



**Review of proposals to change hyper acute
stroke services in South and Mid Yorkshire,
Bassetlaw and North Derbyshire**

**Joint Committee of Clinical
Commissioning Groups**

November 15 2017

Hyper acute stroke services

- the case for change

Why change?

- **Compelling national evidence** that organised stroke care in a designated stroke unit – hyper acute stroke unit with rapid access to treatment –
 - improves outcomes
 - reduces avoidable disability
 - contributes to reduced mortality and length of stay
 - London reduced 90 day mortality by 5% (absolute reduction of 1.1%) and
 - reduced LOS by 1.4 days (London) and 2 days (Manchester)
 - and where higher patient numbers, have improved thrombolysis rates and increased adherence to guidelines, associated with improved stroke outcomes

Why change?

Current variation in quality - Scope to improve

- Most SYB stroke units have improved their performance on indicators in the Sentinel Stroke National Audit Programme (SSNAP), yet significant variation persists, with several providers unable to perform well in the areas that are relate to hyper acute care.
- Barnsley and Rotherham services have a low percentage of patients who have been reviewed by a stroke specialist consultant within 24 hours (reflecting the inability to provide 7 day consultant working).
- All units have thrombolysis rates below the national average but they are particularly low in Rotherham and Barnsley (prior to redirection to other units).

Why change?

Current variation in quality - Scope to improve

- There is a need to improve and ensure equity of care across SYB, the proportion of patients who
 - receive brain scanning within an hour
 - thrombolysis
 - are admitted to a stroke unit within 4 hours
 - are seen by a stroke specialist within 14 hours and
 - the timeliness of some therapy assessments, especially speech and language therapy
- It would not be possible to achieve improvements in all these areas across all existing service provision.
- The evidence base indicates that larger units are more likely to achieve quicker access to CT scans and have higher thrombolysis rates.

Why change?

Workforce challenges

- The combination of a national shortage of staff for some stroke specialist disciplines and increased staffing requirements to meet national standards (eg 7 day access to stroke specialist consultants, 7 day therapy assessments) are creating increasing challenges for existing services.
- The impact of insufficient medical staff is unsustainable rotas and over reliance on locums (particularly in Barnsley and Rotherham), with services becoming increasingly fragile.
- The workforce challenges mean that it is not possible for us to meet all the requirements for hyper acute stroke care set out in the NHSE Clinical Standards for seven day services and the national standards for stroke care across all existing services.
- Consolidation of hyper acute care at fewer hospitals would enable us to meet the Clinical Standards for seven day services & national standards and thus deliver high quality care that improves outcomes for patients.

Why change?

Clinical & Cost Effectiveness

- The Clinical Senate endorsed the national expert view that the total number of patients to access a hyper acute stroke service should be a minimum of 600 confirmed stroke patients a year to maintain clinical competency with a maximum of 1500 to avoid workload pressures.
- Not all existing SYB units admit above the recommended minimum threshold of admissions to ensure provision of a clinically effective unit (600 per year).
- All existing units except Sheffield fall below the number of admissions for a cost effective unit (ie the break even point based on national tariff and 100% best practice tariff is 900 patients per year).

One proposal on which we consulted:

- If you live in South Yorkshire and Bassetlaw and North Derbyshire and have a stroke, you would receive hyper acute stroke care in
 - Doncaster Royal Infirmary,
 - Royal Hallamshire Hospital in Sheffield,
 - Chesterfield Royal Hospital
- The proposal means that patients who would previously have been admitted to Barnsley Hospital or Rotherham hospital for hyper acute stroke care will in future receive care at Doncaster Royal Infirmary , Royal Hallamshire Hospital in Sheffield, or Pinderfields Hospital in Wakefield.
- After on average 72 hours of critical hyper acute care, they would be transferred to back to Barnsley or Rotherham for the remainder of their care.

Impact of the proposals

Criteria we need to take account of	What the evidence shows
Ambulance travel - access meets 45 minutes for 95% of population	Travel impact assessment and analysis confirms journey times within 45 – 60 mins
HASU activity levels - Clinical critical mass, of >600 and <1,500 stroke admissions per annum	Two (South Yorkshire and Bassetlaw) units would be within the range
Transformation should minimise cross-boundary impact	All patient flows remain within the original planning footprint
Is there a 7 day service being offered?	Greater opportunity to achieve through organised units & consolidating activity into 2 units
Adequate workforce - performance against SSNAP scores (case for change)	As above
Impact of change on visitors and carers travel time (pre consultation)	Travel impact assessment confirms journey times within 45 – 90 mins

