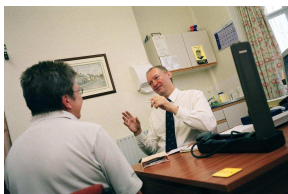
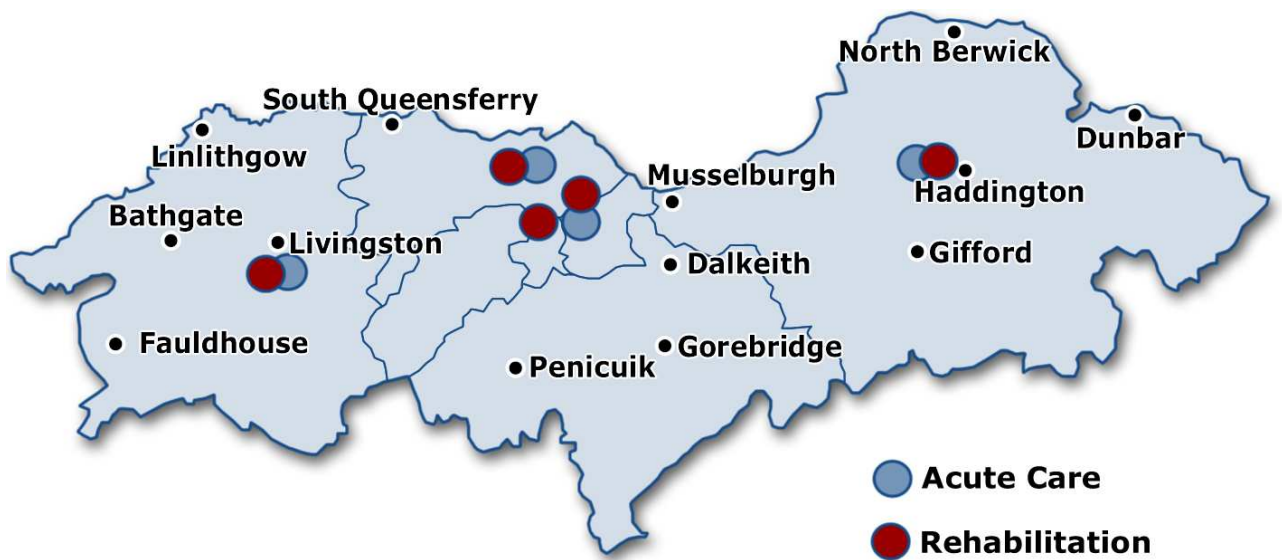


Lothian Stroke MCN Annual Report 2004-2005



Foreword

The Coronary Heart Disease and Stroke Strategy for Scotland set the scene in 2002. With initial funding, we were asked to set up a 'managed' network to improve patient care, to promote 'evidence-based' medicine, measuring our outcomes and embracing a truly multi-disciplinary approach to care involving patients.

In Lothian the professionals working in stroke care already had a culture of working together across Lothian. The pathway of care had been described. Audit data had been collected for 2 years and the Lothian audit system was to be rolled out across Scotland. We had a very active research group with international standing and Professor Martin Dennis from Lothian was appointed as the Chairman of the National Advisory Committee on Stroke for Scotland. These were solid foundations on which to build.

A number of meetings inviting key stakeholders across the 'network' to consider funding bids further strengthened the developing Stroke Managed Clinical Network (MCN). The appointment of the clinical lead with managerial and administrative support, cemented the Lothian Stroke MCN within the planning and redesign framework.

Within one year, the successes of the MCN in improving services to patients have been substantial and are highlighted. But challenges remain and these are frankly addressed in this report.

The report champions the work of the Lothian Stroke MCN, emphasising integrated cross-professional working and the new opportunity for encouraging further discussion and involvement. Should you wish to be more involved, or simply to make contact with the stroke MCN, we would be delighted to hear from you.



Professor Martin Dennis
MCN Lead Clinician



Dr Alison Bramley
MCN Manager

The Stroke Managed Clinical Network brings together professionals from primary, secondary and tertiary care with patients and carers, to work in a coordinated way across geographical, organisational and professional boundaries.

The MCN aims to ensure equitable provision of high quality, clinically effective care for Stroke patients throughout Lothian.

Stroke Services in NHS Lothian

About 1000 patients are admitted with a stroke and another 1300 are referred to neurovascular clinics with a suspected stroke each year. Acute stroke services are provided at the Royal Infirmary of Edinburgh (RIE), the Western General Hospital (WGH) and St John's Hospital (SJH).

