

Report to: **East Sussex Health Overview and Scrutiny Committee (HOSC)**

Date: **16th June 2011**

By: **Director of Governance and Community Services**

Title of report: **Stroke Care in East Sussex – Progress Report**

Purpose of report: **To consider progress with implementation of the recommendations arising from HOSC's Review of Stroke Care in East Sussex and wider stroke strategy**

RECOMMENDATIONS

HOSC is recommended:

- 1. To consider and comment on the progress report from NHS East Sussex Downs and Weald/NHS Hastings and Rother on behalf of local health and social care organisations (appendix 1).**
 - 2. To request a further monitoring report in March 2012.**
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1. Background

1.1 In June 2008 HOSC established a Review Board to examine stroke care for East Sussex residents. The objective of the review was to assess and make recommendations on the stroke care provided to East Sussex residents, with particular focus on awareness and prevention, provision of acute services and the integrated provision of rehabilitation and long-term support.

1.2 The Review Board's findings and recommendations were outlined in the final report which was endorsed by HOSC at its meeting in March 2009. The report has therefore previously been circulated to the Committee and it is available on the HOSC website www.eastsussexhealth.org.

1.3 HOSC received a response to the recommendations in July 2009 from NHS East Sussex Downs and Weald (ESDW)/NHS Hastings and Rother (H&R) who had agreed to co-ordinate the responses from other local health and social care organisations through the multi-agency East Sussex Stroke Programme Board. All the HOSC recommendations were accepted and were integrated into the various workstreams comprising the East Sussex Stroke Care Strategy, overseen by the Programme Board. These workstreams also incorporated a large number of other recommendations arising from national and local reviews, notably the National Stroke Strategy Quality Markers.

1.4 The Stroke Programme Board invited HOSC to nominate a Member to join the Board in order to oversee progress on implementing the East Sussex Stroke Strategy. Cllr Davies agreed to take on this role, as Chairman of the HOSC Review Board on Stroke Care.

2. Progress update

2.1 HOSC last received a report on progress against the review's recommendations in September 2010. NHS ESDW/H&R have provided a further update on progress with the HOSC recommendations and wider stroke strategy (attached at appendix 1). This report has been produced with input from East Sussex Healthcare NHS Trust, the Sussex Stroke Network and Adult Social Care.

2.2 Alistair Hoptroff, Programme Lead for Stroke and Long Term Neurological Conditions, NHS ESDW/H&R, together with Dr James Wilkinson, Divisional Director and Jane Darling, General

Manager, Medicine and Emergency Care, East Sussex Healthcare NHS Trust will be in attendance at the HOSC meeting to present the update and take questions.

BILL MURPHY

Interim Director of Governance and Community Services

Contact officer: Claire Lee, Scrutiny Lead Officer

Telephone: 01273 481327

Background papers:

Review of Stroke Care in East Sussex: Final Report, HOSC, March 2009

HOSC 16 September 2010, Item 9

Progress on implementation of recommendations on Stroke Care in East Sussex

16th June 2011

1.0 Executive Summary

- 1.1 Recent awareness raising actions for both the public and primary care professionals have been undertaken in respect of improving the speed with which strokes are identified (FAST) and atrial fibrillation.
- 1.2 Acute stroke care improvements have received added impetus following the peer review commissioned by Sussex Stroke Network on the invitation of East Sussex Healthcare NHS Trust. Progress towards these recommendations, as well as those previously made by HOSC, continues and it is the Trust's intent to recruit additional stroke consultants thereby increasing their numbers from 2 to 4. This increase in medical staffing is essential for the improvements sought by both HOSC and following the peer review.
- 1.3 Expansion of both the Irvine Unit and early Supported Discharge community rehabilitation teams continues and current discussions are that the beds at Irvine Unit will increase beyond the 12 originally envisaged.
- 1.4 Palliative care capacity is being expanded within East Sussex Healthcare NHS Trust and it is expected that this will benefit stroke patients.
- 1.5 The existing service commissioned from the Stroke Association will end in October 2012 so an evaluation of its effectiveness is to be carried out to inform the decision regarding whether to recommission the service.

2.0 Background

- 2.1 HOSC last received an update on strategies for improving stroke services, including implementing HOSC's recommendations, in September 2010.
- 2.2 This paper aims to provide a further progress report on the actions taken over the last year, and wherever possible to report directly on actions that were then being planned.
- 2.3 HOSC is aware of the recent peer review of stroke services provided by East Sussex Healthcare NHS Trust (attached as Appendix 2). This report will also summarise the findings from this review, its recommendations and progress on improving stroke services by addressing these recommendations. The recommendation that HOSC develop a plan to share the findings of its original review has been completed and its recommendation regarding monitoring progress made to address its recommendations is ongoing as evidenced by this latest report as well as its previous progress reports.
- 2.4 This progress report is structured around the four workstreams that cover the full breadth of stroke services within East Sussex. Progress on improving each workstream will be covered within the relevant section.

2.5 It has been acknowledged that progress has been slow in delivering the East Sussex stroke strategy. However intensive executive attention from both East Sussex Healthcare NHS Trust and East Sussex PCTs, together with support from the Sussex Stroke Network has given new impetus and a more structured and focussed approach to the issues will be implemented.

3.0 Awareness, prevention and primary care

3.1 HOSC recommendations for this workstream:

- i.) *The public need to be more aware of:*

 - a. *The causes of stroke and what the public can do to reduce risk.*
 - b. *The symptoms of stroke and that calling 999 is the normal action to take on suspecting a stroke.*

- ii.) *The national awareness campaign is welcome but must be complemented by local, targeted work co-ordinated by the PCTs and involving a range of local agencies (e.g. Older People's Partnership Board). The findings from the awareness survey should be used to inform this work.*
- iii.) *GPs and other front line health and social care professionals need to be more effective at recognising stroke and ensuring an emergency response. It is recommended that the PCTs and Adult Social Care consider ways to increase awareness and training for community and primary care staff and ensure that clear protocols are available and followed.*
- iv.) *A robust pathway for follow-up care/secondary prevention should be put in place to ensure that all stroke and TIA patients receive regular checks, information and advice in line with National Stroke Strategy standards. This should include the maintenance of robust and consistent registers of stroke and TIA patients at all GP practices.*
- v.) *A mechanism should be put in place to identify those at higher risk of stroke on practice based 'at risk' registers to ensure regular health checks and preventative medicine.*
- vi.) *Urgent action should be taken to remedy all staffing shortages and to bring staffing standards up to National Stroke Strategy guidelines.*
- vii.) *Mechanisms should be established to ensure the ongoing active involvement of patients and carers in the implementation and evaluation of the stroke strategy. The Health Overview and Scrutiny Committee should indicate its willingness to participate in this process.*

3.2 HOSC are asked to note the following updates in respect of these recommendations as well as the progress already made and noted in September's Progress report.

- We are supporting the Stroke Association's 'Ask First' campaign (see Appendix 3) aimed at raising public awareness of Atrial Fibrillation (AF) which is a risk factor with regard to the likelihood of having a stroke. The radio campaign commenced on 19th May and letters to inform GPs of the campaign will also be sent. AF prevalence in East Sussex is higher than national

average and, as well as identifying those at risk, it is important to ensure that they are treated with anti-coagulants, for example Warfarin, rather than simply rely on aspirin.

- FAST / CHADS2 education has been undertaken across both PCTs and all practices have been involved. Education events continue to stress the importance of treating stroke and TIA as an emergency and to appropriately treat those at high risk.
- A Sussex-wide primary care pathway for AF has been agreed.

4.0 Acute phase

4.1 HOSC recommendations for this workstream:

- i.) When moving towards 24 hour acute stroke services, progressing the full range of specialist care is essential. This should include, but not be dominated by, 24 hour access to thrombolysis, as thrombolysis will only be appropriate for around 10% of patients.*
- ii.) The PCTs should commission for the provision of all diagnostic investigations for stroke patients to National Stroke Strategy standards well ahead of the Strategy's 10 year timescale. Patients (and carers as appropriate) should be informed of the outcomes in a way they can understand.*
- iii.) Rapid access to the specialist stroke team is crucial. Acute Trusts should have strategies in place to proactively 'pull' stroke patients into their stroke units. Ideally, there should be a dedicated A&E bay for stroke, a stroke co-ordinator monitoring admissions to ensure they reach the stroke team and all stroke patients should be allocated to a stroke specialist consultant who will oversee their care.*
- iv.) Urgent action should be taken to remedy all staffing shortages and to bring staffing standards up to National Stroke Strategy guidelines.*
- v.) The Sussex Stroke Network should consider the provision of a Sussex-wide service for young stroke survivors and those needing specialist rehabilitation. Longer travel times may be necessary for such specialist care but the need to travel outside Sussex should be avoided.*
- vi.) Mechanisms should be established to ensure the ongoing active involvement of patients and carers in the implementation and evaluation of the stroke strategy. The Health Overview and Scrutiny Committee should indicate its willingness to participate in this process.*

4.2 HOSC are asked to note the following updates in respect of these recommendations as well as the progress already made and noted in September's Progress report.

- 24/7 thrombolysis is available at both Conquest and Eastbourne although improvements regarding the clinical staffing of the out of hours rota have yet to be made. The expected utilisation of telemedicine during the year may well help resolve this challenge whilst the expected recruitment of additional stroke specialists will ameliorate the issue.

- Stroke scanning at East Sussex Healthcare NHS Trust (“ESHT”) has been highlighted in the recent peer review and the current levels of 78% is well above target and further improvement is expected.
- Direct admission to the stroke units remains an operational issue despite a protocol for achieving this having been drawn up by the Trust in response to concerns raised in the Peer Review. External advice has been sought via a Clinical Associate visit and further recommendations to address the remaining obstacles are being taken forward. ESHT anticipate resolution of this issue and will be outlining how this will be achieved and in what timescale in the new project plan being presented to the steering group meeting on the 28.06.2011. This will outline the key changes needing to be made to the pathway and remains the key priority in the stroke improvement plan. Patients are routinely allocated to a stroke specialist consultant whilst a stroke co-ordinator monitors admissions during normal hours Monday to Friday. It remains the intention to expand the co-ordinator’s coverage to include weekends and bank holidays.
- Most staffing shortages have been addressed for normal working hours during weekdays although more therapy staff are still required during the week. Any Allied Health Professional (AHP) staffing gaps are currently being reviewed and addressed through a business case which has been collated by the relevant management teams involved in supporting the stroke service. This has involved consultation with AHPs from Physio, Occupational Therapy, Speech and Language Therapy and Dietetics. The business case is expected to be presented at ESHT Clinical Board in late June or early July.
- The stroke units within East Sussex Healthcare NHS Trust (“ESHT”) have undertaken patient questionnaires to inform evaluation of the services provided (see Appendix 4). In addition to this ESHT will have a rolling program of audits.
- ESHT Key performance indicators are appended as Appendices 5 and 6

4.3 The Peer Review made a number of recommendations including:

- Direct admission to the Stroke Units;
- Improvements in the provision of out of hours thrombolysis in particular in respect of clinical rota and potential use of telemedicine
- Stressing the need to improve the number of patients spending 90% of their stay on specialist stroke wards
- Recruitment of additional Stroke Consultants;
- Appropriate and timely application of scanning, particularly Magnetic Resonance Imaging (“MRI”).

4.4 The first two recommendations have already been covered as they already featured as recommendations made by HOSC. East Sussex Healthcare NHS Trust (“ESHT”) intends increasing its stroke consultant workforce from 2 to 4 during the current year. There is clear agreement on the benefit of the modality change to MRI and is one of planned changes that should be occurring this year, this had dependencies on radiology capacity and is currently been worked through as part of imaging requirements for stroke in terms of modality and timing change as the pathway changes.

- 4.5 The current performance with regard to the proportion of time stroke patients spend within a specialist stroke unit remains poor with performance typically below 50% of stroke patients at ESHT though the proportion is significantly better at Brighton & Sussex University Hospitals NHS Trust. However, the recent and continuing improvements in the provision of rehabilitation beds and Early Supported Discharge service are expected to increase the availability of beds within the existing stroke wards at ESHT and thereby lead to a step improvement in the numbers of patients spending 90% of their acute stay on these stroke wards. The improvement in performance from the present position will become evident as the various stages in the pathway link up, direct access, Early Supported Discharge, rehabilitations beds, there are efficiency that can be made as well as change to the pathway. This will culminate in an increased capacity on the ward, resulting in an increase in the proportion of time spent on the stroke ward.
- 4.6 ESHT requested the Sussex Stroke Network to undertake a peer review of the acute stroke pathway. Although there has been progress in improving acute care since the Peer Review, it was clear that the changes have not as yet made the necessary step change in improvements. The Trust has engaged with the National Stroke Improvement Programme to provide a Clinical Associate who has visited the teams in April and focused upon how best to deliver the direct admission pathway. A report from the visit will be made available to both the PCT and ESHT Boards in June. The issues highlighted through this visit were similar to those raised in the Peer Review. In particular, issues were around
- the lack of medical and allied health professional staffing;
 - the need for executive support and action to make improvements;
 - the need to significantly improve the direct admission pathway, ensuring that all patients access best care not just those suitable for thrombolysis, to ensure care is the same no matter what time of day you are admitted.
- 4.7 The Sussex Stroke Network has set-up a Steering Group for East Sussex to review and progress the recommendations of both the Peer Review and the Clinical Associate visit. In addition, this group will ensure that the changes across the wider stroke pathway are implemented in keeping with delivering objectives of the Peer Review. The Steering Group will first meet on 28th June. This will be the mechanism for progressing, monitoring, reviewing and reporting on action to ensure that both acute stroke units meet the required standards. A Network project manager to support the process has been identified to work with the lead managers and clinicians in ESHT.

