Somerset County Council
Scrutiny for Policies, Adults and Health Committee

Update on Hyper Acute Stroke Care

Lead Officers: Maria Heard, Programme Director, Fit for my Future Programme Director
Julie Jones, Programme Manager for Stroke, Neurorehab and Community Hospitals, Somerset NHS FT

Author: Maria Heard
Contact Details: maria.heard1@nhs.net

Cabinet Member: Councillor Heather Shearer
Division and Local Member: All

1. Summary

1.1 Fit for my Future is a strategy for how we will support the health and wellbeing of the people of Somerset by changing the way we commission and deliver health and care services. It is jointly led by NHS Somerset Integrated Care Board and Somerset County Council and includes the main NHS provider organisations in the county.

1.2 The stroke strategy for Somerset was drafted in 2019 and provides a direction of travel for the next five years, setting out how stroke services should operate across the pathway from prevention to living with the impacts of stroke. Many of the recommendations within this strategy have been implemented.

1.2 This report provides an update on the development of hospital based hyper acute stroke services and Transient Ischaemic Attack (TIA) services in Somerset.

2. Issues for consideration / Recommendations

Members are asked to note the update and support the direction of travel.

3. Introduction

Stroke is both a sudden and devastating life event, with 100,000 new strokes a year and over a million people living with the consequences of stroke[1]. It is the single largest cause of complex disability. It therefore has a significant impact on health and social care, unpaid carers, and lost productivity.

The good news is that over recent years, the number of deaths from stroke is going down, which is due to improved prevention and people are seeking help and getting

[1] Patel A, Berdunov V, Quayyum Z, King D, Knapp M, Wittenberg R. Estimated societal costs of stroke in the UK based on a discrete event simulation. Age Ageing. 2020 Feb 27;49(2):270-276. doi: 10.1093/ageing/afz162. PMID: 31846500; PMCID: PMC7047817.

treated more quickly. This rapid access to treatment means that more people are surviving stroke, with better outcomes, than ever before.

3.1 Types of strokes

What is a stroke?

There are two mains types of stroke – ischaemic and haemorrhagic. About 85% of all strokes are ischaemic and 15% haemorrhagic (Stroke Association, 2017).

- Ischemic strokes are caused by a blockage cutting off the blood supply to the brain. This can cause damage to brain cells.
- Haemorrhagic strokes are caused when a blood vessel bursts within or on the surface of the brain. Haemorrhagic strokes are generally more severe and are associated with a considerably higher risk of dying within three months of having a stroke and beyond. When compared to ischaemic strokes, between 10-15% of people with subarachnoid haemorrhage die before reaching hospital. Subarachnoid haemorrhage is an uncommon type of stroke caused by bleeding on the surface of the brain
- Transient ischaemic attack, or TIA (often referred to as a 'mini-stroke' or 'warning stroke') is the same as a stroke, except that the symptoms last for less than 24 hours. When symptoms first start, there is no way of knowing whether someone is having a TIA or a full stroke. A TIA should be treated as seriously as a full stroke. About half of all strokes after TIA occur in the first 24 hours.

Source: The Stroke Association

3.2 Rapid Access to stroke care should be provided in a stroke unit, or more specifically a Hyper-acute Stroke Unit (HASU) which typically covers the first 72 hours after admission. Every patient with an acute stroke should gain rapid access to a stroke unit within 4 hours and receive an early multidisciplinary assessment to ensure that they get the most appropriate treatment

For suspected and confirmed TIAs, guidance states that people need to be seen for assessment within 24 hours of symptom onset. Prompt intervention after TIA can reduce stroke rates by up to 80%.

3.3 Vision for stroke care in Somerset

Our vision for stroke is that

"Stroke patients in Somerset will receive timely acute interventions and receive access to world-class services, regardless of where they live."

We want people to have a quicker diagnosis and access to faster treatment, with stroke experts available 24 hours a day, 7 days a week, 365 days a year, in line with national guidance. We want people who have had a stroke or TIA to experience joined up services that will support them and their families throughout the whole stroke pathway. We want to provide stroke care that is:

- Equitable
- High quality
- Efficient
- Well led
- Sustainable

- Attractive
- Innovative

4 National and Local Context

4.1 National context

Rates of death following stroke have reduced by half over the past 20 years[2], but the number of people having a stroke continues to rise[3].