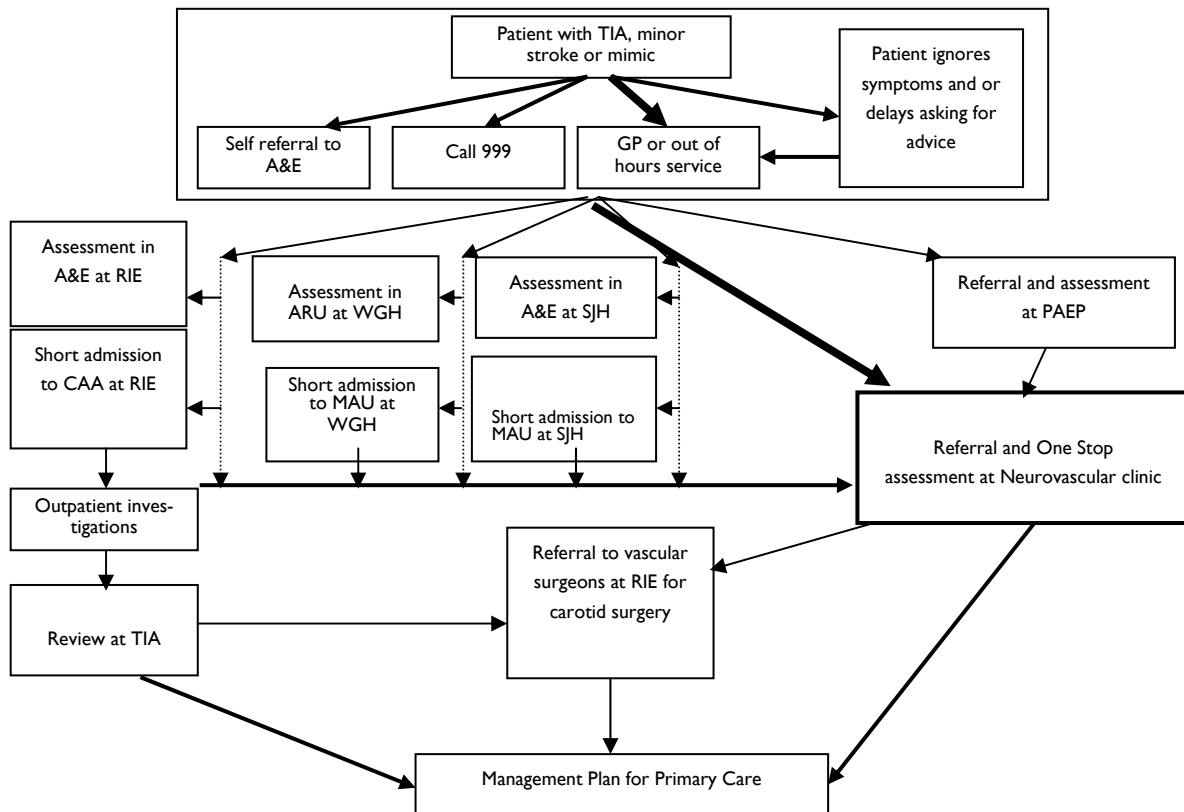
Patients may self refer to Accident & Emergency departments (A&E) at RIE or SJH or be referred by their GP or out of hours medical services. Patients are usually referred to the hospital that serves their area for acute medical admissions i.e. South Edinburgh patients go to the RIE, North Edinburgh patients go to the WGH and West Lothian patients go to SJH. A few patients from East Lothian are admitted to

the medicine for the elderly service at Roodlands Hospital.

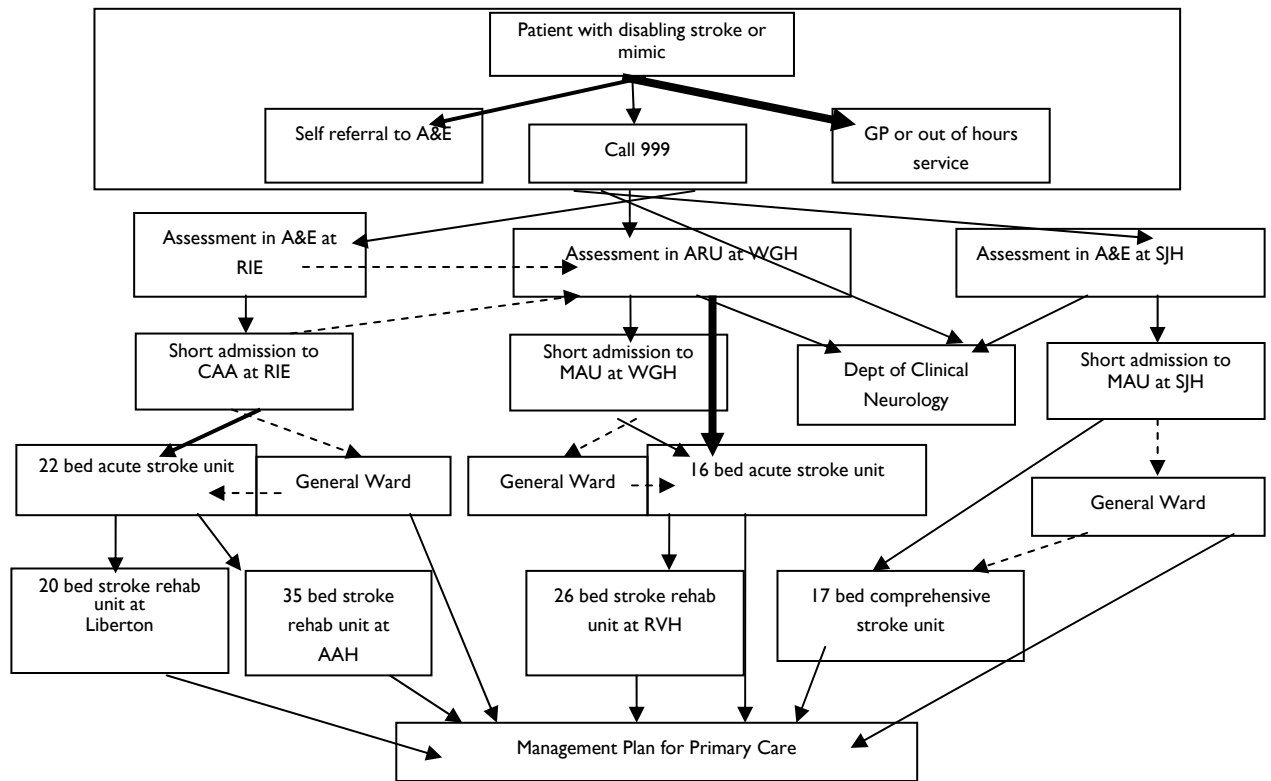
Each hospital provides similar stroke unit care. The majority of admitted patients will go first to an assessment ward but the aim is to transfer all stroke patients to a specialist stroke unit as soon as possible.

At the WGH a greater proportion of patients are admitted directly from the acute receiving unit to the acute stroke unit. At the RIE and WGH there are acute stroke units with 22 and 16 beds respectively. At SJH there is a 17 bedded combined acute and rehabilitation unit within a 22 bed ward. When no stroke unit bed is available patients may be admitted to general medical or geriatric assessment wards.

