of the Local Enhanced Service Templates. This is not available in Clyde. Health Improvement service pathways have been developed to raise staff awareness of service and encourage referrals including alcohol. Alcohol BI training programme targeting primary care and acute staff in place.
3.		NHS Boards, through their cardiac and stroke MCNs, should develop plans for adopting the flexible and culturally-sensitive approach to services developed by the NHS Tayside ”Community Heart” project.	A BME community Stroke toolkit has been developed to raise knowledge and awareness of stroke & primary prevention. This resource will be disseminated to community group

4.	Improving Stroke Services	NHS Boards, through their stroke MCNs, should ensure their stroke services are comprehensive and include each of the essential elements identified in Chapter 5.	
5.	Raise public awareness of stroke	The SGHD and NHS Boards, through their stroke MCNs, should continue to support the ongoing (FAST) public awareness campaigns run by CHSS, taking account of the evaluation of the Stroke Association Campaign in England.	A local FAST campaign will take place across GG&C in November 2009.
6.	Raise public awareness of stroke	NHS Boards, through their stroke MCNs, in conjunction with CHPs and the voluntary sector, should develop a local communications strategy to raise public awareness of stroke.	MCN patient & Carer forum supports people to get involved in developing services.
7.	Raise public awareness of stroke	NHS 24 staff, primary care staff, ambulance crews and A&E department staff should all receive appropriate stroke awareness training, including FAST.	NHS 24 and SAS are conducting in-house training. Further training needs will be reviewed through the work to develop comprehensive thrombolysis services.
8.	Improving TIA services	NHS Boards, through their stoke MCNs, should engage with the Scottish Centre for telehealth, to ascertain whether the Unscheduled Care TIA and Stroke Telemedicine Service to Orkney model is a viable option for TIA outpatient redesign in their area.	Links with Telehealth established. Discussions ongoing.
9.	Improving thrombolysis services	NHS Boards, with advice from their stroke MCNs, should consider appropriate models to facilitate access to thrombolysis for stroke patients, particularly in areas with limited medical cover.	All patients across GG have access to immediate thrombolysis. All Clyde patients can access the Glasgow service but travel times from Inverclyde are longer and other options for service provision are being reviewed.
10.	Improving stroke care	The Regional Planning Groups, in conjunction with the local stroke MCNs, the Scottish Ambulance Service and the Scottish Centre fro Telehealth, should consider how to deliver optimal	The GG&C MCN are in discussion with regional planning to look at the provision of thrombolysis to Lanarkshire and Ayrshire and Arran.

		hyper-acute stroke care, including thrombolysis.	
11.	Improving stroke services	SGHD should continue to highlight NHS Boards' performance in the SSCA on an annual basis and NHS Boards should provide action plans that will address any shortcoming.	Action plan in preparation in response to 2009 report.
12.	Improving access to imaging	The newly-established Scottish Imaging Managed Diagnostic Network, in conjunction with the SAS and NHS 24, should as a matter of urgency be asked to address whether duplex ultrasound, CT and MRI services can be delivered on a 24-hour basis in all hospitals admitting those who have had a stroke, and the additional neuroradiology capacity required.	Although this is not specifically the responsibility of the MCNs, the GG&C Stroke MCN have already formed an imaging working group, with the aim of producing a Stroke Imaging Strategy by the end of 2009.
13.	Supporting younger people who have had a stroke	NHS Boards should adopt the model developed by CHSS and NHS Lanarkshire which helps younger people deal with the wider social consequences of stroke such as access to education, family relationships and the economic impact of stroke. Access to vocational rehabilitation support should also be provided.	Plans for integrating vocational rehabilitation approaches within stroke services are being developed as part of the broader vocational rehabilitation under the Rehabilitation Framework.
14.	Improving early supported discharge	NHS Boards with their local planning partners must ensure that early supported discharge and community rehabilitation teams are integrated and easily accessible to assist people who have had a stroke to become as fully independent as possible.	ESD Teams are present across the whole of GG&C. Health Improvement service pathways (physical activity, healthy eating, smoking, weight management etc) have been developed to raise staff awareness of services and support referral/sign-posting.
15.	Improving rehabilitation and recovery	NHS Boards, through their stroke MCNs, should investigate the implications of allowing self referral to AHP services by those recovering from a stroke.	Referral pathways into AHP services will continue to be reviewed. However currently self referral is not included within the pathway.
16.	Improving rehabilitation and	NHS Boards, through their stroke MCNs, should continue to work with leisure industry representatives to make best use of the new training course "Exercise after stroke: Physical Activity	A new community maintenance exercise programme *Vitality* has been developed to offer appropriate group based community exercise.

	recovery	and Health" to improve access to exercise and fitness training for people with stroke in their area.	Instructors are required to undertake specialist training programmes. NHSGGC contributed to the development of the *Exercise after Stroke* training programme and a number of *Vitality* instructors have already completed the course
17.	Improving rehabilitation and recovery	NHS Boards, through their stroke MCNs, should prioritise the provision of OT services for stroke rehabilitation, given the strong evidence base in this area.	All Stroke teams across GG&C have OT associated with them
18.	Improving rehabilitation and recovery	NHS Boards, through their stroke MCNs, should ensure implementation of the Best Practice Statement on Ankle-foot Orthoses, once available	A number of members of the GG&C MCN have been involved in the development of this Best Practice Statement
19.	Improving rehabilitation and recovery	NHS Boards, through their Stroke MCNs, should ensure that provision of SALT services is included in the mapping exercise being undertaken by the Rehabilitation Co-ordinator in each NHS Board, and supported appropriately, including voluntary sector communication support services.	Voluntary sector projects are in place to support long term communication needs. SLT attached to all community stroke teams.
20.	Improving rehabilitation and recovery	NHS Boards, through their stroke MCNs, should encourage the use of the Stroke Workbook which provides information and support to patients who have had a stroke and their carers.	The My Stroke Book information resource has currently been republished and is available across GG&C. This provides information for patients and carers and has evaluated very well. An NHSGGC Heart Stroke & Diabetes website has been developed as an additional format of the my stroke book and provides links to other reputable stroke websites and information.

21.	Improving palliative care	NHS Boards' stroke and palliative care MCNs should collaborate to implement the objectives in NHS Boards' Living and Dying Well Delivery Plans, and ensure that the best practice statement on palliative care is implemented once available.	Lorraine Smith, who sits on the Stroke MCN Steering Group, is leading in the development of the Stroke Palliative Care Best Practice Statement. Living and Dying well presentation at Nov 09 MCN Steering Group meeting.
22.	Reducing delays to carotid surgery	NHS Boards and Regional Planning Groups should urgently implement the kind of service redesign undertaken in NHS Lothian and elsewhere to reduce the current unacceptable delays in time to carotid endarterectomy for eligible patients.	The GG&C Stroke MCN will be undertaking a baseline audit during the summer of 2009 to help direct future planning.
23.	Improving stroke services	NHS Boards should ensure that their stroke MCN is providing in-service training opportunities such as STARS to staff involved in stroke care. Boards should also ensure that staff have access to online training through their hospital IT systems.	The GG&C Stroke MCN currently employs a CHSS Trainer who provides training days and also in-service training to all staff. This post is funded until April 2010. The Stroke MCN Education Subgroup will discuss the findings of the recent STARS report and look at how to resolve low uptake across the health board,
24.	Improving patient information	NHS Boards, through their cardiac and stroke MCNs, need to make concerns about communication issues for heart disease and stroke patients one of their priorities, and develop plans to tackle these concerns locally.	My Stroke book available in range of formats and languages. Aphasia handbook also available via SLT