The National Stroke Programme[4] aims to deliver better prevention, treatment, and care for people in England who have a stroke each year.

However, the lack of stroke specialist staff nationally is impacting care for many people who have had a stroke.[5] In the 2021 SSNAP audit[6] of the stroke workforce in England, a number of areas of concern were identified:

- Over half the stroke units have a consultant vacancy
- Less than half of stroke units meet the minimum recommended staffing levels for senior nurses
- There are not enough people trained to undertake thrombectomy procedures
- Only 6% of hospitals have access to the right number of clinical psychologists

Addressing the workforce challenges is essential if improvements in stroke care and outcomes are to be achieved.

Many areas of the country are undertaking similar reconfigurations to our own which provides us with an opportunity to learn from their experiences and apply best practice approaches.

There's now a very strong evidence base from a range of reconfigurations that consistently shows that patients are prepared to travel further to receive specialist treatment in emergencies, including thrombectomy, and it mirrors what already happens in heart attack and trauma.

Professor Martin James, Consultant Stroke Physician Royal Devon and Exeter Hospital and Honorary Clinical Professor University of Exeter

4.2 Local context

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[2] NHS Digital (2018). Mortality from stroke. Available at https://digital.nhs.uk/data-and-information/publications/clinical-indicators/compendium-of-population-health-indicators/compendium-mortality/current/mortality-from-stroke

[3] Patel, A., Berdunov, V., King, D., Quayyum, Z., Wittenberg, R. & Knapp, M. (2017) Current, future and avoidable costs of stroke in the UK. Available from: https://www.stroke.org.uk/sites/default/files/costs_of_stroke_in_the_uk_report_-executive_summary_part_2.pdf

[4] NHS England » NHS England's work on stroke

[5] psp_stroke_workforce.pdf

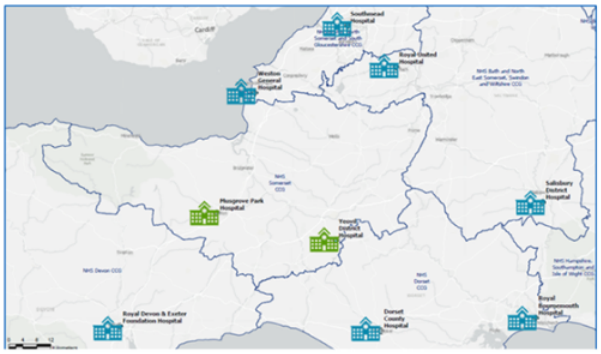
[6] Sentinel Stroke National Audit Programme results Jan-March 2022 https://www.strokeaudit.org/results/Clinical-audit/National-Results.aspx

The ageing population and rurality of Somerset are two of the biggest challenges that we face as a system.

The current prevalence of stroke in Somerset is higher than the national average at 2.38%, compared to an England-wide prevalence rate of 1.8%. This equates to around 1,600 people per year. There are currently 13,991 stroke survivors registered with a Somerset GP.

Hyperacute (HASU) and acute stroke (ASU) care are provided at

- Musgrove Park Hospital in Taunton
- Yeovil District Hospital in Yeovil



Provider	Capacity
Musgrove Park Hospital	HASU 4 beds
	ASU 19 beds
Yeovil District Hospital	HASU 4 beds (co-located with cardiology)
	ASU 12 beds

The map shows the location of all sites which currently provide HASU care in or around Somerset.

Thrombectomy services are provided at Southmead Hospital in Bristol.

Most people with a suspected stroke are admitted via a 999 call to either Musgrove Park Hospital in Taunton or Yeovil District Hospital, in Yeovil. Journey times are a challenge due to the rurality of the county. A small number of people "walk-in" to the Emergency Department and some are admitted from the wards if they have a suspected stroke whilst they are an inpatient.

Around 250 people a year are taken by ambulance to hospitals outside of Somerset for their suspected stroke. If people need a thrombectomy, they are taken by ambulance to Southmead in Bristol.

Every year, around 250 people in Somerset experience a transient ischaemic attack (TIA). A TIA is often called a warning stroke and having rapid assessment and investigation helps to reduce risk of having a stroke by 80%.

