Mid Cheshire Hospitals NHS
NHS Foundation Trust

Report

Agenda No.:	

Report To:	Health and Adult Social Care Overview and Scrutiny Committee
Report Title:	Hyperacute Stroke Pathway for South Cheshire and Vale Royal Patients
Meeting Date:	14 January 2016

Report Author(s)	
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Glossary/Acronyms	
CCE	Clinical Commissioning Executive
CCG	Clinical Commissioning Group
MCHFT	Mid Cheshire Hospitals NHS Foundation Trust
UHNM	University Hospital of North Midlands
COCH	Countess of Chester NHS Foundation Trust
FAST	Face, Arms, Speech, Time
NWAS	North West Ambulance Service
NICE	National Institute of Clinical Excellence
TIA	Transient Ischaemic Attack

Outcome Required	**Approval**	✓	**Assurance**		**Discussion**		**Information**	✓

Recommendations:

The Health and Adult Social Care Overview and Scrutiny Committee are asked to:

- Note the report following the service review and approve progression with the proposed option described in the report. The recommended option being that MCHFT and UHNM combine the stroke services within a collaborative model of care, with patients retaining primary support and diagnosis at MCHFT after which, where appropriate, 24-72 hours of intensive stroke support will be provided at UHNM with repatriation back to MCHFT when the patient is sufficiently recovered.

- Support the continuation of this work until its conclusion. MCHFT and UHNM will develop a proposal for the new service provision in January 2016, with a planned implementation of the service by 1 April 2016. This will include a full financial impact and a clear communication plan that can be used to inform local clinicians and the public of the changes.

Executive Summary (Key points, purpose, outcomes)

The current arrangements at MCHFT for Hyperacute Stroke patients is unsustainable due to revised clinical standards and an inability to recruit to a sufficient number of senior clinical posts.

In order to address the current issues, service design options have been discussed extensively between provider organisations, the two relevant CCGs and the Stroke Regional Network over the past 12 months.

A number of options have been reviewed and discounted during these discussions with a final proposal agreed by the Joint CCG Clinical Commissioning Executive group on the 10 December 2015.

The proposal is for a collaborative working arrangement between UHNM and MCHFT that provides 7 day consultant cover for newly diagnosed strokes, whilst retaining the benefit of local access to clinical interventions where time to treatment is an important factor in patient outcomes.

The new arrangement will mean that patients who would previously have been an inpatient at Leighton hospital for the full duration of their stay will now spend the first 24-48 hours of their stay at UHNM.

Overview Summary of Stroke Clinical Standards

Stroke is the fourth single largest cause of death in the United Kingdom and second in the world. By the age of 75, 1 in 5 women and 1 in 6 men will have a stroke. 1 in 8 strokes are fatal within the first 30 days and 1 in 4 strokes are fatal within a year (Stroke Association, 2015).

There is a growing evidence base to demonstrate that the outcomes for stroke patients improve if the first 72 hours of care (known as hyperacute care) are delivered according to stroke clinical standards set out in:

- Stroke Strategy (2007)
- NICE Stroke Quality Standards (2010)
- NICE guideline 68 – Diagnosis and initial management of acute stroke and transient ischaemic attack (TIA)
- NICE Technical Appraisal No 264 - Alteplase for the treatment of acute ischaemic stroke
- Royal College of Physicians (RCP) National Clinical Guideline for Stroke (2012)

The clinical standards set out in each of these documents are consistent for care of patients with stroke for the first 72 hours and are as follows:

- People seen by ambulance staff outside hospital, who have sudden onset of neurological symptoms who screen positive using a validated tool* and who have a possible diagnosis of stroke, are transferred to a specialist stroke unit within 1 hour.

  *FAST – face-arm-speech-test or ROSIER – an assessment used in the emergency room to recognise stroke.

- Patients with acute stroke receive brain imaging within1 hour of arrival at the hospital if they meet any of the indications for immediate imaging.

- Patients with suspected stroke are admitted directly to a specialist stroke unit and assessed for thrombolysis, receiving it if clinically indicated.

- The recommended drug for treating acute ischaemic stroke (stroke caused by a blood clot rather than bleeding into the brain) in adults is Alteplase (a drug that dissolves blood clots). In adults, if treatment is started as early as possible, within 4.5 hours of onset of stroke symptoms, it has been reported that for every 1,000 patients treated with thrombolysis within three hours, about 100 more will be alive and live independently than 1,000 patients not treated with thrombolysis (Stroke Association 2015).

- Patients with stroke are assessed and managed by stroke nursing staff and at least one member of the Specialist Rehabilitation Team within 24 hours of admission to hospital and a ward round undertaken by a Stroke Consultant 7 days per week.

Current Service Provision at MCHFT

All patients with suspected stroke are admitted through the A&E department. If arriving by ambulance there will usually be a 'standby' notification. Once A&E is aware of the stroke arrival the stroke specialist nurse is notified. A ROSIER score is completed by the A&E team and if patients are suitable, rapid assessment is undertaken for delivery of thrombolysis. This is usually delivered in the A&E department before movement to the acute stroke unit.

Patients who are not suitable for thrombolysis are preferentially admitted directly to the acute stroke unit or the acute medical assessment unit.

The Thrombolysis Service is available Monday-Friday, 9am – 9pm. Patients arriving out-of-hours who are suitable for thrombolysis will be discussed with the Stroke Team at Royal Stoke University Hospital and appropriate transfer will be arranged.

Once on the stroke ward patients are admitted to the Acute Stroke Bay and commence 72 hours of physiological monitoring. Swallowing assessments are performed by nursing staff on the wards who have been trained to perform this. Once stable patients are moved to the rehabilitation section of the unit, to continue their care.