5.0 Community rehabilitation, discharge

5.1 HOSC recommendations for this workstream:

- i.) *All stroke patients' discharge from hospital should be managed by the multi-specialist stroke unit team. There should be a protocol in place to ensure this happens even if, in exceptional circumstances, a patient is on another ward prior to discharge, so that they have the same access to community stroke services as patients discharged from the stroke unit.*
- ii.) *Urgent action should be taken to remedy all staffing shortages and to bring staffing standards up to National Stroke Strategy guidelines.*

- iii.) *Patients should have access to a phased process of rehabilitation, including availability of inpatient rehabilitation between the acute and community care settings. The PCTs should commission additional and improved community inpatient rehabilitation. This should support consistent access and standards across East Sussex, based on analysis of need.*
- iv.) *There must be options available for longer-term rehabilitation. A pathway for patients requiring 'slow-stream' rehabilitation should be developed, supported by appropriate bed provision based on needs analysis.*
- v.) *The Sussex Stroke Network should consider the provision of a Sussex-wide service for young stroke survivors and those needing specialist rehabilitation. Longer travel times may be necessary for such specialist care but the need to travel outside Sussex should be avoided.*
- vi.) *The debate on whether stroke or neurological community rehabilitation team models are best practice should be resolved. A consistent patient pathway and model of community rehabilitation for stroke patients should then be introduced across East Sussex. Priority should be given to the north of the county which currently has no specialist service. Additional resources will be required to enable existing teams to meet demand, to expand their remit if appropriate, and to establish a team in the north.*
- vii.) *Community neuro-psychologist/psychological counsellor roles should be developed to provide rapid response to referrals from community teams and inpatient units.*
- viii.) *A county-wide approach is needed to cope with deterioration or crises. This should incorporate clear information for patients and carers on what to do and availability of rapid response, short-term, nursing and social care.*
- ix.) *On returning home or to residential care, patients and carers should have access to a single contact point (a 'helpline') for questions or concerns about their condition or care. This must be available on an ongoing basis, not just while receiving rehabilitation and advice should be available from specialist, qualified staff.*
- x.) *Mechanisms should be established to ensure the ongoing active involvement of patients and carers in the implementation and evaluation of the stroke strategy. The Health Overview and Scrutiny Committee should indicate its willingness to participate in this process.*

5.2 HOSC are asked to note the following updates in respect of these recommendations as well as the progress already made and noted in September's progress report.

- At present the system in place may not be providing equality of access to community stroke services due to reliance on a manual process of referral for stroke patients not on the stroke ward, however in the future it is envisaged that direct access and Early Supported Discharge will support this. In the interim period an automated process to retrospectively audit all stroke patients being discharged from a non-stroke ward were managed through by the multi-specialist stroke unit team.

- Most staffing shortages have been addressed for normal working hours during weekdays although more therapy staff are still required during the week. Any Allied Health Professional staffing gaps are currently being reviewed and addressed through a business case which has been collated by the relevant management teams involved in supporting the stroke service. This has involved consultation with Allied Health Professionals from Physio, Occupational Therapy, Speech and Language Therapy and Dietetics. The business case is expected to be presented at ESHT Clinical Board in late June or early July.
- ESHT offer a number of contact points for patients seeking information about their care or condition.
- Dedicated specialist stroke rehabilitation beds have been established located at the Irvine Unit in Bexhill and a community rehabilitation team to provide an Early Discharge Service has commenced assisting with discharges from all ESHT sites including the Irvine Unit. The capacity of both services is being increased with recruitment underway. Expansion to meet patient flows from other stroke units is envisaged.
- There has been an expansion of the community teams to cover the northern part of East Sussex. Now that ESHT includes the community provision, there is an opportunity to review how services across the community and acute sector work together and improve integration.
- ESHT offer a number of contact points for patients seeking information about their care or condition. All stroke patients returning home are provided with information including the Stroke Association's information line via the community stroke service commissioned from the Stroke Association.
- There will be patient representation on the newly formed steering group which will have a whole pathway approach to stroke improvement hence will be having input into Primary/Acute/community stages of stroke care.
- The Sussex Stroke Network is setting up a Patient and Public Involvement group which will link with the new East Sussex Steering Group to support engagement of patients, carers and their advocates in service development.

6.0 Community integration, long-term support, end of life

6.1 HOSC recommendations for this workstream:

- i.) Urgent action should be taken to remedy all staffing shortages and to bring staffing standards up to National Stroke Strategy guidelines.*
- ii.) Support commissioned from the voluntary sector should be on a county-wide basis, and ensure that all stroke patients are identified and assisted to access support if required.*
- iii.) Mechanisms should be established to ensure the ongoing active involvement of patients and carers in the implementation and evaluation of the stroke strategy. The Health Overview and Scrutiny Committee should indicate its willingness to participate in this process.*

- 6.2 ESHT is currently seeking to expand its palliative care consultant workforce as part of its "Palliative Care Expansion". An additional consultant has recently been appointed working between St Wilfrid's Hospice and Eastbourne DGH and recruitment is under way for an additional post working between St Michael's Hospice and the Conquest Hospital. It should be noted that ESHT has already embarked on an extended programme of converting the wards from the current format of 4 main 6 bedded bays and a small number of side rooms, to a format in which single rooms predominate. This will greatly improve the ability to provide privacy for those patients at their End of Life.
- 6.3 The stroke association was appointed to provide support to stroke survivors and carers on a countywide basis. HOSC are asked to note the following updates in respect of these recommendations as well as the progress already made and noted in September's Progress report.

The activity report highlighted the following:

- a) The community stroke support service was tendered in 2009 and awarded to the Stroke Association in October 2009. The current contract £159,000/yr will end in October 2012.
- b) During 2010/11, the community stroke support service received 265 referrals, with 64% of referrals coming from health and social care services.
- c) 70% of the clients supported live alone, whilst 30% have some form of support.
- d) 49% have are attending communication support groups, 9% are attending exercise groups and 6% a carers support group. The remaining group received advice, information and emotional support.
- e) The estimated unit cost of the service based on the current level of activity is £600 per patient per year.
- f) We are working with health and social care services to increase the number of people receiving support.
- g) We are working with the stroke association to evaluate the impact of the service to inform commissioning of support services for people with long term neurological conditions.

Appendix 2**East Sussex Hospitals, Stroke Services Peer Review**
Friday 17 September 2010

Following on from our network peer review of the East Sussex Stroke Service, please find our outline below:

Current Service Specification

East Sussex Hospitals Trust, comprising 2 district general hospitals, one based in Eastbourne (DGH) and the other, The Conquest, in Hastings. These are both combined units and have 23 and 18 beds respectively. The lead consultants for stroke services upon each site are Dr Conrad and Dr Rahmani, with Dr Rahmani having the title of Trust Lead for Stroke Services.

Much work has ensued in the last 6 – 12 months and there is now a common thrombolysis proforma and stroke pathway, which is universal upon both sites. Patients are admitted to both sites via Accident and Emergency, and/or MAU/CDU. There are no direct admissions from general practitioners (GP's) to the Stroke Unit bypassing the emergency care floor, however GP's do admit stroke patient's directly to the MAU/CDU.

The thrombolysis service operates on both sites and has done for the last 18 months, run single-handedly by the stroke consultants upon each site, with a band 6 nurse in attendance along with the medical registrar of the day. During periods of absence on holiday, the stroke consultant's place is covered on an ad hoc basis by neurology and/or geriatric colleagues. There appears to be no formal process of cover clearly defined.

Out of hours, the on call medical consultant and/or on call geriatrician (depending on the age of the patient) at Hastings is responsible, in conjunction with the on call radiologist, and will be called in to assess the patient once the medical registrar has deemed the patient may well be suitable, taking into account a strict guidance (ie < 80; < 3 hours from symptom onset, fast positive). The on call general physician/geriatrician is rarely called and there have been limited out of hours thrombolyses performed. Dr Conrad suggested that he had offered to consultant colleagues on the Eastbourne site that he was available for consultation any night if there were concerns.

Eastbourne Service

There are 23 combined stroke beds of which 8 are nominally identified as for acute patients. These are housed on Wilmington Ward, which is on the ground floor – distant from both A/E and radiology, and one floor above the neuro-rehabilitation gym and therapy department. There were 5 bays of 4 beds with 3 side rooms. There were two distinct nursing stations, one containing telemetry for 8 beds. There was a small therapy area, self-contained, upon the ward with a wide and slim plinth which was used for both physiotherapy and OT sessions, including washing and dressing assessments, quiet co-operative work and therapy note writing. There was a separate desk available for this and a therapy table was in use as a bench.

A full compliment of physiotherapists, occupational therapists and nurses were available with a SpR, FY2 and FY1 junior doctor who, in addition had responsibility for up to 10 outlying general medical patients in addition to the 23 patients upon the stroke unit. One consultant, Dr Conrad cared for all patients admitted to the acute stroke unit, performing a consultant-led ward round 3 times a week, and a SpR ward round on the other 2 days. There is a shortage of speech and language therapists (SLT) so currently no communication therapy is carried out. A review of the skill mix of therapy staff on the unit and consideration of the development of stroke specific rather than profession specific assistants could be of value as could the development of associate practitioner posts. Consideration of more cross boundary or transdisciplinary working could increase the number of people able to deliver therapy across all disciplines. More dysphagia trained staff could alleviate the pressure on SLT time and free up some time for communication therapy.

Dr Conrad suggested all patients were seen by him at least within 24 hours of admission during the week, and 72 hours if they were admitted over the weekend.

There was a multi-disciplinary meeting which was undertaken once a week but which rarely had consultant input, and occasional junior doctor support. The rehabilitation consultant-led ward round occurred on the day following the MDM. This was deemed appropriate by the ward nurses as they were prepared for the consultant ward round, although therapists expressed a desire to attend the ward rounds, at the time of the review, they did not.. There appeared to be no neuropsychology input or back-to-work stroke association link. There was a general feeling that the therapy team were separate from the nursing and medical team and even within the therapy team that they were working in a unidisciplinary way. Team working could be improved in a number of ways. The therapy team could be based on the ward rather than in their own departments, this would make them more accessible and facilitate better team working with nursing and medical staff. Consideration of the development of an interdisciplinary assessment tool and multidisciplinary goal setting documentation would promote closer working and avoid the duplication of assessments. Closer working with and more training for nursing staff could enable them to carry out simple therapy programs in between formal therapy sessions. Teams should be aiming towards 45 minutes of therapy per day, per discipline required for each stroke patient and in order to reach these targets therapy has to be delivered by the whole team working towards joint goals.

The therapy team highlighted the lack of adequate specialised seating or wheelchairs available. This will impact patients with the most severe strokes as they will not be able to sit out and work on trunk control and sitting tolerance. A variety of specialised supportive seating options should be available.

There was a TIA nurse recently appointed, working full time, who assessed all GP TIA referrals and arranged to see all patients within 24-hours who scored highly on the ABCD² scoring system (4 or above). No telephone triaging prior to assessment occurred. Up to 60 referrals per month were received. All patients were seen by both the TIA nurse and the stroke consultant, Dr Conrad. Imaging modality for these patients consisted of a plain CT head and carotid doppler. The former being performed within 24 hours and the latter between 2 – 7 days. Limited MR capability, either MRI (DWI) or contrast enhanced MRA existed for TIA patients, with < 10% patients receiving this imaging modality after their plain CT and doppler.

Vascular surgery for carotid endarterectomy is performed upon the Eastbourne site with a mean wait of days between TIA and surgery. There was an understanding of the referral process but no formal pathway appeared evident.

Process

Patients who attend Accident and Emergency are screened by the receptionist who is aware of the FAST assessment process, and ushered through to majors if they are FAST positive. If they arrive by ambulance, the ambulance staff telephone through those patients who are < 80 years and within 3 hours of symptom onset, if they are FAST positive. In the last 6 weeks there appeared to be 3 thrombolysis calls during the 9 – 5 period, of which one was thrombolysed. Patients who are > 80 years or have symptoms longer than 3 hours cannot be telephone through by the ambulance staff, and GPs directly admit them to the MAU floor. Patients are accepted here with the anticipation that they will be moved to an acute stroke bed if one were available, which frequently they are not, by the next working day. The vast majority of patients attend MAU before admission to the stroke unit (> 80%). There appeared to be no clear pathways regarding stroke specific screening guidelines upon the MAU (no guidance as to stroke specific DVT prophylaxis, feeding, infection prevention and rehydration).

Liaison Outreach Nurses contact MAU on a twice or thrice daily basis to assess patients suitable for repatriation to the stroke unit. There is a bed management tool in force which clearly reminds bed management staff of the need to attempt to arrange urgent transfer to the stroke unit within 4 hours of admission.

Estimated discharge date is not routinely set by the medical teams and a generic 10-day length of stay appeared to be in operation, which was then reviewed at the multi-disciplinary team meeting the following Wednesday. A Community stroke/ICT team existed with no inpatient bed facilities available and although they do attend the MDM. 5 – 6 non-specific generic ICT rehabilitation beds at Thirlwood House, which is primary care trust provider arm funded and GP run. This is part of a 20-bed stock with direct GP access, although patients tend not to be referred directly to Thirlwood House from primary care, but come via the stroke unit. Patients must be able to transfer with the

assistance of one carer, with a view to discharge home to be accepted at this establishment.

In the future there are advanced plans to provide 12 stroke specific rehabilitation beds at Bexhill. No specific admission criteria has yet to be devised, and it is envisaged that 6 inpatient beds from the Eastbourne Stroke Service may be removed as patients continue their rehabilitation at Bexhill in the future.

Radiology

Currently there does not appear to be clear guidelines as to who should have an emergency CT brain scan in the context of persistent neurological deficit or neurovascular aetiology (i.e. stroke) outside of the patients possibly suitable for thrombolysis. Cases appeared to be discussed by the junior medical team (particularly out of hours) with radiology registrar on call and performed on a rather ad hoc basis. There was awareness that patients required imaging within 24 hours, although some confusion as to whether this was 24 hours from symptom onset or admission to hospital. Frequently there was suggestion that all patients got imaged within 24 hours of admission to hospital, but there appeared to be no formal electronic manner to record time of symptom onset to aid data collection or assist the radiology department in prioritizing scanning. There appeared to be no guidance as to the eight key indicators for emergency cerebral imaging within the hour other than for thrombolysis.

NICE head injury guidance appeared to be followed although there was no obvious recent documentation and advice regarding the guidance within the Accident and Emergency and Resuscitation department. All emergency out-of-hours imaging had to be discussed with a radiologist (SpR or consultant) and there were no automatic discussions with radiographers for arranging of imaging.