Outpatient Pathways through Hospital Stroke Services in Lothian



Inpatient Pathway through Hospital Stroke Services in Lothian



Patients remain on the acute units for on average 2-3 weeks. Many are discharged home but a few who make a poor recovery are transferred to long term NHS or nursing home care. At the RIE and WGH those needing more prolonged rehabilitation are transferred to off-site specialist stroke rehabilitation units at Liberton Hospital (20 beds), the Astley Ainslie Hospital (35 beds) and Royal Victoria Hospital (26 beds). At SJH the acute and rehabilitation units are integrated in the same ward.

For patients with transient ischaemic attacks (TIAs or mini strokes), minor strokes and those conditions which mimic these, both the WGH and SJH provide rapid access, one stop Neurovascular Clinics for patients throughout Lothian. Some of these patients are referred as emergencies to the A&E departments or acute receiving unit at the WGH where they have an initial assessment, perhaps involving an overnight stay in an

assessment area, and are then referred on to a neurovascular clinic at WGH or the specialist stroke clinic at the RIE. This ensures that their investigations are complete and secondary prevention is optimised.

After discharge from hospital, a Liaison Stroke Nurse employed by Chest Heart & Stroke Scotland (CHSS) follows up all patients in the community. Some will be managed by a community-based rehabilitation team or are reviewed in geriatric day hospitals or receive outpatient based therapy.

Lothian Stroke MCN

All clinicians that stroke patients and their carers may meet in Lothian are members of the Network. A Steering Group with representatives from all hospital sites and all professional groups meets three times a year

to share progress and approve key decisions. Professor Martin Dennis was appointed as Lead Clinician in August 2003 by Lothian Health. The support team, comprising half time of a senior manager Dr Alison Bramley and Carol Brown as a co-ordinator, were appointed in February 2004. Morag Medwin replaced Carol from October 2004.

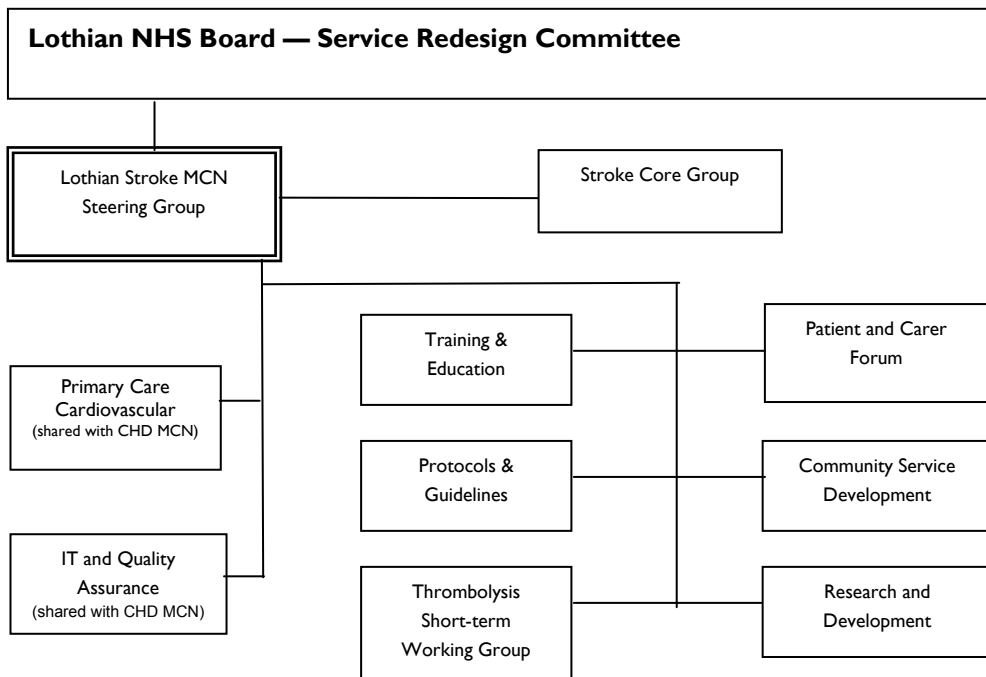


Morag Medwin, Martin Dennis, Alison Bramley

work. We set up a Core Group, meeting monthly, to action decisions taken by the Steering Group. We have GPs on the Steering Group but we have tried unsuccessfully to find a GP representative for the Core Group. There are about 60 members of the Steering Group, and the majority of these members also belong to one or more subgroups that have been established to take forward specific developments. We set up two subgroups jointly with the Coronary Heart Disease (CHD) MCN, taking advantage of common requirements for these closely related MCNs. These are the IT and Quality Assurance Subgroup and the Primary Care Cardiovascular Subgroup.

The Steering Group, which is the main decision making body of the network, first met in February 2004 and agreed a constitution and sub groups to carry out its

Details about the MCN, the constitution and the membership and remits of all its Groups are on our Website at www.lothianstrokemcn.scot.nhs.uk
A diagram of our structure is shown below.



Patient and carer involvement

There has been a 'recruitment' drive to find patients to be involved in the MCN, and to date there are 15 members of the Patient and Carer Forum. A meeting was held on 3rd May to discuss how patients and carers can become fully involved at all levels on the Steering Group and Subgroups. The Forum will meet regularly to discuss the services offered to stroke patients throughout Lothian and to ensure patients and carers are fully involved in the work of the MCN.



