Improving Health Outcomes
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Alastair McColl, Paul Roderick, John Gabbay
Stroke in Wandsworth

Geographical Area: Wandsworth
Focus: Case studies focusing on the use of national indicators

Contributors:
Authors: Hilary Stirland, formerly Director of Public Health, Merton, Sutton and Wandsworth Health Authority
Address for correspondence: Merton and Sutton and Wandsworth Health Authority, The Wilson, Cranmer Road, Mitcham, Surrey, CR4 4TP

Editorial comments on how case study is linked to improving health outcomes: (also published in Volume 1)

Stirland describes how the use of population based outcome indicators drew attention to stroke as a disease of major public health importance in Wandsworth. Comparative service utilisation data were helpful in determining the extent and pattern of resource use and demonstrating the complexity of service requirements for these patients. The population indicators alone were insufficient to identify the nature of individual need or to generate specific proposals for change. They undertook an action research project to investigate the concerns of patients and their carers and to track their experience through the course of the illness and its treatment. The project demonstrated inequity of access to diagnosis and care in the acute stage of stroke, variation in rehabilitation, scope for improvement in continuity of care between hospital and community services, lack of ongoing review and re-planning of treatment and the need for much better education of carers and patients about stroke and its care and prevention. They produced a framework for future stroke services and made changes.

Abstract (also published in Volume 1)

The use of population outcome indicators drew attention to stroke as a disease of major public health importance in the inner London Borough of Wandsworth.

Some of the measures examined were indicators of premature mortality, i.e. age standardised death rates, standardised mortality ratios and years of potential life lost before the age of 75. Indicators of risk were also analysed, e.g. percentages of the population who smoke, consume too much alcohol, take little exercise, have hypertension and raised serum cholesterol. Other risk factors such as being born in the Caribbean and having impaired glucose tolerance were also considered.

Comparative service utilisation data were helpful in determining the extent and pattern of resource use and demonstrating the complexity of service requirements for these patients.

However, population indicators alone are insufficient to identify the nature of individual need or to generate specific proposals for change. Therefore an action research project was undertaken to investigate the concerns of patients and their carers and to track their experience through the course of the illness and its treatment. The project culminated in a strategic conference for representatives of the Health Authority, the professions involved in the health and social care of stroke patients, the voluntary sector and patients and carers themselves.

The project demonstrated inequity of access to diagnosis and care in the acute stage of stroke, variation in rehabilitation, scope for improvement in continuity of care between hospital and community services, lack of ongoing review and re-planning of treatment and the need for much better education of carers and patients about stroke and its care and prevention.

A framework for future stroke services was produced specifying requirements in the acute phase of the illness, the rehabilitation phase and the ongoing care stage. There were proposals for improvement in clinical practice, in the provision of information and advice and in the overall management or co-ordination of care for stroke patients. A number of changes have resulted. These include specialist stroke teams,
expansion of the options for rehabilitation including an inpatient rehabilitation unit and a new community therapy centre and team and the production of guidelines of good practice for diagnosis, assessment, treatment, rehabilitation and ongoing care. A stroke co-ordinator post was set up to improve access to information and advice and to facilitate a smoother passage for patients and carers between the different parts of the service.

Key factors in this work were the use of data to focus attention on the topic, the detailed investigation of the whole process of care and giving the opportunity for providers of different disciplines and agencies to work collaboratively with commissioners in finding a solution. Patients, carers and primary health care staff gave us some very illuminating perspectives.

Population outcome changes cannot be expected in the short term so most of the monitoring is focused on the "process" aspects of the service developments and the benefits to individual patients. A multi-disciplinary group is overseeing the operation of the service changes, clinical care is monitored by formal audit of patients' progress during acute and rehabilitation phases and service uptake is measured through contract information returns and feedback from general practitioners. Stroke patients are also included in a wider monitoring of hospital discharges and reasons for prolonged hospital stay. In the longer term, changes in mortality and premature loss of life may be demonstrable at a population level.