Impression: Eastbourne Service

We found enthusiastic and approachable nursing and therapy staff who with engaged and pleasant junior doctors with a committed consultant stroke physician who had recently been able to reduce his general medical commitment to enable him to focus his attention on patients upon the stroke unit. No formal arrangement to cover consultant leave appeared evident. Limited joint therapy working between physiotherapy and OT, with a separated neuro-gym from the stroke unit, disassociating some therapy working from the ward environment. Limited medical support at the multi-disciplinary meetings with no daily multi-disciplinary review. No attendance of therapists upon medical ward round.

Once monthly pan-Trust education sessions with once bi-monthly business meetings. No neuro-radiology meeting evidence to discuss cases and increase knowledge within the team

Limited use of thrombolysis, possibly due to restricted protocol, but also non-specialised out-of-hours thrombolysis cover. There appeared limited experience from A/E colleagues

becoming involved in the thrombolysis pathway, particularly the out-of-hours component. Some anxiety existed around intensity of out-of-hours telemedicine rota, although general agreement from Dr Conrad that he would like to participate if he thought it would improve the patient outcome.

Hastings Service

20-bedded unit situated on the first floor with co-located therapy area, with full complement of nurses. Speech and language therapy is provided on an irregular basis and I was told that the therapist is not dysphagia trained so it was unclear how patients with swallowing difficulties are managed (However, there are swallow trained nurses, a stroke specialist nurse and support from non-ward based SALT who undertake swallow screening of patients.). Both OT and physiotherapy staffing levels are quite low and they are not currently able to provide the recommended 45 minutes of therapy per day. Dr Rahmani only saw patients who were thrombolysed (12 in last 18 months) and those patients that were admitted directly on a 1:4 basis under his geriatric on call. All other patients were admitted under the physician or geriatrician of the day, depending on age (76 years) they are reviewed by a general consultant Physician/teams during their admission and staff grade based on stroke ward

As with Eastbourne a review of the skill mix of staffing with consideration of stroke specific rather than therapy specific assistants would be of benefit. The introduction of associate practitioners who could carry a non complex caseload could also help increase the amount of therapy delivered on a daily basis and free up therapists' time to work with more complex patients and set treatment programmes for assistants to carry out

Team working could be improved especially between occupational therapy (OT) and physiotherapy. The ward has a lovely gym area that could also double up as a therapy team office space so that the therapy team could be based on the ward. This area could become a multidisciplinary treatment area to encourage joint treatment sessions and closer working. Unfortunately the OT areas on the ward have been converted into office space which means patients have to go off the ward to have treatment sessions in the day hospital ADL kitchen. On the visit I was told that this area was at risk of being taken away and if this was the case there would be no area to carry out kitchen assessments. These are very important to establish a patient's safety for discharge and to determine the effect of cognitive or visual deficits on functional activity.

The physiotherapists have established a system of timetabling which helps to structure the day and keep the nursing staff, patients and relatives aware of what the plans are for therapy interventions. Unfortunately this has not been taken on by OT and a team approach to this could strengthen joint working. The introduction of an interdisciplinary assessment tool could help prevent duplication of assessments.

At the time of visiting 3 of the 20 patients were under the care of Dr Rahmani (stroke consultant). There were 2 empty beds; 13 patients were under 6 other clinicians. The multi-disciplinary team conceded this arrangement did not fill the basic requirements of an acute stroke unit as patients were admitted on an ad hoc basis under non-specialist physicians. This resulted in numerous junior doctors attending at varying intensities and

times with varying management plans without agreed protocol regarding preventative agents, feeding, sequelae prevention etc. This was perceived as being a major barrier to acute stroke care. All patients were, however, followed up by Dr Rahmani in a neurovascular clinic regardless of the admitting consultant.

A TIA nurse was in post and saw all TIA referrals, attempting to see all those with ABCD² 4 or above within 24 hours during week days. 50% of these were reviewed by a stroke consultant and the other 50% seen solely by the nurse. The image modalities of choice were CT and carotid doppler. The carotid doppler being available upon the day of assessment or within 48 hours, and the CT head also available (<48 hours). There was limited access to MRI, with approximately 10 % patients who had a CT head and carotid doppler going on to have an MRI.

There were 3 bays of 6 beds plus two side rooms, with 6 telemetry stations. There was concern raised by the nursing staff regarding mixed sex acute bays and they had been informed that patients should only be managed within a single-sex bay and the acute patients were therefore rarely side by side or in one particular bay, but tended to be dotted between the 3. There were mobile monitors and the nurses conceded that although this was not ideal, they had not recalled any adverse incidents as a direct result. Arrhythmia recognition software was available, although the nurses conceded it was rare for them to document an episode of atrial fibrillation and inform the medical team the next day of this.

Process

Patients who arrived by ambulance or self-presented to A/E were assessed by the receptionist or nurses in A/E as to whether they were FAST positive or thrombolysis positive, and if so the nurse holding the thrombolysis bleep on the stroke unit would be called. Rarely were patients admitted directly to the acute stroke unit and more likely spent time on MAU. The MAU had a sign detailing the FAST scoring system and indications for a thrombolysis call, which documented the inclusion criteria appropriately. There was a thrombolysis box evident in A/E without a designated thrombolysis bay, but with the appropriate medication guidance within.

I understand there had been an increase in CT scanning for stroke patients and that CT head and carotid doppler were thought appropriate imaging modalities for TIAs. There was some confusion as to the most appropriate imaging modality of choice.

There was a lack of clear guidance as to which patients required emergency imaging with persistent neurological deficit and which patients could wait until the following morning. There are designated CT scanning slots each day, including weekends, for patients who may have suffered a neurovascular event.

There was some anxiety expressed from the radiology department that the neuro-imaging guidance was not being firmly adhered to and that patients may well have been investigated via the stroke pathway, when a more appropriate clinical diagnosis was self-evident initially. There was, however, understanding that the imaging modality of choice may well be MRI/MRA for TIA patients and that this may be accommodated if there was a reduction in other imaging modalities.

Impression

The Conquest Hospital does not offer a satisfactory acute stroke service, nor has an acute stroke unit in the true sense of the term. Many procedures and excellent practices are in place and some excellent multi-disciplinary care delivered, but the lack of a consultant physician with expertise and knowledge of a stroke, looking after all the patients who were admitted, significantly impairs the quality of care delivered. Both using the Association of Stroke Physicians and Royal College of Physicians guidance, this lack of consultant medical input is of serious concern.

General Impression of Entire Trust

There has been much excellent work that has gone on in the last 6 – 12 months within the Trust to develop and improve the quality of neurovascular services offered to the population of East Sussex. There has been limited investment directly over and above tariff (£78,000 to the TIA service). A SINAP data clerk has also recently been employed which will assist in data collection.

There is joint documentation and multi-disciplinary discussion between the two sites but currently their two models differ significantly in the quantity and quality of medical input. Eastbourne works upon consultant running a specialist service with limited arrangements for cover during annual leave. Hastings offers a generic service with non-specialists providing input to patients, dependent on the day upon which they had their stroke. Less than 20% of patients see a stroke consultant during their inpatient stay. Of note on the Hastings site, of the 240 medical beds, 140 of these are looked after by 4 geriatricians, with the remaining 100 shared between the other 12 general physician consultant colleagues. There is a separate geriatric on call rota operating for those patients over the age of 76 years.

Urgent attention is required to inpatient capacity on the Hastings site between consultant colleagues if specialised acute stroke care is to be offered by a consultant stroke physician, which is equitable to all patients. In its current format the Conquest would not be considered to qualify as offering an acute stroke unit and service.

Research

There is limited neurovascular research currently ongoing within the East Sussex Trust. TARDIS, DNA lacunar mentioned on the Eastbourne site and an expression of interest was made for IST3.

Suggestions

1. Radical rethink of service provision for stroke patients at the Conquest site. An additional physician with expertise in stroke is urgently required to share the 20 beds and to provide cover during holidays and leave.
2. An additional physician with stroke expertise is less urgently required on the Eastbourne site to allow cover for Dr Conrad.
3. A review of radiology investigations and timing of, is urgently required in order that the appropriate use of radiation is considered for patients with transient neurological deficit, and the appropriate use of magnetic resonance imaging for those patients in a timely manner.
5. A review of the skill mix of staffing with consideration of stroke specific rather than therapy specific assistants would be of benefit
4. Clinical engagement within the Sussex network appears limited, possibly as a result of time limitations with current clinical engagements.
5. The out-of-hours thrombolysis rota currently is dysfunctional in that non-specialists are being asked to provide advice with the consequent outcome of limited patients being offered treatment (this should be roughly 50:50). There needs to be some training- such as the BASP study days- for everyone on the rota.
6. The introduction of telemedicine to allow a specialist from outside the Trust to share the out-of-hours thrombolysis duty has been considered, although there is some reluctance given the potential for this to be relative onerous. I would suggest a local Hastings/Eastbourne based education day/afternoon, demonstrating evidence of appropriate imaging techniques for acute stroke and TIA, and the use of thrombolysis, with data suggesting nocturnal disturbance to facilitate both imaging modality and the out-of-hours thrombolysis cover.
7. Processes need to be developed that ensure that those not suitable for thrombolysis get the same prompt assessment and treatment as those who are for thrombolytic intervention. There is currently an inequity of treatment between these two groups on both sites.
8. Processes and pathways must take the MAU/CDU out of caring and treating stroke patients.
9. Estimated discharge dates should be set on admission and conveyed to the patient and relatives. The date needs to be clinically relevant and not always ten days.
10. CT imaging is not clinically indicated or financially viable in the treatment of TIAs.

Trudie France- Consultant Practitioner, Medway Community Healthcare NHS Trust

David Hargroves- Consultant Physician & Clinical Stroke Lead, East Kent University Hospitals NHS Trust

Steven Duckworth- Director, Kent & Medway Stroke Network

Appendix 3

Ask First: South East/South Central Campaign Briefing

The basics about AF and stroke

AF

- Atrial fibrillation (AF) is the most common heart rhythm disturbance affecting approximately 750,000 people in the UK.
- It can affect adults of any age, but is more common as people get older. In the over 75 year old age group it affects about 10% of people.
- AF accounts for some 14% of all strokes
- 12,500 strokes per year are thought to be directly attributable to AF
- The estimated total cost of maintaining one patient on warfarin for one year, including monitoring is £383
- The cost per stroke due to AF is estimated to be £11,900 in the first year after stroke occurrence

Stroke

- An estimated 150,000 people have a stroke in the UK each year
- Stroke accounts for around 53,000 deaths each year in the UK
- Stroke is the third most common cause of death in England and Wales, after heart disease and cancer
- Stroke accounts for 9 per cent of all deaths in men and 13 per cent of deaths in women in the UK
- Stroke has a greater disability impact than any other chronic disease. Over 300,000 people are living with moderate to severe disabilities as a result of stroke
- The direct cost of stroke to the NHS is estimated to be £2.8 billion. The cost to the wider economy is £1.8 billion. The informal care cost is £2.4 billion

Campaign objectives

- To raise awareness of atrial fibrillation as a risk factor for stroke amongst the **public**.
- To ensure that **primary healthcare professionals** (predominantly GPs and practice nurses) are screening, diagnosing and managing Atrial Fibrillation (AF) appropriately.

Key Messages

For the public:

- AF is a major risk factor for stroke
- Your risk of stroke could be dramatically reduced by taking the appropriate medication
- Anyone concerned about whether they have AF should seek medical advice.

Please note that telling people how to check their own pulse is **not** one of our campaign's key messages.

For primary healthcare professionals:

- Health professionals and in particular GPs should be routinely screening, diagnosing and managing people with AF.

Activities

Our major activity will be **radio adverts** on regional stations (Classic FM south, Heart Kent, Wave 105FM etc) which will raise awareness of the links between AF and stroke and tell people that if they are concerned they should go to see their GP. These are due to start between mid May and end of May and will last for three – four weeks. The target audience for the campaign will be 55 -65 year olds and mainly women. Not because they are the most at risk of AF but because they tend to be the health guardians within their family for the younger and older generations.

We have produced a short **leaflet** which discusses the issues around AF and prevention of stroke. This compliments a more detailed factsheet which we have also produced. Furthermore, we have produced an A3 **poster** promoting the Ask First about AF message. We will be sending these out directly to GP practices before the radio campaign and hope that they are useful tools for the surgeries to promote awareness and provide information.

Promotion of our new dedicated **website** section on AF and stroke. This includes a test for anyone who has AF to find out their risk of stroke using the CHADS2 test. This web tool has been developed with the help of Dr Matt Fay and Dr Richard Healicon. It can be found at www.stroke.org.uk/askfirst

Impact on GP surgeries

We expect that people who have concerns that they may have AF will go to their GP or practice nurse and possibly ask for a pulse test.

At pre-launch stage we are contacting Stroke and Cardiac networks, PCTs and GP surgeries directly to raise awareness of the campaign and warn them about a possible increased amount of patients presenting with concerns about AF or AF symptoms.

NHS Improvement will be supporting the Stroke Association campaign as well as using the opportunity to promote the national AF work plan. This may be through supporting local education/awareness events for both public and clinical audiences.

Patient Satisfaction Survey on Patients Discharged from Edgerton Ward - 2010

Sarah Snowball

Stroke Specialist Nurse

Dr MJH Rahmani

Consultant Physician

Geraldine Falconer CEF

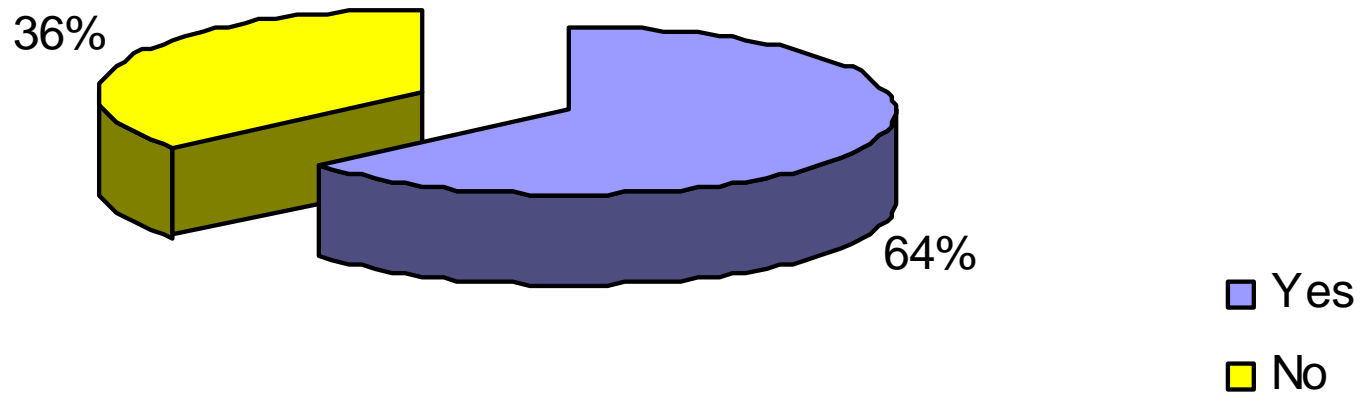
Background/Why ?

