



## Improving stroke services in Bristol, North Somerset and South Gloucestershire

# Factsheet: How will the proposals affect travel?

### Travel time context

The time taken to travel to hospital in an ambulance is a small part of a significant and complex process from initial call to treatment. This process involves a 999 call, response, arrival on scene, stabilisation of the patient on scene, travel, arrival at hospital, in hospital assessment, scan and treatment.

Expected improvements in the time taken from ambulance arrival at a specialist hospital, through to receiving specialist treatment, will ensure that patients do not experience an overall delay in receiving the best standard of treatment. (This is known as 'Door to Thrombolysis performance').

### Travel time to a Hyper-Acute Stroke Unit (HASU)

We analysed the travel time by ambulance if there was one HASU at Southmead Hospital providing emergency treatment, and a specialist Acute Stroke Unit (ASU) providing ongoing treatment and care for everyone in Bristol, North Somerset and South Gloucestershire.

Travel times across the area have been analysed and show :

- 5% of people would be able to get there by ambulance within 10 minutes
- 28% of people would be able to get there by ambulance within 20 minutes
- 71% of people would be able to get there by ambulance within 30 minutes
- 100% of people would be able to get there by ambulance within 45 minutes

We worked with the ambulance service to check that there would be enough ambulances and paramedics to support these proposed changes.

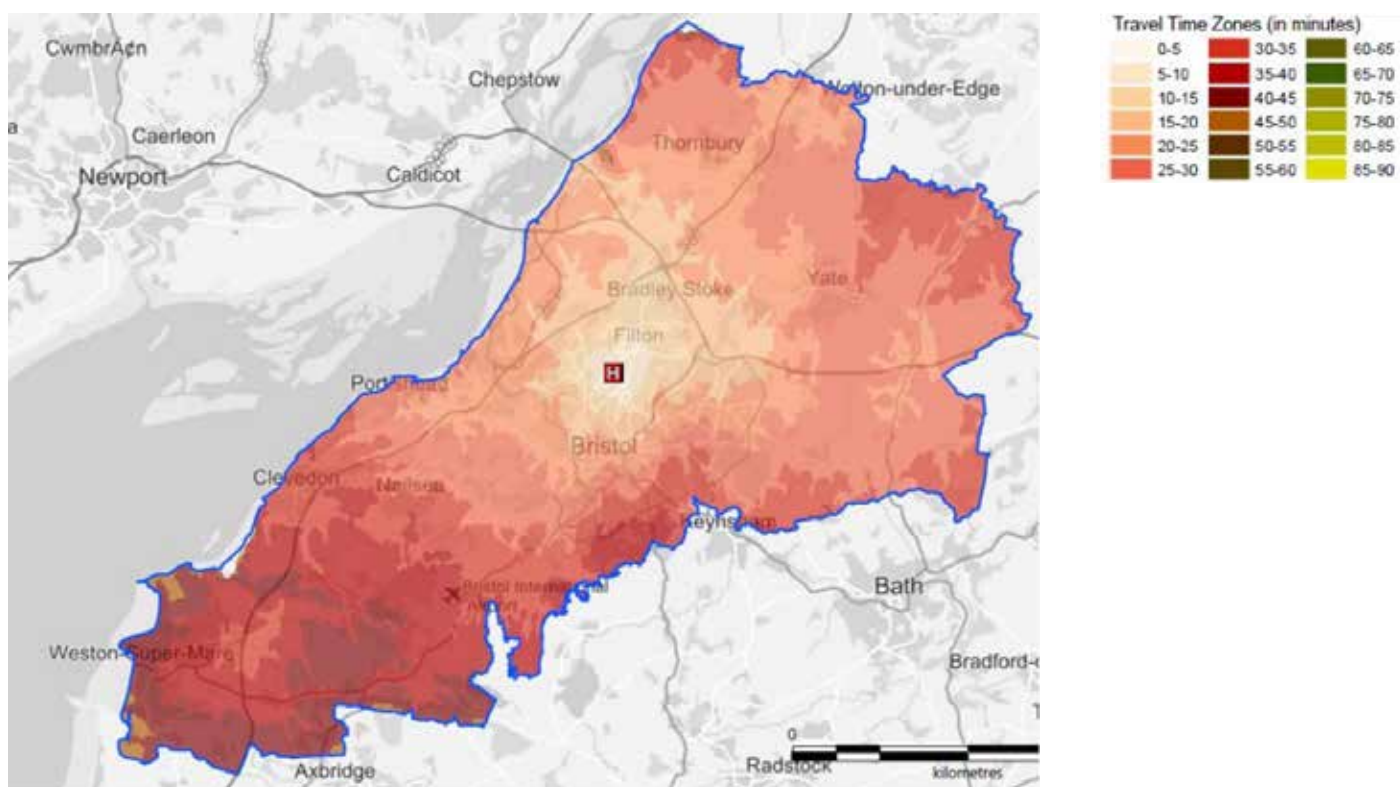
## How much longer will it take via ambulance?

