‘Using data to influence practice: The experience from stroke’.

Tony Rudd

What you need to know about stroke

- Common disease. 120,000/year, 3rd commonest cause of death (after heart disease and cancer) and major cause of acquired disability
- Costs England £7b/yr
- Typical service in 1980s

What you need to know about stroke

- Late starter
  - Evidence to support specialist treatment and when evidence did emerge slow implementation e.g. Stroke units, thrombolysis, early supported discharge.
  - Development of stroke as a specialty.
- Organisation of care makes a big difference to outcome
- Huge inequalities in quality of care depending on geography and time people have their stroke

Stroke Programme at the RCP

- Guidelines (3rd edition) –2008
  - NICE Guidelines on Acute care and TIA
  - Intercollegiate Guidelines on the rest
- National Audit
  - Organisation of Care
  - Clinical/Process of Care
  - Carotid interventions audit
  - Profession Specific Audit
  - Acute Continuous Stroke Audit (SINAP)
- Change management
  - Presentations
  - Workshops
  - Peer Review
  - Stroke improvement network links
- Accreditation

Features of Audit

- 100% participation
- Run by clinicians
- Exceptional level of data quality and completeness
- Detailed analysis centrally to allow tailored interrogation of data
- Performed every 2 years allowing time for implementation of change
- Rapid production of results

Data Collected

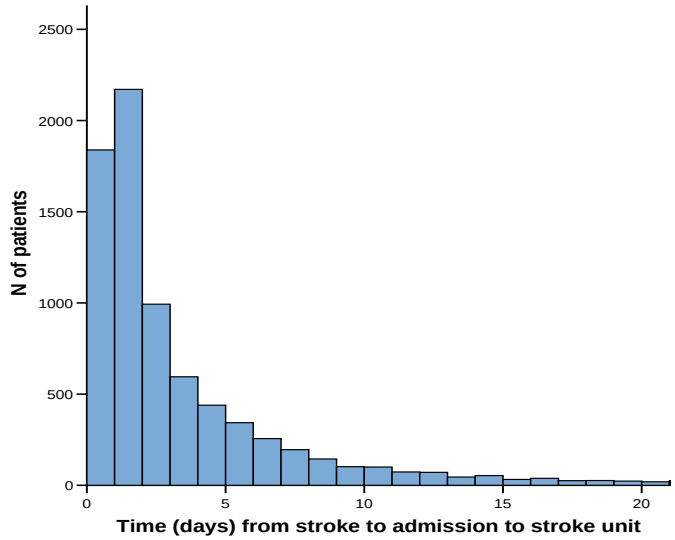
- Organisation of hospital and community services (stroke unit, staffing levels, discharge arrangements etc)
- Retrospective case note analysis of quality of
  - acute care
  - rehabilitation
  - secondary prevention
  - discharge planning
  - community rehabilitation

How do we use the data to influence change?

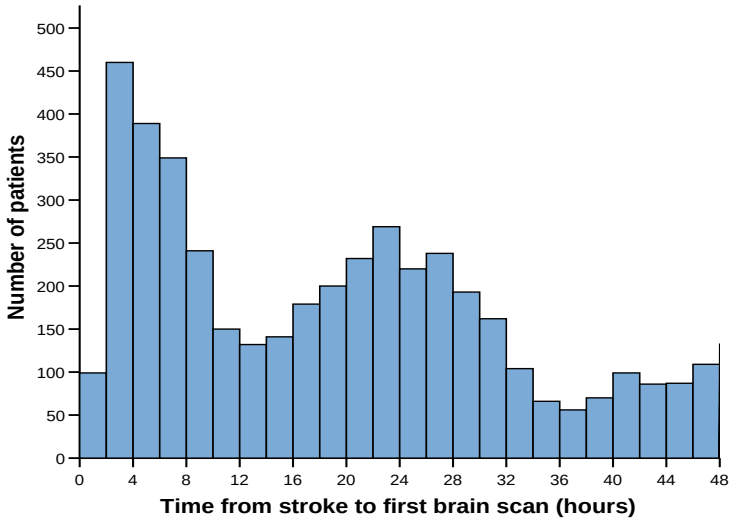
Individual Clinicians and Units

- Sufficient detail to enable all members of the team to find the data relevant
- Rapid production of trust reports providing local results benchmarked against the national averages
- Comparisons with previous years results
- Slide sets that can be downloaded by clinicians to use for presentations

