# Cost-effectiveness of centralised stroke services<sup>1</sup>







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#### 1. What we knew

- In 2010, stroke services were centralised in London and Greater Manchester, into a small number of specialist "Hyper Acute Stroke Units" (HASUs).<sup>2</sup>
- In London, where all patients were eligible for HASU treatment:
  - Length of stay and mortality reduced more than rest of England,<sup>3</sup>
  - Patients were more likely to receive evidence based care.<sup>4</sup>
- Greater Manchester implemented 'partial centralisation' (only patients reaching hospital within 4 hours were eligible for HASU care):
  - Length of hospital stay reduced significantly more than the rest of England, but not mortality.<sup>3</sup>
  - Patients were no more likely to receive evidence based care.<sup>4</sup>
- London received additional money to change their services. After centralising, London hospitals also got more money for stroke patients admitted to hospital.
- Greater Manchester also received some additional money, but less than London.
- We wanted to know if the cost of centralisation is balanced by the additional benefits to patients, in terms of quality of life and other outcomes.

## 2. What we did

- We looked at the additional costs and quality of life benefits for (a) London and (b) Greater Manchester compared to the rest of England.
- We estimated what the costs and benefits for patients were over 90 days and over 10 years.
- We also experimented with reporting results in different ways as some policy makers may prefer different information.

#### 3. What we found

- Over 90 days, compared to the rest of England:
  - London cost an extra £770 per patient.
  - Greater Manchester cost £156 less per patient.
- Over 10 years, extra costs in London were balanced out by the additional quality of life benefits for patients.
- When we looked at which changes would result in the most benefit if each region were given the same amount of money (i.e. a fixed budget), Greater Manchester resulted in the most benefit.

### 4. What this means

- London's changes resulted in additional quality of life and reduced mortality. These came at additional cost, but this was worth it for the benefits obtained.
- Although Greater Manchester saw no improvement in clinical outcomes, stroke care cost less after the 2010 partial centralisation.
- Deciding which is a better result requires weighing up costs and benefits and which you think are more important.







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#### References

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#### Find out more

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