- Inpatient satisfaction to include in developing care further
- To gather patients view on our stroke care
- To identify area of improvement
- Map patient experience through stroke ward
- Help improve service

Audit Collection data

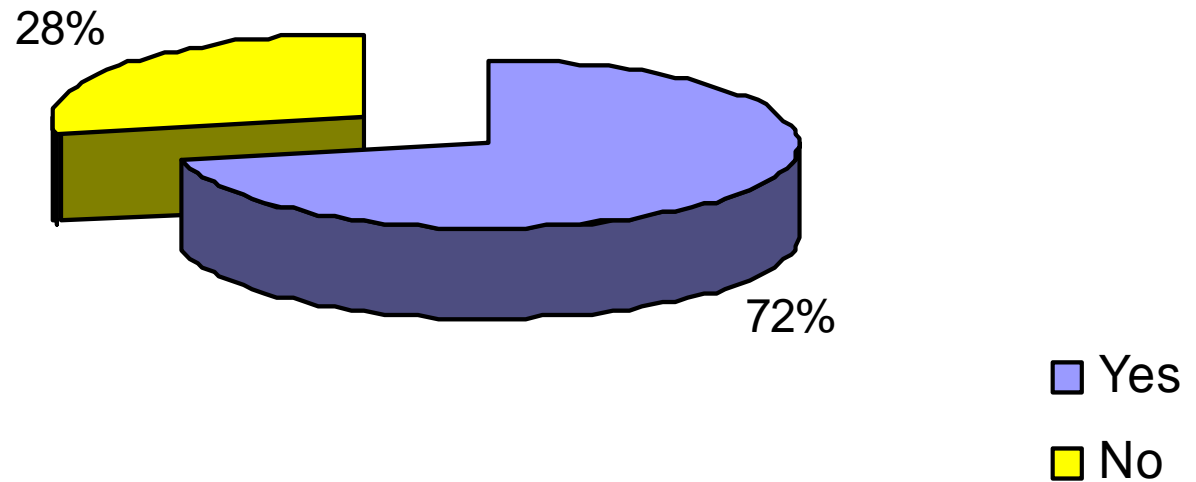
- Postal questionnaire
- The questions were based on the patient's stay in hospital
- Views Collected after discharge (3-6months later)
- Total numbers of letters sent out : 50 (Previous year 40)
- Total replies 27,(57%) (response rate previous year 96%)

When you were admitted were you aware that you had a stroke?



2009 Results: 45% answered Yes, 52% answered No, 3% were not sure.

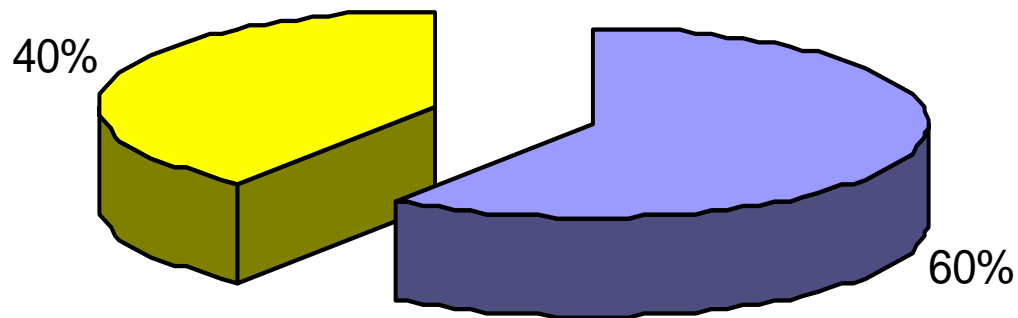
Did you feel able to discuss your concerns with a member of staff?



2009 Results: 74% answered Yes, 26% answered No

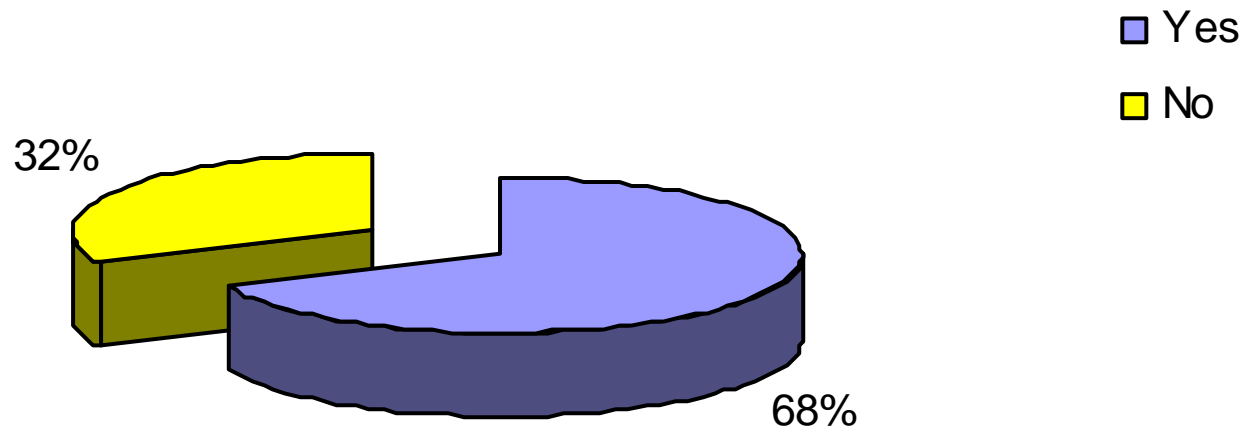
Did you feel that you were involved in your management/treatment?

■ Yes
■ No



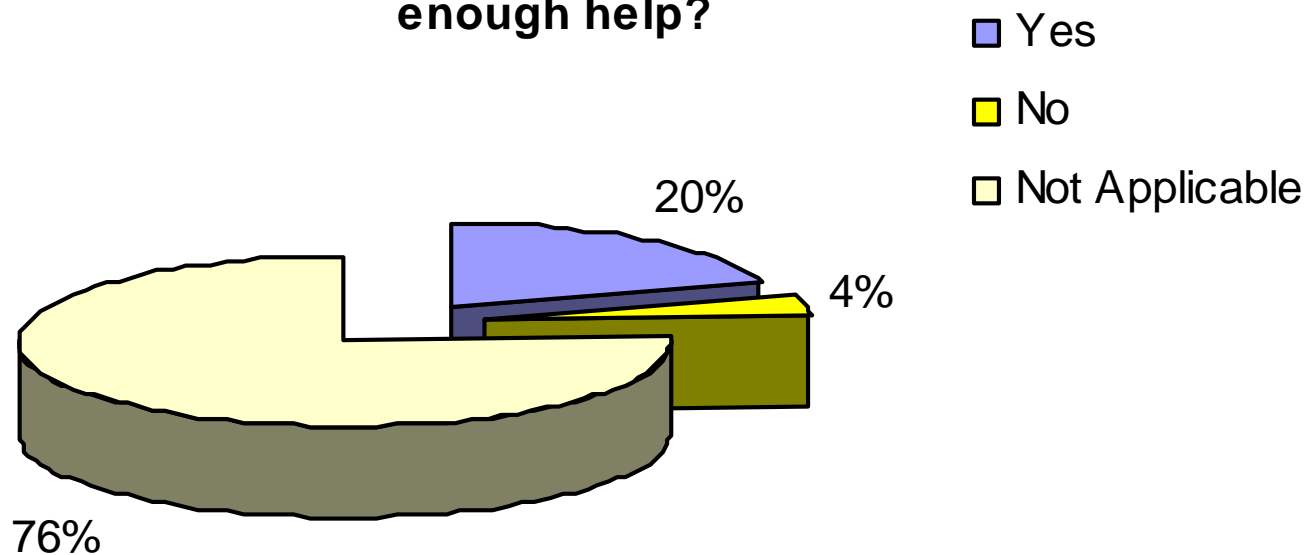
2009 Results: 60% answered Yes, 37% answered No, 3% were unsure.

Did you feel you had enough treatment to help improve your mobility?



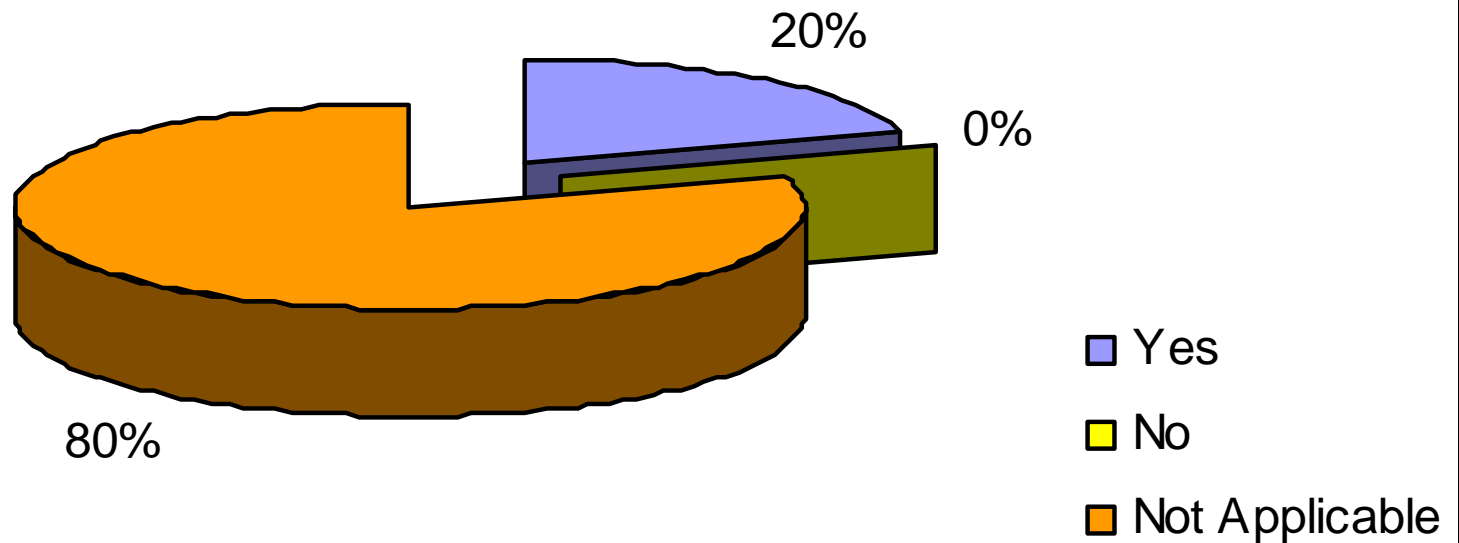
2009 Results: 71% answered Yes, 18% answered No, 8% not applicable, 4% not recorded.

If you had speech problems did you feel that you had enough help?



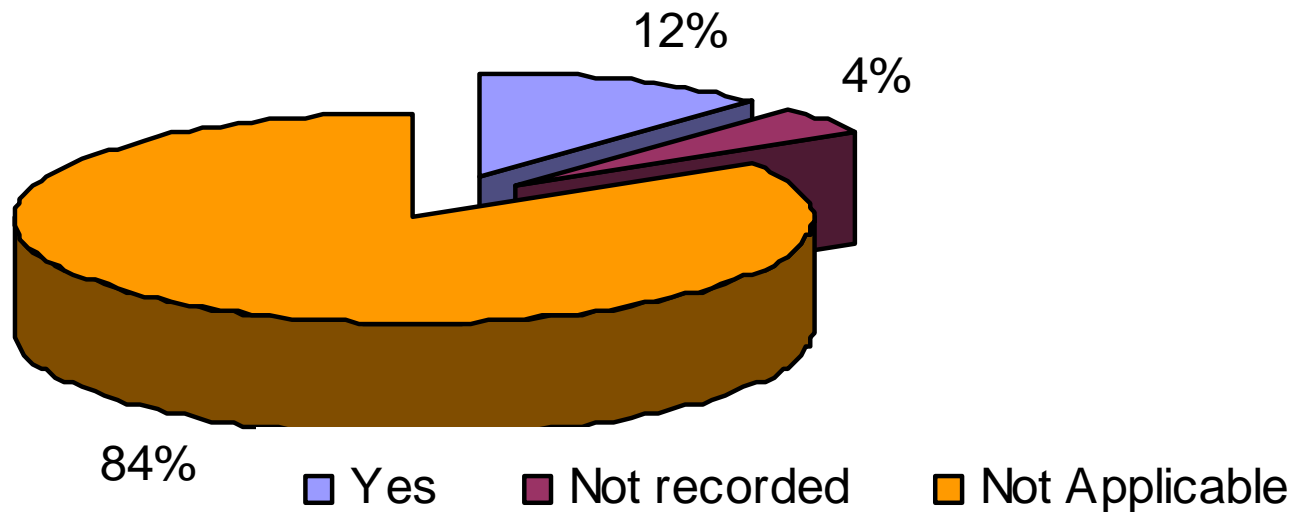
**2009 Results: 24% answered Yes, 5% answered No,
71% not applicable**

If you had problems with swallowing did you feel that you had enough help?