Patients and carers—Colin, Mary and Jonathan, at our first meeting

How we communicate now and in future

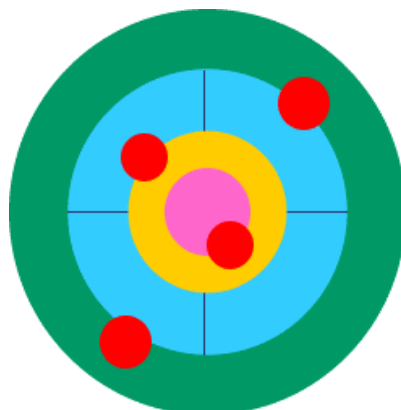
To be a network we must communicate well with each other. Initially this was achieved through members' attendance at Groups and Subgroups. MCN meetings were a new opportunity for health professionals to meet each other to discuss aspects of patient care across boundaries, particularly as members from primary care met with those from the hospital service to discuss how patients were referred between them. The MCN and its groups provide a forum for professionals from all three hospital sites in Lothian to meet to ensure that services are provided equitably.

The MCN office is an email hub, so that any important new information can be sent out to everyone interested in stroke services.

There is support from a national project to help all CHD and Stroke MCNs to develop websites and the Lothian Stroke website is in preparation for June 2005.

A newsletter for patients and the public is being designed and will be published regularly.

To engage with the public, we are opening our June 2005 Steering Group meeting to the public and launching this Annual Report, along with a poster display of work undertaken and our achievements.



- Core Group
- Steering Group
- Subgroups
- Working Groups
- Stakeholders

The

MEASURING STROKE AND MONITORING THE MCN

Stroke statistics in Lothian

The CHD & Stroke Strategy for Scotland (2002) set a target for the reduction of premature (below the age of 75) deaths from stroke by 50% between 1994 and 2010. Results for Lothian are already ahead of this target but we should not be complacent since data from other European countries show that further reductions are possible. The population of Lothian does not have the same proportion of elderly and deprived people as some other parts of Scotland so we would expect our results to be better than average. The decline in mortality is less in very deprived areas compared to affluent areas so health inequality has increased. Research also shows that stroke is more common in African-Caribbeans and in people of South Asian origin.

Leading the National Stroke Audit

Since 2002 the three acute hospitals in Lothian have collected data that reflect the quality of care for all patients admitted with stroke or referred to either of the neurovascular clinics. This system has now been rolled out to all other Scottish hospitals and forms the Scottish Stroke Care Audit System that is co-ordinated from Lothian.

The system produces reports reflecting the performance of each hospital or unit with respect to various indicators. These include the proportions of patients and the delays in accessing: stroke unit care; brain imaging; swallowing assessment; blood thinning, blood pressure and cholesterol lowering medication.

From our audit we know that 977 patients

were admitted to hospital with stroke in 2004: 429 to the Royal Infirmary of Edinburgh, 418 to the Western General Hospital and 130 to St John's Hospital in Livingston. About 1300 are referred to the neurovascular clinics for advice, of whom 730 have a stroke related condition.

Information and quality assurance

We set up a joint IT and Quality Assurance Subgroup with the CHD MCN. One key project is the development of Primary Care Registers of Stroke patients. With the advent of the GP Contract and the Quality Framework, which requires GPs to maintain CHD and stroke registers and to monitor a number of primary prevention activities, we were able to see an opportunity to work together by building on the well-developed Diabetes Register.

We decided to work with an IT Consultant from Extramed who had managed the implementation of the Diabetes Register project in Lothian. With a contribution from Sanofi-Aventis and project funding from the Stroke MCN we have now devised a new Patient Quality Register (PQR), which will link the wealth of data in GP practice computers with data collected in hospital.

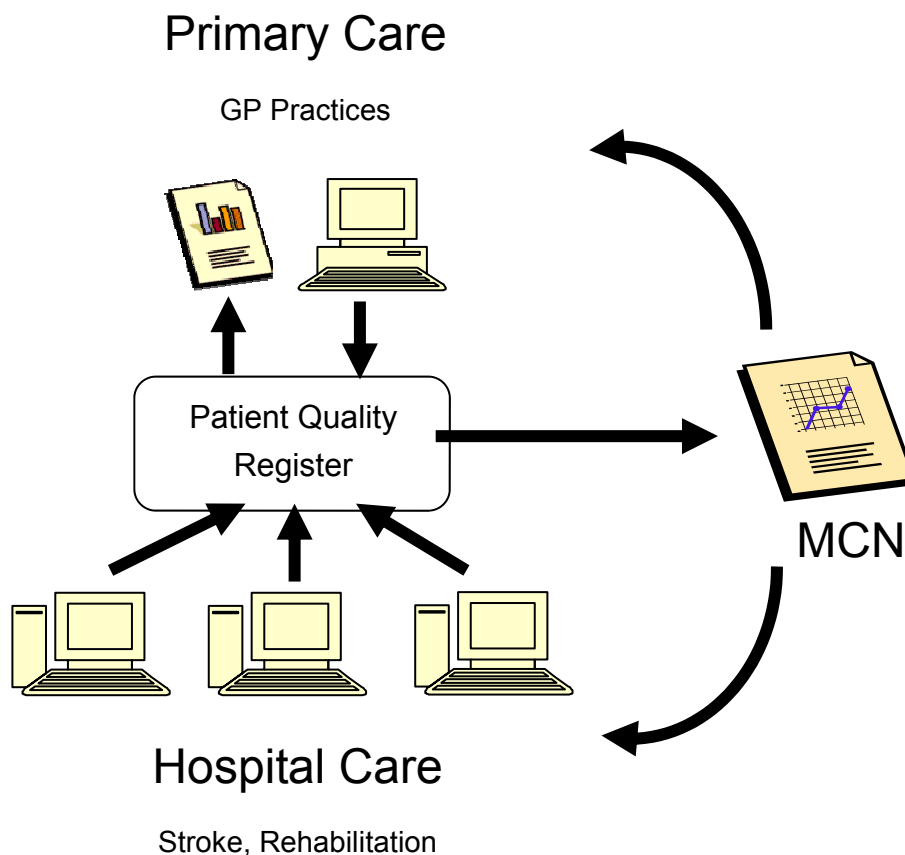
This important development is the key to enabling the MCN to monitor quality of care for Lothian's patients. It will provide reports which can be fed back to the lead GPs with an interest in stroke and heart disease for them to identify opportunities for improvement in quality of care. We will shortly be appointing facilitators jointly with the Diabetes MCN to support the rollout of this system.

