## Stroke services in Mid and South Essex



# General comments on the consultation and its stroke specific proposals

The Stroke Association welcomes the opportunity to respond to the stroke specific elements of the Mid and South Essex proposals. We have been actively supporting this consulting process by supporting those affected by stroke to engage at STP events and at dedicated Stroke Association events. We have also been meeting with local MPs in Mid and South Essex to help explain the importance of reorganisation and share evidence.

We have been encouraged by the steps the STP has taken to involve the public in this important decision. It is essential that the views of people affected by stroke are fully considered and taken into account in the process of reshaping stroke services in Mid and South Essex. Recently published evidence has shown the value of involving the patient perspective in a major system change such as an acute stroke service reconfiguration.<sup>1</sup> Engagement and consultation with stroke patients provides the opportunity to 'manage actual or potential resistance or agitation' to plans, to gain verification that plans are supported by patients, and act a reminder of the ultimate importance of reconfiguration, to achieve high quality stroke care for all patients.

The Stroke Association supports the decision to reconfigure acute stroke services in Mid and South Essex. Reconfiguration of services to a more centralised model, as is proposed here, has been proven to save lives, improve recoveries and save the NHS money<sup>2</sup> through improving access to evidence based care.<sup>3</sup>

The available evidence suggests that the proposals outlined in the consultation document will help stroke patients in Mid and South Essex achieve better outcomes after their stroke. The model of diagnosing and treating stroke patients in local hospitals before transporting them to a specialist centre has been shown in other locations to increase overall rates of thrombolysis.<sup>4</sup>

We support the decision to create a specialist stroke unit in Basildon. We recommend that this is developed in line with the Royal College of Physicians (RCP) guideline definition of specialist stroke service, 'all components of a specialist acute stroke service should be based in a hospital which has the requisite facilities to investigate and manage people with acute stroke and the medical and neurological complications.' <sup>5</sup> We've heard anecdotally from hospital staff that the specialist stroke workforce is stretched within Mid and South Essex. Developing a specialist stroke unit in Basildon will provide the opportunity to maximise the use of staff and deliver the best possible stroke care

Reorganisation of acute stroke care is supported by NHS England and by governments and health leaders across the UK. The NHS England's Five Year Forward View refers to the "compelling case for greater concentration of care"<sup>6</sup> and

has also produced guidance to support hospitals, CCGs and Sustainability Transformation Plans (STPs) to reconfigure



services<sup>7</sup>. The Royal College of Physicians' guideline on stroke also emphasises the need for greater centralisation<sup>8</sup>. In Northern Ireland the Government has undertaken a pre-consultation on acute stroke reconfiguration across the country. The National Clinical strategy for Scotland acknowledges the need to evaluate the Hyper Acute Stroke Unit (HASU) model in the Scottish context and Wales has also begun research and discussions around reconfiguring acute stroke services.

Reconfiguration is even more important because research has shown that the scale of stroke is going to increase. Within two decades the number of strokes will almost double, and the number of stroke survivors will increase by a third.<sup>9</sup> Reorganisation allows for the best use of workforce and specialist infrastructure, it helps to make stroke services more efficient and results in higher quality care. As pressure on the NHS and social care system from the UK's ageing population increases the importance of implement acute stroke reconfigurations will also increase.

Centralisation also helps to address the continued unwanted variation of stroke care across England, including in Mid and South Essex. Patients at Broomfield and Basildon have poorer access to Speech and Language therapy and patients at Southend are not regularly having all of their care delivered in a HASU.<sup>10</sup> Reconfiguration will help ensure equity of access to specialist acute care for all stroke patients within Mid and South Essex.

It is important that post-acute and community rehabilitation services are also put in place to provide evidence based care, and the reorganisation of hospital care is an excellent opportunity to do this. 45% of stroke survivors, in our 2016 survey, have described being abandoned after leaving hospital. They felt there was no support for them to continue their recovery. For stroke survivors to be supported to make their best possible recovery, well-resourced community services must also be put in place in Mid and South Essex. We would like to see the STP develop plans, alongside this reconfiguration, for high quality Early Supported Discharge, 6-month follow-up reviews, community rehabilitation and peer support services across Mid and South Essex, all of which are vitally important to stroke survivors to aid their recovery and are highlighted in NICE and RCP guidelines.

