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Explaining outcomes in major system change: a qualitative study of implementing centralised acute stroke services in two large metropolitan regions in England[1]

Research at a glance:

What we know

Little is known about the best way to make improvements to health services across a whole geographical area or 'system'. An example is how best to centralise specialist services into fewer hospitals to try and improve the quality of care for patients.

In 2010, acute stroke services were centralised in London and Greater Manchester, into a small number of specialist "Hyper Acute Stroke Units" (HASUs)[2].

The two areas implemented different models of centralisation, with significantly different results:

- In both areas, length of hospital stay fell more than the rest of England; only in London did mortality fall more than the rest of England.[3]
- After centralisation, London stroke patients were significantly more likely to receive evidence-based care than in Manchester or elsewhere: this was in part because far more patients were treated in a HASU in London (93%) than in Greater Manchester (39%)[4]

To understand how these outcomes were influenced by (i) the different service models implemented in London and Manchester, and (ii) how the changes were implemented, we analysed stakeholder interviews (125) and documents (653) associated with the changes.[1]

What we found

The greater success in London was achieved due to a combination of the more radical model implemented and the way the changes were made.

Service models:

- London's model was simple and inclusive: all potential stroke patients were eligible for HASU and all HASUs accepted patients 24 hours 7 days a week
- Greater Manchester's model was more complex and selective: only some patients were eligible for HASU, and two HASUs operated an in-hours service

Implementation approaches:

- London: 1) all services were launched on a single day; 2) services could only launch if they met service standards, which were linked to financial incentives; and 3) local networks provided hands-on support.
- Greater Manchester: 1) services were launched in multiple stages; 2) services could launch without meeting service standards, and standards were not linked to financial incentives; and 3) local networks acted as a platform for learning, but provided no hands-on support.

Impact:

- London: the new referral pathway was followed reliably by ambulance and hospital staff, and all HASUs were able to provide evidence-based care.
- Greater Manchester: 39% of potential patients were treated in HASU (mainly because of selectivity); other patients were not treated in HASUs, and received more variable care.

What this means

- Service models should be simple and inclusive; to ensure that healthcare staff and the public understand the new service.
- Service standards should be used, to ensure that all services are able to provide the best possible care; providers should receive support to achieve standards; and ongoing achievement of standards should be linked to financial incentives.
- The new system should be launched on a single day so that the change is clear, and a smooth transition is achieved

Contact
n.fulop@ucl.ac.uk or angus.ramsay@ucl.ac.uk

Our website
www.ucl.ac.uk/dahr/research-pages/stroke_study

This project was funded by the National Institute for Health Research Health Services & Delivery Research programme (Project number 10/1009/09).

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