Introduction:

Why this clinical area was chosen:

This study was carried out during the period October 1992 to March 1994 in Wandsworth Health Authority before it merged with Merton and Sutton Health Authority in 1994. The Authority's 191,000 resident population lived in the eastern 16 electoral wards of the London Borough of Wandsworth. Compared with England and Wales there were smaller proportions of children under 15 (17%) and elderly people (14%) but there was a richer cultural mix with 23% of the population belonging to ethnic or racial minority groups mainly of African, Caribbean and Indian subcontinent origin. The overall Jarman index of deprivation was high at 23.0 but the scores for the individual wards ranged from 9.2 to 40.3.

In Wandsworth Health Authority, we believed that our central role was to try to improve the health of our residents. We therefore first described the broad range of health problems and then concentrated on the topics that had poor scores on the various indicators of health but offered opportunities for improved outcome within our available resources.

Our needs assessments comprised the following components:

- analysing the major health indicators (including risk factors and service use), comparing the local position with that of similar Authorities, the Region and the country as a whole;
- tracking time trends and looking for particular at risk groups e.g. by age, sex, ethnic group, geography;
- taking account of the views of health professionals about local pressures and opportunities for improving clinical outcome;
- taking account of concerns, aspirations and suggestions of patients and carers;
- appraising the availability of effective treatments.

During 1991/92 an analysis of the risk factors, estimated incidence and prevalence, mortality and service use had demonstrated that stroke was a disease of major public health importance in Wandsworth. The inclusion of stroke as a Health of the Nation focus area re-inforced our conviction that this was a disease to target locally. Subsequent analysis of mortality data for stroke at ward level demonstrated considerable variation in standardised mortality ratios but because of the small numbers of deaths, only two wards were shown to have statistically significantly raised values.

The nature and progress of the disease mean that there are many opportunities for "health gain" at both population and individual levels. For example, several risk factors could be reduced, notably hypertension and unhealthy behaviours such as smoking. There was no real consensus about the effectiveness of medical treatment in the acute stages of stroke and surgery had been shown to be useful only in a few highly selected cases (Shenkin and Zavala 1982). There was a lot of interest in the role of rehabilitation in aiding recovery (Wade 1990).

The heavy use of both hospital and community services by stroke patients indicated that more cost effective deployment of resources and better co-ordination of care might be possible and the importance of the contribution of informal carers suggested that attention to their needs would pay dividends.
The remainder of this section describes some of the relevant results of the initial needs analysis. These raised local awareness of the importance of stroke as a major health problem and stimulated the subsequent collaborative work between the Health Authority and care providers at all levels of the service.

**Population health indicators**

**Risk factors**

The major risk factors for stroke (Wade 1992) are hypertension, smoking, excessive alcohol intake, obesity, inactivity, raised blood cholesterol levels and impaired glucose tolerance. People born in the Caribbean area and to a lesser extent those born in the Indian Subcontinent and Africa have higher mortality rates from stroke than the population as a whole. Using local survey data where available and applying epidemiological data from elsewhere for the remainder of factors, we estimated that the following numbers of Wandsworth residents are at risk of developing stroke. The figures are rounded up and assume a population of approximately 191,000.

- Hypertension 24,000 people
- Smoking 74,500 people
- Alcohol intake above safe limits 24,000 people
- Obesity (Body Mass Index above 30) 20,500 people
- Inactive or light exercise only 24,000 people
- Serum cholesterol above 7.8mmol/l 8,120 people
- Estimated number of people with diabetes 3,250 people
- Number born in the Caribbean 7,800 people
- Number born in Africa 7,000 people
- Number born in Indian Subcontinent 6,800 people

**Incidence**

Based on an estimated rate of 2.4/1000 population (Wade 1992) we would expect around 450 new strokes to occur per annum in Wandsworth Health Authority residents. About 15% of these would be in people under the age of 65. Approximately 135 acute stroke sufferers would be expected to die within 3 weeks, and of the 315 survivors, about half (i.e. 157) would have residual disability.

