Brighton and Hove HOSC report

Stroke Services, November 2014

Executive Summary

- Stroke is a medical emergency. Stroke medicine and patient outcomes have changed beyond recognition in the last 15 years. The consequences of stroke cost the NHS £3 billion per year[1]
- Any patient presenting with a stroke like symptoms needs rapid assessment at a stroke unit capable of providing thrombolysis
- Following the recent presentation of the MRFIT trial stroke units are also likely to have to provide more specialised intra arterial thrombolysis
- To provide high quality, equitable stroke care for patients across Sussex some changes to services may be required which are being taken forward by the Sussex Collaborative Delivery Team Stroke Reference Group
- Clinical outcomes of stroke care at the Royal Sussex County Hospital are currently excellent with a relatively high proportion of patients discharged home, low length of stay, low mortality and high patient satisfaction.
- However, we believe the service could be improved further and we are supporting the Sussex-wide review work to secure these improvements

Introduction

A stroke is a blood clot affecting the brain that can cause permanent disability or death. Each year, 110,000 people in England, have a stroke and 900,000 people are living with the effects of stroke. Most strokes are age related –75% occur in those > 65 years, 1:4 who experience stroke are < 65 and 1:10 are < 55. It is the third commonest cause of death in the UK and costs £8 billion pa (£3 billion NHS costs)[1]

Following stroke onset, the most critical period for intervention is the first 4.5 hours where thrombolysis (clot busting) treatment can potentially be delivered. Time is brain, with 2 million neurones damaged per minute. Direct admission to the stroke unit within 4 hours, early expert multidisciplinary assessments and treatment, intravenous fluids, nutrition and treatment with aspirin and statins all contribute to improved stroke outcomes. To achieve this requires organised, expert units providing 7 day, 24/7 services. The acute clinical pathway should provide:

- Immediate access to imaging for all patients
- Thrombolysis – clot-busting drugs – for those stroke victims where this is clinically appropriate
- completion of all investigations and treatments to reduce the risk of stroke for transient ischaemic attacks (TIAs or 'mini-strokes') within 1 week or within 24 hours for high risk cases

1 National Audit Office. Progress in improving stroke care. London: NAO, 2010.

- an acute vascular surgical service (i.e. surgeons who operate on blood vessels) to perform further tests and interventions where necessary

Acute stroke services therefore require specific organisation and designation and are subject to specific national standards. CCGs in Sussex have established a collaborative team to look at how best to commission very acute services such as stroke care, where changes in one CCG area frequently have an impact on others. In January 2014, at a Sussex Collaborative quarterly strategy meeting, there was unanimous agreement for a Sussex-wide review of stroke services across the whole pathway including prevention, acute phase and rehabilitation taking whilst into account co-dependent services.

Current Brighton and Hove stroke provision

In Sussex, 2012–13 there were 2,000 acute stroke admissions (SUS data). Patients attend one of six acute stroke units. BSUH has around 700 confirmed stroke admissions pa, split 70/30 between RSCH and Princess Royal Hospital.

The BSUH acute service comprises 2 multidisciplinary units - Donald Hall/Solomon wards, RSCH (22 beds) and Ardingly ward, PRH (10 beds). Complex neuro-rehabilitation is provided at the Sussex Rehabilitation Centre at PRH. Transient ischaemic attack (TIA) clinics are provided within the stroke unit at RSCH.
In June 2014 RSCH introduced a 7 day TIA service which can be referred into for urgent review by senior stroke doctors.

SSNAP (Sentinel Stroke National Audit Programme) audit, key outcomes for stroke and how we compare nationally

The SSNAP audit is an aspirational national audit of stroke care run by the Royal College of Physicians It consists of a biannual audit of the organisation of care and a continual ongoing review looking at the care of all stroke inpatients. 74,307 records have been analysed to date (April 13 - Mar 14)

The 2014 acute organisational audit score is based on combined Domains looking at all aspects of the organisation of services and is summarised in Appendix A. BSUH's performance is summarised below.

	RSCH	**PRH**
Summary of domain scores		
D1 Acute care*	**B** **87.5**	**D** **50.0**
D2 Specialist roles	**C** **70.0**	**E** **40.0**
D3 Interdisciplinary services	**D** **45.8**	**E** **41.7**
D4 TIA/Neurovascular clinic	**A** **100.0**	**A** **100.0**
D5 Quality improvement, training & research	**A** **100.0**	**D** **60.7**
D6 Planning & access to specialist support	**A** **100.0**	**B** **85.9**
Organisational audit total score	**B** **83.9**	**D** **63.0**

The latest data from the clinical audit shows that the RSCH stroke unit scores highly for immediate CT scanning, thrombolysis rates, Stroke unit processes, early specialist assessments, and discharge, but is challenged to provide sufficient early specialist rehabilitation due to low therapy staffing or the ideal of 7 day working for all staff. Review of the BSUHT data shows improvement in overall SSNAP scores on both sites across the quarters. Whilst the 'D' overall is challenging, 71% of national units currently achieve a D or E. Where stroke services have undergone significant reorganisation and financial investment in London, standards are generally A or B. This supports the case for Sussex-wide review of the model of care.

