HEAT – Somerset Acute Hospital-based Stroke Services Reconfiguration: Shortlist for Consultation

Programme or project being assessed	**Somerset Acute Hospital-based Stroke Services Reconfiguration**
Date completed	29/11/22
Contact person (name, Directorate, email, phone)	Julie Jones julie.jones@somersetft.nhs.uk
Name of strategic leader	Maria Heard

Steps to take	Your response – remember to consider multiple dimensions of inequalities, including protected characteristics and socio-economic differences
A. Prepare – agree the scope of work and assemble the information you need	
1. Your programme of work	
What are the main aims of your work?	Somerset is reviewing the delivery of stroke care under the Fit for My Future Programme (FFMF) programme of work. FFMF was formed to develop the Strategy for Health and Care in Somerset and in 2019 a review of the current configuration of stroke services was carried out. One of the key recommendations from the strategy was to review the way Hyper Acute Stroke Unit (HASU) and Transient Ischaemic Attack (TIA) services are provided in Somerset. Getting it Right First Time (GIRFT) also undertook a review of stroke services across Yeovil and Taunton and this identified that in Somerset, the services performed well clinically and emphasised that the services had progressed well with regards to the stroke community rehabilitation model. However, it identified the following domains as the most challenging: • Rapid assessment by stroke nursing and medical teams • Scanning within one hour • Thrombolysis rate and door to needle times • MDT therapy assessments

We know there is variation in the ability of services in Somerset to meet national clinical standards, as evidenced in the Sentinel Stroke National Audit Programme (SSNAP) and there is strong evidence from elsewhere in the country that the centralisation of hyper acute stroke services, such as brain scanning and thrombolysis, delivered as part of a 24/7 networked service, will improve outcomes for patients.

The focus of this work is the hyperacute (first 72 hours) and acute parts of the whole stroke pathway and provision of TIA services, where care for patients is not currently optimal within Somerset for the following reasons:

- Demand for stroke care will increase and the specialist stroke workforce available to provide care is limited.
- The provision of acute stroke services currently does not meet National Guidance resulting in variable outcomes for patients.
- Poorer outcomes from stroke result in higher financial costs for health and care.

The vision for stroke care in Somerset is:

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

The NHS Long Term Plan sets out clear ambitions from the delivery of stroke care including increasing access to thrombolysis and thrombectomy how services are organised will make it possible to meet these ambitions that will ultimately improve patient outcomes and bring greater equity of services to the local population.

Specialist stroke workforce available to provide care is limited: both providers have sub-optimal levels of specialist stroke workforce; neither provider has 24/7 consultant cover; TIA weekend service inequitable.

The stroke pathway can be divided into five distinct phases.

The focus of this work is the hyperacute (first 72 hours) and acute parts of the whole stroke pathway and provision of TIA services, where care for patients is not currently optimal.