**Prevalence.**

Prevalence can be estimated in different ways

- Applying the rate of 6/1,000 population (Wade 1992) that had been found in a population studies, there would be about 1,200 Wandsworth residents with stroke at any one time. 600 would be severely disabled, (for example unable to use public transport);
- According to the Health Survey for England (Office of Population Censuses and Surveys 1992) carried out in 1991, 2% of the population reported that they had ever been diagnosed as having had a stroke. On this basis, around 4,000 Wandsworth residents would have had a stroke at some time in their lives.

**Disability**

It is useful to estimate the amount of disability stroke patients may suffer at three stages in the course of their illness (Wade 1992) namely:

- The acute stage of approximately three weeks after the onset of the stroke;
- The rehabilitation stage of up to six months; and
- The residual or maintenance stage after six months.

In any one year, in the acute stage it is estimated that approximately:

- 160 Wandsworth residents will have reduced levels of consciousness.

In addition, some patients will need help in the following areas of daily living

- Getting out of bed 315 people
- Speaking and communicating 250 people
In the rehabilitation stage, some will need to relearn how to

- dress 160 people
- walk 130 people
- use the toilet 120 people
- speak and communicate 90 people

After about 6 months,

- about 75 people may still be severely confused

Some will still need help for

- bathing 135 people
- walking 40 people
- dressing 85 people
- communicating 45 people

**Mortality**

We used several different measures of death from stroke as described below. Because of the comparatively small number of deaths at District Health Authority level, it is not always possible to demonstrate statistical significance. The possibility remains therefore that some of the differences found may be due to chance. However, consistently raised values in several indicators and over several years suggest that there may be a real concern that requires action.

- Stroke (ICD 430 - 438) had consistently accounted for about 8% of the total deaths for men and 12% of the total for women since 1986. It was the second most common cause of death in 1991;
- Age specific death rates (DoH 1990/1993) while similar to the national average, were higher than the averages for the South West Thames Region, particularly for men and in the younger age groups;
- The all ages standardised mortality ratios (SMR) (DoH 1990/1993) for stroke (1988 - 1992) were similar to the national average for men but significantly lower for women. The men's SMR was 13% higher than the average for Region while the women's value was 2% lower;
- Death from hypertension and stroke in the age group 35 - 64 is considered to be potentially avoidable. (DoH 1990/1993). The SMRs for Wandsworth on this indicator in the same time period, were raised in both sexes but only the men's value reached statistical significance;
- The trend over time in the age standardised average annual death rate was showing little improvement in either the under 65s or the 65 - 74 year olds. Indeed it may have been increasing in the younger age group although this was difficult to prove, given the small number of deaths (DoH 1990/1993);
- There was a substantial loss of life before the age of 75 from stroke in Wandsworth (DoH 1990/1993). The average annual rate of years of potential life lost was higher than the Regional average in both sexes, although not so great as in England and Wales as a whole;
- The table 1 summarised the mortality indicators.
### Service use

In 1991, there were 365 finished consultant episodes of hospital care for Wandsworth residents in which the primary diagnosis was stroke and a further 135 where stroke was a subsidiary diagnosis. This made stroke the fifth most common reason for hospital admission.

The hospitalisation rate for all ages at 210/100,000 population was 11% lower than the national average, but the rates for people aged 16-64 and 65-74 exceeded the national averages by 22% and 20% respectively (NHS Management Executive 1990/1). Examination of the reasons for a hospital stay of more than 28 days had revealed stroke to be the most common cause.

### Local views

During routine contract monitoring and speciality meetings, Providers had expressed concerns to the Health Authority about the fragmentation of care and the many internal and external organisational barriers to delivering optimum care for all stroke patients. Particular issues were a marked lack of continuity between hospital and community health services and between health and social care.

Health authority commissioners and general practitioners had been informed of variations in the access of different patients to special expertise for diagnosis, assessment, rehabilitation and continuing care and inconsistency in the type and standard of care offered to Wandsworth residents. In public meetings with the Health Authority, and in enquiries to the Health Authority, patients and carers had voiced their uncertainty about the services available and their inability to obtain adequate advice and information.

