# Transforming and reorganising acute stroke services

Rebuilding lives after stroke

Stroke Association

# There is strong evidence that reorganised acute stroke care provides better care, improved clinical outcomes and makes services more cost effective.

Reorganisation, sometimes called reconfiguration or transformation, usually involves concentrating stroke services onto fewer sites and creating large centres of excellence operating 24/7. These centres have the best equipment and clinicians under one roof, to treat patients during the first critical hours and days after the onset of stroke. During this process, smaller neighbouring stroke units may be either closed or changed to become stroke rehabilitation wards.

Reorganising hospital stroke services has happened or is happening in some parts of the UK to save lives, prevent disability and make services more efficient. The most well-known examples are London and Greater Manchester, but reorganisation is already working well in rural areas like Northumberland and the South West of England and is being planned in Wales. Progress elsewhere is slow and patchy, with too many areas not treating the improvement of acute stroke services as a priority.

The transformation of stroke services needs to be a key priority at a national and regional level, because of the evidenced benefits that it brings and will bring to stroke patients across the UK.

### Stroke services reconfiguration – key points

- There is strong evidence for reorganised acute stroke care.
- Evaluations of networks have demonstrated the benefits of stroke networks across both urban and rural areas.
- We urgently want to see all areas of the UK push forward with plans to configure local stroke services in a way that delivers the best care and patient outcomes.

# What's the issue?

As stroke care has developed and become increasingly complex over the years, not all hospitals can be equipped with specialist staff and equipment to provide the best evidence-based care around the clock. [1]

Therefore, commitments have been made across the UK to transform the way stroke services are delivered, often in a 24/7 networked approach. This often involves reconfiguring acute stroke services locally into large specialist centres with the equipment and experts to treat patients all day, every day. Care in these centres will normally last for up to 72 hours, and then patients will usually be repatriated to their local stroke unit.

In some areas, these centres will be called Comprehensive Stroke Centres (CSC) or Hyper Acute Stroke Units (HASU) depending on where you are.

In England, the National Stroke Service Model introduced new terms to replace HASU, Acute Stroke Units and Stroke Units to instead be named:

- Comprehensive Stroke Centre (CSC) – covering hyper-acute, acute and inpatient rehabilitation as well as thrombectomy and neurosurgery,
- Acute Stroke Centre (ACS) – covering hyper-acute, acute and inpatient rehabilitation, but not thrombectomy and neurosurgery and
- Stroke Recovery Unit (SRU) – covering acute and inpatient rehabilitation only.

Elsewhere, HASU is still the preferred term.

CSCs and HASUs are large centres of excellence usually operating 24/7, with better levels of staffing and with access to the latest equipment - including the ability to perform game changing procedures such as thrombectomy and thrombolysis, which are currently only available to a proportion of the patients who could benefit.

# There is strong evidence for reorganisation

- **There is a move towards reorganisation across the UK because of the benefits it brings stroke patients.**

Studies have demonstrated that 24/7 networked configurations, with certain stroke units providing hyper-acute care, leads to **better patient outcomes**, including:

- Reduced mortality at 90 days;
- Shorter lengths of stay;
- Increased likelihood of receiving a brain scan within 3 hours and arrival at a stroke unit within 4 hours; and
- Shortened door-to-imaging and door-to needle times.[2]

Evidence shows that reconfigurations can save lives, improve recoveries and result in greater cost effectiveness for health services. Patients are also more likely to receive the right treatment sooner than if they were treated at a smaller stroke unit, as they are better staffed, have the latest equipment and are open 24 hours a day. [3]

Interventions such as brain scanning, thrombolysis and thrombectomy are shown to be best delivered through a networked 24/7 service. There is also a significant decline in mortality and additional quality-adjusted life years (QALYs) for those treated in specialist stroke centres. [4]

Evidence also shows that it is 'reasonable to expect some improvements in short- and long-term disability and quality of life due to service reorganisation that increases those aspects of acute care'.[5]

- **Evaluations of networks in London, Manchester and Northumberland have demonstrated the benefits of stroke networks across both urban and rural areas.**