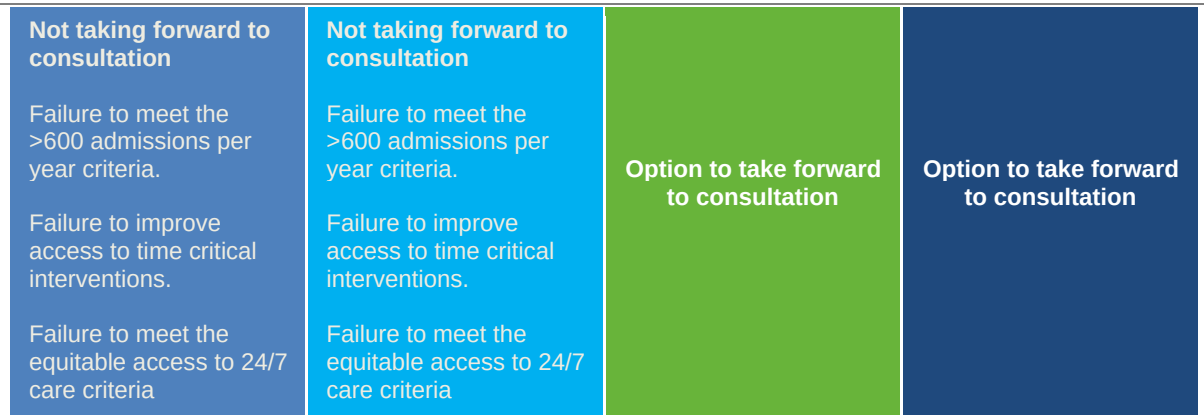
Transient Ischaemic attack

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%. CT scanning should no longer be offered, but MRI considered and if done, performed on the same day as assessment. This is not currently always offered within these timeframes in Somerset.

Shortlisted Options for Consultation

- A comprehensive process has been undertaken to move from a potential longlist of 9 reconfiguration proposals to a shortlist of 4.
- Following a thorough assessment process from a wide range of stakeholders, the initial shortlist has now been reduced to two preferred options – C and D. These are as follows, and will be taken forward to public consultation:

Option A Previously Option 1	**Option B** Previously Option 2	**Option C** Previously Option 5b	**Option D** Previously Option 6B
Do Nothing No change to current model	**Do Minimum** As for option A, but with shared medical workforce	**1 HASU** Single HASU at Musgrove Park Hospital in Taunton. No HASU in Yeovil. ASU in Taunton and Yeovil.	**1 HASU and ASU** Single HASU and ASU at Musgrove Park Hospital in Taunton. No HASU or ASU at Yeovil

	 This HEAT evaluation is focusing on the impact on, and implications for, health inequalities of the two options which are being taken forward to consultation: • **Option C** - Single HASU at Musgrove Park Hospital in Taunton. ASU in Taunton and Yeovil. • **Option D** - Single HASU and ASU at Musgrove Park Hospital in Taunton. No HASU or ASU at Yeovil
How do you expect your work to reduce health inequalities?	There are currently inequities between both the way stroke services provided at Yeovil and Taunton, and the subsequent outcomes. There is variation and inequitable provision of acute stroke care - especially over weekends and out of hours - where it takes significantly longer for patients to receive treatments such as thrombolysis. Patients admitted to Yeovil District Hospital at weekends are much less likely to see a consultant stroke specialist until after the weekend. There is no weekend outpatient service for patients suffering a TIA in the Yeovil area. The table below shows how these variations impact clinical outcomes. This is from the SSNAP data and shows there 3 areas of significant variation between Musgrove Park Hospital and Yeovil District Hospital as follows:

Metric	MPH	YDH	Significance Flag[1] (95%)	Potential reductions in inequalities
90% of patients admitted to HASU within 4 hours	59.7%	44.3%	**MPH significantly higher**	Neither service is performing to target. By centralising services on a single site, there will be more timely access to specialist assessment and streamlined admission pathways. As such this will improve for all people experiencing a suspected stroke and bring those in the Yeovil area up to the same standard.
95% of people had specialist stroke assessment <30 minutes	53.5%	20.5%	**MPH significantly higher**	
60% of patients with stroke assessed and managed by stroke nursing staff and at least one member of the MDT within 24 hours of admission	67.1%	35.2%	**MPH significantly higher**	The way stroke nursing and MDT staff work is different across YDH and MPH. MPH has dedicated, specialist staff working in standalone stroke unit, whilst at YDH stroke beds are co-located with non-stroke patients and staff work across different specialisms. By centralising the HASU +/- ASU beds onto a single site, there will be dedicated stroke nursing and MDT staff who can ensure that early specialised interventions are provided. This will lead to improved outcomes for those in the Yeovil area.

2. Data and evidence

What are the key sources of data, indicators, and evidence that allow you to identify HI in your topic?