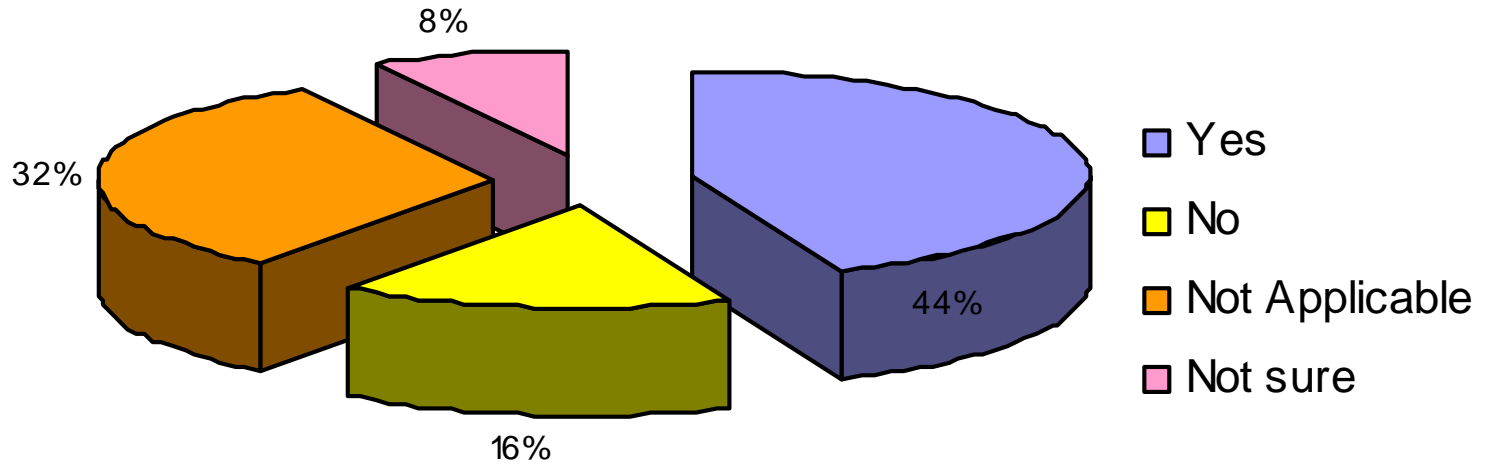
2009 Results: 21% answered Yes, 79% not applicable

If you needed help with feeding did you feel that you had enough support?



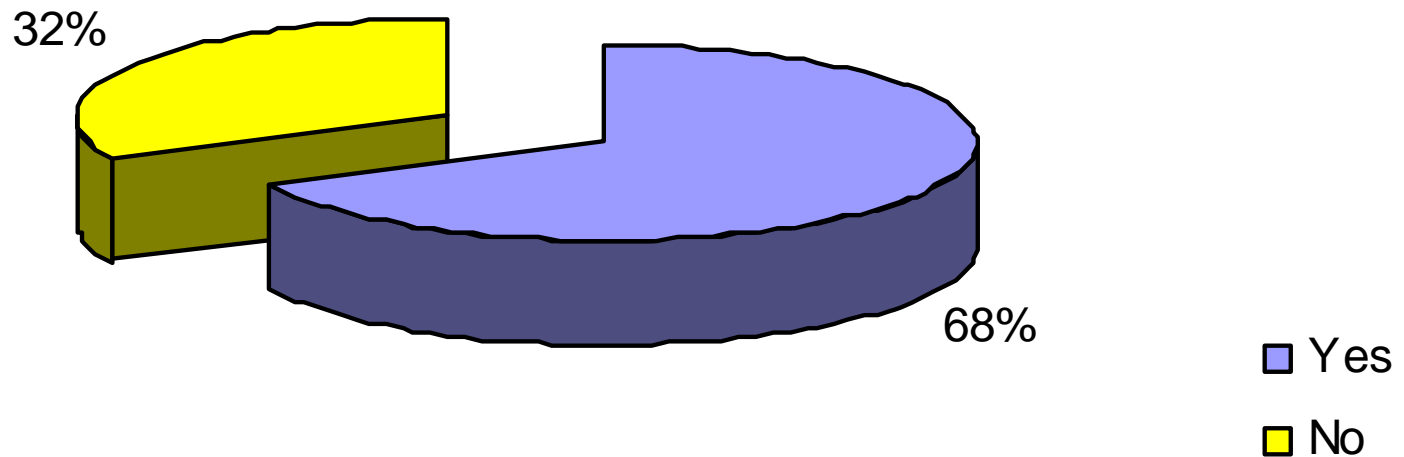
**2009 Results: 21% answered Yes, 8% answered No,
71% not applicable**

If you needed assistance to use the toilet did you feel help was available when required?



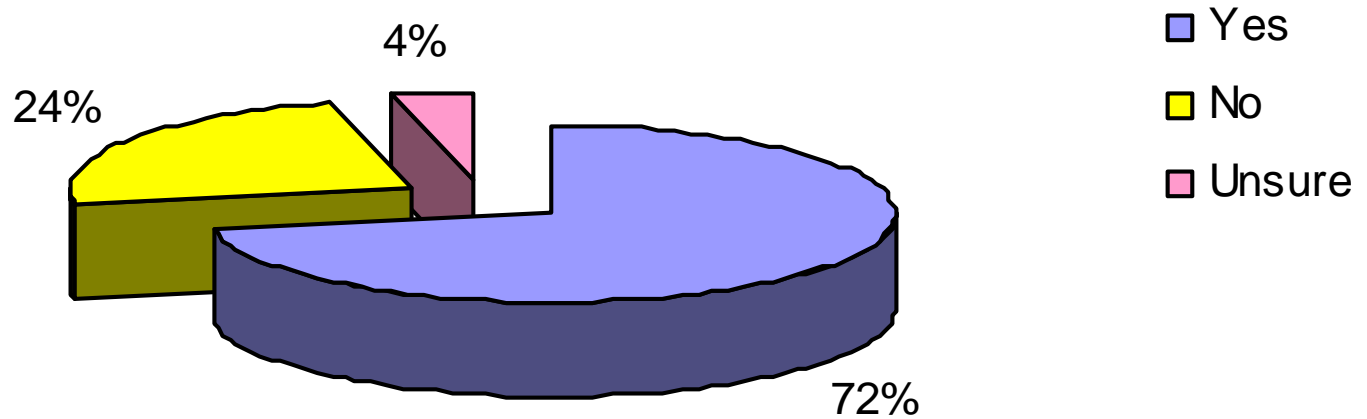
2009 Results: 55% answered Yes, 3% answered No, 39% not applicable, 3% answered Not Always.

Did you Receive Information regarding your stroke during your stay on the ward?



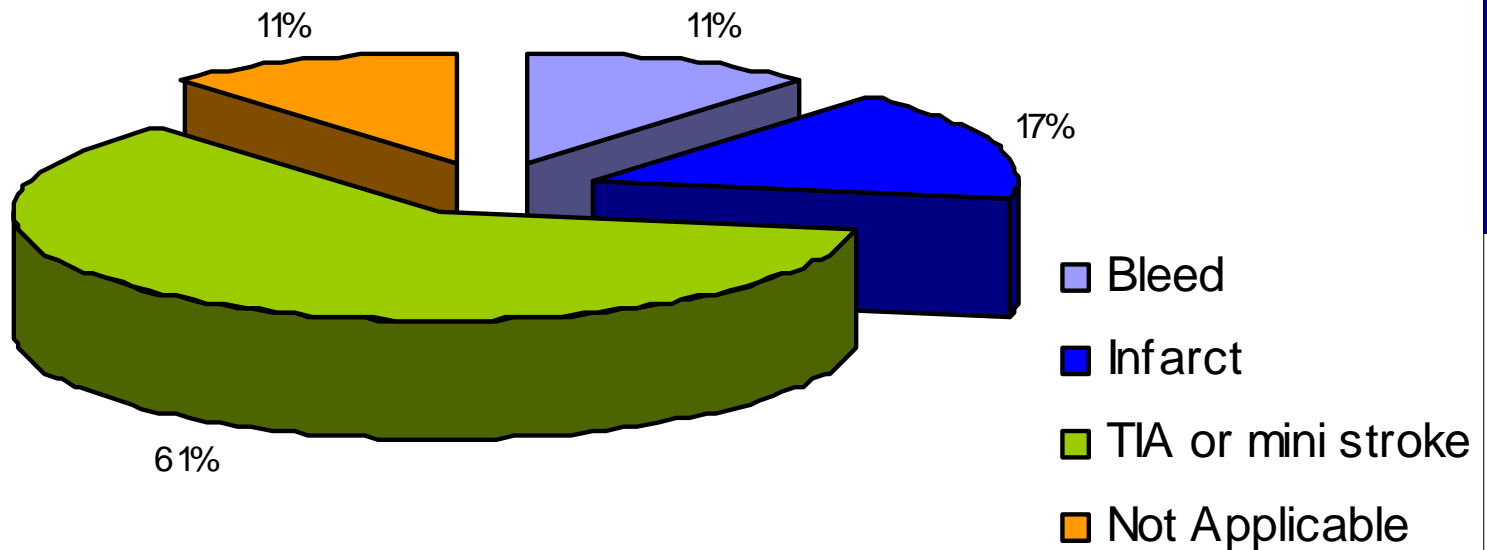
2009 Results: 66% answered Yes, 34% answered No.

Were you Informed what type of stroke you had?



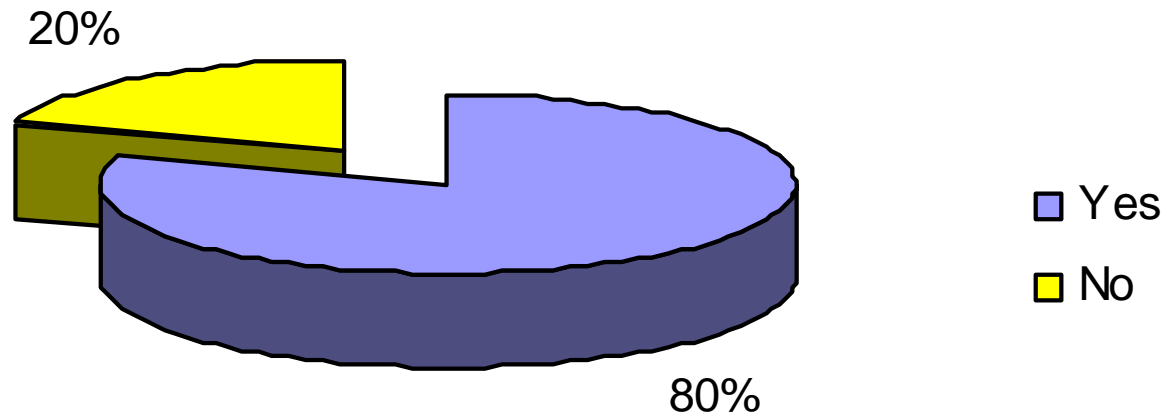
**2009 Results: 65% answered Yes, 32% answered No,
3% not recorded.**

If yes to previous question (18 patients) what type of stroke did you have? (25 patients)



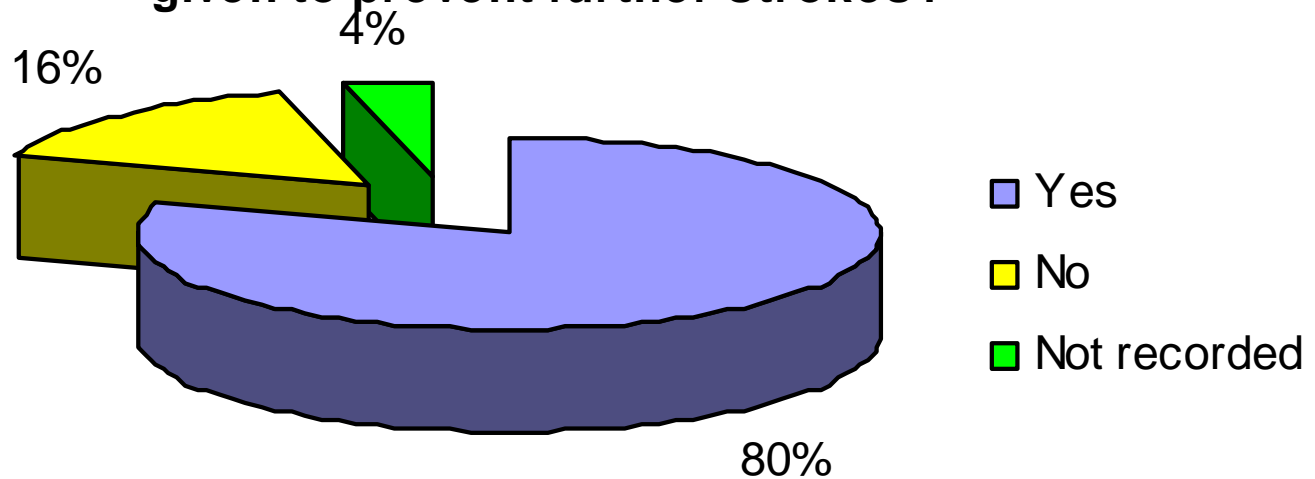
2009 Results: (25 Patients) 4% had a Bleed, 28% an infarct, 68% a TIA or mini stroke.

Did you receive information regarding your follow up care on discharge?



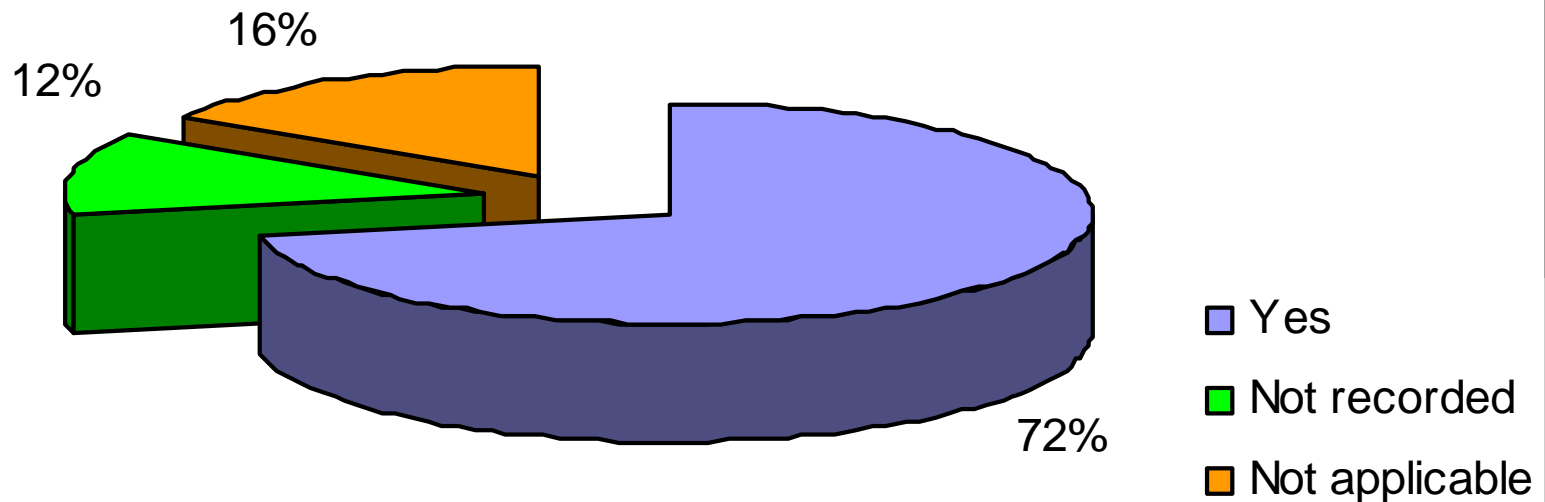
2009 Results: 76% answered Yes, 24% answered No.