5 What are the concerns with stroke services in Somerset?

Provision of acute stroke care is not considered optimal in Somerset for the following reasons:

5.1 Demand for stroke care will increase and the specialist stroke workforce available to provide care is limited

- The local population is growing, getting older and living with more complex long term health conditions
- There will be an increasing number of strokes in the local population and certain groups are more likely to have a stroke
- The workforce available to provide specialist stroke care is limited

- A new way of delivering specialist stroke care is needed that ensures that those most at risk have equitable access to specialist services
- Somerset needs to maximise the way in which the available specialist stroke workforce is deployed to achieve the highest outcomes possible for patients

5.2 **The provision of acute stroke services currently does not meet National Guidance resulting in variable outcomes for patients**

- Although clinical quality of services shows that both services perform relatively well against many of the key national indicators across the whole stroke pathway, both acute providers perform less well in the hyperacute and acute phase standards
- Rates of thrombolysis and thrombectomy are below national standards, leading to poorer clinical outcomes for Somerset stroke patients.
- Centralising acute stroke care will improve clinical outcomes for patients
- Creating a single specialist stroke workforce will increase the quality of care that is given and enhance flow throughout the stroke care pathway
- Reconfiguring services is an opportunity to commission more equitable services which are in line with national best practice.

5.3 **There are variations in provision of care and access to specialist services in Somerset**

- Stroke services provision is inequitable across Somerset
- There is a shortage of specialist stroke doctors and nurses
- The challenge of correcting the historical variations in services is significant and requires the local healthcare system to change the way that stroke services are organised
- If Somerset does not act now there is a significant risk that the gap in workforce availability will get worse

5.4 **Poorer outcomes from stroke result in higher financial costs for health and care**

- There is currently a poor correlation between the money spent on stroke and the outcomes achieved
- Somerset can bring greater value to patients by spending NHS money on stroke services differently
- There is opportunity to reduce the long-term care costs associated with disability by reconfiguring services and giving more people in Somerset rapid and equitable access to those interventions that provide the best outcomes

6 Developing hyper acute stroke services in Somerset

A significant amount of work has been undertaken by the Somerset stroke steering group (a partnership of clinicians, people with lived experience of stroke and other health and social care staff, as well as colleagues from Dorset) to design a new model for acute stroke services that meets both clinical best practice and one that is grounded in what matters most to people and delivers the best outcomes for

patients. This work has been led by Dr Rob Whiting, Clinical Services Director for Neurological Services and Consultant Stroke Physician at Somerset NHS Foundation Trust.

6.1 It was agreed that the proposals for change should be in line with the draft National Stroke Service Model and address the current inequalities in stroke care provision across Somerset.

The group recognised that in rural areas, compromises might need to be made as achieving a well-staffed unit working 24/7 that is also within a 45 – 60-minute drive in a blue light ambulance might not be possible[7].

Ideally, the model of care in Somerset should:

- Provide high quality emergency stroke care 24 hours a day, 7 days per week.
- Minimise the number of handovers in care for patients
- Consolidate the workforce to provide optimum care, operationally flexibility and an integrated service
- Improve the affordability of the proposals
- Enhance transient ischaemic attack (TIA) services, ensuring equity of access for rapid assessment in all areas of Somerset with digital links to the HASU for advice and support
- Optimise the use of digital technology and learning from COVID-19 to enhance the "reach" that specialist clinicians achieve beyond their immediate vicinity, supporting community services, primary care and ambulance crews in a way not currently seen.

To deliver the model and operate effectively, these dedicated units will need to be supported by other services, including acute medicine, urgent diagnostics, vascular surgery, critical care, and therapies.

6.2 Centralisation of HASUs has been associated with the following improvements in clinical outcomes and benefits for patients and their families[8] [9]:

- Reduced time from admission to thrombolysis
- Improved time from admission to brain imaging for thrombolysed patients
- Reduced total length of inpatient stay[10] [11]
- Reduced mortality

Whilst there are concerns regarding longer ambulance journey times as a result of centralisation, especially in rural areas, these have been shown to be offset by the improved speed of thrombolysis delivery[12] [13]

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[7] stroke-services-configuration-decision-support-guide.pdf (england.nhs.uk)
[8] psp_-_reorganising_acute_stroke_services_0.pdf
[9] The impact of acute stroke service centralisation: a time series evaluation - PMC (nih.gov)
[10] Impact of centralising acute stroke services in English metropolitan areas on mortality and length of hospital stay: difference-in-differences analysis | The BMJ
[11] Effects of centralizing acute stroke services | Neurology
[12] The impact of acute stroke service centralisation: a time series evaluation - PMC (nih.gov)

Stroke services need to focus on maximising the likelihood that the local population can receive the best stroke care at the right time, even if it may slightly disadvantage a very small number of people. Not reconfiguring acute stroke services because of this would potentially disadvantage all their residents, by preventing access to best quality stroke care.