### Further information that was required:

Having established the case for stroke as a local priority, we wanted to understand better the needs of stroke patients and their carers and find out whether services as currently provided were meeting these needs satisfactorily. If not, we wished to identify areas of change. A local consortium comprising the Health Authority, the Family Health Services Authority, St. George’s Healthcare, the Wandsworth Community Unit and the Wandsworth Mental Health Unit had already been selected to participate in the Department of Health’s “Localities Project”. This was designed to explore different ways of implementing the NHS reforms and reflect on the lessons learned. One aspect of our “Localities Project” work was a series of case co-
ordination studies including one on stroke known as the Wandsworth Stroke Project. A former speech and language therapist was recruited as a "case co-ordinator" in October 1992 to carry out the main research. The project was managed by a joint purchaser/provider steering group of senior clinicians, managers and commissioners and the researcher was also supported by a multi-disciplinary clinical group and by the Wandsworth Health Authority's public health department. The project's aims and methods were determined by the steering group and were as follows.

Aims of the stroke project

- To discover how services are provided in hospitals and community with particular focus on the management of stroke and the extent to which individual patients' needs are met;
- To reduce time spent in hospital by identifying avoidable factors that delay discharge;
- To seek the views and experiences of patients, carers and professionals about the needs of people with stroke and possible ways of meeting these;
- To identify where changes would be beneficial and to use a consensus approach to facilitate these;
- To develop a high quality, consistent and locally sensitive stroke policy that ensures that resources are used in the most cost effective way for the benefit of this whole group of patients.

Specific service areas that were investigated

The pattern of hospital use by people with stroke was investigated both by analysing routine hospital data and by following a cohort of patients through the course of their admission and discharge. A total of 87 hospital patients with a diagnosis of stroke were investigated during a period of 10 weeks in the winter and spring of 1992/93. Patients who died in the Accident and Emergency Department or within a few hours of admission were excluded because of difficulties in obtaining adequate information and the study design did not allow for the identification of patients who were not referred for admission. The patients studied fell into the following groups:

- all stroke admissions to general medical firms 52 patients
- all stroke admissions to geriatric firms 27 patients
- all patients developing stroke after admission 8 patients

Admission and initial assessment practices were examined for appropriateness, consistency and access criteria.

The interests and expertise of the many different disciplines involved in stroke care were brought together in order to improve professional collaboration and co-ordination of hospital services.

The progress of care for stroke patients admitted to hospital was tracked to ascertain whether there was advantage in nursing them together.

Factors influencing patients' access to rehabilitation (both early and ongoing) were identified.

The adequacy of links between hospital and community services were assessed including the speed of response in the community.

The adequacy of links with local authority services including the timeliness and quality of provision of equipment and housing modification were reviewed.

Potential barriers to early discharge were investigated in terms of:

- patient characteristics;
- social circumstances;
- hospital organisation;
- community organisation.

The contribution of the voluntary sector was considered, particularly its role in providing information, advice and emotional support.
The views of the key stakeholders

Focused interviews were held with carers and people who have had a stroke. These took place at a variety of venues including day centres, lunch clubs and stroke clubs. Participants were asked to talk about their experiences; for instance, what they liked and did not like about the services they received and what were their continuing requirements. They were also encouraged to think what would be most helpful to them to achieve their own choice of lifestyle.

A series of uni-disciplinary discussion groups took place with representatives of the relevant professional and voluntary sector groups. Both specialist stroke staff and general professional staff took part. They were asked to consider the needs of patients and carers at the three stages of illness - the acute phase, the rehabilitation phase and the maintenance phase and to be imaginative in their suggestions for ways in which the current services could be altered to meet these needs better.

A multi-agency, multi-disciplinary strategy conference was then convened with the objectives of sharing key findings from the previous stroke discussions, converting these ideas into practical proposals and developing a framework for the future stroke service.