Travel impact

- The vast majority of the population is within 30 – 45 minute drive-time to the proposed HASUs – with cost of parking actually being less than they would currently pay at their local centres for up to 4 hours.
- 26 and 27% of Rotherham and Barnsley don't have cars (census data) and so we analysed the impact of travelling by public transport. Majority can get to a site within 90 minutes (as a visitor) on buses, trains or trams.
- For places outside this travel time, they would mostly be treated/travel to a different NHS region (eg, very west of North Derbyshire would likely go to Manchester or Stockport and Cottam (Bassetlaw) are more likely to go to Lincoln).
- Travel by public transport from Barnsley to Pinderfields as a visitor would mean an increased cost due to crossing the South to West Yorkshire border.



The consultation process

There were a number of ways in which all internal and external stakeholders could respond to the consultation, these were:

- Online consultation questionnaire
- Paper surveys
- Meetings and events eg, public meetings and focus groups
- Individual submissions eg, via telephone, email or letter
- Representative telephone survey
- Online poll

Communications and engagement activity

- **Digital communications and engagement**
 - 8,318 unique visitors used the CWT website
 - 62,000 page visits to the consultation webpages
- **Broadcast and print media releases**
 - 19 pieces of coverage in local, regional and national media
- **Social media**
 - Tweets generated more than 55,000 impressions
 - CWT's 21 Facebook posts reached 16,991 people and saw 939 users take action
- **Public consultation events**
- **Specific interest engagement** via email, hard copies of the consultation documents and meetings

Communications and engagement activity

- **Seldom heard group** engagement via email, hard copies of the consultation documents and discussion groups
- **Stakeholder briefings** including local MPs and councillors, Health and Wellbeing Board, Health Overview and Scrutiny Committees
- **Staff briefings** via internal communications channels, newsletters, forums and groups
- **Hard copies** of the consultation documents, postcards and flyers distributed to hospitals, GP practices, libraries and children's centres, dental practices, campaign groups, town halls, community venues and organisations and at public events. 50,000 copies of the consultation document were printed and distributed on request through these channels



The responses

- **1109 for hyper acute stroke services**
 - 282 were from the online survey
 - 58 were from the paper survey
 - 740 were from the telephone survey
 - 6 individual written submissions
 - 6 from partner organisations
 - 16 public meetings/focus groups/local groups
 - 1 petition

Hyper acute stroke services

CCG area	Consultation survey respondents		Telephone survey respondents	
	Actual	%	Actual	%
Barnsley	132	39%	72	10%
Bassetlaw	14	4%	33	4%
Doncaster	52	15%	98	13%
North Derbyshire and Hardwick (combined)	16	5%	227	31%
Rotherham	75	22%	106	14%
Sheffield	41	12%	139	19%
Wakefield	3	1%	65	9%
Other	3	1%	0	0%
Did not say	4	1%	0	0%
Total	340	100%	740	100%

What did people say?

Stroke

- Mixed response to the three centre option. 54% of self-selecting consultation survey respondents disagree with this option and 50% of telephone survey responses agree with it.
- The patterns of agreement are similar across both survey channels except for Bassetlaw, Sheffield and Wakefield where the majority of self-selecting consultation survey respondents disagree with the three centre option compared to the telephone survey respondents in those areas.
- There are high levels of support for the three centre option in Doncaster and North Derbyshire and Hardwick (which cover hospitals where the hyper acute stroke services are being proposed). There is low level of support for this option in the Barnsley CCG area.

Where disagreed, themes were:

- Not being able to access high quality care quickly and patient safety
- Social impact
- Other concerns (lack of funding for the NHS, wish to have a centre in local area so could access high quality care, additional pressure on the ambulance service)

Where agreed, themes were:

- Quick and easy access to high quality care
- Better quality of care and improved health outcomes
- More effective allocation of resources
- Other comments

A number of people **didn't feel they could comment.**

Alternative suggestions

- Almost half of the consultation survey respondents had alternative suggestions to make. The majority were making the case for Barnsley District General Hospital to have a hyper acute stroke service to make sure that local people could have quick access to time-critical care.
- The other main suggestions were to have a hyper acute stroke service in every hospital and to start investing in the right calibre of staff to make this happen.

Meetings

- The themes emerging from the meetings are the same as those from the consultation and telephone responses.

Written submissions

- 3 written submissions by individuals
- All our hospitals, except Sheffield Children's and Mid Yorkshire Hospitals
- Dan Jarvis MP
- Barnsley Save Our NHS

The themes emerging from the written public submissions mirror those in the surveys.