Did you understand what medication you had been given to prevent further strokes?



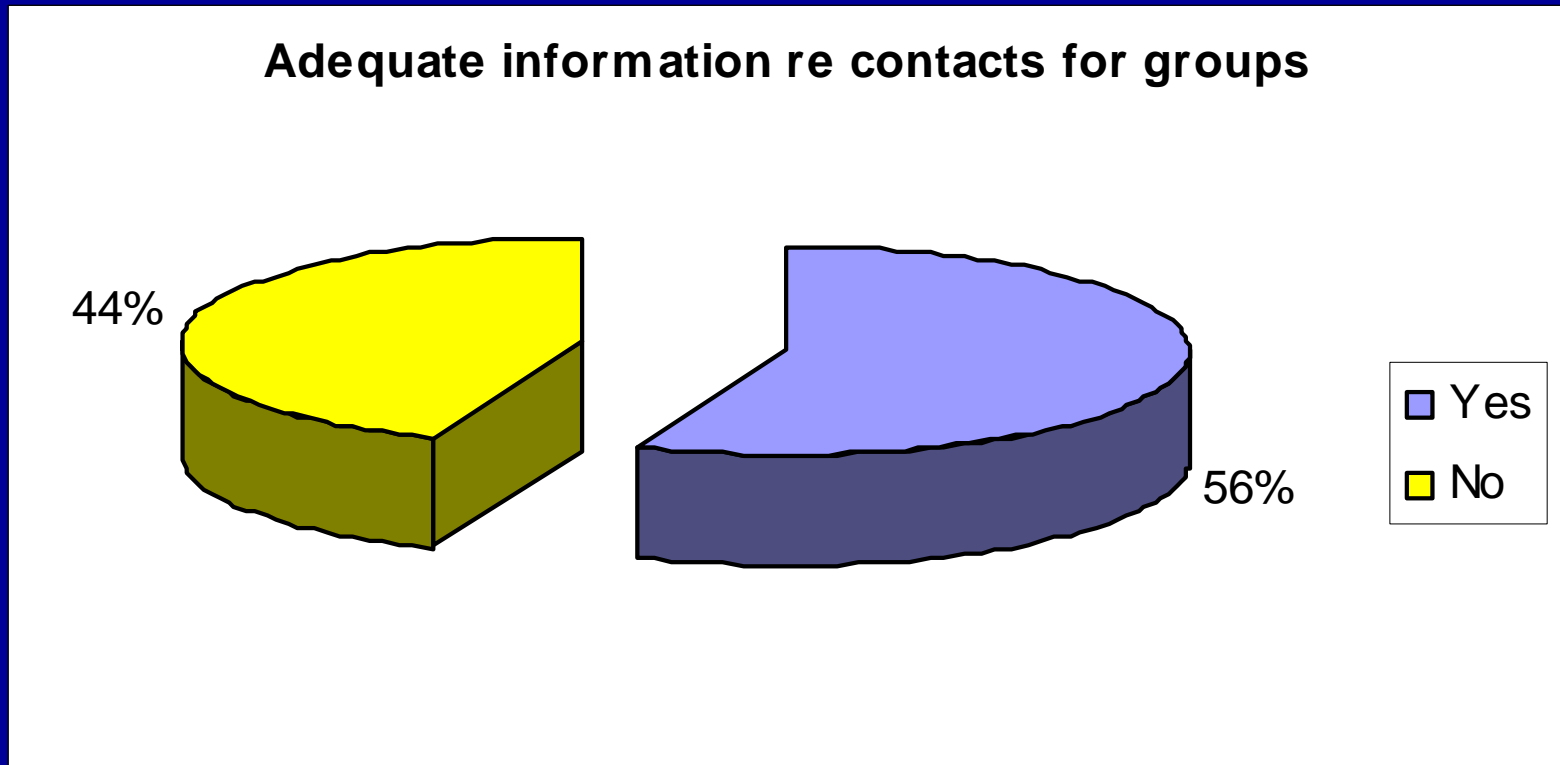
2009 Results: 76% answered Yes, 24 % answered No.

Did your carer/next of kin feel comfortable discussing issues with staff?



**2009 Results: 85% answered Yes, 11% answered No,
5% not applicable**

Did your Carer/next of Kin feel that you had been given Adequate information to enable you to contact support groups?



This question was added to the current questionnaire.

Positive comments

“I am sorry that I cannot find the right words to express my appreciation and my gratitude to the nurses, the doctors and Consultants as well as the Social Workers. The special treatment that I received from the Physiotherapist, the dietician and all the excellent unique services that I received from all the EXCELLENT precious people that I mentioned alone and those that I might have omitted, during my stay at the ward and later at home. Thank You Thank you.”

Positive Comments (2)

“I feel that when I had my last stroke in April after collapsing in Tesco Express at Silverhill could not have received better treatment from all the ambulance men to ward staff. Words do not convey my thanks. Yours with much appreciation of the work you do.”

“The care that I received in Egerton Ward, Conquest was excellent and could not have been better especially as my wife had died in the same ward only 6 months previously.”

“ When I went back to hospital they said I have a very good recovery. I do find that my memory is not 100% and I have clumsy hands.” (Aged 79)

Positive Comment (3)

“The care I received was superb. The nurses were very helpful and went out of their way to accommodate my problems. The nurses were very caring, I am very grateful to them. Please add my name and address to the Stroke Support Group.”

“I was treated very well by all staff while in hospital.”

Not so Positive Comments

“Liaising with EDGH re earlier TIA would have been helpful. I had two TIA's in two months which were treated separately by EDGH and Conquest. It was distressing to be in a bay of very elderly non-verbal patients when I am only 46 years old. Other than that I received (12 day stay) top quality care from everyone involved in Egerton ward, for which I am very grateful.”

Not so Positive Comments (2)

“It took so long for anyone to contact us about support & help, that when I received a letter (approx 2 weeks ago) I felt very angry. It was only my very organised family, who sorted out the help I needed, and there are many families without this backup so, I imagine they would feel helpless and abandoned. With reference to feeding, I am right handed & no help was available to assist me. Whilst trying to eat left-handed - very messy. Mobility - No assistance was given whilst I struggled to get to the toilets”

Conclusions:

There was not such a high response 57% to the questionnaire as the 2008 response was 96%.

- 36% (52%) (of patients were not aware that they had a stroke
- 72% (65%) said they were informed as to what type of stroke they had
- 60% (68%) of patients felt that they were involved in their treatment

Conclusions:

- 61% (68%) of patients had a TIA or mini stroke
- 72% (74%) of patients felt able to discuss their concerns with a member of staff
- 80% (76%) of patients understood the medication to take to prevent further stroke.

Recommendations:

- Start up stroke group in September at Irvine unit with CSRT
- Drop in sessions Wednesday Pm to discuss goal setting and MDT meetings with patients and carers
- ICP to continue for follow up which might help improve information patients receive and their contribution to their treatment and care.

Action Plan:

Action	By Whom	Date
Ensure all staff involve patients in management/treatment	S Snowball E King	Ongoing training
Ensure patients understand preventative medication on discharge	S Snowball E King	Ongoing Training
Set up Stroke Support Group	S. Snowball	2010
Re-Audit	S. Snowball	2011

Accelerating Stroke Improvement Metrics 2010-11

(based on discharge dates within period)

ASI 3: Acute stroke care 90% stay (Vital Signs)

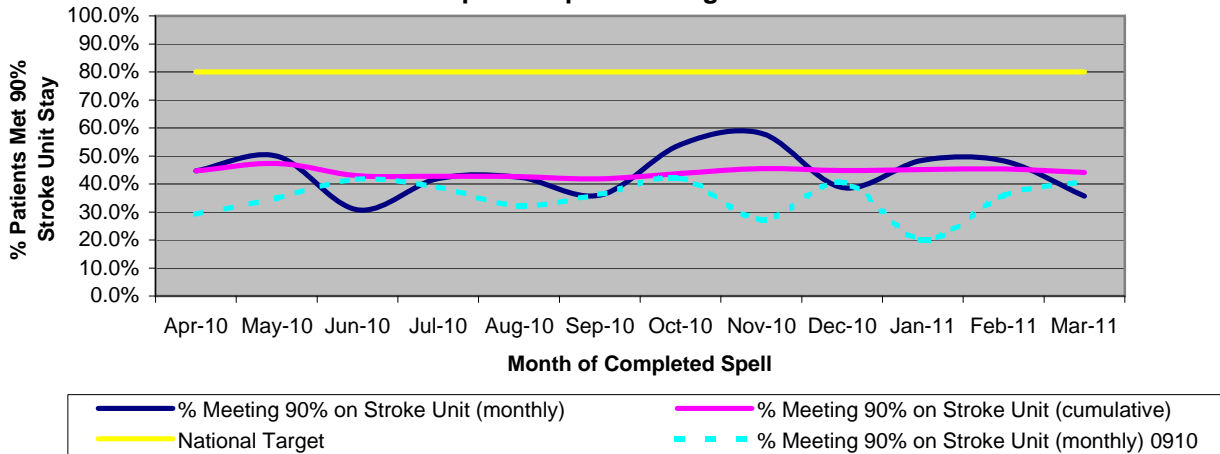
CONQUEST

Performance Indicator	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11
Number of spells with primary stroke diagnosis	38	36	26	31	33	25	37	31	31	33	29	56
Number of patients who spent 90% hospital stay on stroke unit	17	18	8	13	14	9	20	18	12	16	14	20
% Meeting 90% on Stroke Unit (monthly)	44.7%	50.0%	30.8%	41.9%	42.4%	36.0%	54.1%	58.1%	38.7%	48.5%	48.3%	35.7%
% Meeting 90% on Stroke Unit (cumulative)	44.7%	47.3%	43.0%	42.7%	42.7%	41.8%	43.8%	45.5%	44.8%	45.2%	45.4%	44.1%

Q1	Q2	Q3	Q4
100	89	99	118
43	36	50	50

43.0%	40.4%	50.5%	42.4%
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**90% Stay on Stroke Unit (CONQUEST)
Completed Spells During 2010-11**



Accelerating Stroke Improvement Metrics 2010-11

(based on discharge dates within period)

ASI 3: Acute stroke care 90% stay (Vital Signs)

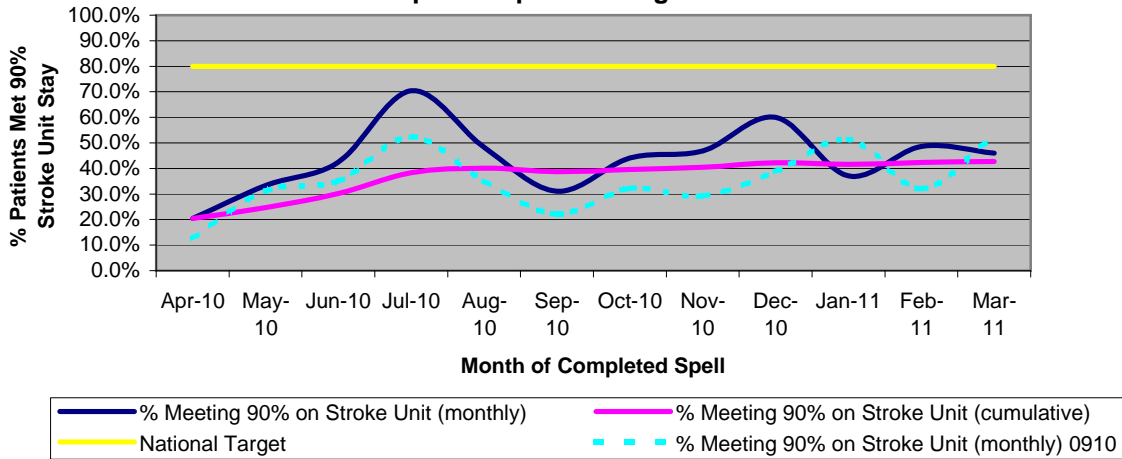
EDGH

Performance Indicator	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11
Number of spells with primary stroke diagnosis	49	24	33	27	29	29	34	32	25	35	37	37
Number of patients who spent 90% hospital stay on stroke unit	10	8	14	19	14	9	15	15	15	13	18	17
% Meeting 90% on Stroke Unit (monthly)	20.4%	33.3%	42.4%	70.4%	48.3%	31.0%	44.1%	46.9%	60.0%	37.1%	48.6%	45.9%
% Meeting 90% on Stroke Unit (cumulative)	20.4%	24.7%	30.2%	38.3%	40.1%	38.7%	39.6%	40.5%	42.2%	41.6%	42.4%	42.7%

Q1	Q2	Q3	Q4
106	85	91	109
32	42	45	48

30.2%	49.4%	49.5%	44.0%
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**90% Stay on Stroke Unit (EDGH)
Completed Spells During 2010-11**



Accelerating Stroke Improvement Metrics 2010-11

(based on discharge dates within period)

