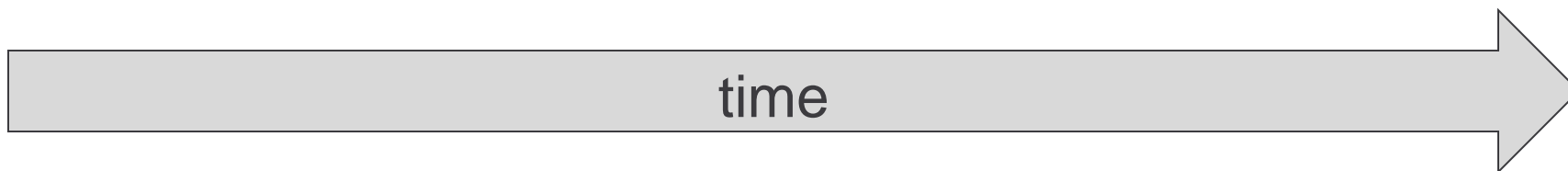
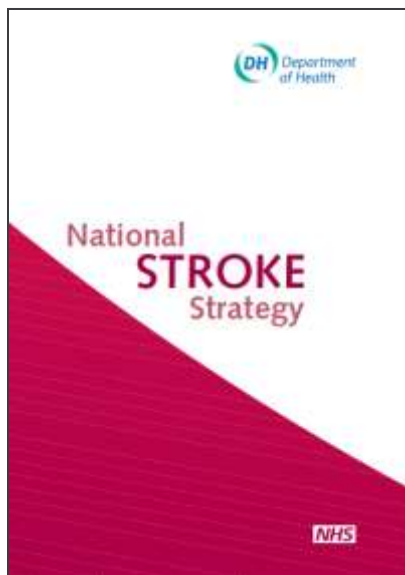


A National Stroke Strategy Quality Marker

But is it productive?

Ruth Boaden and Katy Rothwell

NIHR CLAHRC for Greater Manchester



Collaboration for Leadership in Applied Health Research and Care

- Greater Manchester
- Birmingham and the Black Country
- Cambridge
- Leeds, York and Bradford
- Leicester, Northamptonshire and Rutland
- NW London
- Nottinghamshire, Derbyshire and Lincolnshire
- South Yorkshire
- Peninsula

Collaboration between a university and its local NHS trusts that will...



Conduct high quality health services research



Ensure knowledge gained from the research is translated into improved health care in the NHS

Stroke

- 110,00 people in England have a stroke every year
- Leading cause of disability and second most common cause of death in the UK



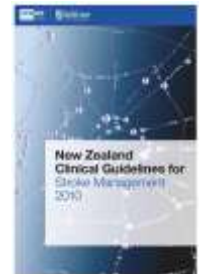
COST

- NHS and economy £7 billion/ year
- 4-6% of total NHS expenditure
- 7.4% of spending on community health care
- 5.5% of spending on hospital care

People say they feel 'abandoned' in the years and months after their stroke and have problems accessing the services they require to address their needs

Six Month Post-Stroke Reviews

A range of national policies/guidelines require stroke patients and their carers to receive a **review** of their needs **six months post-stroke**.



strokefoundation



NHS Accelerating Stroke Improvement metric: 95% of patients with confirmed stroke to be reviewed at six months (*by April 2011*)

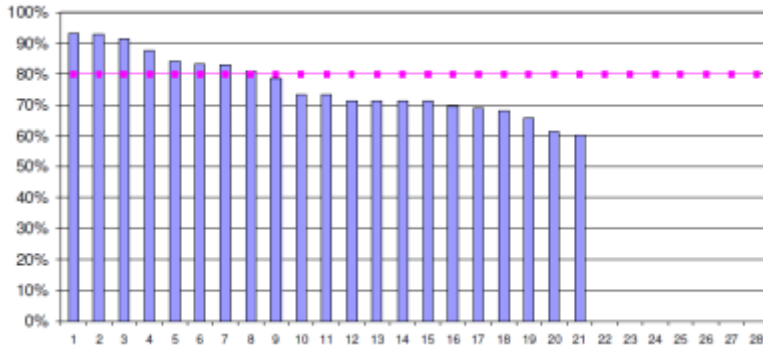


But:

- *'There is no firm evidence...'*
- *'It would be reasonable to assume...'*
- No details of costing models