The themes emerging from the organisations can be summarised as:

- Support for the proposals
- Clarification on maintaining outcomes and quality of care for local populations
- Clarification on repatriation and ambulance service protocols
- Staff retention and development
- The potential adverse impact of increased activity levels (where a hospital could see more patients as a result of change)
- **Financial viability/affordability**

Online poll

- Mid-point analysis highlighted the complexity of the narrative on the proposals and the difficulty in engaging people on the issues.
- Recommendation from the Consultation Institute to create a short poll. At the end of the poll, respondents were directed to full details of the consultations on the CWT website.
- The questions were developed to capture people's thoughts on the proposals in a different way and were checked by a market research agency.
- The themes within the poll are the same as those within the main consultation.
- The results do not inform the main consultation survey analysis and are simply intended to provide further data on people's opinions

Concluding comments

- As with all public consultations, the public response cannot be seen as representative of the population as a whole but instead is representative of interested parties who were made aware of the consultation and were motivated to respond
- Within the analysis we cannot be clear the extent to which responses are informed by the supporting information that has been provided
- The telephone survey was undertaken with a randomly selected and representative cross-section of residents to ensure that the consultation process accurately captured the views of the wider population of South and Mid Yorkshire, Bassetlaw and North Derbyshire.
- A consistent picture - there is mixed support for the proposals

- Potential changes to services, particularly where loss of services are involved, understandably cause apprehension among those who may be affected and there has been clear and vocal opposition in some areas where this is potentially the case
- The main concern highlighted across all consultation feedback is the impact on the ability for patients and families to access high quality care closer to home if the proposed changes are introduced.
- The outcomes of the consultation process will need to be considered alongside other information available

Hyper acute stroke care

The Proposed Model

The Proposed Model

- A **Stroke Managed Clinical Network (MCN)** to support the development of networked provision of stroke care across the South Yorkshire and Bassetlaw Accountable Care System.
- **Consolidation of hyper acute stroke care** at the following units –
 - **Doncaster Royal Infirmary**
 - **Royal Hallamshire Hospital**
 - **Pinderfields Hospital Wakefield**
 - Plus the continuation of hyper acute stroke care at Royal Chesterfield Hospital.
- The hyper acute stroke model above will be supported by
 - **NHS England commissioning and gradual implementation of mechanical thrombectomy**
 - A review of the wider stroke pathway as part of the Hospital Services Review
- There is also a need to continue improvements in primary and secondary prevention of stroke risk factors.

The Proposed Model

The Stroke Managed Clinical Network will

- Support all operational aspects of delivery, ensure effective care pathways and clinical collaboration and coordination between sites.
- Facilitate cross organisational, multi professional clinical engagement and patient/carer engagement to improve care pathways.
- Fulfil a key role in assuring providers and commissioners of all aspects of quality, in addition to coordinating provider resources to secure improved outcomes for patients.

The Proposed Model - Consolidation of hyper acute stroke care

- Hyper acute stroke care will be delivered at
 - **Doncaster Royal Infirmary**
 - **Royal Hallamshire Hospital**
 - **Pinderfields Hospital Wakefield**
 - Plus the continuation of existing HASU care at Royal Chesterfield Hospital.
- Patients who would previously have been admitted to Barnsley Hospital or Rotherham hospital for hyper acute stroke care will in future if they present within 48 hours of onset of symptoms (the critical period for hyper acute stroke care) receive care at Doncaster Royal Infirmary , Royal Hallamshire Hospital in Sheffield, or Pinderfields Hospital in Wakefield.
- Work has been undertaken with the ambulance service to understand the new anticipated patient flows and to inform the total number of patients expected to receive their hyper acute stroke care in each of the HASUs.

The Proposed Model - Consolidation of hyper acute stroke care

- On arrival at a SYB HASU patients will receive an initial assessment and for those felt to have had a stroke a CT scan.
- After admission to a SYB HASU it is expected that patients will -
 - receive thrombolysis if clinically indicated,
 - have a consultant review (within 14 hours, 7 days a week)
 - have neurological and physiological monitoring until stable and appropriate stroke nurse assessments
 - have their swallow assessed and receive nutritional support if required
 - Have therapy assessments and therapy will be commenced while on HASU where clinically indicated (7 day therapy)
- After on average 72 hours of critical hyper acute care, patients will be transferred back to Barnsley or Rotherham for the remainder of their care and rehabilitation.