	SSNAP level (Q1 2014)	Patient Numbers (Q1 2014)	SSNAP Score (level) Jul-Sept 2013 (Q2)	SSNAP Score (level) Oct-Dec 2013 (Q3)	SSNAP Score (level) Jan-March 2014 (Q4)	SSNAP Score (level) Apr-June 2014 (Q1)
RSCH	D	131	**41.5 (D)**	**45.6 (D)**	**54.2 (D)**	**57.9 (D)**
PRH	D	61	**38.8 (E)**	**35.7 (E)**	**45.0 (D)**	**53.0 (D)**

Strategic Challenges for BSUH

Whilst the service provided for stroke patients at RSCH performs well, it faces a number of challenges.

- Immediate access to acute stroke beds, partly a factor of the general pressure on beds faced at RSCH, although the RSCH direct admission rate is above the national mean at 59.2% (National 58%)

- Insufficient specialist staff, including senior nurses, therapists, psychologists and doctors to deliver the standards of care we aspire to. There are national shortages in staff in these groups who have the specific training required for acute stroke care. This impacts on :

    - Providing a uniform service 24 hours a day, 7 days a week
    - Providing all the therapeutic interventions stroke patients need

- Lack of responsive Early Supported Discharge (ESD) for East Sussex patients, impacting on East Sussex patients length of stay and our ability to rapidly discharge home with community rehabilitation. This impacts on the overall availability of stroke beds. In contrast the Brighton and Hove ESD is very responsive

- Currently the service is not resourced to deliver 6 monthly patient reviews by the whole stroke team. At present we undertake a six-monthly follow up phone call by our senior stroke co-ordinator and bi-monthly multi-disciplinary evening sessions to invite patients and carers back to RSCH to review any urgent issues. In addition all patients are seen in outpatients post discharge. Patients perceive a 'gap in care' when they go home and the reality of life post stroke is more apparent. We are discussing this area of provision with local CCGs.

- The challenge of running acute stroke units on two sites and providing equitable 24/7, 7/7 per week care

The way forward

BSUH has identified in its clinical strategy, that improvements to stroke care are a key priority for the organisation.

We believe significant re-organisation of our services will be required to achieve this. In order to make the improvements against national standards that will benefit patients, we believe re-organisation to a single site may be the best approach. However, this will be a significant change to service provision which will require extensive consultation and firstly and most importantly, the support of our clinically-led commissioners.

At the present time, we believe it is best that we do this in partnership with all of the CCGs and providers of stroke care across Sussex. Changes to provision at BSUH could adversely affect other systems, so it is important to plan to improve stroke care on a larger footprint.

However, should changes not go ahead on a Sussex basis, BSUH will need to formally consider the case for change of its own service configuration in the near future. The sole and over-riding basis in such a consideration will be improving the quality of care for patients. However, the Trust will need to consider the 'fit' of stroke services with other specialised care such as neurosurgery and vascular surgery, and also the impact of any changes on how it manages the limited supply of inpatient bed space at both acute sites. In any event proposed change will need to be discussed with commissioners, patients and the public and this will be done through the relevant consultation processes.

Dr Nicola Gainsborough, November 2014

Appendix A

Summary of domain scores

RSCH scores are highlighted in bold in the table

Summary of domain scores	A	B	C	D	E	RSCH
D1 Acute care*	21 sites (11%) scored 90-100%	**15 sites (8%) scored 80-89%**	45 sites (25%) scored 65-79%	86 sites (47%) scored 50-64%	16 sites (9%) scored <50%	**B 87.5**
D2 Specialist roles	45 sites (25%) scored 90-100%	40 sites (22%) scored 80-89%	**51 sites (28%) scored 65-79%**	39 sites (21%) scored 50-64%	8 sites (4%) scored <50%	**C 70.0**
D3 Interdisciplinary services	7 sites (4%) scored 85-100%	42 sites (23%) scored 70-84%	45 sites (25%) scored 60-69%	**65 sites (36%) scored 45-49%**	24 sites (13%) scored <40%	**D 45.8**
D4 TIA/Neurovascular clinic	**88 sites (48%) scored 90-100%**	45 sites (25%) scored 80-89%	37 sites (20%) scored 70-79%	5 sites (3%) scored 60-69%	8 sites (4%) scored <60%	**A 100.0**
D5 Quality improvement, training & research	**55 sites (30%) scored 85-100%**	30 sites (16%) scored 75-84%	48 sites (26%) scored 65-74%	26 sites (14%) scored 50-64%	24 sites (13%) Scored <50%	**A 100.0**
D6 Planning & access to specialist support	**94 sites (51%) scored 90-100%**	37 sites (20%) scored 75-89%	15 sites (8%) scored 60-74%	12 sites (7%) scored 50-59%	25 sites (14%) scored <50%	**A 100.0**
Organisational audit total score	12 sites (7%) scored 90-100	**46 sites (25%) scored 80-89%**	61 sites (33%) scored 70-79%	44 sites (24%) scored 60-69%	20 sites (11%) scored <60%	**B 83.9**