#### Diagnosis and treatment at local hospital

The recommended treatment for patients with acute ischemic stroke is assessment through brain imaging and, if eligible, administration of thrombolysis.<sup>11</sup> Thrombolysis treatment has been shown to significantly reduce the number of stroke patients who die and also reduce levels of disability following stroke.<sup>12</sup>

We support the decision to transfer suspected stroke patients by ambulance to their local A&E to diagnose and initiate treatment. Research has shown that this model proposed in Mid and South Essex, is safe<sup>13</sup>. Research has also shown that it can



lead to increased number of patients being given access to thrombolysis compared to a local hospital model as is currently set up in Essex.<sup>14</sup>

This model, often referred to as 'drip and ship' provides access to thrombolysis and to the best possible ongoing treatment by being transferred to the specialist stroke unit in Basildon. This ensures patients experience the same access to specialised workforce, who are able to administer the same evidence-based interventions patients would receive in a direct to specialist stroke unit model.<sup>15</sup> Evidence also suggests that there is little difference in patient outcomes between direct transfer and 'drip and ship'.<sup>16</sup>

Data from SSNAP shows that whilst the proportion of eligible patients who receive thrombolysis (97%, Southend 87% Basildon and 94% in Broomfield) is relatively high in all three hospitals, there remains a minority of eligible patients who are missing out on this life saving drug, and we support efforts to improve the situation.<sup>17</sup> By reconfiguring acute stroke services and implementing this 'drip and ship' model, it will allow more patients to receive thrombolysis, leading to more lives saved and more patients avoiding serious disability.

We support the proposal to diagnose and transfer patients with haemorrhagic stroke from their local hospital to Basildon or the higher specialised centre in Cambridge or Romford. Research has shown that centralised stroke care also benefits patients with brain bleeds. <sup>18</sup>

Of course, it is important that any major service reconfiguration is closely monitored and assessed. We appreciate that changes to hospital services can be a scary time for patients and their family and friends. We therefore recommend the STP evaluates this model to understand its effectiveness and its impact on patient's outcomes, as was done in London and Manchester following their reconfigurations. It is important that patient experiences are also monitored to evaluate the impact of the reconfiguration, the Stroke Association can support with this if necessary. It is important that analysis is used to further improve stroke services. In Greater Manchester, the evaluation<sup>19</sup> resulted in a second, more comprehensive, reconfiguration to mirror the pathway used in London and further improve stroke services, with good resulting outcomes for patients.<sup>20</sup>

We know that it can be upsetting and stressful for family and friends to have to travel further to visit their loves ones in hospital. We therefore welcome the decision to fund transport for patient's family and friends between hospitals. We also welcome the decision that this is reviewed to ensure that it is properly supporting families to be able to see their loved ones whilst they are being treated at Basildon hospital.

# **TIA patients**

We would recommend that TIA patients are also explicitly considered in this stroke reconfiguration to ensure they get



timely access to treatment and support. There is strong evidence to suggest that treating someone with suspected TIA in an urgent acute setting reduces the likelihood of them going on to have a full or completed stroke within seven days. Giles and Rothwell (2007) showed that the risk of completed stroke was much lower in studies of emergency treatment of TIA in specialist stroke services compared to non-urgent settings (0.9% v 11.0%).<sup>21</sup>

Treating someone with TIA in the same way as someone with full stroke can also present an early opportunity to engage in secondary prevention. For example, fully assessing someone with TIA could uncover previously undiagnosed stroke risk factors such hypertension or atrial fibrillation (AF), allowing clinicians to begin managing these associated conditions.

# Specialist Stroke Unit at Basildon

The Stroke Association supports the decision to develop a specialist stroke unit at Basildon hospital. The evidence is clear that stroke patients achieve better outcomes if they spend the majority of their stay in hospital is on a specialist stroke unit, preferably a HASU. Specialist stroke units enable patients to have access to the right skills and equipment and be treated 24/7 on a dedicated stroke unit, staffed by specialist teams.

We support the decision to have the specialist stroke unit as Basildon so that it can have strong links with the existing Essex cardiothoracic centre for heart and lung problems which is also based at Basildon. Evidence from the STP transfer modelling also shows that Basildon is best situated in terms of access and travel times. The modelling shows that 91% of patients will get to the hospital by 45 minutes by blue light transfer compared with 86% for Southend and 85% for Broomfield. <sup>22</sup>

Stroke units with higher patient volumes, like specialist stroke units, have a better quality of care.<sup>23</sup> NHS guidelines state that stroke units need to admit between 600-1500 patients a year for staff to have enough clinical experience and institutional learning to maintain their experience.<sup>24</sup> Data from the SSNAP annual portfolio April 2016 – March 2017 shows that all of the existing hospitals in Mid and South Essex either do not meet or are at the lower end of this range (Broomfield 555, Basildon 620 and Southend 678).<sup>25</sup> Creating one specialist stroke unit for patients in Mid and South Essex will ensure that it has high enough patient volume to maintain the staff experience needed for high quality care.

