Northern England
Strategic Clinical Networks

North Cumbria University Hospitals NHS Trust

Stroke Services Visit Summary Paper

Prepared by the Northern England Strategic Clinical Network on behalf of Professor Tony Rudd, National Clinical Director for Stroke, NHS England

November 2014

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1. Introduction

This paper provides a summary of the findings of the visit by Professor Tony Rudd, National Clinical Director for Stroke, and members of the Northern England Strategic Clinical Network to North Cumbria University Hospitals NHS Trust to discuss their stroke services. In addition to Professor Rudd the visiting team included:

- Dr Benjamin Bray, Clinical Lead for Stroke, National Cardiovascular Intelligence Network, Public Health England / Quality Improvement Fellow, Royal College of Physicians
- Dr Tim Cassidy, Network Stroke Clinical Lead
- Dr Stuart Huntley, Stroke Clinical Lead for Northumbria Healthcare NHS Foundation Trust
- Alison Featherstone, Network Manager (Cardiovascular Disease)
- Elizabeth Morris, Network Delivery Manager (Stroke)

This visit was part of a national programme of visits by Professor Rudd to promote and advise on improvements, including supporting organisations to develop stroke services in response to the results of the Sentinel Stroke National Audit Programme (SSNAP) data.

The visit to North Cumbria University Hospitals NHS Trust (NCUH) took place on 14 November 2014 and included site visits to West Cumberland Hospital (WCH) Whitehaven and Cumberland Infirmary Carlisle (CIC). The day involved visiting clinical areas and discussions with the stroke clinical teams, led by Dr Paul Davies, Dr Olu Orugun as well as meeting with the Trust Chief Executive, Ann Farrer and Dr David Rogers who represented the NHS Cumbria Clinical Commissioning Group (CCG). During the visit there was also the opportunity to meet with stroke survivors who had previously been treated in the Trust and now give their time as volunteers.

The conclusion of the visit resulted in a series of recommendations by Professor Rudd that are included in Section 4 of this report.

2. Background

Prior to the visit on the 14 November the Northern England Clinical Senate had undertaken phase 1 of a review of stroke services. The Senate review was initiated following a formal request by NHS Cumbria CCG for the Senate to undertake a review of acute services within NCUH, including stroke services. As part of the review a Senate team visited the Cumbria Trust sites at the beginning of November 2014. Subsequently, the Senate is producing a report which includes background information about the geography, population distribution, road access and recruitment issues in North Cumbria. Therefore, to avoid duplication this level of detail has not been included in this report.

Within Cumbria there is one Clinical Commissioning Group (CCG), NHS Cumbria, however, within that CCG there are six localities, four of which – Carlisle, Allerdale, Eden and Copeland - lie within the geographical area covered by the Northern England Strategic Clinical Network.

Over recent years sufficient evidence has been produced to demonstrate the benefits of centralising acute stroke services, including a recent report published in the British Medical Journal which states that 'a centralised model of acute stroke care in which hyperacute care is provided to all patients with stroke across an entire metropolitan area, can reduce mortality and length of hospital stay', (Morris *et al*, 2014)[1].

Another important factor that has an impact on any stroke service and needs to be taken into consideration is the significant number of stroke mimics that present to stroke services which can be in the region of 40% as a minimum.

Currently stroke services, both inpatient and outpatient are delivered five days a week across two sites within NCUH, Whitehaven and Carlisle. The April to June 2014 quarter of the SSNAP results show that the overall scores for the Trust are E for CIC and D for WCH. The report also reported that thrombolysis rates have risen from 3.1% to 6.8% for CIC, and 0.0% to 9.1% for WCH, with the current national average at 12.2%.

The current stroke model is supported by a telemedicine service where 14 slots are covered by 12 clinicians as part of the North West rota. It was reported that the service was supported by a very robust IT system and that a contingency plan was in place if the system fails.

3. Overview of Discussions

This section provides a summary of the broad range of topics discussed and debated.

The visiting team looked at the available facilities on both sites and discussed a range of issues with staff. Staff were also encouraged to express their views on how services could be improved. The stroke survivors involved in discussions gave a positive account of their overall experience and treatment they had received within the Trust.

The Trust reported that the decision had already been made to centralise the hyperacute stroke services on to one site and agreed that the site choice will be the CIC due to its closer proximity to Neurosciences Services at Newcastle. Therefore, part of the discussions were around the impact of the change on CIC and what would need to happen to ensure that CIC was ready if services did move across from WCH. The remainder of the discussions looked at how the Trust could improve on their performance against the SSNAP data.

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[1] Morris, S., Hunter, R,Ramsay, A., Boaden, R., McKevitt, C., Perry, C., Pursani, N., Rudd, A., Schwamm, L., Turner, S., Tyrell. P., Wolfe, C., Fulop, N., Impact of centralising acute stroke services in English metropolitan areas on mortality and length of hospital stay: difference-in-differences analysis, BMJ, 2014:349:g4757 http://dx.doi.org/10.1136/bmj.g4757

3.1 Key Issues Discussed

a) Model Options

Different models that would meet the needs of the population across the geographical areas were discussed. The "Drip and Ship" model was included and how resource intensive this model would be to operate. Centralisation of hyperacute stroke services was the agreed option of choice.