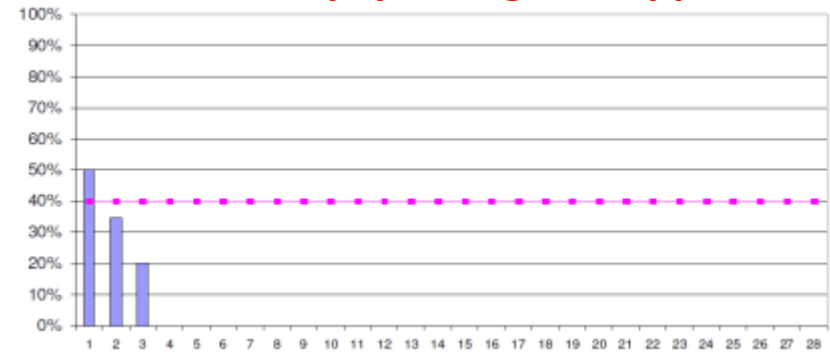
Six Month Post-Stroke Reviews

90% stay on a stroke unit



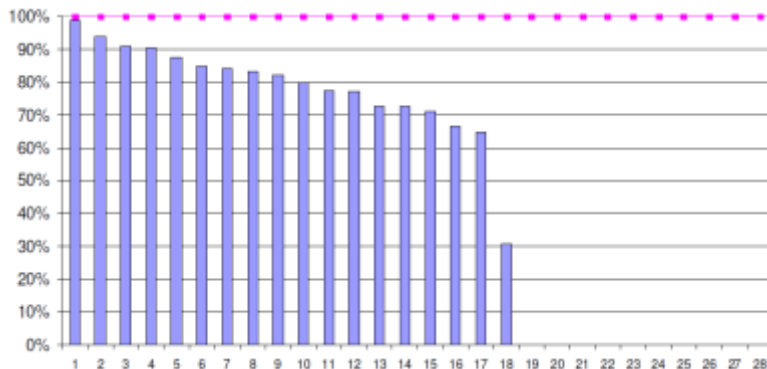
Stroke Network (Sorted by relative performance)

Access to psychological support



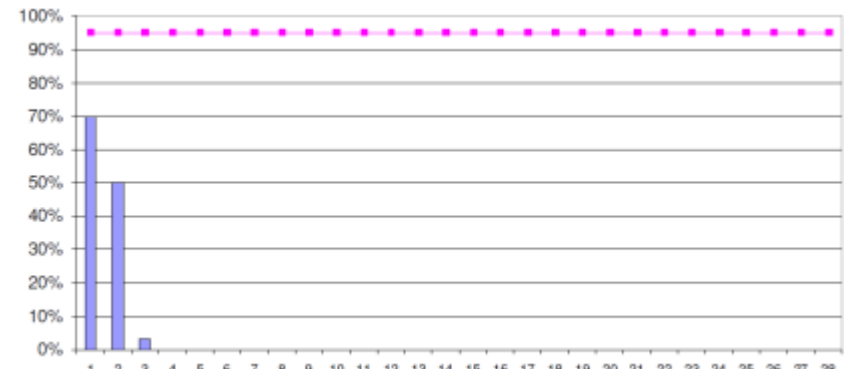
Stroke Network (Sorted by relative performance)

24hr scan



Stroke Network (Sorted by relative performance)

Post-stroke assessment and review



Stroke Network (Sorted by relative performance)

Stroke Improvement Programme: April 2011

The GM CLAHRC post-stroke review project

- (i) define the **content** of the six month review, and
- (ii) support the development and implementation of **local service models** for delivering the reviews:
 - Stroke Association Information, Advice and Support (IAS) Coordinators (*home visits*)
 - Stroke specialist nurse and assistant practitioner (*community clinic/telephone/home visit*)
 - Community nurses (*home visits*)
 - Practice nurses (*GP practice clinic*)
 - Stroke physician (*outpatient clinic*)



Greater Manchester Stroke Assessment Tool

- **GM-SAT:** the Greater Manchester Stroke Assessment Tool
- An evidence-based, standardised post-stroke assessment tool
- Covers 35 areas of common post-stroke need - medical, physical, social and emotional.
- Provides assessment questions and a simple evidence-based management algorithms for each area.
- Can be localised to reflect local service provision.



Evaluation of Stroke Association delivery

- 15 IAS coordinators from 10 pilot sites nationwide
- 137 service users
- 464 unmet needs across 37 areas (average 3 unmet needs per service user)
- Unmet needs addressed through
 - the provision of information and advice (50%)
 - advising service users to see their primary care team (21%)
 - signposting to local services (20%)
 - referrals to other services (9%)
- Results in line with unmet needs reported through the Stroke Association Needs Survey (McKevitt *et al*, 2011)

Provider and patient evaluation

"I felt this review was very much needed and helped support the service user and their family with their concerns."