Data validity studies:

The project did not attempt to validate in any formal sense, the population data that had prompted our interest in this topic. It did confirm the size of the problem in terms of morbidity and hospital use and highlighted the lack of suitable community alternatives. It also demonstrated the chronicity of the illness and showed that people continued to need practical and emotional support after their condition had reached a plateau and active rehabilitation was no longer effective in further improving function.

The information obtained from the service use analysis and from the users, referrers and providers of service reinforced our previous (largely anecdotal) impression that there was considerable variation in the quality, range and amount of care that stroke patients receive. The patient cohort study showed that access to investigation and therapy depended more upon the practices of the admitting firm than on the clinical condition of the patient. There were some differences in crude admission rates among the electoral wards with the highest rates being in the wards with the highest deprivation scores and the greatest proportion of non-white racial groups. We did not carry out the age standardised analyses that would have helped interpret the differences in admission because we needed greater numbers, (i.e. more years of accurate data) to be able to demonstrate any significant differences.

Summary findings from initial work:

- Stroke is an important cause of death, disability and premature loss of life among residents of Wandsworth Health Authority;
- There are opportunities for saving life and improving the quality of life of patients with stroke if access to established good practice is made uniformly available;
- There is evidence that there are no consistent hospital admission criteria nor access to initial diagnostic investigations or to therapy at any stage of the illness;
- The current admission system isolates patients on unsuitable wards and blocks appropriate care and rehabilitation;
- Lack of communication between agencies causes delays and wasted resources;
- Delays in supplying equipment and lack of community therapy support impede progress from hospital to community;
- Patients' and carers' needs for information, emotional support, long term maintenance and respite are largely unmet.

Changes which were made:

The strategic framework

A summary chart was drawn up and agreed following the strategy conference. This was based on the needs of patients and carers in the three stages of acute illness, rehabilitation and continuing care.

The framework included statements about three major aspects, namely, clinical and social care, information and advice and co-ordination and continuity of care Briefly, it summarised

- the requirements at each stage of the illness
the agreed practical suggestions for meeting these needs
action that had already been taken
the agency responsible for leading further work

Some examples of changes in care practices

In the hospital, an acute stroke unit was developed with specialist medical nursing and therapy staff. It was intended that all stroke admissions should be to this unit for expert assessment and treatment.

Guidelines and quality standards for the diagnosis, assessment and initial treatment of acute stroke were drawn up for use with all stroke patients. These were developed by a multi-disciplinary clinical group and subsequently included in the core quality standards agreed between commissioner and provider. They were based upon clinical agreement of good practice drawn from published research and members own experience within their local environment. The needs of ethnic minority groups were a major consideration, particularly with respect to health promotion and the specific care needs arising from their different cultures.

Arrangements were made for GPs to be able to receive immediate advice about their patients including the need for admission and the optimum care plan for each individual.

Guidelines for rehabilitation were also devised including criteria for access to early therapy in the acute phase, active rehabilitation and reassessment and treatment as required in the continuing care phase.

Links with the tertiary neuro-rehabilitation centre were strengthened and clarified and a greater choice of rehabilitation options was made available including the following developments:

- The existing stroke ward was relocated into the same building as the specialist tertiary centre and new access criteria and rehabilitation policies were drawn up;
- A co-ordinated therapy service was set up in the community comprising a therapy centre and a multi-disciplinary therapy team offering treatment at patient's own homes, or as an outpatient or day patient according to need;
- New posts for specialist neuro-therapists were included in the community team.

Improved emotional support and psychiatric treatment was provided through increasing the commitment of the existing Consultant Psychiatrist specialising in physical disability and the appointment of a community psychiatric nurse to work with people with physical disability.

A revised system for assessing housing needs and speeding up the provision of housing aids and equipment was drawn up by the Local authority.

A post of stroke co-ordinator was set up to act on a number of recommendations for improving co-ordination of care between hospital and community and to be an easily accessible source of expertise and advice for patients and carers as well as general staff.

Funding was provided to help the voluntary sector set up self help groups and home visiting services for patients and carers.

Contract changes

Start up costs for the reprovided stroke residential rehabilitation unit were agreed as part of the reconfiguration of beds at the hospital.