We plan for a first stage database combining information from primary and secondary care with reports to become available in July 2005. Stroke data for the PQR will also come from an IT system being piloted in the Neurovascular Clinic, which captures clinical information for audit purposes, but also helps generate a structured summary for the notes, for primary care and the patient themselves.

The system will provide a customised summary of appropriate length, detail and simplicity for each recipient. Thus it is planned that the patient version would include simple information leaflets relating to the individual patient's problems or circumstances.

Acute stroke services reviewed by NHS Quality Improvement Scotland

NHS Quality Improvement Scotland (NHS QIS) published the "Clinical Standards for Stroke Services: Care of the Patient in the Acute Setting" in March 2004. The MCN completed a detailed self-assessment for a review visit on 27th January 2005. Approximately 70 staff were involved in the group interviews during the day, enabling the review team to gain an overview of the stroke services within Lothian.



At the end of the review visit, the review team summarised their findings:

Good practice

- ◆ Comprehensive education and training programmes;
- ◆ Secondary prevention protocols;
- ◆ Commitment to timely planning of discharge.

Challenges

- ◆ Improve equity of access to stroke units;
- ◆ Documentation of swallow screen assessment;
- ◆ Develop systems to ensure communication of risk factors to the patient and their GP.

NHS QIS will publish their local and national reports in November 2005.



Lifestyle changes being promoted in the community

ACHIEVEMENTS

Preventing strokes in the community

We published a Strategy for the Primary Prevention of Coronary Heart Disease and Stroke in February 2005. This was our response to the requirement in the Scottish Executive's 'Coronary Heart Disease and Stroke Strategy for Scotland' which led to the setting up of the CHD and Stroke MCNs.

The Lothian strategy aims to reduce inequalities in health and to reduce the incidence of CHD and stroke in the whole population as well as providing more intensive interventions to those at high risk. It supports prevention activities based in the community and in healthcare settings.

In the community there is already much work by NHS Lothian working with partners in Local Authorities and the voluntary sector. They are targeting the general population and populations at high risk because of ethnicity or deprivation.

In healthcare settings we plan to develop common risk assessments and to support lifestyle change such as smoking cessation. We will help patients to manage high blood pressure and cholesterol, which are associated with stroke and heart disease, bringing together Lothian guidelines. Everyone should have equal access to healthcare services.

The Strategy was widely distributed to healthcare staff and partner agencies and the Primary Care Cardiovascular Subgroup will monitor this work.

Stroke Unit provision increased

Over the last twelve years Lothian has expanded the number of specialist stroke unit beds from 0 to 136. Around 70% of patients admitted to hospital access a stroke unit bed at some time during their stay. The national standard is currently that 70% should be admitted to a stroke unit bed within a day of admission. Our results range from around 20-80% for this measure but on average we do not meet the standard.

The suboptimal access to stroke unit care is due to a number of factors:

- ◆ Delayed discharges mean that it is sometimes difficult to make stroke unit beds immediately available.
- ◆ Medical admissions are being increasingly channelled through assessment wards. This inevitably leads to delays in admission to the stroke unit.
- ◆ Some patients with stroke are quite reasonably referred to the neurology and neurosurgery services at the WGH for specialist care.
- ◆ A small number of patients with acute stroke are admitted to Roodlands hospital which does not have a stroke unit.

Access to stroke unit care has been improved during 2004 by opening an additional 6 beds at SJH and transfer of the stroke unit in the RIE to its own ward. Development of a new stroke unit outreach service aims to ensure that those patients who cannot be accommodated on a stroke unit are not disadvantaged.

Lothian has more stroke specialists and works well in the multi-disciplinary team

Lothian is fortunate in having a comparatively large number of consultant physicians with an interest in stroke working at its hospitals. Lothian was the first region in the UK to establish training posts for doctors in stroke medicine and currently has two.

The key to the success of stroke units is the multidisciplinary team. Nurses, doctors, physiotherapists, occupational therapists, speech and language therapists, dieticians, social workers and psychologists work closely together, meeting at least weekly, to co-ordinate individual patients care. Lothian is fortunate in having well established teams in all hospitals.

Good access to high quality imaging of brain and vessels

Additional funding for imaging has enabled improved access for patients with stroke to computerised tomography (CT) and magnetic resonance (MR) brain imaging at the RIE, the WGH and SJH, and also improved access to carotid ultrasound and MR angiography at all three sites. The money has paid for additional staff and imaging sessions.

We are about to implement provision of teleradiology workstations for viewing images of stroke patients in the stroke units and acute receiving areas of the Edinburgh hospitals to ensure clinicians can act as soon as possible on the result. Image viewing systems already exist at SJH.

This improved access has enabled the implementation of rapid imaging for diagnosis and secondary prevention both for patients

admitted to hospital as well as those managed as outpatients, and is now avoiding delays of several weeks incurred through waiting for a neurovascular clinic outpatient appointment.

A new stroke liaison nursing service across all sites

Chest Heart and Stroke Scotland have employed five stroke nurses in partnership with the NHS. The Lead Stroke Nurse took up post in December 2003. She was joined in April 2004 by a further four. They link with each of the hospital teams based in the stroke units. The nurses visit every patient after discharge for up to one year. The stroke nurse can help patients and carers cope with problems associated with stroke, looking at risk factors and give advice with regard to reducing the risk of further strokes. Already over 400 patients have benefited from the new service.

The stroke nurses provide each patient with tailored information regarding their stroke, risk factors and measures to prevent further events. They may contact the GP, or members of the hospital team on behalf of the patients if health concerns arise during the post discharge period.

This service is funded by the Big Lottery fund



Audrey Bruce (right) - our Lead Stroke Nurse with a young stroke patient, Angela.

for the first three years, but will be funded by the MCN thereafter.