- Consider nationally available data such as health profiles and RightCare
- Consider local data such as that available in JSNA, contract performance data, and qualitative data from local research

"The unwarranted variation in stroke care may inversely impact different groups within society." NHS RightCare[2]

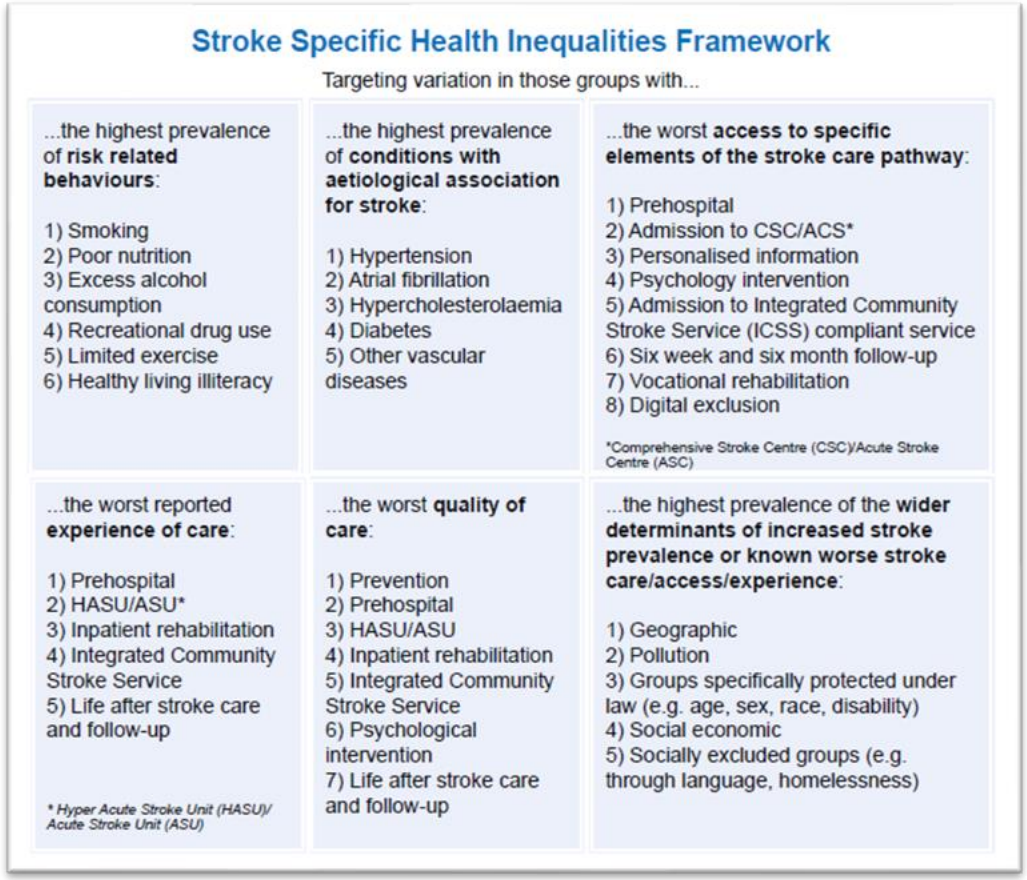
NHS RightCare have developed the Stroke Specific Inequalities Framework[3] which is designed to highlight variation relation to health inequalities and stroke outcomes[4]:

[1] Confidence intervals for each of the percentages for the 2021 SSNAP figures from MPH and YDH - at the 95% level, based on Wilson's method Wilson CI - Statistics How To

[2] B0850-RightCare-Stroke-Toolkit_July-2022.pdf (england.nhs.uk)

[3] B0850-RightCare-Stroke-Toolkit_July-2022.pdf (england.nhs.uk)

[4] NHS RightCare » Stroke toolkit (england.nhs.uk)



Compared to the England average, Public Health England describes Somerset's health profile as 'varied' with better than average life expectancy and good figures for mortality from cardiovascular diseases and cancer, but worse than average incidences of alcohol related issues and overweight adults[5].

The table below summarises they key headlines for Somerset:

Topic	Headline
Population	• 571,600[6].