Effective stroke interventions such as, brain imaging, thrombolysis and thrombectomy require expert knowledge and infrastructure to diagnose patients, safely deliver treatment and monitor for and treat any complications.

## Workforce



By creating a specialist stroke unit in Basildon the existing specialist workforce will be able to be used most effectively to provide evidence based interventions that save lives and reduce disabilities. Access to and availability of a specialist stroke workforce continues to be a problem for delivering high quality evidence based stroke care. The British Association of Stroke Physicians has stated 'Clinical developments in UK stroke services have overtaken the specialist resource needed to support them'.<sup>26</sup> In 40% of hospitals there is at least one unfilled stroke consultant post.<sup>27</sup> We know from anecdotal evidence that hospitals in Mid and South Essex are struggling with workforce issues, and these must be resolved in order to maintain a good level of service for those affected by stroke in the area.

#### Rehabilitation and ongoing care

Centralising acute services is incredibly important, however this must be done in conjunction with high quality post-acute rehabilitation services that can deliver evidence-based care for all stroke survivors. Without this support stroke survivors cannot continue their recoveries.

We support the proposal that the stroke team in Basildon would provide a clear plan to support stroke patients' recoveries including physiotherapy and speech and language therapy. In acute rehabilitation, variation also remains a problem, nationally only 31% of stroke units provide at least two types of therapy to applicable patients 7 days a week.<sup>28</sup> Data from SSNAP shows that within the three hospitals in Mid and South Essex the percentage of eligible patients receiving the equivalent of at least 45 minutes, 5 days a week physiotherapy varies considerably (15% at Southend, 27% at Broomfield and 46% at Basildon).<sup>29</sup>

Stroke patients who need ongoing inpatient rehabilitation should be treated in a specialist stroke rehabilitation unit. In particular the 2016 RCP guidelines state 'patients should accumulate at least 45 minutes of each appropriate therapy every day, at a frequency that enables them to meet their rehabilitation goals, and for as long as they are willing and capable of participating and showing measurable benefit from treatment'.<sup>30</sup> Without this 7 day rehabilitation in acute stroke units in Mid and South Essex patients may miss out on vital rehabilitation assessments and intervention, which can impact on patient outcomes and quality of life.

#### **Early Supported Discharge**

Early Supported Discharge (ESD) service is central to a good start to post-acute rehabilitation. Evidence suggests that ESD for people with mild to moderate disability after stroke helps to reduce dependency and admission to institutional care.<sup>31</sup> ESD is also cost-effective and can save money. We recommend that a properly resourced, stroke specific early supported discharge service is in place for all eligible stroke patients in Mid and South Essex.

## **Community support**



Stroke survivors need to have access to services and support in the community to be able to continue their recovery. However a survey carried out by the Stroke Association in 2016 found that 45% of stroke survivors across the country felt 'abandoned' after being discharged from hospital.

Stroke survivors report that they need early and ongoing rehabilitation and support, regular holistic reviews of their progress and information about stroke and sources of support throughout their stroke journey. Without 6 month reviews ongoing issues are not identified and patients can struggle to adapt to life after stroke. Access to support needs to be available into the long term as research has shown that around half of stroke survivors between 1 and 5 years post stroke have at least one unmet need.<sup>32</sup>

In Mid and South Essex stroke patients have told us how they left hospital or finished their ESD rehab without a plan or named contact for ongoing support. We therefore believe it is important that community support for those affected by stroke is also improved alongside this acute reconfiguration of services in Mid and South Essex

## Conclusion

The acute service reconfigurations that have taken place across the UK, most notably in London and Greater Manchester, have been successful in improving the overall quality of stroke care for patients in that area. However progress in other areas has been slower, and unfortunately these delays lead to unnecessary variation and deaths and disability from stroke that could have been avoided.

Our latest report, *Current, future and avoidable costs of stroke in the UK*<sup>33</sup>, warns that the number of stroke survivors in the UK is expected to rise to over two million over the next 20 years, and each year, 700,000 people will be living with a long-term disability as a result of stroke. There is an urgent need to reshape stroke services to save more lives and reduce disabilities and the Stroke Association welcomes this process as an opportunity to create a world class stroke service for everyone in Mid and South Essex.