Psychology input to all units

Psychological problems are common for patients with stroke and yet provision of specialist services, which are recommended in SIGN Guidelines, are uncommon in Scotland. Strategy funding was allocated to develop a new clinical neuropsychology service for stroke patients in Lothian. In May 2004 two psychologists were appointed and based at the Astley Ainslie Hospital to cover all the stroke units in Lothian. They have already developed referral criteria and seen 92 patients up to January 2005. They are making an important contribution to improving the ways stroke units assess, monitor and treat mood disorder and cognitive impairment following stroke and they are training other staff. They link closely with the Stroke Liaison Nurses who identify patients with psychological needs.

Bridging the gap for speech and language therapy

An audit of the time taken to see a Speech and Language Therapist had shown that there was a big gap in provision with some patients waiting 5 weeks after leaving hospital to be assessed. Strategy funding has been used to recruit a Speech and Language Therapist to reduce this. The therapist was appointed in January 2005 to work from the Astley Ainslie Hospital, at first for patients in Edinburgh but with a view to also supporting those in East and Midlothian. MCN funds have also been used to bolster the East and Midlothian service, subject to a review of the whole service next year.

Lothian-wide education and training scheme

The Education and Training Subgroup oversees core training for all staff involved in stroke care. A Co-ordinator, funded by NHS Lothian and employed by the Chest, Heart and Stroke Scotland organises courses at introductory, intermediate and advanced levels. These courses are free to participants from Lothian, and clinical managers are encouraged to offer staff the opportunity to attend and progress through the various levels.

We also provide training for specific groups of people such as social workers and district nurses. We have, in partnership with Universities, worked to provide validated post-graduate modules for staff working with stroke. We aim to incorporate the National Core Competencies for Stroke within our programmes. Current initiatives include the involvement of the Scottish Ambulance Service in stroke training, and designing a course for frontline staff in the delivery of thrombolysis.



Stroke Core Competencies for Healthcare Staff

Active research programme

Clinical research depends for its success on well-organised clinical services since it requires patients to be managed according to high standards and strict protocols. Also, clinical research may enhance the care provided by offering patients access to extra diagnostic, assessment and treatment modalities. So Lothian is fortunate in having a well established and internationally renowned stroke research group.

Currently researchers are involved in seven important randomised controlled trials of treatments. Also there are numerous observational studies using cutting edge imaging techniques based in the Scottish Brain Imaging Centre which are improving our understanding of stroke and its subtypes. Other projects are focusing on risk factors, genetics, post stroke depression and personality, visuo spatial problems and drug adherence.



CT scan

Active development of common protocols

The Protocols and Guidelines Subgroup aims to improve the management of stroke through the development of an integrated care pathway (ICP), protocols and guidelines.

- ◆ Our preparation for the NHS QIS visit highlighted that whilst many protocols existed, they differed across sites. We are now in the process of harmonising protocols across the whole service.

Our integrated care pathway (ICP) will be a standardised, user friendly, flexible document that is easy to update. Subjects for supplementary protocols have been agreed, priorities have been established and appropriate members of the group are currently working to produce these. We will liaise with the Education and Training Subgroup to educate staff in the use of the protocols. Once these are in place we will ensure they are kept up to date and systematically monitor adherence to them.

MORE TO DO

Difficulty attracting and retaining nurses in stroke services

There is a national shortage of trained nurses. Stroke units are a recent innovation that, to be effective, need well trained and specialised stroke nurses. Unfortunately basic nurse training does not fully prepare nurses to work on stroke units and stroke nursing has not been a recognised career path. Also there is a perception that stroke nursing is heavy and unrewarding. Our challenge is to make stroke unit nursing more attractive to help with recruitment and retention of staff.

In Lothian we have introduced or are planning various changes, which we hope will improve the situation. These include:

- ◆ The introduction of a Lothian wide stroke training scheme
- ◆ NHS Lothian and the MCN are investing heavily in new ward equipment to ensure patients are managed in line with movement and handling guidelines. Thus most wards are equipped with electric profiling beds and are upgrading hoists, cushions, seating etc
- ◆ We are piloting rotations between units and outreach services into non-stroke areas of the hospitals to broaden the nurses experience and better prepare them for future roles in stroke nursing. Outreach into other wards and clinics will broaden their experience and offer additional opportunities to gain experience in teaching, health promotion and research. The planned development of a Scotland wide stroke research network

may allow nurses to dedicate specific sessions to clinical research.

Hopefully, with the development of more stroke specific community-based stroke rehabilitation services, opportunities to pursue a career in stroke nursing outside the hospital will grow. There are already opportunities to gain formal recognition of specialist stroke training through the local universities.



Staff at WGH with new lifting hoist purchased with MCN funds.

Delays of up to 3 weeks for neurovascular clinics

NHS QIS standards indicate that 80% of patients with stroke and TIA should be seen within 14 days of referral to a neurovascular clinic and ideally within seven. However, the proportion of patients being seen within 14 days has fallen in the last two years from about 74% to about 60%. This is despite increasing the numbers of patients seen in neurovascular clinics. There has been an increase in referrals, which may partly be due to the introduction of the new GP

contract, partly through greater awareness amongst primary care physicians and others and also from A&Es and assessment wards. In addition the proportions of referral with a final diagnosis of stroke or TIA has fallen to about 55%. This may in part reflect the continuing long waiting lists for general neurological clinics.