"It is good to know that there is someone I can ask when I have a question. I don't like to bother my GP."



"Open, honest forum, identified needs and some solutions. Chance for stroke survivor and wife to broach sensitive issues."

"It helped me identify one or two issues that needed to be resolved to enable me to improve my quality of life."

How much does it cost?

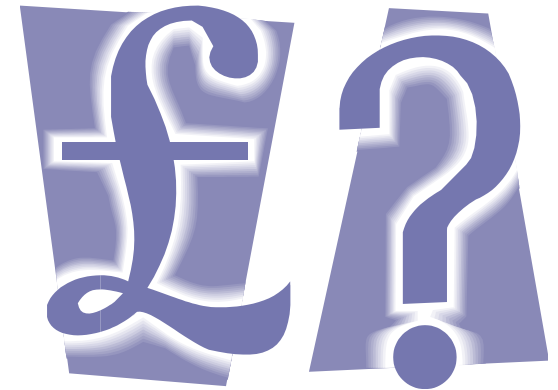
- Staff costs.
- Travel expenses.
- Sundries (stationery, postage etc).
- Set up costs (staff time for training, equipment, paperwork, etc).
- Costs of referrals made and other subsequent services provided (etc).



The total cost will be different for each delivery model employed

What are the benefits?

- Improved control of risk factors
 - e.g. hypertension
- Improved quality of life for patient and carer
- Avoidance of future deterioration
 - psychological state
 - physical dependence
 - employment status
 - admission to hospital
- Little short-term financial benefit



The scale of benefit will be different for each patient and each local situation

Our attempts at cost/benefit analysis

COSTS

- £30 per patient for review
 - Staff time (including overheads) (if usual visit already funded)
- £70 per patient
 - Onward referral etc
- National GP/nurse/social worker visit costs are available
- Voluntary sector and community service costs variable and difficult to identify

BENEFITS

- Using breakdown of data in National Stroke Strategy:
 - £88/year/patient saved through use of the review

	Y1	Y2	Y3
Cost	£100		
Benefit	£88	£88	£88
Cumulative	-£12	£76	£144

Scarce research data

*“Management of patients after discharge from hospital **receives much less attention** in the research literature than does acute stroke” (Williams et al, 2009)*

*“Current recommendations [for 6 month post-stroke review] has **not been supported by any trial evidence**” (Williams et al, 2009)*

*“**There is a lack of accurate data** on the frequency, relationship and predictors of various long-term functional outcomes and costs of stroke” (Feigen et al, 2008)*

Other conditions have evidence to use



Patients who might benefit from Cardiovascular Disease (CVD) screening were identified by comparing those on a CVD risk register with estimated prevalence. Screening and evidence based treatments were then offered to those at risk.

- It is predicted that a £1-2m saving will be made, mainly from preventing CVD incidents
- **120 Heart attacks and strokes have been prevented;**
- **40 Lives have been saved**
- Lifestyle changes such as smoking cessation will also contribute savings to the wider health economy but are not yet quantified.

<http://arms.evidence.nhs.uk/resources/qipp/29460/attachment>

Reviews cannot be shown to be 'productive'

Because

- scant cost evidence about ACTUAL savings
- huge variability in patient condition and prognosis compared to many other long-term conditions
- huge variation in current service provision and delivery systems
- lack of longitudinal research/cohort studies from which to extrapolate
- lack of RCT evidence that might lead to inclusion in clinical guidelines

We can't show it IS productive ... but does that mean it isn't?

Other incentives include

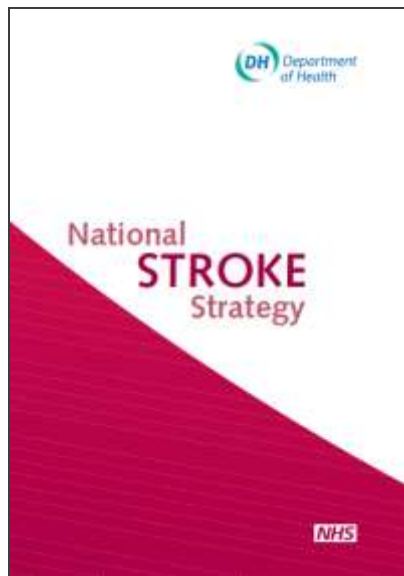
- National strategy requirement/measure
 - But this hasn't worked
- Incorporation into the Quality and Outcomes Framework (QOF)
 - But the review doesn't have to be delivered in/by general practice
- Pressure from interested parties
 - Voluntary sector (e.g. Stroke Association)
 - Patient groups



insufficient incentive

'proof' of productivity?

?



What matters? And to whom?