The Trust reported that discussions had taken place with North West Ambulance Service (NWAS) and that they are supportive of the changes. The existing hip fracture pathway and use of private ambulance services was highlighted as a good example that could be replicated for the repatriation of stroke patients.

b) Recruitment and Retention

It was recognised that recruitment and retention of staff was an ongoing issue and that the option to appoint four additional stroke physicians was unrealistic. The compliment and grades of nursing staff was also discussed including the situation where the nurses on the stroke unit are currently banded as AFC Band 5.

The group also discussed nursing to bed staff ratios and the impact they have on outcomes, recent work by Bray *et al*, (2014) [2] confirms that 30 day mortality risk is reduced for patients admitted to a stroke unit with a nurse staffing ration of 3.0 nurses per 10 beds.

c) Bed Numbers

A lack of stroke beds and bed management was also highlighted as an issue. The options to increase bed numbers and reduce length of stay were discussed. The Trust reported that they were working hard across the Trust to reduce bed capacity by reducing admissions, and ensuring when patients are medically fit that they are moved out as appropriate. The Trust agreed to look at the option of ring fencing two assessment cubicles for stroke patients. It was also reiterated by the team that they needed to look at reducing the number of Transient Ischaemic Attack (TIA) patients they admitted. In addition, it was reported that the opening of the new hospital in Whitehaven in April 2015 will have 20 beds available for stroke patients.

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[2] Bray, B.D., Ayis, S., Campbell, J., Cloud, G.C., James, M., et al. (2014). Associations between stroke mortality and weekend working by stroke specialist physicians and registered nurses: Prospective multicentre cohort study. PLoS Medicine, 11(8), e1001705. http://dx.doi.org/10.1371/journal.pmed.1001705

d) Thrombolysis Service

The discussions addressed all of the issues that impact on reducing 'door to needle time' and increasing thrombolysis rate to the expected 10% to 11% for a demographic such as Cumbria's. This included the lack of timely access to a CT scanner and appropriately trained radiographers. It was also reported that there was only one CT scanner available on the CIC site and no resident radiographer services available 24/7. Further monitoring of the SSNAP data will demonstrate if the upward trend of thrombolysis rates reported in the April to June SSNAP data is continuing.

e) Therapy Services

The current stroke facilities at CIC site do not allow for the storage of even basic equipment. Although, physiotherapy and occupational therapy staffing levels are adequate, there is inadequate SALT service, particularly on the WCH site. The Trust also reported on a partnership remote rehabilitation service they were involved in which they agreed to evaluate and share the findings.

f) Early Supported Discharge

It became clear that there is inequity in access to Early Supported Discharge (ESD) services and that the level of service varied across the localities. For the geographical area there should be at least four to five teams in operation, the area currently has two teams.

g) Other Issues

It was reiterated that the Trust needed to improve on swallow assessments within four hours and mood screening. Nursing staff also raised a lack of access to continence advisors as an issue, although in other hospitals a successful approach is to have stroke nurses as the lead on continence.

4. Recommendations

4.1 Hyperacute stroke services should be centralised on one site, potentially CIC site. To achieve this, the Trust needs to ensure that CIC is ready and able to offer a 7 day service. The pathway should be the simplest pathway possible. The option of a "Drip and Ship" model should only be considered once the pathway is well established. Any model also needs to ensure that the ambulance service is actively involved in the process.

4.2 A stroke policy needs to be devised to attract stroke staff to the Trust. The current stroke nursing levels do not meet the requirements for a hyperacute stroke unit (HASU). This, as well as the stroke nurse grading, needs to be addressed. Specialist stroke nurse posts should be banded at Band 6 to reflect the level of responsibilities, create career progression and aid retention of staff. The option to introduce a Nurse Consultant role should also be seriously considered.

4.3 To address the issue of bed availability for stroke patients it is recommended that two assessment beds are ring fenced for stroke patients. Hyperacute stroke units will normally have a length of stay of 3 days or less. However, given the geography of Cumbria, it may be more important to allow the stroke team to keep patients longer before repatriation to the other units.

4.4 By centralising the acute stroke services onto one site, this will allow the stroke clinicians to run a weekend TIA service / clinic. This will prevent unnecessary admissions of TIA patients to the two hospitals, allow quick and early assessment to a stroke specialist and appropriate investigations.

4.5 The current CT imaging service is one of the key issues for the Trust to address as matter of urgency. A second CT scanner needs to be installed at CIC to ensure a reliable and robust service. Additional radiographers also needed to be trained in CT scanning, along with establishing a residential 24/7 to allow access to CT services 24/7.

4.6 Additional space needs to be provided on the stroke wards to house a gym and basic equipment.

4.7 Additional SALT staffing is needed.

4.8 Further work is needed to develop 7 day therapy services.

4.9 ESD services and longer term therapy needs to be addressed, with an urgent business case submitted by April 2015.

5. Summary

The visit demonstrated the commitment and enthusiasm of the stroke teams across both sites to improve services.

The next steps require clinical staff to submit a final paper to the Chief Executive outlining the proposed stroke service model. It was agreed that this would take place within two weeks of the visit.

To support any modelling work the National Cardiovascular Intelligence Network has agreed to provide any additional data on the different models. In addition, the Northern England Strategic Clinical Network is willing to discuss any specific projects with the Trust that they could undertake on behalf of the Trust.

The other main issue that needs to be addressed is how to present these changes to the local population and gain consensus and willingness from the whole community to support these changes.