Modelling data provided from the ambulance service indicates that on average, it will take 8.7 minutes longer to travel to a centralised HASU at Southmead Hospital.

The data shows that the majority of patients will experience a change of ambulance travel time of between 5-10 minutes (this is for approximately 60% of patients who wouldn't go to Southmead currently)

The longest change in ambulance travel time is 36 minutes, this is for the postcode BS23 1.

## Map – illustrating travel time to the HASU at Southmead hospital



## Visitors' travel time - HASU

As part of our review we also looked at travel times for visitors to a HASU:

	% of population within 30 minutes	% of population within 60 minutes	% of population within 90 minutes
Using public transport off peak	28%	71%	96%
Using public transport peak hours	29%	70%	96%
Using private vehicle off peak	43%	100%	100%
Using private vehicle peak hours	50%	100%	100%

## Visitors' travel time - ASU

And, we looked at travel time to an ASU. Our proposals set out two options:

### Option 1

To provide ongoing care in hospital on a specialist stroke unit alongside the HASU at Southmead Hospital where people receive their emergency stroke treatment. This would mean people who had a stroke would not need to travel by ambulance to another hospital for ongoing care.

### Option 2

As well as an ASU at Southmead, a second specialist Acute Stroke Unit at Bristol Royal Infirmary. In this case, people who live in Bristol and North Somerset would have their emergency treatment in Southmead Hospital and then be transferred by ambulance to Bristol Royal Infirmary after the first few days.

The table below shows travel times if there was an ASU for ongoing hospital care at Southmead Hospital (S) and if there was an ASU for ongoing care at both Southmead Hospital and Bristol Royal Infirmary (BRI).

S = Southmead B = Bristol Royal Infirmary	% of population within 30 minutes		% of population within 60 minutes		% of population within 90 minutes	
	S	S and BRI	S	S and BRI	S	S and BRI
Using public transport off peak	28%	49%	71%	93%	96%	99%
Using public transport peak hours	29%	50%	70%	92%	96%	99%
Using private vehicle off peak	43%	87%	100%	100%	100%	100%
Using private vehicle peak hours	50%	76%	100%	100%	100%	100%

## Visitors' travel time - Stroke Sub-Acute Rehabilitation Unit (SSARU)

With the Weston Hospital site as a proposed fixed SSARU option, we also looked at travel times expected for each combination of SSARU options. The tables below show the percentage of the BNSSG population that can travel to the different sites, within different time bands:

Scenario: Frenchay Site and Weston Site	0-15 Minutes	15-30 Minutes	30-45 Minutes	45-60 Minutes	60-75 Minutes	75-90 Minutes	90+ Minutes
Public Transport Peak	3%	23%	35%	27%	8%	2%	2%
Public Transport Off Peak	3%	22%	33%	28%	10%	2%	–
Driving Peak	33%	59%	8%	–	–	–	–
Driving Off Peak	44%	54%	2%	–	–	–	–

Scenario: South Bristol Community Hospital and Weston Site	0-15 Minutes	15-30 Minutes	30-45 Minutes	45-60 Minutes	60-75 Minutes	75-90 Minutes	90+ Minutes
Public Transport Peak	5%	13%	14%	29%	27%	8%	3%
Public Transport Off Peak	5%	13%	13%	28%	28%	9%	4%
Driving Peak	13%	33%	50%	5%	–	–	–
Driving Off Peak	18%	49%	33%	–	–	–	–

Scenario: Elgar Unit (Southmead) and Weston Site	0-15 Minutes	15-30 Minutes	30-45 Minutes	45-60 Minutes	60-75 Minutes	75-90 Minutes	90+ Minutes
Public Transport Peak	7%	26%	24%	25%	14%	2%	–
Public Transport Off Peak	7%	26%	26%	24%	14%	2%	–
Driving Peak	15%	48%	36%	–	–	–	–
Driving Off Peak	23%	64%	13%	–	–	–	–

Scenario: Skylark Unit and Weston Site	0-15 Minutes	15-30 Minutes	30-45 Minutes	45-60 Minutes	60-75 Minutes	75-90 Minutes	90+ Minutes
Public Transport Peak	6%	8%	34%	36%	13%	2%	1%
Public Transport Off Peak	5%	8%	29%	38%	17%	2%	1%
Driving Peak	12%	45%	42%	1%	–	–	–
Driving Off Peak	17%	61%	22%	–	–	–	–

\*Note some rounding and may not equal 100%

## What about travel time from my specific postcode

Travel analysis has been conducted for each each Bristol, North Somerset and South Gloucestershire postcode, this includes a visual map for all of the consultation scenarios. If you would like to find out more detailed analysis for your postcode please email [bnssg.strokeprogramme@nhs.net](mailto:bnssg.strokeprogramme@nhs.net)