In an attempt to reverse this trend and to meet the NHS QIS standards, we are working on protocols to manage demand and ensure patients are sorted out at first presentation:

- ◆ In the last two years we have attempted to reduce the time it takes for referrals to reach us. Most referrals are now faxed or sent electronically using Second Opinion or SCI gateway systems
- ◆ All referrals are prioritised to try to ensure that those with more definite TIAs and strokes are seen earlier than those with less well defined events
- ◆ The Medicine for the Elderly services plan to establish a “fits, falls and funny turns” clinic at Leith CTC and Royal Victoria hospitals. We hope to be able to divert some of the less appropriate referrals to this new service
- ◆ We have increased the number of new patient slots by increasing the numbers of neurovascular clinics. And we have shortened appointment times to allow us to see more patients per clinic
- ◆ We have produced guidelines in an attempt to ensure that when patients are referred to A&E or neurology services that they are fully assessed at that time, and that specialist advice is obtained so that referral on to the neurovascular clinic would be unnecessary

- ◆ We are developing a new computer system to increase efficiency of the clinics.

Inequality of access to thrombolysis for early stroke

Some people who develop a stroke may benefit from a treatment that aims to relieve the blockage in the blood vessel that causes the stroke symptoms (thrombolysis). However, this treatment has risks as well as benefits and should only be given under the supervision of an experienced medical and nursing team. Also, it can only be given in the first few hours of a stroke.

There is a thrombolysis service available at the WGH and plans to provide similar services at the RIE and SJH are underway. Co-ordinated by the Thrombolysis Subgroup, all sites are creating operational policies. The aim is to have a service operational at the RIE and SJH later this year.

Speed is of the essence in thrombolysis treatment, and we are looking at a number of ways to shorten the time from presentation with symptoms to seeing a stroke specialist. This includes the use of telemedicine.

Not everyone with stroke is cared for in a stroke bed

Our own audit data shows that we do not meet the NHS QIS standards for the proportion of patients cared for in stroke units.

In West Lothian access was poor because of a limited number of stroke beds so strategy funding was used to increase the number from 11 to 17. Additional rehabilitation equipment and staffing resources were provided. The stroke unit was relocated into a 22 bedded ward with adjacent rehabilitation facilities. Strategy funding was also used to recruit a staff-

grade stroke physician who works part time and a rotational liaison nurse and nurse audit post. Not all stroke admissions to SJH access stroke unit care so we have developed a stroke unit outreach service there to provide specialist input from the stroke team for stroke patients on the medical admissions unit and other medical wards. This service identifies all stroke & TIA patients, allowing those who will benefit most from stroke unit care to be transferred to the stroke unit. Those who do not require a prolonged hospital stay are provided with information and counselling about stroke and further access to rehabilitation and follow-up by the stroke team is arranged.

There are also problems with access to the stroke units on the WGH and RIE sites. For RIE some improvement was achieved by moving the stroke ward adjacent to the rehabilitation facilities, but difficulties in timely discharge for patients is a common problem in Edinburgh, which reduces the availability of beds. The stroke unit outreach service similar to that in SJH and described above, will provide specialist stroke support to those patients with stroke who are not in the stroke units at the RIE and WGH.

Swallow screens are not documented fully

Difficulty swallowing (dysphagia) is relatively common in the early days after stroke and it is important to identify problems early, to avoid complications such as pneumonia. Complications will slow recovery, disrupt rehabilitation and can even be life threatening.

Swallow screening aims to promptly and reliably identify swallowing problems so they can be dealt with. There are clear standards, which

include evidence that the swallow screen has been carried out properly and noted in the medical record.

An audit performed in preparation for the NHS QIS review highlighted that the swallow screen was not adequately documented in the medical notes. Therefore we are actively implementing an improvement plan with a supporting protocol and training. The swallow screening procedure should be integrated into the admission documentation for stroke to prompt earlier screening.



Patient awaiting swallow screening

Delays to carotid endarterectomy

A proportion of patients with an ischaemic stroke or TIA have a narrowing of the carotid artery in the neck which normally carries blood to the eyes and brain. Clots may form on this narrowing which can cause further strokes or loss of vision. An operation, carried out by vascular surgeons, called a carotid endarterectomy, removes the narrowing and is known to reduce the risk of future stroke. However, the operation is most effective if done

soon after the first symptoms and it must be performed to a high standard. The most important complication of the operation is to cause a stroke.

In Lothian, along with most other parts of Scotland, the delay between the patients having their minor stroke or TIA and having surgery is too long. Patients are having preventable strokes. Our attempts to reduce the delays in seeing patients in the neurovascular clinics and the improvements in one-stop imaging have helped. In addition, during 2004 we revised the system for referring patients to the vascular surgeons at the RIE, which we hope will further reduce delays. The delays to surgery and the strokes rate associated with surgery are being closely monitored.

There is variation in quality of delivery of information given to patients and GPs

The case note audits performed in advance of the NHS Quality Improvement Scotland visit in January 2005 highlighted that, although all units were assessing patients with respect to risk factors, these data were not being systematically passed on to patients or primary care. Part of the problem was undoubtedly that, even when information was communicated verbally, this was not documented.

We expect the situation to have improved now that the CHSS Stroke Liaison Nurse service has been introduced. The Patient Quality Register will automatically provide information to GPs when patients are discharged and the new Neurovascular Clinic computer system produces reports for patients and GPs which contains all the important information.

Lack of stroke specific community rehabilitation

The Community Developments Subgroup agreed that the key gap in the stroke patient's pathway in Lothian is in stroke specific community rehabilitation. The Subgroup is overseeing a number of investments in staff which partly address this gap: the stroke liaison nurses, speech and language therapist, and psychologists. Strategy funding has also been agreed for a new Advanced Healthcare Practitioner (therapist) Consultant post. This will be a first for Scotland and the professions involved are writing the job description for approval by the Scottish Executive. The new AHP Consultant will offer leadership to develop services in this important area.

PLANS FOR THE COMING YEAR

The MCN has a prioritised workplan for 2005/06 which is attached to the Report.

We aim to build on our first Patient and Carer Forum meeting, identifying more individuals who wish to take part in the MCN. We will provide those we have already met with opportunities to join our Subgroups and work with us on developing services and we will give them the training and support that they need to become involved.

The following are some new improvements that we expect to deliver.