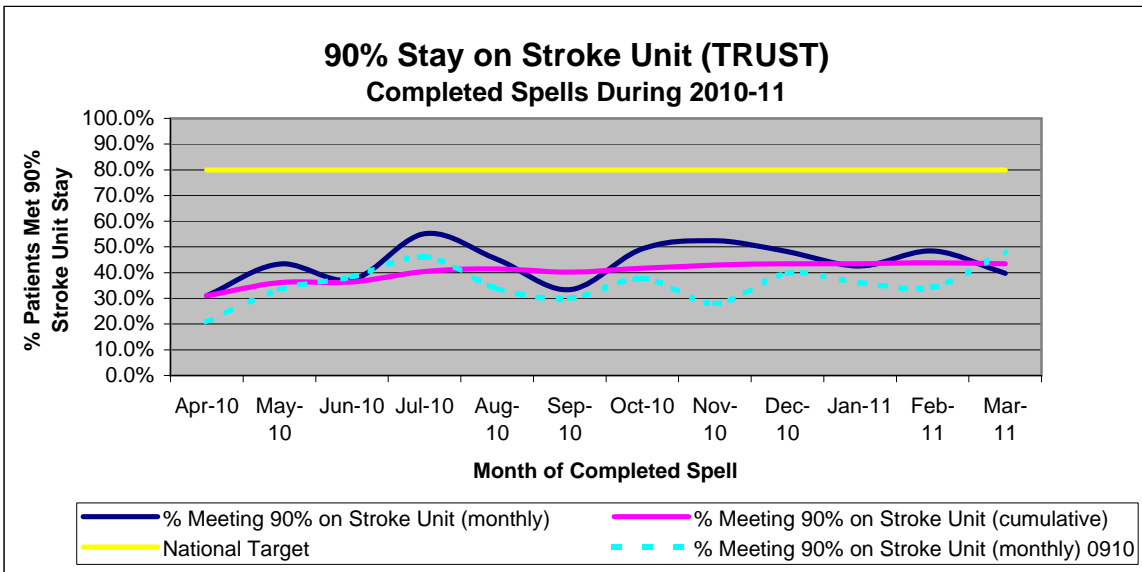
ASI 3: Acute stroke care 90% stay (Vital Signs)

TRUST

Performance Indicator	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11
Number of spells with primary stroke diagnosis	87	60	59	58	62	54	71	63	56	68	66	93
Number of patients who spent 90% hospital stay on stroke unit	27	26	22	32	28	18	35	33	27	29	32	37
% Meeting 90% on Stroke Unit (monthly)	31.0%	43.3%	37.3%	55.2%	45.2%	33.3%	49.3%	52.4%	48.2%	42.6%	48.5%	39.8%
% Meeting 90% on Stroke Unit (cumulative)	31.0%	36.1%	36.4%	40.5%	41.4%	40.3%	41.7%	43.0%	43.5%	43.4%	43.9%	43.4%

Q1	Q2	Q3	Q4
206	174	190	227
75	78	95	98

36.4%	44.8%	50.0%	43.2%
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Accelerating Stroke Improvement Metrics 2010-11

(based on discharge dates within period)

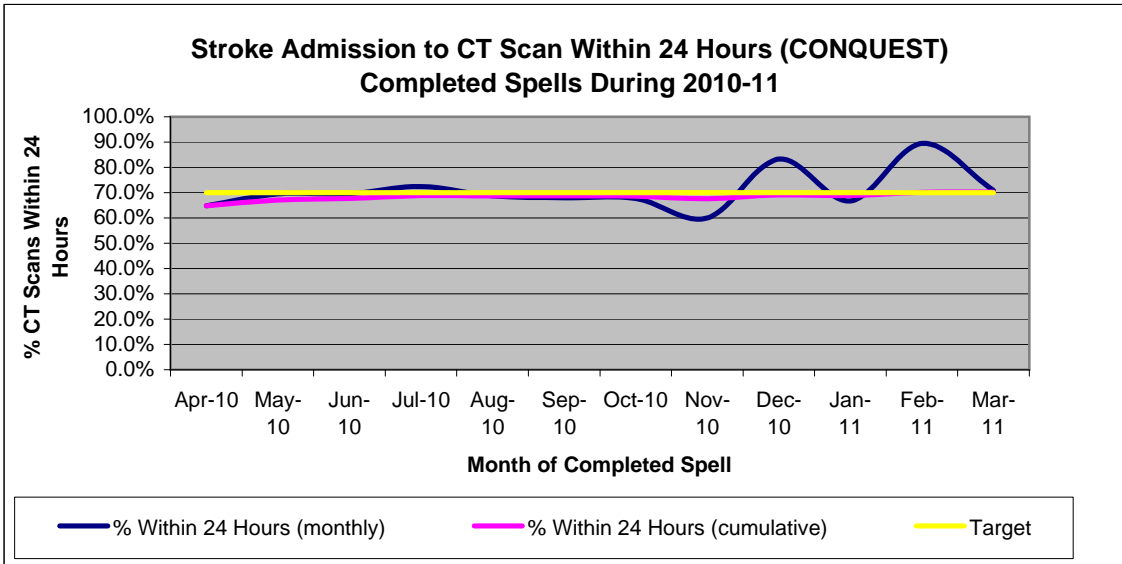
ASI 4b: Access to brain imaging within 24 hours

CONQUEST

Performance Indicator	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11
Between Minus 24 and up to 24 Hours	24	25	16	21	22	17	21	15	20	16	17	34
Over 24 Hours Within Spell	10	10	4	6	9	6	8	10	4	3	2	12
Over Minus 24Hs	0	0	0	0	0	0	0	0	0	0	0	0
Over 24 Hours Outside Spell	0	0	0	0	0	0	0	0	0	0	0	0
No CT Scan Match/ Performed	3	1	3	2	1	2	2	0	0	5	0	2
Total Spells	37	36	23	29	32	25	31	25	24	24	19	48
% Within 24 Hours (monthly)	64.9%	69.4%	69.6%	72.4%	68.8%	68.0%	67.7%	60.0%	83.3%	66.7%	89.5%	70.8%
% Within 24 Hours (cumulative)	64.9%	67.1%	67.7%	68.8%	68.8%	68.7%	68.5%	67.6%	69.1%	68.9%	70.2%	70.3%

Q1	Q2	Q3	Q4
65	60	56	67
24	21	22	17
0	0	0	0
0	0	0	0
7	5	2	7
96	86	80	91

67.7%	69.8%	70.0%	73.6%
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Accelerating Stroke Improvement Metrics 2010-11

(based on discharge dates within period)

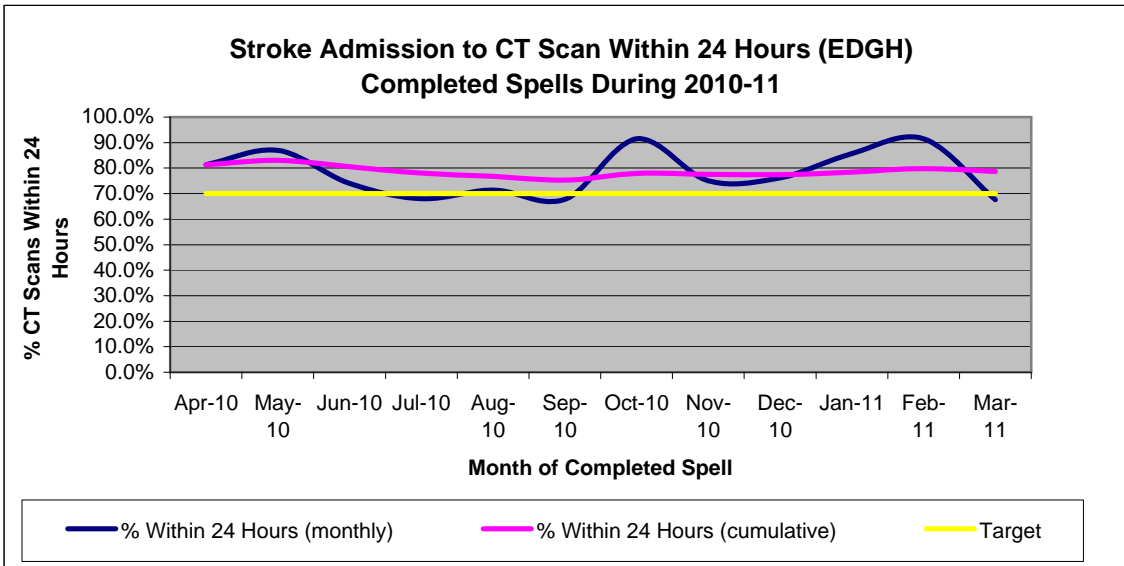
ASI 4b: Access to brain imaging within 24 hours

EDGH

Performance Indicator	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11
Between Minus 24 and up to 24 Hours	39	20	20	17	20	21	32	21	16	30	32	23
Over 24 Hours Within Spell	5	2	4	6	7	7	3	6	5	3	1	9
Over Minus 24Hs	0	0	0	0	0	0	0	0	0	0	0	0
Over 24 Hours Outside Spell	0	0	0	0	0	0	0	0	0	0	0	0
No CT Scan Match/ Performed	4	1	3	2	1	3	0	1	0	2	2	2
Total Spells	48	23	27	25	28	31	35	28	21	35	35	34
% Within 24 Hours (monthly)	81.3%	87.0%	74.1%	68.0%	71.4%	67.7%	91.4%	75.0%	76.2%	85.7%	91.4%	67.6%
% Within 24 Hours (cumulative)	81.3%	83.1%	80.6%	78.0%	76.8%	75.3%	77.9%	77.6%	77.4%	78.4%	79.8%	78.6%

Q1	Q2	Q3	Q4
79	58	69	85
11	20	14	13
0	0	0	0
0	0	0	0
8	6	1	6
98	84	84	104

80.6%	69.0%	82.1%	81.7%
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Accelerating Stroke Improvement Metrics 2010-11

(based on discharge dates within period)

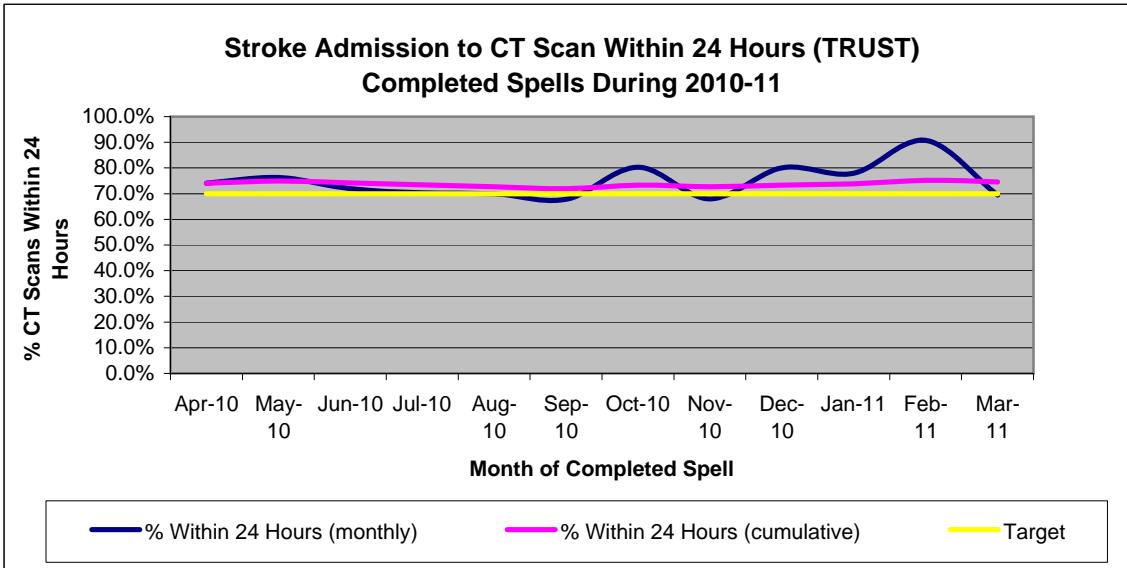
ASI 4b: Access to brain imaging within 24 hours

TRUST

Performance Indicator	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11
Between Minus 24 and up to 24 Hours	63	45	36	38	42	38	53	36	36	46	49	57
Over 24 Hours Within Spell	15	12	8	12	16	13	11	16	9	6	3	21
Over Minus 24Hs	0	0	0	0	0	0	0	0	0	0	0	0
Over 24 Hours Outside Spell	0	0	0	0	0	0	0	0	0	0	0	0
No CT Scan Match/ Performed	7	2	6	4	2	5	2	1	0	7	2	4
Total Spells	85	59	50	54	60	56	66	53	45	59	54	82
% Within 24 Hours (monthly)	74.1%	76.3%	72.0%	70.4%	70.0%	67.9%	80.3%	67.9%	80.0%	78.0%	90.7%	69.5%
% Within 24 Hours (cumulative)	74.1%	75.0%	74.2%	73.4%	72.7%	72.0%	73.3%	72.7%	73.3%	73.8%	75.2%	74.6%

Q1	Q2	Q3	Q4
144	118	125	152
35	41	36	30
0	0	0	0
0	0	0	0
15	11	3	13
194	170	164	195

74.2%	69.4%	76.2%	77.9%
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Accelerating Stroke Improvement Metrics 2011-12

(based on discharge dates within period)

[Click here to see definitions & guidance notes](#)

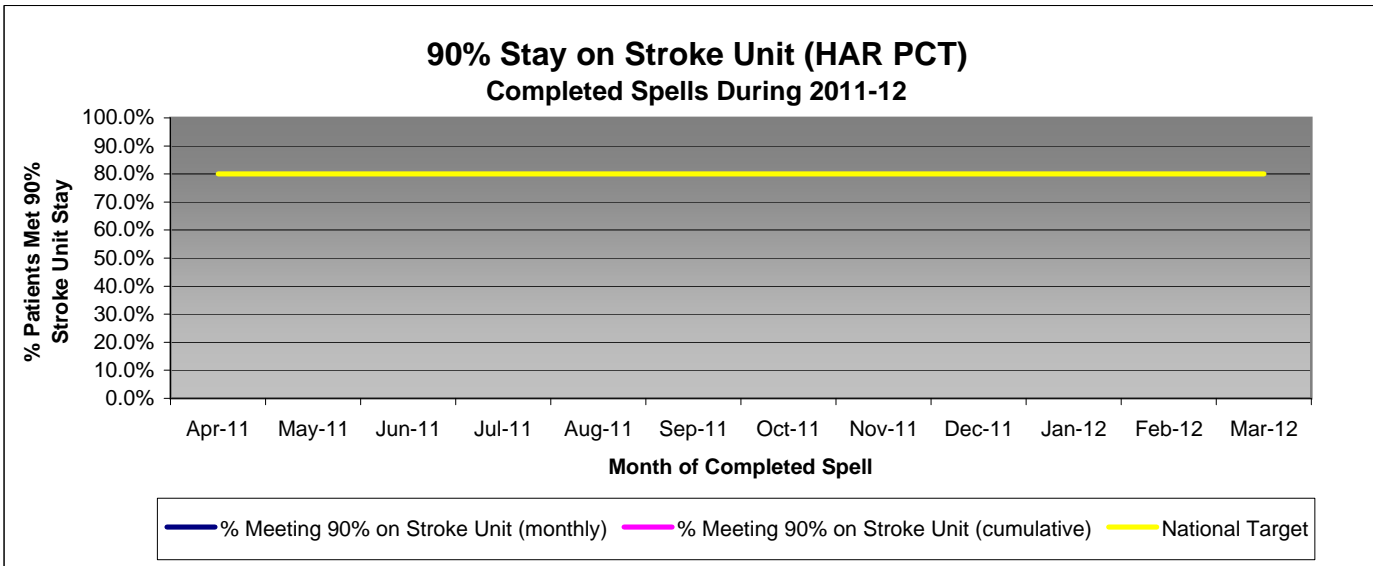
ASI 3b: Acute stroke care 90% stay (Vital Signs)

