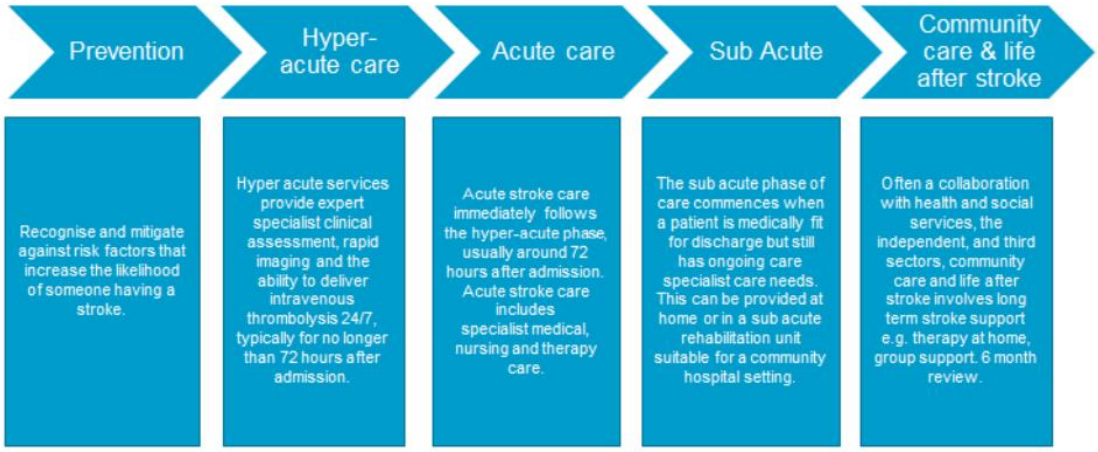
Fit for my Future (FFMF) Stroke Update

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 Somerset Clinical Commissioning Group and Somerset County Council and includes the main NHS provider organisations in the county. More information can be found at www.fitformyfuture.org.uk
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 stroke. Many of the recommendations within this strategy have been implemented. This paper provides an update on the development of hospital-based stroke services in Somerset.
1.3		Changing the way we deliver hospital based stroke services has potential implications for neighbouring Health and Care Systems and the impact of Somerset's proposals for hospital-based stroke affects the Dorset system the greatest, with a small impact on Royal United Hospital Bath NHS Foundation Trust (RUH). Depending on the solution which is developed, early modelling indicates a possible increase of approximately 1 suspected stroke patients per week to RUH. We have kept colleagues from both RUH and NHS Bath and North East Somerset informed of potential changes.
2.		**Somerset Hospital Based Stroke Services**
2.1		Stroke is both a sudden and devastating life event and a long-term condition. It's the fourth biggest killer in the UK, and a leading cause of disability. Over recent years, there have been significant advances in proven, highly effective methods of stroke treatment and care. The NHS Long Term Plan (LTP) states stroke mortality has halved in the last two decades. However, without further action, due to changing demographics, the number of people having a stroke and stroke survivors living with disability will increase.
2.2		***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*

2.3		It is projected that the number of strokes will increase by as much as 16% in Somerset by 2025 due to the rise in an ageing population with more complex health needs. This means that there will be an increasing demand for stroke care into the future. Stroke services in Somerset need to adapt so that the available specialist stroke workforce can provide the best possible outcomes to those that experience a stroke.
2.4		Following the 2019 stroke strategy, we are taking forward the recommendation about the provision of acute hospital-based services providing stroke care. This specifically includes Hyper Acute Stroke Units (HASU) and Transient Ischaemic Attack (TIA) services. Provision for both services are required to meet National Stroke Guidance[1] to maximise outcomes for patients. Currently Somerset has HASU and TIA services at both Musgrove Park and Yeovil District Hospitals. A review of neuro rehabilitation services is underway in parallel to the acute stroke work. This aims to ensure improved equity of access across the county, as services are currently centred around the Taunton region.
2.5		Hyper-acute stroke care provides the initial, most complex care in the 72 hours after a stroke event. 
2.6		Acute stroke care is not considered optimal in Somerset for the following reasons: **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

[1] NICE guidelines on Stroke and transient ischaemic attack in over 16s: diagnosis and initial management, 2019, available at: Stroke and transient ischaemic attack in over 16s: diagnosis and initial management (nice.org.uk)

		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. **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 **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
3		**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 from across Somerset 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. As part of the process, a review of the available evidence for optimal stroke care was built into our thinking.
3.1		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[2]. 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.
3.2		Centralisation of HASUs has been associated with the following improvements in clinical outcomes and benefits for patients and their families[3] [4]: • Reduced time from admission to thrombolysis • Improved time from admission to brain imaging for thrombolysed patients • Reduced total length of inpatient stay[5] [6] • 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[7] [8]
4		**Potential impact of 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 NHS Foundation Trust.
4.1		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.