Stroke Association, Transforming and reorganising acute stroke services 2022[14]

7 Potential impact of the changes

We recognise that changing the way in which stroke care is provided may impact Somerset residents as well as the Dorset residents who use services at Yeovil District Hospital.

7.1 In considering how we can address the current issues and improving hyper acute stroke care in Somerset, we have been engaging with local clinicians and staff, people with lived experience, community and voluntary sector partners and colleagues from our neighbouring health systems.

At the start of the process, we identified a long list of all the possible ways in which we could change the hyperacute stroke service, including an option to not change it at all.

A range of expert groups were asked to review this longlist of nine options that we could use to improve hyper acute stroke care against a set of Hurdle Criteria which scored a Pass or Fail. These groups were as follows:

- People with lived experience
- Taunton Stroke Team
- Yeovil Stroke Team
- Dorset Stroke team
- The Ambulance Service
- Taunton Emergency Department Team
- Yeovil Emergency Department Team

Options with more passes than fails were added to the shortlist, along with the Do-Nothing option. A shortlist with 6 options was developed and was reviewed by the Stroke Steering Group and reduced to 4 options based on clinical safety.

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[13] psp_-_reorganising_acute_stroke_services_0.pdf
[14] psp_-_reorganising_acute_stroke_services_0.pdf

OPTION A	**Do nothing** **HASU and ASU ay both Taunton and Yeovil.** **Same clinical model.** **All suspected strokes taken to nearest ED.**
OPTION B	Minimal change HASU and ASU at both Taunton and Yeovil. Same clinical model, but with a single medical workforce. All suspected strokes taken to nearest ED.
OPTION C	Single HASU at Taunton. No HASU at Yeovil. All suspected strokes taken to nearest HASU.
OPTION D	Single HASU and ASU at Taunton. No HASU or ASU at Yeovil. All suspected strokes taken to nearest HASU.

These four options are being modelled and tested against a set of agreed criteria as described below:

1. Quality of care – impact on patient outcomes
2. Quality of care – impact on patient experience and on carer experience
3. Deliverability
4. Workforce sustainability
5. Affordability and value for money
6. Travel times for patients and their carers and visitors
7. Impact on equalities

We are now considering which final options we will take forwards to consultation.

7.2 Many of our neighbouring systems are reviewing or have reviewed their stroke services.

Changes to stroke services being implemented in Bristol, North Somerset & South Gloucestershire (BNSSG) mean that Musgrove Park Hospital will need to provide hyper acute stroke care to an additional 3.8 patients per week. The changes we make to our services will take account of this.

The greatest impact of any change we make, is likely to be on the Dorset healthcare system. We are working with colleagues in NHS Dorset Integrated Care Board and Dorset County Hospital NHS Foundation Trust to understand how our stroke services can best work together to improve outcomes for both Somerset and Dorset residents. We have also updated the Dorset People and Health Scrutiny Committee on 19 July 2022 on our intentions to review hospital-based stroke services in Somerset.

7.3 The Public Sector Equality Duty requires us to eliminate discrimination, advance equality of opportunity and foster good relations with protected groups. We are engaging with a range of people and organisations representing protected groups, utilising known contacts within Somerset to build the Equality Impact Assessment.

We recognise that centralising services may have an impact on older people, those with a disability or their carers.

8 Communication and engagement

Our approach to communication and engagement is built upon our 10 principles for working with people and communities. These principles were developed through engagement with stakeholders across the Somerset Integrated Care System (ICS).