[5] https://fingertips.phe.org.uk/static-reports/health-profiles/2019/e10000027.html?area-name=somerset

[6] Census 2021 - Somerset Intelligence - The home of information and insight on and for Somerset - Run by a partnership of public sector organisations

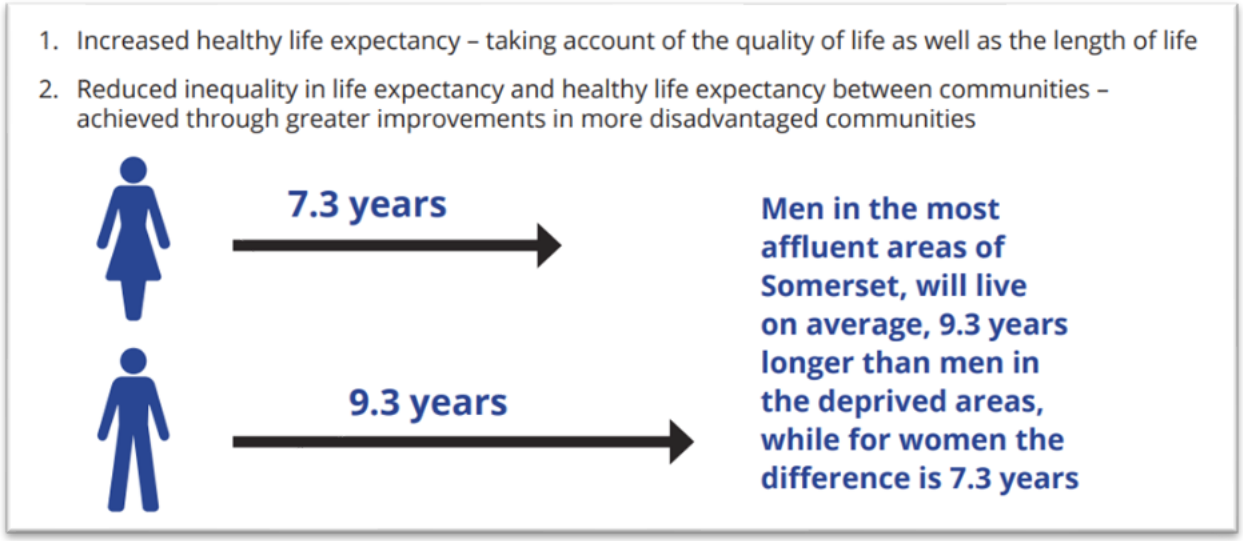
Ageing	• Somersets population is ageing at a faster rate than nationally • The number of people over 75 is expected to double in the next 25 years • By 2036 nearly 1/3 of the population of Somerset will be over the age of 65 • There has been more than a 50% increase in the number of people aged 70-74 since 2011 Census • Most strokes occur in people over the age of 50 • Attendances for TIA are highest in those over the age of 75 • Stroke mortality rates for those over 75 are worse than nationally
Rurality	• Somerset is in the top 10 most rural counties in England • 48.2% of Somerset's population live in rural areas • In some areas of rural west Somerset, nearly 20% of residents are over the age of 75[7].
Travel	• 50% of people over the age of 50 can access an A&E within 30 minutes • Over 90% of people over the age of 50 can access an A&E within 45 minutes
Deprivation	• 9 of Somerset's neighbourhoods are in the most deprived 10% in England • 29 of Somerset's neighbourhoods are in the most deprived 20% in England • Around 47,000 people live in these areas • Smoking is the single largest cause of inequality, accounting for up to half the difference in life expectancy between the most and least healthy neighbourhoods
Ethnicity	• 94.6% of Somerset's population are 'White British'.
Stroke risk factors	• Smoking remains the single largest cause of premature death in Somerset • Circulatory diseases cause more deaths in Somerset than any other condition • 66.1% of adults in Somerset are overweight or obese • Hospital admissions for alcohol-related harm in Somerset are worse than the England average • Risk factors for stroke are more prevalent in older people and people living in more deprived areas
Unpaid carers	• 58,300 people in Somerset provide unpaid care[8] around 10% of the population

The Improving Lives Strategy[9] aims to achieve the following outcomes for health and wellbeing of people in Somerset, as follows:

[7] Age - Census Maps, ONS

[8] The 2011 Census is currently the most reliable means of quantifying carers. It asked the question: Do you look after, or give any help or support to family members, friends, neighbours or others because of either: long-term physical or mental ill-health / disability or problems related to old age.