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

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.

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.

More information on these options can be found in Appendix 1.

These four options have been 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

4.2

Assessing impact on neighbouring health systems

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 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.

Our current modelling demonstrates a potential impact on RUH of approximately one Somerset resident a week and minimal impact on Salisbury of approximately one resident per month receiving care at an alternative hospital if we were to relocate the Hyper Acute Stroke Unit from Yeovil District Hospital to Musgrove Park Hospital. The current modelling of the potential impact is shown below.

Hospital Site	Activity	Proportion of YDH activity
Musgrove Park Hospital	124	27.3%
Dorset County Hospital	259	57.0%
RUH Bath	51	11.2%
Salisbury Hospital	17	3.7%
Southmead Hospital	2	0.4%
Royal Devon & Exeter	1	0.2%

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Next steps:

- We are finalising our Pre Consultation Business Case and will be taking this through the NHSE Stage 2 Assurance process to move to formal public consultation.
- We will be taking the Pre Consultation Business Case to NHS Somerset Board in January 2023.
- Public Consultation is expected to commence in January 2023 and run for a twelve week period

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Ask to Bath and North East Somerset Children, Adults, Health and Wellbeing Policy Development and Scrutiny Panel

- to note the potential changes within hospital-based stroke care in Somerset
- to advise how the panel would like to be informed and engaged as we move to formal consultation

Appendix 1

Option A	Option B	Option C	Option D
Do Nothing No change to current model	**Do Minimum** As for option A, but with shared medical workforce	**1 HASU** Located at Musgrove Park Hospital in Taunton, no HASU in Yeovil	**1 HASU and ASU** Located at Musgrove Park Hospital in Taunton, no HASU or ASU in Yeovil
There would be **no change** to the current delivery model	There would be **no change** to the current delivery model	SWASFT would take all suspected stroke patients to **nearest HASU**	SWASFT would take all suspected stroke patients to **nearest HASU**
Yeovil emergency department (A&E) would continue to receive suspected stroke patients	Yeovil emergency department (A&E) would continue to receive suspected stroke patients	Yeovil emergency department (A&E) **would not** receive suspected stroke patients at any time	Yeovil emergency department (A&E) **would not** receive suspected stroke patients at any time
HASU services would continue to be delivered in both Taunton and Yeovil in the same way	HASU services would continue to be delivered in both Taunton and Yeovil in the same way	Most patients who would normally go to Yeovil would go to **Taunton or Dorset for their HASU** care	Most patients who would normally go to Yeovil would go to either **Taunton or Dorset for their HASU** care
Patients would receive their ASU care in the same way they currently do	Patients would receive their ASU care in the same way they currently do	Patients would return to **Yeovil for their ASU** care	Patients would remain in **Taunton or Dorset for their ASU** care
There would be **no change** to the workforce	There would be a **single medical workforce** would be shared across both sites. There would be no change to the nursing, AHP or support staff workforce	There would be **some changes** to the medical, nursing and AHP workforce	There would be **some changes** to the medical, nursing and AHP workforce
Once ready for rehabilitation, patients would ideally be **discharged closer to home** following their acute care – either home or to a community hospital	Once ready for rehabilitation, patients would ideally be **discharged closer to home** following their acute care – either home or to a community hospital	Once ready for rehabilitation, patients would ideally be **discharged closer to home** following their acute care – either home or to a community hospital	Once ready for rehabilitation, patients would ideally be **discharged closer to home** following their acute care – either home or to a community hospital
There will be **no impact** on other health systems in this option	There will be **no impact** on other health systems in this option	There will be **an impact on other health systems** in this option, primarily Dorset	There will be an **impact on other health systems** in this option, primarily Dorset