Separate contract schedules were included for a number of the developments listed above which were funded from specific sources such as the London Initiative Zone’s primary care development plan and the Authority’s health gain initiative. These schedules were in the form of project briefs setting out the objectives for each scheme, how these were to be achieved and monitored and the funds that were available.

How changes will be monitored:

Monitoring of the changes resulting from this project have been built in to the existing routine managerial, clinical audit and contract monitoring processes as illustrated in the following section.
Qualitative

An implementation group with commissioner representation was set up following the completion of the stoke project. This group has the opportunity to review how the service changes actually work for patients, staff and referrers and to identify any problems or constraints.

Two issues that have arisen are the difficulties in maintaining admissions to the acute stroke unit in the face of extreme pressure on admission beds and a lower than expected number of Wandsworth patients being suitable for the inpatient rehabilitation unit. The latter has led to the extension of the rehabilitation facilities to residents of Merton and Sutton.

Clinical details of all patients admitted to the acute stroke unit are entered into a stroke register and the outcome of care is audited regularly. Similarly, progress in rehabilitation is systematically measured.

The Health Authority has also suggested that the interface between hospital and community should be an audit topic in all relevant providers.

Quantitative

Information schedules have been agreed with each provider as part of the routine contract monitoring system between the providers and the health authority contract managers. This allows the utilisation of the different parts of the stroke service to be measured. Examples include actual use compared with contracted use in the following areas:

- hospital admissions;
- referrals to the tertiary neurosciences unit;
- admission to the stroke rehabilitation unit;
- referrals to the tertiary rehabilitation unit;
- referrals and contacts with the different therapy services;
- referrals and contacts with community services.

Data collection has gradually improved in that the data fields for diagnosis, postcode and GP are now almost always completed. The accuracy of GP and diagnostic coding could still be improved.

Mortality data are monitored as a routine part of public health surveillance. Unfortunately, now that the whole of the Borough of Wandsworth is included in the new Merton, Sutton and Wandsworth Health Authority, information relating to the previous Wandsworth Health Authority wards will not be provided centrally, but will need to be extracted locally from the detailed mortality data available from the Office of Populations, Censuses and Surveys if we wish to carry out time series analysis.

Information is still received about patients staying in hospital for more than one month. This not only demonstrates changes in the number of stroke patients with long lengths of stay, but also highlights reasons for delayed discharge. This information is used by commissioner contract managers both to facilitate discharge and in more general service discussions with providers. It has also been helpful to a joint commissioner/provider/local authority group monitoring hospital discharges both to expedite individual discharge and to identify more general problem areas requiring policy or practice changes.

Feedback from referrers and users

General practitioners are consulted in a number of ways, for example via the formal advisory structure, through annual visits to each practice and by periodic surveys on specific issues. They have been asked about the revised stroke service and the majority have noticed improved continuity and consistency of care.

The community therapy service has had good reports in annual specialty reviews between provider and commissioner.

Hospital discharge policies including links with the local authority are regularly and formally monitored. Any difficulties (or successes) with stroke patients are brought to light in this process.

Resource Implication:
These have been referred to in earlier sections of this report. In summary, the resource implications of the service changes can be considered in the following categories:

**Major requirement - funding for the community therapy service and centre**

This service is not confined to stroke patients although they are of course major users. The Authority allocated £100,000 pa to the cost of this initiative as part of its contribution to the primary care development plan. The project was phased starting with the setting up of the specialist team and then the conversion of an existing building into a new therapy centre. This is now well established and offers a full range of therapies and day hospital services under one roof. It also accommodates self help and support groups.

**Reorganisation of existing staff to concentrate expertise**

There was a nucleus of experienced nursing and therapy staff in the hospital that formed the basis of the reorganised stroke team. Other resource implications for the provider arising from the development of an expert resource are training costs and the costs of developing better information for both patients and professionals.

**Other development costs**

Re-configuration of beds at the hospital had displaced the stroke unit that existed before the stroke project. A non recurrent addition to the hospital contract of £50,000 was agreed to re-provide this in a new location alongside the tertiary rehabilitation unit with the provider picking up the ongoing revenue costs after 6 months.