Hastings & Rother PCT

Performance Indicator	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12
Number of spells with primary stroke diagnosis	25											
Number of patients who spent 90% hospital stay on stroke unit	6											
% Meeting 90% on Stroke Unit (monthly)	24.0%											
% Meeting 90% on Stroke Unit (cumulative)	24.0%											

Q1	Q2	Q3	Q4
25	0	0	0
6	0	0	0

24.0%			
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Accelerating Stroke Improvement Metrics 2011-12

(based on discharge dates within period)

[Click here to see definitions & guidance notes](#)

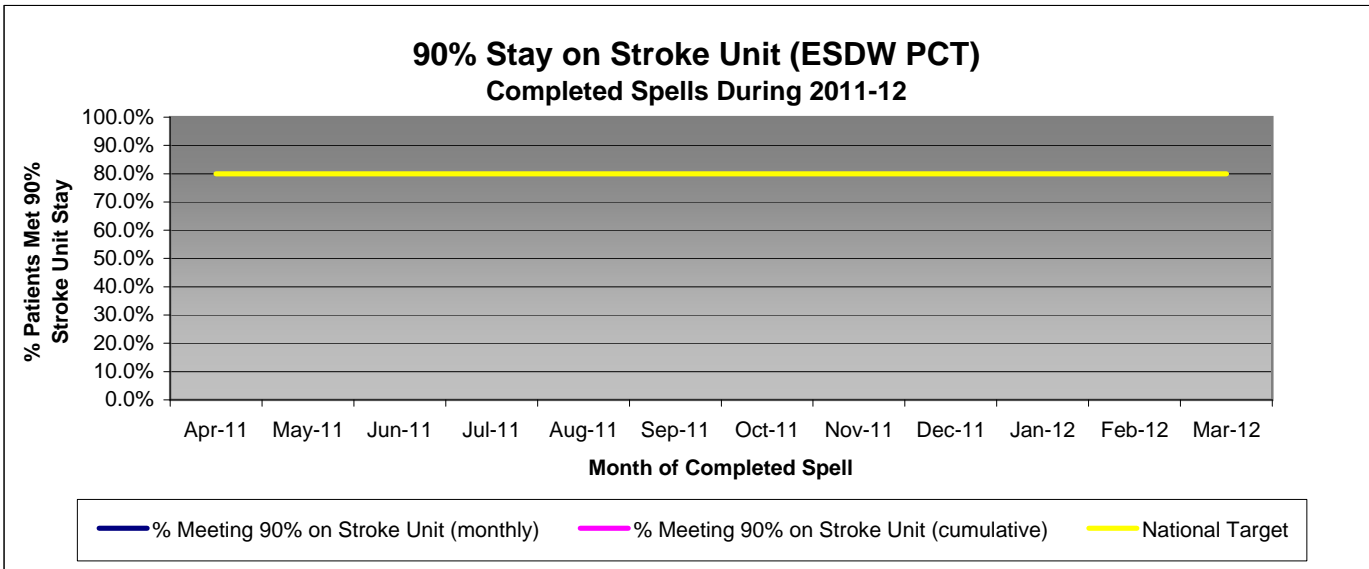
ASI 3b: Acute stroke care 90% stay (Vital Signs)

East Sussex Downs & Weald PCT

Performance Indicator	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12
Number of spells with primary stroke diagnosis	28											
Number of patients who spent 90% hospital stay on stroke unit	16											
% Meeting 90% on Stroke Unit (monthly)	57.1%											
% Meeting 90% on Stroke Unit (cumulative)	57.1%											

Q1	Q2	Q3	Q4
28	0	0	0
16	0	0	0

57.1%			
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Accelerating Stroke Improvement Metrics 2011-12

(based on discharge dates within period)

[Click here to see definitions & guidance notes](#)

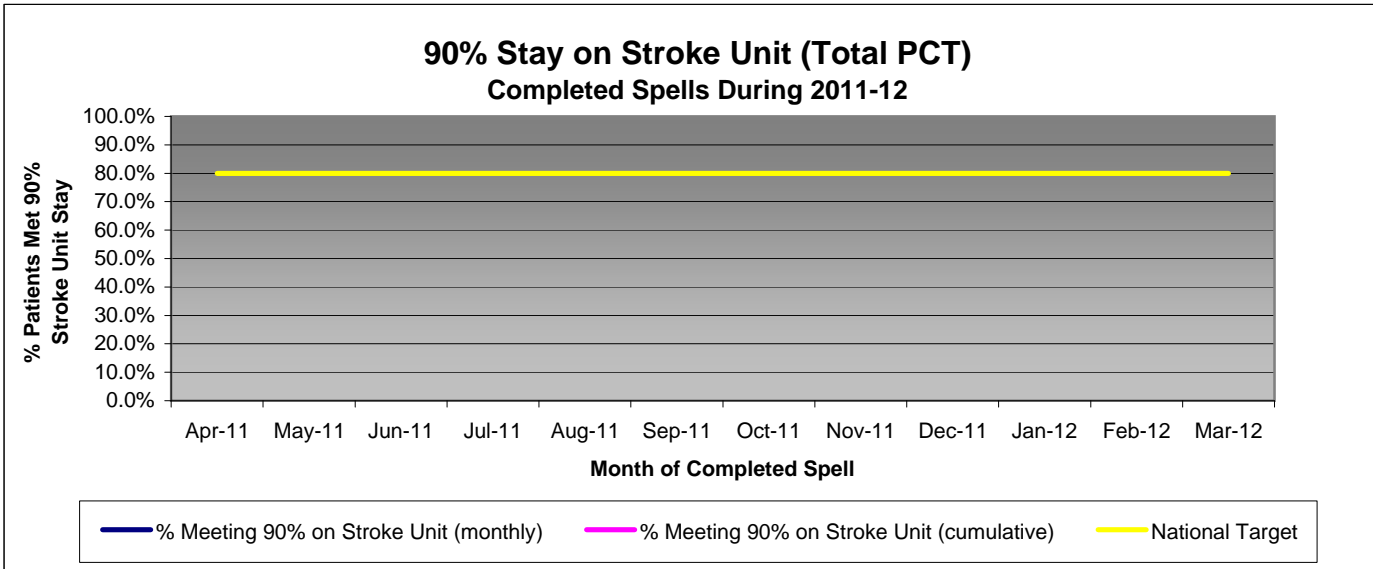
ASI 3b: Acute stroke care 90% stay (Vital Signs)

Total PCT Activity

Performance Indicator	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11
Number of spells with primary stroke diagnosis	53											
Number of patients who spent 90% hospital stay on stroke unit	22											
% Meeting 90% on Stroke Unit (monthly)	41.5%											
% Meeting 90% on Stroke Unit (cumulative)	41.5%											

Q1	Q2	Q3	Q4
53	0	0	0
22	0	0	0

41.5%			
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Accelerating Stroke Improvement Metrics 2011-12

(based on discharge dates within period)

[Click here to see definitions & guidance notes](#)

ASI 4b: Access to brain imaging within 24 hours

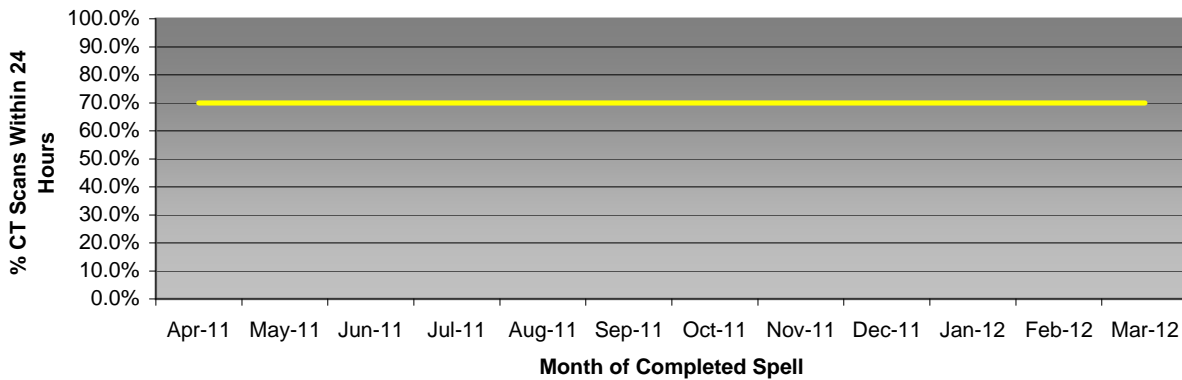
CONQUEST

Performance Indicator	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12
Between Minus 24 and up to 24 Hours	14											
Over 24 Hours Within Spell	9											
Over Minus 24Hs	0											
Over 24 Hours Outside Spell	0											
No CT Scan Match/ Performed	0											
Total Spells	23											
% Within 24 Hours (monthly)	60.9%											
% Within 24 Hours (cumulative)	60.9%											

Q1	Q2	Q3	Q4
14	0	0	0
9	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
23	0	0	0

60.9%	0.0%	0.0%	0.0%
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**Stroke Admission to CT Scan Within 24 Hours (CONQUEST)
Completed Spells During 2011-12**



Accelerating Stroke Improvement Metrics 2011-12

(based on discharge dates within period)

[Click here to see definitions & guidance notes](#)

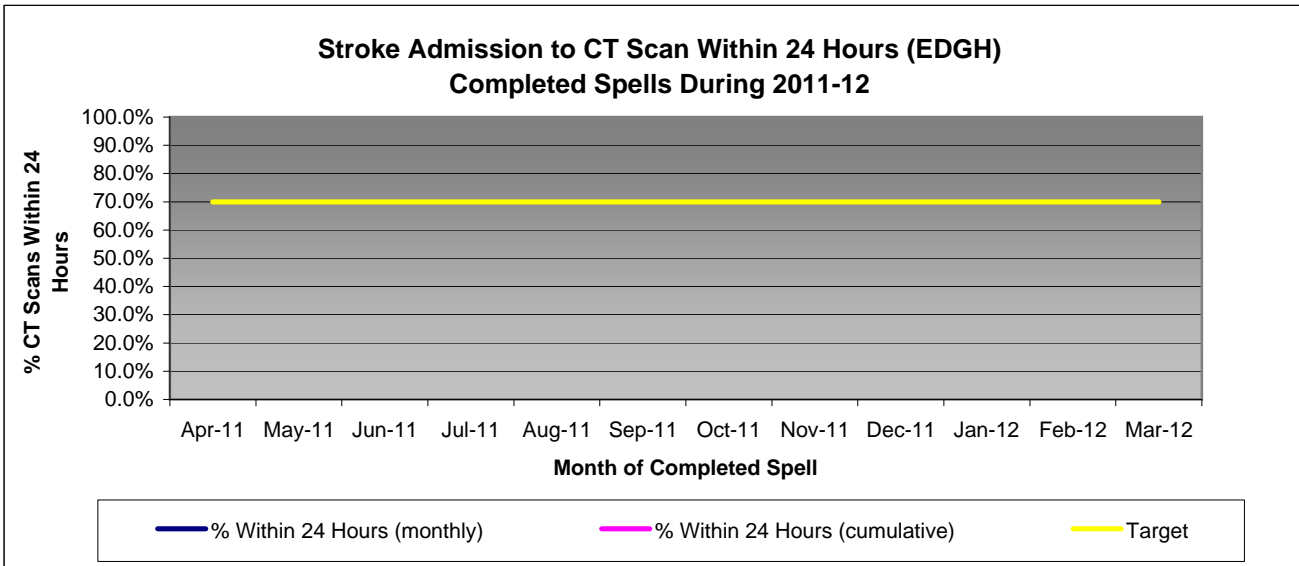
ASI 4b: Access to brain imaging within 24 hours

EDGH

Performance Indicator	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12
Between Minus 24 and up to 24 Hours	23											
Over 24 Hours Within Spell	2											
Over Minus 24Hs	0											
Over 24 Hours Outside Spell	0											
No CT Scan Match/ Performed	0											
Total Spells	25											
% Within 24 Hours (monthly)	92.0%											
% Within 24 Hours (cumulative)	92.0%											

Q1	Q2	Q3	Q4
23	0	0	0
2	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
25	0	0	0

92.0%	0.0%	0.0%	0.0%
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Accelerating Stroke Improvement Metrics 2011-12

(based on discharge dates within period)

[Click here to see definitions & guidance notes](#)

ASI 4b: Access to brain imaging within 24 hours

TRUST

Performance Indicator	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12
Between Minus 24 and up to 24 Hours	37											
Over 24 Hours Within Spell	11											
Over Minus 24Hs	0											
Over 24 Hours Outside Spell	0											
No CT Scan Match/ Performed	0											
Total Spells	48											
% Within 24 Hours (monthly)	77.1%											
% Within 24 Hours (cumulative)	77.1%											

Q1	Q2	Q3	Q4
37	0	0	0
11	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
48	0	0	0

77.1%	0.0%	0.0%	0.0%
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**Stroke Admission to CT Scan Within 24 Hours (TRUST)
Completed Spells During 2011-12**