1. Put the voices of people and communities at the centre of decision making and governance.
2. Understand our community's needs, experience and aspirations for health and care, with a strong focus on underrepresented communities.
3. Involve people at the start in developing plans and feedback how their engagement has influenced decision-making and ongoing service improvement, including when changes cannot be made.
4. Ensure that insight from groups and communities who experience health inequalities is sought effectively and used to make changes in order to reduce inequality in, and barriers to, care.
5. Build relationships with underrepresented groups, especially those affected by inequalities, ensuring their voices are heard to help address health inequalities.
6. Work with Healthwatch and the voluntary, community and social enterprise (VCSE) sector as key partners.
7. Through partnership working, co-production, insight, and public engagement address system priorities in collaboration with people and communities, demonstrating accountable health and care.
8. Use community development approaches that empower people and communities, building community capacity.
9. Provide clear and accessible public information about vision, plans and progress, to build understanding and trust.
10. Learn from what works and build on the assets of all ICS partners – networks, relationships, and activity in local places - to maximise the impact of involvement.

8.1 Although only a small percentage of the population of Somerset will need to be admitted to a hyper acute stroke bed, it is important that our engagement and communications reach extends widely, as many people may be impacted by strokes. During our pre-consultation engagement and during any potential public consultation, we will ensure we extend our reach to communities more likely to be impacted by stroke, carers, stakeholders, and the public.

Our approach builds on the engagement work already undertaken.

Throughout the pre-consultation engagement, to ensure we capture the voices of stakeholders effectively we have developed an approach which takes into

consideration the differing levels of interest, involvement, and knowledge.

8.2 Our stakeholders

To make sure our engagement effectively captures the widest possible views and feedback we have developed an extensive list of stakeholders who are involved in, affected by, or interested in the future configuration of the service, as well as the wider public.

The Equality Impact Assessment (EIA) has been utilised to inform our stakeholder analysis and current engagement activities. Our pre-consultation engagement and consultation plan aims to engage with those groups that are most at risk of experiencing a stroke.

Priority audiences to engage with include:

- People with lived experience of a stroke / TIA, either as a survivor or carer of someone who has experienced stroke/TIA
- Key charity, community and voluntary sector organisations supporting those with lived experience, including the Stroke Association
- Those with protected characteristics identified in the EIA as being at higher risk of stroke
- NHS and social care staff working in stroke/TIA services
- Somerset and Dorset Health Overview and Scrutiny Committees (HOSC).

8.3 Our pre-consultation engagement plan

Our plan

Phase 1: The engagement activities which have already been undertaken and which have informed the development of the long list of options are Phase 1.

Phase 2: Informed / interested stakeholder engagement

- Establishment of the Stroke Steering Group
- Establish the Stroke Public and Patient Stakeholder Group
- Undertake engagement around the case for change
- Undertake engagement to inform the development of the longlist of options
- Undertake engagement to assess the longlist of options
- Undertake engagement to develop and inform the shortlist of options.

Phase 3: Wider stakeholder and public outreach engagement.

- Promote the stroke reconfiguration more widely
- Undertake further engagement on the shortlist of options.

8.4 During the pre-consultation engagement NHS Somerset will analyse all of the

feedback received and share this with steering group for consideration. This feedback will be considered and used to inform the development of the solutions.

8.5 Planning for formal public consultation

The proposals for reconfiguring hyper acute stroke services in Somerset are significant. Therefore, we are planning to include formal public consultation as part of our service change plans. The public consultation will be undertaken in line with NHSEI guidance on 'Planning, assuring, and delivering service change for patients.

A consultation engagement and communications plan is being developed.

The public consultation will ensure that there is good opportunity to hear from members of the public, service users, staff and patient groups, particularly higher risk and seldom heard groups. These groups will be targeted in our ongoing pre-consultation engagement work leading up to the public consultation.

The programme is committed to listening to people and will ensure that all the feedback from the consultation is collated and independently reviewed before being fed back to system partners. The final Decision-Making Business Case (DMBC) will demonstrate how the feedback has been taken on board when it puts forward the final clinical model for system-wide decision.

9 Next steps

- We are reviewing the financial, workforce and sustainability modelling of the 4 shortlisted options and are considering whether there is a preferred option(s) for consultation
- Continue to engage with Dorset and neighbouring systems on potential impact of our shortlisted options
- Finalise the draft Pre-Consultation Business Case
- Clinical scrutiny of our proposals to change services by the Southwest Clinical Senate on 28 September 2022
- NHS scrutiny of our proposals by NHS England on 15 November 2022
- ICB Board (Part A) to approve start of consultation 1 December 2022

10 Background papers

Background papers can be found on the Fit for My Future website www.fitformyfuture.org.uk