New appointments were made to enhance the delivery and co-ordination of the new service for example:

- Funds were made available from the Authority's health gain initiative for a stroke co-ordinator (£25,000 pa for two years); and
- additional speech and language therapists (£49,000 pa) to work with stroke patients in the community (see final section for a description of the health gain initiative).

**Practical lessons learnt:**

**Use of population data**

Production of the needs analysis data was helpful as a catalyst for raising awareness of the problem among both commissioners and providers and securing agreement on stroke as an area of importance. The data reinforced and stimulated local interest and gave legitimacy to the expenditure of time and effort in this area.

**Collaborative working among providers**

Until the stroke project was set up, there had been very little contact between the many professionals involved in the care of stroke patients. The appointment of a care co-ordinator to research the problem in detail was very helpful in bringing different groups together, harnessing the existing expertise and stimulating new ideas.

**Commissioner involvement**

The close involvement of the Health Authority was helpful in keeping the focus on the needs of the patients and carers. It also lent weight to the whole process of reaching a consensus on what was required and helped to find ways of implementing many of the proposals. A further advantage was an increased mutual understanding of each other's perspectives, problems and opportunities that was not only useful in improving stroke services, but helped to set the tone for a productive and fruitful collaborative relationship between commissioner and providers.

Clinicians responded very positively to the specific interest and close involvement of commissioners in the detail of the project. For example their willingness to talk to individual clinicians in their own territory, visit the clinical areas and try to understand the practical issues were all helpful in breaking down any natural initial professional defensiveness. Also useful was the clarification of common goals and making it clear
that commissioners as well as providers were interested in improving the quality and outcome of care. Although it is clearly vital to enlist the wholehearted co-operation and support of the relevant Consultants, it is also important to involve all the team of professionals providing stroke care. It is equally important to make sure that provider managers are fully involved from the outset if the agreed changes are to be implemented successfully.

**Involvement of general practitioners**

Many useful and practical ideas came from the GPs who attended the focus discussion group and the strategy conference. The merits of involving GPs in commissioning are now well recognised but in 1993 when this project was carried out, it was a rarer occurrence.

**Involvement of patients, carers and the voluntary sector**

Their input was invaluable in throwing light on the day to day practical problems faced by stroke patients and their carers. The "wants" were very modest and stemmed mainly from the desire to be better informed and able to participate effectively in care and to lead as full and active a life as possible.

**Value of pump priming to effect change**

Although many of the recommendations were about changing attitudes and re-organisation and re-distribution of existing resource, there were some developmental costs and one major new commitment. The agreement to fund the relocation costs of the hospital inpatient rehabilitation unit helped to achieve changes in clinical practice giving a more coherent, consistent and equitable stroke service.

The employment of a specific and knowledgeable researcher was critical to the success of the project. The potential for service development was undoubtedly helpful in achieving collaborative working, but there was also a genuine desire among providers to standardise and improve stroke care.

**Data imperfections**

Attempting to follow through the cohort of hospital patients highlighted imperfections in the completeness and quality of data collected by the hospital information system. This served to focus attention on the problems this causes for contracting and for the efficient delivery of the service.

**Conclusion:**

**Concentration of expertise**

Patients disliked being treated on wards where they were the only stroke patients and they felt that the staff did not understand their needs. The study confirmed the value of developing specialist skills and promoting consistently good practice in the treatment of stroke. A proposal was made therefore to set up an acute unit within the configuration of medical beds where all patients with stroke could be admitted and receive expert assessment and initial treatment.

**Sensitivity to individual needs**

A degree of flexibility will be necessary if the service is to be responsive to different needs and to offer choices of management. For example, patients should have a range of options for rehabilitation and for ongoing emotional and practical support. Community services in patients' own homes or in local settings are desirable.

**Coherent treatment planning starting on admission**

Prior to the stroke project, there was no certainty or clarity about the type of care a stroke patient would receive. The development of agreed guidelines of good practice and better hand over of care from hospital to community should resolve this problem. Patients and carers wish to be involved in planning their own care. Care plans should take account of their individual circumstances.