There is a consultant ward round 5 days a week in the acute stroke unit. There are twice consultant ward rounds a week for the patients in the rehabilitation ward.

Rehabilitation needs are provided on the combined unit and as of December 2014 a stroke Early Supported Discharge team has been in place to provide continued rehab in a community setting.

External Review of Current Service at MCHFT

Dr Deborah Lowe (Clinical Lead for Regional Stroke Network) provided the following assessment of the service currently provided at MCHFT:

Dr Salehin and his colleague work extremely hard to sustain a hyperacute stroke service at the Trust. It is clear however with the developments in hyperacute care over the last 2 years that the service falls short in some areas, mostly due to manpower issues in terms of Consultant support to provide the service. Of concern is the possibility that Royal Stoke University Hospital will no longer be able to support the out of hour's telephone advice unless the two Consultants at Leighton are able to input into the rota. This would mean that all patients out of hours would need to be directly transferred to Royal Stoke University Hospital for their acute stroke care.

The potential models that would address the current issues rely on partnership arrangement with neighboring trusts and could be:

i. All hyperacute stroke care is delivered at Leighton. In hours the thrombolysis rota is supported by the two stroke physicians. Out of hours and at weekend the rota is supported by the resident A&E Senior medical staff (consultant or middle-grade) at Leighton with telephone advice from the regional thrombolysis consultant on call (1:14). The Leighton consultants don't currently input into this rota as they are required to participate in the 1:12 General Medical on call rota.

ii. All thrombolysis / hyperacute care delivered at Royal Stoke University Hospital with repatriation after hyperacute care complete.

The main issues that need addressing from an SCN prospective following the Gap Analysis for the initial Stroke Summit in July 2014 and subsequent follow up Gap analysis in January 2015 are:

- Plans for hyperacute services to be delivered at Leighton 24/7 are not sustainable when compared to other services both regionally and nationally
- There are only two stroke consultants (one consultant for 30% of the year when leave taken into account) to cover 28 bedded combined stroke unit, a 32 bedded elderly care ward and a 24 bedded general rehabilitation ward. A third consultant (Dr Garcia-Alen), share beds in stroke rehabilitation unit and elderly care ward but not in general rehabilitation ward
- There is no provision currently for 7 day ward round of the acute stroke unit
- Consultants are currently unable to commit to supporting the regional thrombolysis rota as they already do a 1:12 general medical on call rota and an additional morning weekend rota which means there are two consultants available. There is also a large bed base to cover
- There is no provision for a weekend TIA service in this model however the hospital is currently managing this in collaboration with UHNM.

Service Re-design Proposal

In December 2014 a Stroke Pathway Group was formed to review the options for delivering a sustainable and effective Hyper cute and acute stroke service for patients within South Cheshire and Vale Royal. A number of options were reviewed by the group leading to the approval of a final proposal at the SC and VR Clinical commissioning executive group on 10th December 2015.

Service Considerations

The proposal was made with consideration to:

- Transport links between Crewe to COCH & Crewe to UHNM
- Data analysed to ascertain true numbers of patients presenting with stroke mimic symptoms
- Availability of thrombectomy service within UHNM & COCH
- Impact on NWAS repatriating stroke mimic patients
- Impact of NWAS vehicle being out of area and then unable to return
- Transfer time in cases where patient needs thrombolysis
- Current NWAS arrangements whereby patients are already taken to the nearest hospital from the incident
- "Stronger Together" working relationship between MCHFT and UHNM.

Revised Pathway Proposal

- FAST positive patients in the locality attend MCHFT.
- Patients are assessed and diagnosed at MCHFT with under the clinical management of a Stroke Consultant at UHNM.
- Thrombolysis administered at MCHFT when appropriate
- All patients (where appropriate) with a stroke diagnosis then transferred to UHNM.
- Non Stroke patients remain at MCHFT
- Stroke patients repatriated to MCHFT following hyperacute phase

Benefits of Proposed New Pathway

- All patients will have access to a 7-day dedicated stroke service
- Reduced stroke onset to needle time
- Stroke mimics would remain at MCHFT
- Definitive pathway for patients, clinicians and NWAS 24/7
- In line with "Stronger together" partnership agreement with UHNM
- 24/7 access to full tertiary additional services including Thrombectomy at UHNM without the need for second transfer
- Better working relationships with one external team
- Reduced ambulance transfers
- Development of MCHFT staff delivering assessment and thrombolysis
- Reduced complexity of single partner arrangements

Conclusion

The Stroke working group comprising of representatives from UHNM, MCHFT, CoCH, NWAS and the 2 CCGs believe that the amended pathway is an improvement on previous proposals and improves patient care and outcomes not just for stroke patients but for those patients who are initially seen to be a potential stroke and subsequently diagnosed with a different condition.

Next Steps

Following approval to proceed with the revised option, the stroke working group will continue with the ongoing work to review the clinical pathway, the staffing arrangements and the financial implications of the new pathway. Discussions have been had with UHNM to confirm that they have the ability to deliver the service and the appropriate infrastructure to accommodate the additional inpatient demand. Key work streams have been developed to address the following required action points

- Stroke pathway for MCHFT / UHNM to be modified to reflect new ways of working
- Analysis of current staffing establishment for ward 6 at MCHFT
- Identification of nurse availability to provide 24 hour cover to ED for patients FAST +ve
- Training analysis for medical & nursing staff
- Promotion of new ways of working, communication to staff
- Evaluate impact on NWAS
- Bed management model ensuring protection of repatriation availability
- Engagement of bed management team to ensure timely transfers & repatriation
  Infection control engagement inter-hospital transfer protocols

The group will need to develop robust documentation to support the new pathway and aim to have this in place and the service established by the **1st April 2016**.

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