However it is vital this process is about reshaping the *whole stroke pathway* – with adequate investment and consideration given to post hospital/long term care as well as lifesaving acute care. Ensuring people affected by stroke have sufficient and timely access to physiotherapy, occupational therapy, speech and language therapy, psychological and emotional support and peer support will help them make the best recovery possible.

<sup>&</sup>lt;sup>1</sup> Fulop et al (2018) <u>http://onlinelibrary.wiley.com/doi/10.1111/hex.12668/full</u>



<sup>2</sup> . Hunter, RM. (2013). Impact on Clinical and Cost Outcomes of a Centralized Approach to Acute Stroke Care in London: A Comparative Effectiveness Before and After Model. 2013. Available:

http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0070420

<sup>3</sup> Bray BD, Ayis S, Campbell J, et al. Associations between the organisation of stroke services, process of care, and mortality in England: prospective cohort study

<sup>4</sup> Price et al 2009

<sup>5</sup> Royal College of Physicians (2016) National clinical guideline for stroke. Fifth Edition. P.14 Available: <u>https://www.rcplondon.ac.uk/guidelines-policy/stroke-guidelines</u> Last Accessed 02 March 2018

<sup>6</sup> NHS England (2014) Five Year Forward View. Page 23. Available: <u>https://www.england.nhs.uk/wpcontent/uplo</u>ads/2014/10/5yfv-web.pdf

<sup>7</sup> NHS England (2016) Stroke services: configuration decision support guide. p.44
Available: <u>http://www.eoescn.nhs.uk/index.php/download\_file/force/2069/168/</u> Last Accessed 02
March 2018

<sup>8</sup> Royal College of Physicians (2016) National clinical guideline for stroke. Fifth Edition. Available: <u>https://www.rcplondon.ac.uk/guidelines-policy/stroke-guidelines</u>

<sup>9</sup> A Patel et al Current, Future and Avoidable costs of stroke costs of stroke in the UK, Executive Summary Part 1: Burden of stroke in the next 20 years and potential returns from increased spending on research. (2017) p.6 Available:

https://www.stroke.org.uk/sites/default/files/costs\_of\_stroke\_in\_the\_uk\_report\_-

executive\_summary\_part\_1\_v2.pdf Last Accessed 02 March 2018

<sup>10</sup> <sup>10</sup> RCP Sentinel Stroke National Audit Programme Full Results Portfolio April-Jul 2017 Available: <u>https://www.strokeaudit.org/results/Clinical-audit/National-Results.aspx</u> Last Accessed 02 March 2018

<sup>11</sup> National Institute For Health and Care Excellence (2008) Stroke and transient ischaemic attack in over 16s: diagnosis and initial management Available:

https://www.nice.org.uk/guidance/cg68/chapter/1-Guidance#specialist-care-for-people-with-acutestroke Last Accessed 02 March 2018

<sup>12</sup> Emberson, J., et al (2014) 'Effect of treatment delay, age and stroke severity on the effects of intravenous thrombolysis with alteplase for acute ischaemic stroke: a meta analysis of individual patients data from randomised trials', The Lancet 2014, 384:9958 Available:

http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(14)60584-5/abstract Last Accessed 02 March 2018

<sup>13</sup> Deguchi, I., Mizuno, S., Kohyama, S., Tanahashi, N., & Takao, M. (2017) 'Drip and Ship Thrombolytic Therapy for Acute Ischemic Stroke' Journal of Stroke and Cerebrovascular Disease 2018 27:1 Available: <u>http://www.strokejournal.org/article/S1052-3057(17)30407-X/fulltext</u> Last Accessed 02 March 18

<sup>14</sup> Price, C. I., et al, (2009) 'Systematic review of stroke thrombolysis service configuration' Expert review of neurotherapeutics 2009 9:2 Available:

http://researchonline.gcu.ac.uk/portal/en/publications/systematic-review-of-stroke-thrombolysisservice-configuration(45a0cdae-c0d3-4c5c-b7e3-c59661fbcc2b)/export.html Last accessed 02 March 2018

<sup>15</sup> Liebeskin D. S,. (2015) Response to Letter Regarding Article, "Art of Expertise in Stroke Telemedicine--Imaging and the Collaterome" Available:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4442038/ Last Accessed 02 March 2018 <sup>16</sup> UCL Partners Academic Health and Science Partners, Evidence Review of Pathways of Hyperacute Stroke Care Available: <u>http://www.nhsmidandsouthessex.co.uk/background/clinical-</u> <u>evidence/</u> Last Accessed 02 March 2018