[9] Improving Lives In Somerset Strategy, Somerset Health and Wellbeing Board, 2019-2028



Addressing health inequalities and inequity is essential to delivering this ambition.

B. Assess - examine the evidence and intelligence

3. Distribution of health

Which populations face the biggest health inequalities for your topic, according to the data and evidence above?

Socio-economic status or geographic deprivation:
- Rurality
- Poverty

Inclusion health and vulnerable groups:
- Those experiencing homelessness
- Drug and alcohol dependence
- Gypsy, Roma and traveller communities

Experience related to protected characteristics:
- Age
- Disability
- Race
- Religion or belief

4. Causes of inequalities
 	
What does the data and evidence tell you are the potential drivers for these inequalities?
 	
• Which wider determinants are influential? E.g., income, education, employment, housing, community life, racism and discrimination.
• What aspects of mental wellbeing are affected? Consider risk and protective factors.
• Which health behaviours play a role?
• Does service quality, access and take up increase the chance of health inequalities in your work area?
 	
Which of these can you directly control?
Which can you influence?
Which are out of your control?
	Access to services – Within our control to address through the reconfiguration
	• Rurality leading to
	  ○ impact on ambulance response times
	  ○ impact on travel times to HASU services
	  ○ impact on carers travel
	  ○ impact on access to rehab closer to home
	• Poor public transport system
	  ○ Impact on carers travel
	• Challenging road links to the main acute hospitals
	  ○ Impact on travel times
	  ○ Impact on carers travel
	  ○ Impact on staff travel
	• Staffing challenges within the stroke services
	  ○ There is vulnerability within a range of staffing in stroke services, which has a direct impact on operating hours and availability of services across the county.
	• Availability of ring-fenced acute and rehab beds for stroke – enabling access to specialist care and treatment and ensuring timely patient flows
	
	Health behaviours – Able to influence
	• Whilst there is not a direct relational cause and effect with rates of stroke and poor health behaviours, there is a strong correlation.
	• Improvements in preventative measures, such as reducing smoking and alcohol rates have a direct impact on risk of stroke
	• As a system we need to ensure we make every contact count, especially in areas of higher deprivation and within populations where we know there are higher rates.

	Wider determinants – Out of our direct control • Areas of increased deprivation are associated with higher rates of poor health behaviours such as smoking, alcohol consumption and rates of activity, as such we need to work with people within these communities to make it easier for them to make better and choices in relation to their health behaviours. • People who have experienced a stroke or who are carers for those who have had a stroke may be unable to return to education or employment. This may have a direct impact on the life chances and experiences of other dependents within those families. • Ensuring rehabilitation services are provided close to peoples' homes and in a way that takes into account peoples health literacy is essential for maximising recovery from stroke. • Providing connections with CVSE partners to support people within their communities and to maximise recovery is essential. **Mental wellbeing** – Able to influence • There may be anxiety about HASU services no longer being available in Yeovil – these can be addressed through appropriate FAQs and responses within the consultation materials • There may be anxiety and stress caused to relatives and carers who may need to travel further to visit their relatives during the first 72 hours under option C and up to 10 days for Option D. This may be especially significant for those who are older, have a disability, live more rurally or who do not have access to their own transport. • We need to consider how to ensure carers are able to fully participate in supporting the recovery process for their loved ones following a stroke and receive the support they need.
C. Refine and apply – make changes to your work plans that will have the greatest impact	

5. Potential effects

In light of the above, how is your work likely to affect health inequalities? (positively or negatively)

Could your work widen inequalities by:

- requiring self-directed action which is more likely to be done by affluent groups?
- not tackling the wider and full spectrum of causes?
- not being designed with communities themselves?
- relying on professional-led interventions?
- not tackling the root causes of health inequalities?