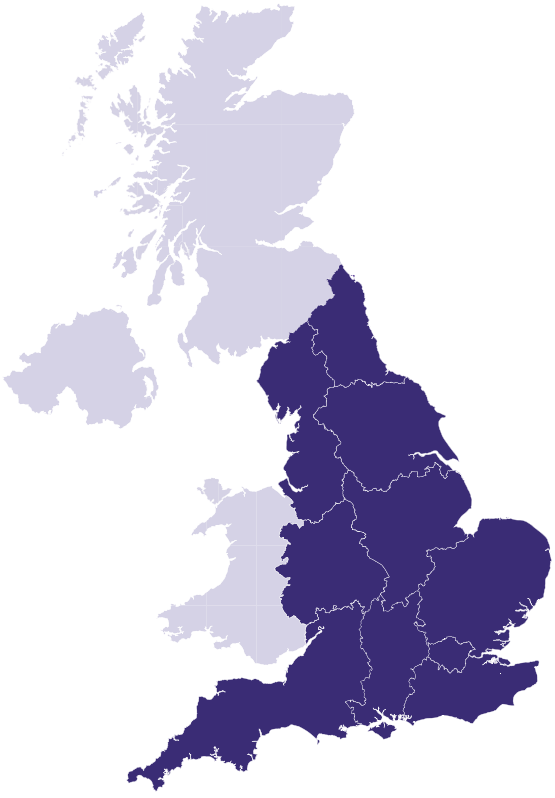
The study into the impact of reconfiguration in Northumberland 'found evidence that the centralisation of three acute stroke units within a single NHS trust in North East England improved door-to-needle times and reduced the average length of inpatient stay'. The study provided evidence to support 'the ongoing re-organisation of emergency care for stroke patients as an NHS priority'. [6]

# Reorganisations are backed up by clear policy commitments and direction of travel

- **NHS England has committed to improving the way hospital stroke services are delivered to achieve better outcomes for stroke patients.**

NHS England's Long Term Plan states new Integrated Stroke Delivery Networks (ISDNs) across England will support local systems 'to reconfigure stroke services into specialist centres, improve the use of thrombolysis and further roll out mechanical thrombectomy', which we fully support and believe is of benefit to patients. [7]

The National Stroke Service Model for England further outlines how this networked approach will be key to delivering the ambitions within the Long Term Plan, such as reducing mortality and disability. ISDNs are expected to design and introduce optimal pathways across the whole stroke pathway over the lifetime of the Long Term Plan. [8]



**Elsewhere in the UK, moves towards integration and the reorganisation of stroke services are also underway, with varying levels of progress.**

The Northern Ireland Executive included commitments to reconfigure services within a 2019 consultation on plans to reshape the delivery of stroke services, admitting that 'the current model fails users'.[9] However, progress since has been too slow, with the Department failing to move forward with vital reforms.

In Wales, the Stroke Delivery Plan recognised a need for reorganisation of stroke services, but progress has been slow. The Quality Statement for Stroke, published in September 2021, outlines new ambitions for transformation – including for services to 'be reconfigured to produce the outcomes expected in high quality, patient focused services and to ensure national standards can be met consistently and sustainably'.[10]

In Scotland, a vision report for a new, 'progressive stroke service' is due in early 2022, with an action plan for the delivery of the report's recommendations expected to follow. As part of reconfiguring acute stroke services in Scotland, two of the three planned national thrombectomy hubs are now running pilot services, with a Scotland-wide thrombectomy service planned to be operational by 2023.

More widely, following the Health and Care Bill in England, Integrated Care Systems (ICSs) are expected to be placed on a statutory footing to best design and deliver integrated health and care pathways for patients locally. Scotland, Wales and Northern Ireland are also in different stages of looking at or delivering a networked approach to health care.

- **Reconfigurations are cost effective and help make the most of equipment, expertise and staff resource**

The average benefit of national pathway optimisation is **estimated to be around £48m annually,** demonstrating an economic advantage to the introduction of networks as well as a social one. [11]

There is also a current shortage of stroke consultants, and specialities like qualified clinical psychologists.[12] When the British Association of Stroke Physicians estimated workforce requirements for 2019 to 2022, they found a current shortfall of 226 full-time stroke consultants needed to provide a comprehensive stroke service, with the problem growing. When they reported, '40% of Stroke Unit sites had an unfilled stroke consultant post, compared to 26% in 2014'.[13] Currently, the stroke workforce are spread too thinly across smaller stroke units to provide the best patient care, and often do not see enough stroke patients in each stroke unit to maintain their specialist expertise.

Whilst reconfigurations alone aren't enough to resolve this issue, as efforts to recruit and retain additional staff are key, they can help make best use of resources. Despite this, evidence of patient benefit should always be the driving factor of reconfigurations and not workforce and cost efficiencies. Other acute services are also subject to reconfigurations due to the benefits they bring. For example, reorganising some acute cardiac services led to a significant reduction in mortality and high levels of patient and carer satisfaction, as well as being cost-effective.[14]

# We understand that reorganisations can sometimes feel worrying

- **We are hugely supportive of efforts to reconfigure stroke services for the benefit of stroke survivors, as it improves outcomes, recoveries and saves lives, but we understand they can sometimes feel worrying.**

Local reorganisations can sometimes feel worrying, as they often involve smaller stroke units closing or changing to centralise care into a smaller number of hospitals that are better equipped and staffed. This can sometimes result in increased travel times to get to a stroke unit that can deliver better care.