The Proposed Model – Mechanical Thrombectomy

- The hyper acute stroke care model will be supported by NHSE commissioning and the gradual implementation of mechanical thrombectomy to be delivered in neuroscience centres (Sheffield, Leeds, Hull and East Yorkshire for Yorkshire and the Humber).
- Plans are under development and it is likely that we will have a ‘drip and ship’ model with patients initially assessed by the HASUs, with transfer to a neuroscience centre for eligible patients.
- Further planning is required, but if current flows to neuroscience centres for other conditions are mirrored then patients admitted to Doncaster HASU will go to Sheffield and patients admitted to Mid Yorkshire HASU will go to Leeds.

The Proposed Model – Anticipated Benefits

- **Delivery of an improved, more resilient and sustainable service**
 - Through an established Managed Clinical Network, resulting in an enhanced ability to attract and retain a specialist stroke workforce and facilitate 7 day provision.
- **A service that delivers improved clinical quality** (clinical effectiveness, patient safety and patient experience)
 - All HASUs (except Chesterfield) will have the recommended patient numbers (600-1500) to provide a clinically effective service and will be above the 900 (patients a year) identified as necessary for a cost effective service
 - An enhanced ability to meet evidence based national stroke standards (NICE, RCP and STP guidelines) for HASU care eg increased proportion of patients scanned in an hour and thrombolysed.
 - It will be possible for SYB HASUs to meet all the NHSE Urgent and Emergency Care Standards for seven day care without the need to significantly increase consultant numbers.

The Proposed Model – Anticipated Benefits

- **Reduced inequalities in access, patient experience, quality of care and outcomes**
 - All patients across SYB will have access to high quality hyper acute stroke care that meets the national best practice standards.
- **Contribution to improved health outcomes**
 - A reduction in in hospital and overall mortality from stroke
 - A reduction in disability from stroke and improved quality of life
 - A higher proportion of people who have had a stroke able to return home to live independently and return to work
 - A reduction in the number of patients newly discharged to care homes/continuing health care
- A reduction in stroke mortality was seen after the consolidation of stroke care in London.

Themes from the Public Consultation -

Themes from the public –

- Not being able to access high quality care quickly and patient safety
- Social impact
- Other concerns (lack of funding for the NHS, wish to have a centre in local area so could access high quality care, additional pressure on the ambulance service)

The themes from the organisations were:

- Overall support for the proposals
- Clarification on maintaining outcomes and quality of care for local populations
- Clarification on repatriation and ambulance service protocols
- Staff retention and development
- The potential adverse impact of increased activity levels (where a hospital could see more patients as a result of change)
- Financial viability/affordability

Addressing themes identified in the consultation -

A number of themes were identified from the consultation, from both the public and organisations. All have been considered and informed the development of the proposed model.

- **Not being able to access high quality care quickly and patient safety**
Performance against SSNAP indicators is currently variable.
The proposed new model should enable us to improve performance on key indicators and ensure equity of care.
- **Social Impact**
The new model is about providing hyper acute stroke care (on average the first 72 hours) differently, after which patients would be repatriated for their ongoing care and rehabilitation to Barnsley and Rotherham.

The travel analysis showed most people could get to a site (as a visitor) within 90 minutes, with most journeys well under 90 minutes. Parking charges for visitors at Sheffield and Doncaster would reduce, albeit a potential increase in public transport costs for visits to Pinderfields Hospital. For people on low or no income, hospital travel reimbursement policies would apply

Addressing themes identified in the consultation -

A number of themes were identified from the consultation and all have been considered and informed the development of the proposed model.

- **Clarification on maintaining outcomes and quality of care for local populations**
(not being able to access high quality care).
Performance against SSNAP indicators is currently variable.
The proposed new model should enable us to improve performance on key indicators and ensure equity of care.
- **Clarification on 'repatriation' and ambulance service protocols**
A clinical working group has been established to develop a policy. The ambulance service is involved and if the proposals are approved a plan will be developed with ambulance protocols. More work on the data shows less people will require repatriation than initially anticipated.
- **Staff retention and development**
A workforce group – made up of the different professions - is developing a strategy focusing on staff recruitment, retention and development. There are plans to look at joint medical posts.

Addressing the themes identified in the consultation -

- **The potential adverse impact of increased activity levels** (where a hospital could see more patients as a result of change)
All the units that would see more patients have developed plans that set out how they would manage the increase.

The implementation would be taken forward in phases. Not all the change would be made at once, making it safe for patients and manageable for providers and we would closely monitor it together. All the new HASUs will be below 1500 patients annually.

- **Financial viability**
The new model is driven by a strong clinical case for change and would need investment.