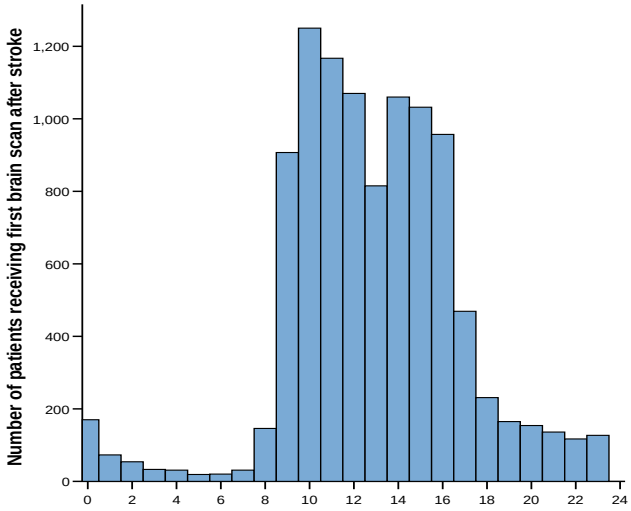
Time from Stroke to Stroke Unit Admission



Time from Stroke to Scan



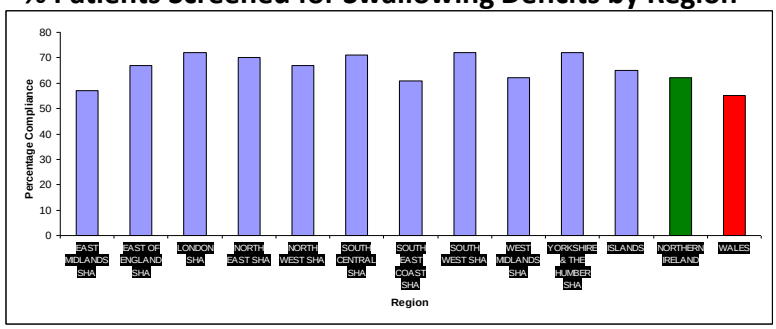
Time of Day Scanning Performed



Regional Data

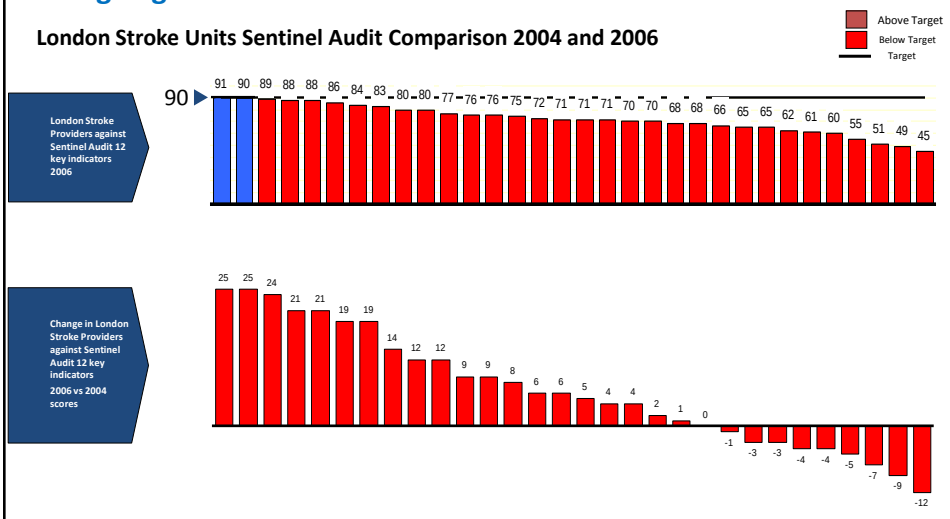
- SHA and Stroke and Cardiac Network reports
- Regional meetings presenting results and highlighting areas of good practice