Area of potential inequality	Description of Impact	Negative / Positive / Neutral
Age	• Stroke is principally a disease of older adults and therefore any change of service provision needs to consider the impact on this group • Somerset has a higher-than-average population aged over 65 years (average 24% per GP practice aged 65+) (Source: PHE Fingertips 2020/21). This results in a high risk of stroke incidence in the County People are having strokes earlier in their lives • The risk of a stroke increases significantly as people get older • A key part of acute stroke reconfiguration is the impact of travel times to access acute stroke care in a timely way, which may negatively impact older people more than younger people due to access to their own vehicle or to public transport. • This is also likely to be an issue for carers visiting relatives. • While most people who have a stroke are older, younger people can have strokes too, including children. One in four strokes in the UK happens to people of working age.[10] Lifestyle factors, family history, medical conditions, pregnancy and ethnicity can all increase risks.	Negative
Disability	• A key part of acute stroke reconfiguration is the impact of traveltimes to access acute stroke care in a timely way. • The benefits of centralising specialist hyper acute care are well understood (see case for change) - early intervention and treatment can prevent long term disability • People with a disability may have issues being able to access their own or public transport to travel to hospital sites and therefore any change of service provision needs to consider the impact on this group • People with learning disability may have difficulty understanding early warning signs and hyperacute management of stroke, and/or what the proposals may mean for them. • People with learning disability may have difficulty understanding early warning signs, encourage use of 999/111 and hyperacute management of stroke, and/or what the proposals may mean for them. • All consultation materials will be available in Easy Read and Plain English formats.	Negative
Gender reassignment	• There is a higher prevalence of negative lifestyle behaviours with people who have undergone gender reassignment. In the Southwest 16.9% of LGBQT people highlighted drug and alcohol misuse as an issue for them (Source: Intercom Trust 2021). This may predispose them to higher risk of stroke.	Neutral

[10] Stroke Risk Factors | Stroke Association

		• There are risks associated with defined male or female specific acute bed provision. This may have an impact on inpatient stroke care.	

	Race and ethnicity	• Strokes happen more often in people who are black or from South Asian families[11].
		• Somerset has a below average proportion of non-white British residents.
		  ○ The non-white British population now comprises 2.0% of Somerset's overall population, which is well below the national average of 14.0%.
		  ○ Non-white British residents of Somerset tend to live in towns and urban areas of Somerset, which are well served by public transport and have good road links.
		  ○ Therefore, it is not anticipated that the proposed changes will negatively impact this group.
		• Gypsy and Traveller community
		  ○ There are an estimated 733 Gypsy or Irish Traveller residents in Somerset, the second highest number of any local authority in the Southwest. Just over a third are resident in Mendip.
		  ○ As in the UK generally, the Gypsy and Traveller community in Somerset experiences notable health inequalities.
		  ○ One in six adults in the Gypsy and Traveller community were reported as long-term sick or disabled (2011 Census) and 15% described themselves as in bad or very bad health, compared with 5% of all adults in Somerset[12].
			Neutral

	Religion or belief	• It is not anticipated that this change will adversely affect people of different religions, however people with different religious beliefs access healthcare in different ways and it is important that we understand access points in the context of any service change.	Neutral
	Gender	• Men are at a higher risk of having a stroke at a younger age than women • However, more women than men die of stroke. This is because women tend to live longer than men, and the risk of stroke increases with age. • The requirement for single sex bays / single rooms presents some organisational challenges to ensure people do not receive poorer quality care due to the lack of beds. • It is not anticipated that the proposed changes will negatively affect people of different genders, but it is important to ensure a balanced representation throughout our engagement activity.	Neutral
	Sexual orientation	• There is limited evidence to suggest the proposed changes to stroke services will disproportionately affect this group. • There is a higher prevalence of negative lifestyle behaviourswith people who are from the LGBQT community. In the Southwest 16.9% of LGBQT people highlighted drug and alcohol misuse as an issue for them (Source: Intercom Trust	Neutral