**Need for consultation and advice as well as active treatment**
The study highlighted the inadequacy of currently available information about stroke. Most patients and carers were unaware of the nature of stroke, how to prevent recurrence and what was available for them to improve the quality of their lives. A readily accessible source of information and advice and better training for non-specialist staff were also thought to be of great importance.

**Ongoing care**

Patients and carers were particularly concerned that they were not forgotten after the rehabilitative phase was completed. In addition to their desire for increased opportunities to carry out occupation and leisure activities of their choice, they also emphasised the need for periodic review of their clinical condition with the opportunity for re-treatment if their needs change.

**References:**

- NHS Management Executive (1990/1). Health Services Indicators.

**Organisational Context:**

**Health policy development**

The Wandsworth Health Authority’s basic approach was to try to maximise the health benefit it could obtain from a reducing revenue budget. It developed its health policy from a broad brush health needs analysis that demonstrated where there was excess mortality, excess potential years of life lost, high levels of adverse socio-economic factors and a diversity of racial and cultural populations. It also believed it must focus first on people with severe and or urgent health problems, those where treatment is both essential and effective and those who have no informal care network. As has been discussed stroke patients fulfilled most of the criteria for a local priority area.

**Health gain initiative**

In order to initiate and stimulate strategic change and to focus attention on the needs of patients and carers, the Authority set up a health gain initiative with funds that had been obtained partly through price negotiation and improving the cost effectiveness of the services purchased and partly from its own management cost savings.

Projects receiving support were those which were innovative, addressed one or more of the Authority’s strategic objectives or met a local priority need. Many different types of project have been funded including nurse specialist posts for oncology, palliative care, haemoglobinopathies, asthma and rheumatology. Several physiotherapy, occupational therapy and speech and language therapy posts for specific purposes have been supported and a contribution has been made to some projects that have been mainly funded from elsewhere such as a rapid diagnosis proctology clinic and an open access endoscopy clinic. Some projects have been designed to expand the service and facilitate change such as the re-alignment of the district nursing service to general practices and the re-organisation of the school health service.

A requirement of all projects was that they should have definite health objectives and should specify how it was proposed to measure whether or not these had been achieved. Health objectives could be either quantitative, such as “to reduce the time spent in hospital by stroke patients”, or qualitative, for example “to achieve demonstrable improvement in the mobility, communication or social functioning of stroke patients”.
The first type of objective can be measured using routine information whereas the second type will require specific arrangements for measuring performance before and after treatment and possibly include a measure of patient satisfaction. Although we were keen to monitor the projects as comprehensively as possible, we did not expect providers to undertake assessments that were additional to their normal clinical practice.

A number of projects relating to the prevention and treatment of stroke have been supported by the health gain initiative. In addition to the specific posts already mentioned, funds were put into the development of a blood pressure unit, a research project to identify ethnic, social and geographical variations in cardiovascular risk factors and an evaluation of a community stroke service.

**Key factors in this type of work**

The close collaboration of public health, commissioning and finance staff of the Health Authority and senior clinicians and provider managers of hospital and community services was essential in this project.

There was a strong commitment from non executive Health Authority members for the project and they participated with great enthusiasm in the development of health policy and the health gain initiative.

It has become increasingly clear that the support of GPs and primary health care teams is vital in improving any service that involves chronic illness and many different carers (both professional and informal). Although the medical school was not directly involved with either the stroke project or the health gain initiative, the work was made easier because many of the staff working in the district have academic appointments and are interested in research and innovation.

The lessons learned in this project are now being used as a basis for improving the stroke service for residents of Merton and Sutton as well as Wandsworth.

This is very detailed and lengthy work. However, it is important to take time to build up trust among health professionals and users if an acceptable and credible solution is to be found. It will be increasingly difficult to carry out similar work under the constraints of a reduced capitation allocation, increased service costs and demands and restrictions on management costs and health authority headquarters expenditure.