If we do nothing, the variation in quality and workforce issues are likely to worsen and it may no longer be possible to deliver the existing service. If this happened, urgent and ad hoc arrangements would need to be put in place – which would require investment.

Managing Stroke Mimics

- Some patients who paramedics or A&E staff initially think may have had a stroke, turn out not to have had a stroke (stroke mimics).
- One of the concerns raised upon considering the consolidation of hyper acute stroke care was that many patients from Barnsley and Rotherham could be transferred to a HASU and found to be a stroke mimic and then need to be repatriated.
- Learning from Greater Manchester indicates that it is possible to improve the recognition and identification of stroke mimic conditions at the outset to reduce unnecessary transfer to HASUs (work with paramedics & A&E staff)
- Recent audit work in Sheffield predicts that only a small proportion of Barnsley and Rotherham patients with a stroke mimic condition will need repatriating. If we assume similar rates in the other two HASUs – the total estimated number of stroke mimics who are likely to need repatriation is approx 1 per week each – Barnsley and Rotherham.

Managing Risks - Mitigation Plans

- **Do nothing**
 - There is a risk that doing nothing will result in more challenges for existing services and potential deterioration in the quality and safety of provision.
 - **To mitigate against unplanned service change** there is established dialog between providers and the ambulance service.
- **Stroke mimics**
 - There is a risk that transfer could result in their management and experience of care being adversely impacted.
 - **To mitigate this** action will be taken to improve the identification of stroke mimics by paramedics and A&E staff and increase patient/carer input to maximise the potential to improve patient experience and minimise adverse impacts.
 - There is also a risk that assumptions around their identification and flow are not fulfilled.
 - **To mitigate this** audit work has been completed and predicts that the numbers requiring repatriation are likely to be low.

Managing Risks - Mitigation Plans

- **Repatriation**
 - There is a risk that it will not be possible to repatriate patients in a timely manner due to transport availability or bed capacity.
 - To mitigate this transport requirements are included in the business case and a 'patient flow' policy will be agreed by all.
- **Ensuring benefit realisation**
 - There is a risk that it may not be possible to timely realise all the anticipated benefits and that focusing on HASU alone will not maximise the possible improvements in patient outcomes.
 - To mitigate this work has been undertaken to articulate the benefits and what needs to be in place to realise them. The MCN will have a key role in benefits realisation & ensuring a pathway approach as will working with other workstreams (such as prevention) to maximise potential to improve outcomes.
- **Wider implications**
 - Acute stroke care is facing increasing challenges and as such has been included in the hospital services review.

Summary

- The proposed new model is to improve the quality of care
- Although there are risks associated with the proposed new model it is possible to mitigate these so that they are manageable
- The most significant risks that are difficult to mitigate are those associated with not progressing the new model, doing nothing will result in increasing challenges for already fragile services in Rotherham and Barnsley Hospitals and potential deterioration in the quality and safety of provision.
- Due to the fragility of existing services and their inability to consistently meet all national standards relating to stroke care, on balance the risks and challenges of the proposed model are less than the risks of doing nothing.
- The evidence base indicates that it will be possible to improve the quality of care, sustainability and cost effectiveness that would not be possible through continuing to try to improve and deliver hyper acute care at all current sites.

Commissioning Implications

- The business case for the reconfiguration of hyper acute stroke care in South Yorkshire and Bassetlaw has been assured by NHS England.
- The proposed new model of hyper acute stroke care requires investment from commissioners of circa £1.8M for higher average tariffs at the HASU sites, additional best practice tariffs and patient transport.
- It is recommended that the approach is to commission once with a system commissioner, a single contract for a hyper acute stroke service with a consistent approach to acute stroke care with a group of providers.
- Procurement advice confirms that there is a clear rationale for the use of a negotiated procedure without prior publication approach ahead of awarding the contract for the new model.
- Due to the scale of the change it is proposed that implementation is phased, given that arrangements are already in place to redirect patients for thrombolysis to other HASUs it is proposed that Rotherham HASU is decommissioned in the first phase, followed by Barnsley HASU.

Recommendation

- The Joint Committee of Clinical Commissioning Groups and Hardwick Clinical Commissioning Group are asked to
 - consider all the information set out in the decision making business case (DMBC)
 - approve the DMBC and therefore proposed changes to deliver the new model of hyper acute stroke care across the South Yorkshire and Bassetlaw Accountable Care System;
 - and by approving this business case Clinical Commissioning Groups are agreeing to fund the proposed new model through tariff and best practice tariff.