[11] Stroke Risk Factors | Stroke Association

[12] Gypsy Traveller Accommodation - Somerset Intelligence - The home of information and insight on and for Somerset - Run by a partnership of public sector organisations

		2021). This predisposes them to higher risk of stroke and therefore consideration of preventative strategies to address the risk factors associated with stroke – high blood pressure and diabetes. • Consider gender sensitivity in care settings, particularly where people who have suffered a stroke struggle with the ability to communicate. We are aware that language and cultural sensitivity within the teams providing care and support will improve the outcomes for those who may have difficulties communicating and for those who may be uncomfortable within a healthcare setting.	
	Others: **Carers** **Veterans** **Homeless** **Low income** **Rurality**	• Carers ○ Due to the high numbers of older adults across Somerset and the link of older age to stroke, it is reasonable to assume that carers will be impacted by the proposed changes. • Homeless ○ The population classed as homeless in Somerset have high levels of health deprivation, and drug and alcohol misuse therefore predisposing them to higher risk of stroke. • Rurality/isolation ○ Somerset is a large county with 48.2% of the population living in rural areas. ○ These areas are likely to have poor public transport links and poor road access, especially travelling from East to West and vice versa. • Deprivation ○ Somerset ranks 92nd out of 151 local authority areas in terms of deprivation (where 1 is the most deprived and 151 is the least deprived) and scores 57th out of 151 on barriers to housing and services. ○ There is some relationship between the areas of deprivation and higher than expected rates of stroke in Somerset, although not conclusive. ○ People living in more deprived areas have poorer levels of self-reported good health. External factors such as household income, and lifestyle factors such as smoking and drinking are key influences in this. This is significant when we consider the risk factors for stroke.	Negative

6. Action plan

What specific actions can your work programme or project take to maximise the potential for positive impacts and/or to mitigate the negative impacts on health inequalities?

- How can you act on the specific causes of

Area of potential inequality	Action Plan
Age	• Undertake detailed travel analysis for Options C and D, for both people who have experienced a stroke and for carers • Consider cost implications for visitors, for fuel, car parking or public transport/taxis under each option • Ensure any specific communication needs for both people who have experienced a stroke and their older carers are understood and recorded, for example: dementia, hearing loss, sight impairment, and that all staff are aware of these needs.

inequalities identified above? • Could you consider targeting action on populations who face the biggest inequalities? • Could you design the work with communities who face the biggest health inequalities to maximise the chance of it working for them? • Could you seek to increase people's control over their health and lives (if appropriate)? • Could you use civic, service and community-centred interventions to tackle the problem – to maximise the chance of reaching large populations at scale? • Who else can help?		• Ensure that the language used to communicate with patients and older relatives and carers is clear and Plain English, whether this is verbal or written. • Ensure co-morbidities, existing treatment plans and medications are accurately recorded, and administered during hyper acute and acute stroke care • Ensure there is an accurate, comprehensive, and timely handover between HASU and ASU providers. • Ensure consultation planning targets areas with high proportion of older residents in a place that is accessible • Aim to provide care and services closer to home to ensure family and carers can support the recovery process. • Involve CVSE partners who are able to provide non-medical support to older people (as patients and carers) • Ensure younger people identified as being at increased risk of stroke are engaged with appropriately.
	Disability	• People with learning disability may have difficulty understanding early warning signs and hyperacute management of stroke, and/or what the proposals may mean for them. • Ensure any specific communication needs for both people who have experienced a stroke and their carers are understood and recorded, for example: dementia, hearing loss, sight impairment, and that all staff are aware of these needs. • Ensure that the language used to communicate with patients is clear and Plain English, whether this is verbal or written. • Ensure co-morbidities, existing treatment plans and medications are accurately recorded, and administered during hyper acute and acute stroke care • Ensure there is an accurate, comprehensive, and timely handover between HASU and ASU providers. • All consultation materials will be available in Easy Read and Plain English formats. Ensure compliance with accessibility standards for written materials. • Aim to provide care and services closer to home to ensure family and carers can support the recovery process. • Involve CVSE partners who are able to provide non-medical support to those with disabilities (as patients and carers)
	Gender reassignment	• There are risks associated with defined male or female specific acute bed provision. This may have an impact on inpatient stroke care. Ensure the configuration of HASU and ASU beds is in single sex bays and that there is access to single rooms within the estate reconfiguration.
	Race and ethnicity	• Non-white British – Ensure targeted consultation activity within areas with higher density of non-white