We know that this will not work everywhere when travel times are considered too long, and NHS England guidance suggest travel times should be no more than 60 minutes.[15]

However, studies have shown that reorganisations result in improved outcomes and more patients receiving high quality specialist care, even if this involves a longer journey to the centre. This is because, once the patient arrives at the larger stroke unit, stroke specialists can receive, assess and begin treating them more quickly.[16] Evidence has also shown that reorganisations do show benefit in rural areas, because small local units are not set up to provide the best specialist care that stroke survivors need – including being able to deliver game-changing and highly-specialist treatments such as thrombectomy.

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 survivors and their carers also have positive experiences of care at specialist units, and believe getting the best care was more important than having to travel further.[17] That's why it's important that any reorganisation is planned carefully, in an open and transparent way that involves the views of those affected by stroke and makes use of existing guidance. And of course, it should only happen where it can be demonstrated that stroke patients will benefit.

## Recommendations for acute stroke reorganisations

**We support the reconfiguration of acute stroke services where there is benefit for stroke survivors. Regional reconfigurations have already taken place in areas across the country, with improved outcomes.**

**To improve stroke services across regions, we want to see:**

- **Urgent progress where reconfiguration has slowed, or not yet begun** – given the huge potential benefits to patients across the UK.
- **Governments across the UK to provide clear policy direction and comprehensive guidance** – on plans to reorganise acute stroke services, where not already done, and ensure local health bodies are implementing these plans.

**When local areas are transforming stroke services, we want to see:**

- **A fully evidenced and examined case for reorganisation** – local areas need clear evidence to show how reorganisation would work and the benefit it would bring. Factors such as access and travel times must be considered and the benefits communicated to the public appropriately.
- **Meaningful engagement and involvement with people affected by stroke** – including through public consultations, steering groups, expert panels and public consultations. Any planned engagement activities should proactively seek to involve and engage communities, including seldom heard groups.
- **Early communication with local stakeholders** – including the voluntary sector and people affected by stroke, of any planned reorganisation to ensure an open and transparent process.
- **Sharing of best practice across the UK** – with areas that have already gone through the process sharing their learnings with those in earlier stages.
- **Clear communication of the evidence when challenged** – where there are challenges in persuading commissioners, politicians and the public that reorganisation works, stroke leaders should clearly communicate the available clinical evidence and insight and explain that they are stalling reorganisation plans that could save lives and reduce disability.

## What needs to happen to progress reconfiguration across the UK?

**We want to see all areas of the UK push forward with plans to configure local stroke services in a way that delivers the best care and patient outcomes.**

**In Scotland:**

- Following the publication of the Scottish Government's final vision report for a progressive stroke service in December 2021, the Scottish Government should work with stakeholders and people affected by stroke to produce an action plan for delivery. This plan must include reorganising of services where required, to ensure timely access for all patients to evidence-based, stroke specialist treatment, rehabilitation and support – and to make best use of available staffing, equipment and expertise. We are hugely supportive of the two current thrombectomy pilot sites in Scotland and look forward to a national service by 2023.

**In England:**

- ISDNs are tasked with working with Integrated Care Systems (ICSs) to reorganise local stroke services. This should be a priority and involve engaging with the Stroke Association and people affected by stroke in discussions and plans early on. Progress with reconfiguration is patchy across England, often facing local challenges, yet it is set out as a clear ambition with the NHS Long Term Plan and the stroke-specific National Stroke Service Model. Any changes to the process of consulting on local service changes proposed by the Health and Care Bill should not cause undue delay to proposed stroke service reconfigurations.

**In Northern Ireland:**

- Progress to reconfigure stroke services in Northern Ireland has stalled in recent years, despite the urgent progress that needs to be made. The Department of Health and the Northern Ireland Executive should urgently progress with plans to improve stroke services in Northern Ireland, including proposals for reconfiguration. As the Department has said themselves, the 'current model fails users' and 'maintaining the status quo is simply not good enough'. (Department of Health, 2019)

**In Wales:**

- We welcome the publication of the Quality Statement for Stroke that sets out high-level ambitions for stroke services in Wales. This now must be developed into an actionable delivery plan with clear milestones, including the next steps for progressing the reconfiguration of local stroke services in Wales.

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JN 2122 292.1