- ◆ We will invest short-term funds in patient care. We are surveying the equipment available at each site in Lothian and we aim to bring them up to a common standard by buying items such as hoists and therapists' equipment.
- ◆ The pilots for services already described will get underway during the year. These are the outreach nursing services from the Stroke Units at RIE and WGH to bring specialist stroke care to patients who are located in beds in wards other than the Stroke Units. We will also introduce telemedicine to enable the stroke consultant to advise on providing early thrombolysis, even if he or she is responding from home. The consultant will be able to see and talk to the patient and also see the CT scan.
- ◆ We expect the new Therapist Consultant to be appointed later this year and he or she will lead on significant developments of stroke services for patients after they have left hospital.
- ◆ We will begin to train staff in the Stroke Core Competencies so that all staff in Lothian understand how to manage patients with stroke.
- ◆ We expect the first phase of the Patient Quality Register to be launched and we will begin to feed information back to GP practices so that they can compare what they do, and make improvements.
- ◆ We will develop Lothian-wide protocols and a common Integrated Care Pathway.
- ◆ We will report our progress again in one year's time and meanwhile information about developments will be posted on our new website at www.lothianstrokemcn.scot.nhs.uk

MONITORING INVESTMENTS

Project Funding List

Project Title	Allocation £ p.a.	Benefits for Patients
Establish Stroke MCN	50,000 for 2 years	MCN office established. Manager and Co-ordinator appointed for Stroke in February 2004. Active MCN in place.
Establish national database for stroke	30,000 for 3 years	Data collected in all 3 Hospitals and used to compare practice.
Staff Grade Physician	45,000	0.6wte physician appointed. Outreach stroke nurse and audit nurse appointed part time. Enables stroke patients to be seen more quickly and to receive specialist stroke care.
Increase stroke unit capacity at SJH	36,000	6 extra stroke beds in newly refurbished ward at SJH.
Brain Imaging and carotid duplex scanning for Lothian patients	199,000	Radiology staff appointed to increase access to timely diagnostic imaging on all three sites. New equipment ordered to allow images to be seen on wards.
Psychology services increased	106,000	2 neuropsychologists employed June 2004. New psychology service available for stroke patients throughout Lothian.
Stroke audit and database development in primary care	134,000	2 year project to build a Patient Quality Register linking primary and secondary care based on existing Diabetes Register. Phase 1 expected in July 2005. Facilitators to be appointed. Funding will pick up CHSS stroke outreach nurses when Big Lottery funds cease in 2007
Bridging the gap in speech and language therapy	47,000	Additional speech and language therapy services to bridge the gap for patients following hospital discharge before they are seen in the community. New therapist appointed January 2005 so shorter waiting times.
Consultant Stroke Physician RIE	99,000	New Consultant started June 2004 mainly at RIE. Patients seen more quickly and assessed for specialist stroke care.
Liberton Hospital Stroke Rehabilitation Unit Occupational Therapy Services	34,000	Occupational Therapy Services at Liberton Stroke Rehabilitation Unit was understaffed and is now able to provide appropriate level of care.
Appointment of an AHP or Nurse consultant for Stroke in Lothian	59,000	Professionals have devised new job description that will go to Panel at SEHD in June 2005. Post will develop new better integrated community services for stroke patients after they leave hospital.
Education/Audit/Stroke Nurses. Health Improvement Programme funds	125,000	Contract with CHSS for staff training in stroke. Support for national audit clerical staff. Funds for staff to attend other training.
Neurovascular clinical networks Health Improvement Programme funds.	137,000	Improve access to one-stop clinic. Part-time consultant salary, secretarial support and extra imaging sessions

Short-term Investments

Equipment and environment bids supported up to February 2005

Title	Hospital	£
Patient hoists	WGH	5,660
Refurbishment of Stroke Ward	SJH	15,000
Treadmills (x 4)	All	32,000
Functional electrical stimulation FES pilot study	AAH	15,000
Drinking cups	RIE	170
Positioning hoists and arm table	RIE	160
Specialist seating	AAH	2,400
Pressure reducing cushion	RVH	2,600
Upgrade of seminar room	RVH	1,100
Curtains for Ward 9	RVH	11,100
Non-slip mats	RVH	600
Hoist	AAH	7,150
Gym screens	RVH	260
Positioning rolls	RVH	85
Wobble boards	RVH	100
Ross ReTurns (x 3)	RVH	2,150
Hoist	RVH	7,100

Plans for investing further short-term funds

Project	£
The Stroke MCN is currently surveying the equipment needs of each hospital in order to bring them all up to a common standard.	45,000
Stroke unit nurse outreach in WGH & RIE - 2 year pilot	60,000
Telemedicine for thrombolysis – 2 year pilot	94,000
Stroke multi-disciplinary clinic to be developed by AHP Consultant – 2 year pilot	90,000

Short-term Investments

Clinical development and training bids supported up to February 2005

Title	Hospital	£
CHSS training programme	All	1,110
Magnetic Resonance Imaging sessions	All	94,000
Ambulatory Blood Pressure Monitoring IT system	All	17,000
Doppler probe	SJH	7,100
Speech & Language Therapy – transport	Edinburgh	2,400
Speech & Language Therapy – computer	AAH	900
Oxygen monitors	RIE	1,200
Goal Setting in Rehab – training course	SJH	3,600
Mood disorder case note survey	All	500
Therapy software	AAH	1,700
Voice recording	AAH	1,400
Digital cameras for communication	AAH	525
'Tech talk' communication aid	AAH	1,656
SLT led Fibre Optic Endoscopy Evaluation of Swallowing (FEES)	WGH, & RIE to follow	24,500
Staff computer	WGH	1,105
Thrombolysis communication kit	RIE	13,886
Ambulatory Blood Pressure Monitor	Leith CTC	5,000
Speech and Language therapy sessions	East & Midlothian	4,750
Electric neuro-plinth	RVH	1,000