	British residents. Consider how to maximise the opportunities to provide preventative healthcare messages within these interactions. • Gypsy, Roma and Traveller community - Ensure targeted consultation activity with members of this community. Consider how to maximise the opportunities to provide preventative healthcare messages within these interactions.
Sex	• The requirement for single sex bays / single rooms presents some organisational challenges to ensure people do not receive poorer quality care due to the lack of beds. • It is not anticipated that the proposed changes will negatively affect people of different genders, but it is important to ensure a balanced representation throughout our engagement activity.
Sexual orientation	• Consideration of preventative strategies to address the risk factors associated with stroke – high blood pressure and diabetes. • Consider gender sensitivity in care settings, particularly where people who have suffered a stroke struggle with the ability to communicate.
Others: **Carers** **Veterans** **Homeless** **Low income** **Rurality**	• Carers ○ Due to the high numbers of older adults across Somerset and the link of older age to stroke, it is reasonable to assume that carers will be impacted by the proposed changes. ○ Need to ensure there is an understanding of impacts of options C and D on carers of older people and those with learning disabilities, as they are crucial partners in the care process following stroke. ○ Ensure targeted consultation activity with members of this community. • Homeless ○ Consider implications for safe and effective discharge during the HASU/ASU phases of care, e.g., ensure early involvement of the CVSE and social care partners to facilitate care and support ○ Ensure targeted consultation activity with members of this community. • Rurality/isolation ○ Undertake detailed travel analysis for Options C and D, for both people who have experienced a stroke, carers and staff ○ Consider cost implications for visitors and staff, for fuel, car parking or public transport/taxis under each option ○ Ensure targeted consultation in rural areas, or provide virtual opportunities for engagement. ○ Aim to provide care and services closer to home to ensure family and carers can support the recovery process. ○ Involve CVSE partners who are able to provide non-medical support to those living in rural areas • Deprivation ○ Ensure targeted consultation activity in areas of higher deprivation. ○ Consider how to maximise the opportunities to provide preventative healthcare messages within these interactions.

7. Evaluation and monitoring How will you quantitatively or qualitatively monitor and evaluate the effect of your work on different population groups at risk of health inequalities? What output or process measures could you consider?	**Analysis of Consultation findings** • An external agency has been commissioned to undertake the evaluation and analysis of the consultation, including the demographic information as well as the responses themselves. • This will be an iterative process, and as such if groups at risk of greater inequality have not been appropriately represented, a more targeted approach can be implemented to ensure all voices are heard. **Review of SSNAP data** • Data relating to incidence, prevalence and outcomes will be reviewed as part of regular reporting. We are anticipating improvements in all areas. **Qualitative feedback** • We will proactively seek feedback from those who have experience a stroke and their carers to identify if there are differences in experience or outcome following their stroke
Set a health equity assessment review date, recommended for between 6 and 12 months from initial completion. Review date:	

D. Review – identify lessons learned and drive continuous improvement	
Date completed (should be 6-12 months after initial completion):	
Contact person (name, directorate, email, phone)	
1. Lessons learned Have you achieved the actions you set? How has your work: a) supported reductions in health inequalities associated with physical and mental health? b) promoted equality, diversity and inclusion across communities and groups that share protected characteristics? What will you do differently to drive improvements in your programme? What actions and changes can you identify?	