Evaluation of reconfigurations of acute stroke services in different regions of England and lessons for implementation: a mixed-methods study

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Declared competing interests of authors: Stephen Morris and Rachael M Hunter were commissioned by NHS London to conduct an economic evaluation of the London reconfiguration of acute stroke services prior to this study. Anthony G Rudd is National Clinical Director of Stroke, NHS England, and London Clinical Director for Stroke. Pippa J Tyrrell was Clinical Lead for stroke in Greater Manchester (Greater Manchester and Cheshire Cardiac and Stroke Network) (2008–14) and is a Trustee of the Stroke Association. Ruth Boaden is Director of National Institute for Health Research (NIHR) Collaboration for Leadership in Applied Health Research and Care (CLAHRC) Greater Manchester (hosted by Salford Royal NHS Foundation Trust, one of the organisations that has a Hyperacute Stroke Unit in Manchester); she also holds an honorary (unpaid) contract at Salford Royal NHS Foundation Trust as an Associate Director, is a member of the NIHR Dissemination Centre Advisory Group, is Chairperson of the NIHR Knowledge Mobilisation Research Fellowship Panel and is a Health Services and Delivery Research (HSDR) board member. Naomi J Fulop and Stephen Morris were HSDR Board members from 2013 to 2018 and 2014 to 2019, respectively. Angus IG Ramsay and Simon J Turner were associate HSDR Board members from 2015 to 2018 and 2015 to 2017, respectively.

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Plain English summary

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Plain English summary

Stroke patients do better if they get the right care at the right time, but getting good stroke care varies depending on where people live and the hospital at which patients are treated. In 2007, the Department of Health and Social Care proposed that having specialist Stroke Units in fewer hospitals (called ‘centralisation’) might improve the chances of patients getting the right care more quickly.

We studied efforts to centralise hospital stroke services in London, Greater Manchester, and the Midlands and East of England in terms of the following:

- how centralisation affected numbers of patient deaths, quality of care provided, patient and carer experience and value for money (in areas where changes were implemented)
- how changes were put into action, whether or not they kept going and what factors made a difference.

We found that if all patients went to a specialist unit for stroke, there were fewer deaths than if some patients went to units that were not specialist. Centralising stroke services led to fewer patient deaths, less time spent in hospital, provision of better care and overall good patient experiences. It also provided value for money.

Putting a centralised service in place depended on region-wide leadership, working together with health professionals, to achieve changes. Local stroke networks helped make change happen within hospitals. Centralisations that linked achievement of quality standards with payments were more likely to have the resources to provide the right care. NHS reforms in 2013 removed region-wide leadership and local networks, making it harder to centralise stroke services.

Our findings provide support for the centralisation of acute stroke services, although we have acknowledged several limitations of our analysis. Our findings relate best to stroke services in larger cities, because rural areas may have longer travel times to hospitals. Our findings on how changes were achieved could help areas that want to centralise health services.
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This report

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