<sup>17</sup> RCP Sentinel Stroke National Audit Programme Full Results Portfolio April 2016 – March 2017 Available: <u>https://www.strokeaudit.org/results/Clinical-audit/National-Results.aspx</u> Last Accessed 02 March 2018

<sup>18</sup> Davie, C., Hunter, R. M., Mountford, J., & Morris, S. (2013) 'London's hyperacute stroke units improveoutcomes and lower costs'. Harvard Business Review 2013

https://hbr.org/2013/11/londons-hyperacute-stroke-units-improve-outcomes-and-lower-costs

<sup>19</sup> Morris et al. (2014) Impact of centralising acute stroke services in English metropolitan areas on mortality and length of hospital stay: difference-in-differences analysis. BMJ. Available: <u>http://www.bmj.com/content/349/bmj.g4757</u> Last accessed 02 March 2018

<sup>20</sup> Greater Manchester Stroke Operation Delivery Network, Annual Report July 2016 – August 2017 Available: <u>http://gmsodn.org.uk/wp-content/uploads/2017/11/GMSODN-Annual-Report-A4-2016-17-FINAL.pdf</u> Last access 02 March 2018



<sup>21</sup> Giles MF & Rothwell PM, 2007. Risk of stroke early after transient ischaemic attack: a systematic review and meta-analysis. Lancet Neurol 2007, 1063-72. Available: <u>https://www.ncbi.nlm.nih.gov/pubmed/17993293</u> Last Accessed 02 March 2018

<sup>22</sup> Mid and South Essex Sustainability Transformation Partnership (STP), A Pre-consultation Business Case, Reconfiguration of hospital services Appendix 8:Access and Travel p. 8-10 Available: <u>http://www.nhsmidandsouthessex.co.uk/background/further-information/</u> Last Accessed 02 March 2018

<sup>23</sup> Svendsen M. L., (2012) 'Higher stroke unit volume association with improved quality of early stroke carw and reduced length of stay' Stroke 2012 43. Available:

http://stroke.ahajournals.org/content/strokeaha/43/11/3041.full.pdf Last Accessed 02 March 2018 <sup>24</sup> NHS England (2016) Stroke services: configuration decision support guide. p.44

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 <sup>25</sup> RCP Sentinel Stroke National Audit Programme Full Results Portfolio 2016-2017 Available: <u>https://www.strokeaudit.org/results/Clinical-audit/National-Results.aspx</u> Last Accessed 02 March 2018
<sup>26</sup> British Association of Stroke Physicians, Meeting the Future Challenges of Stroke, Stroke Medicine Consultant Workforce Requirements 2011-2015 Available: <u>https://basp.ac.uk/wp-</u>

<u>content/uploads/2017/02/BASP-Meeting-the-Future-Challenge-of-Stroke-2011-15.pdf</u> Last Accessed: 02 March 2018

<sup>27</sup> SSNAP Acute Organisational Audit (2016),

https://www.strokeaudit.org/Documents/National/AcuteOrg/2016/2016-AOAInfographic.aspx <sup>28</sup> Royal College of Physicians (2016) Sentinel Stroke National Audit Programme (SSNAP) Acute Organisational Audit. Available:

https://www.strokeaudit.org/Documents/National/AcuteOrg/2016/2016-AOANationalReport.aspx <sup>29</sup> RCP Sentinel Stroke National Audit Programme Full Results Portfolio April-Jul 2017 Available: https://www.strokeaudit.org/results/Clinical-audit/National-Results.aspx Last Accessed 02 March 2018

<sup>30</sup> Royal College of Physicians (2016) National clinical guideline for stroke. Fifth Edition. p.25 Available: <u>https://www.rcplondon.ac.uk/guidelines-policy/stroke-guidelines</u> Last Accessed 02 March 2018

<sup>31</sup> Fearon P, Langhorne P & Early Supported Discharge Trialists, (2012) 'Services for reducing duration of hospital care for acute stroke patients' Cochrane Database of Systematic Reviews, 2012, 9 Available: <u>https://www.ncbi.nlm.nih.gov/pubmed/22972045</u> Last Accessed 02 March 2018

<sup>32</sup> McKevitt C, Fudge N, Redfern J, Sheldenkar A, et al, (2011) Self-reported long-term needs after stroke. Stroke 2011, 42:5 Available: <u>https://www.ncbi.nlm.nih.gov/pubmed/21441153</u> Last Accessed 02 March 2018

<sup>33</sup> A Patel et al Current, Future and Avoidable costs of stroke costs of stroke in the UK, Executive Summary Part 1: Burden of stroke in the next 20 years and potential returns from increased spending on research. (2017) p.6 Available:

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