% Patients Screened for Swallowing Deficits by Region

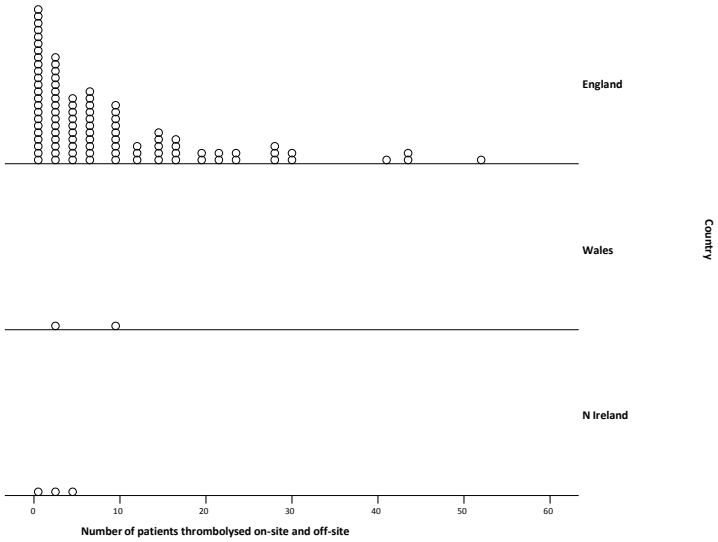


Using Regional Data to Make the Case for London Reforms

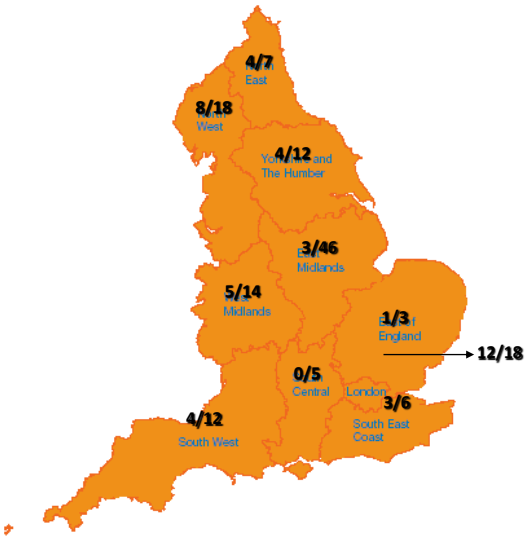
London Stroke Units Sentinel Audit Comparison 2004 and 2006



National Data Thrombolysis Services

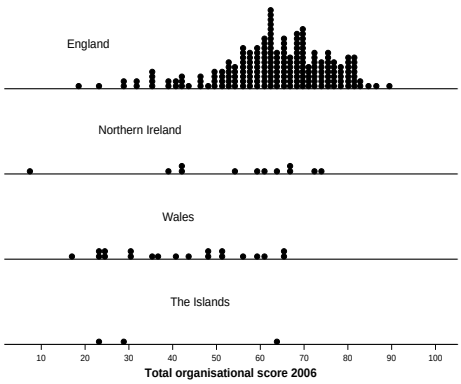


National Data: Number of ASU's with all 5 Quality Features (denominator refers to total number of acute stroke units



Country reports

- Country reports
  - England, Wales, Northern Ireland



Influencing at Country Level

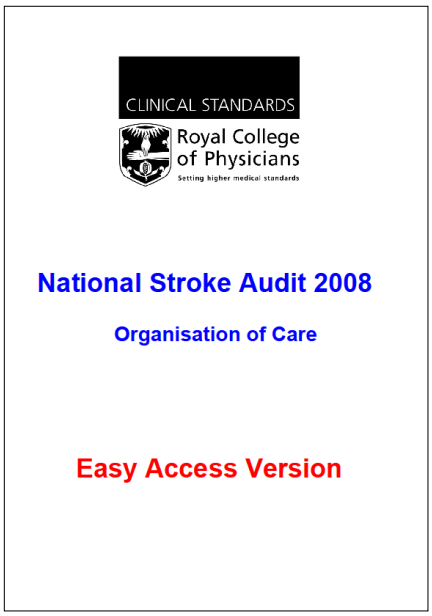
- National Audit Office
- Department of Health
- Care Quality Commission and Performance management
- Parliamentarians
  - All Party Parliamentary Group for Stroke
  - Report for MPs
- Welsh Assembly
- Northern Ireland Stroke Strategy

Patients and the Public

- Public opinion is the most important weapon in influencing change
  - Publication of key data items for named hospitals
  - Public report written with help of patient groups

Clinical audit summary
9 key indicators

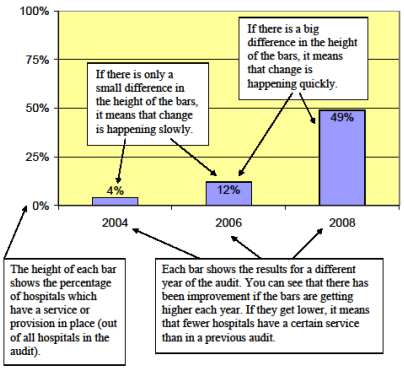
Q1.10	Patients treated for 90% of stay in a Stroke Unit
Q3.3	Screened for swallowing disorders within first 24 hours of admission
Q1.13iv	Brain scan within 24 hours of stroke
Q3.4	Commenced aspirin by 48 hours after stroke
Q3.6	Physiotherapy assessment within first 72 hours of admission
Q4.2	Assessment by an Occupational Therapist within 4 working days of admission
Q5.1	Weighed at least once during admission
Q5.3	Mood assessed by discharge
Q5.5	Rehabilitation goals agreed by the multi-disciplinary team
	Average for 9 indicators



Chapter 2: How to use this report

This report has many different types of information and it is shown in different ways.

- Where we are showing **changes over time** (between each round of the audit), the chart will look like this:



Staffing

There are **more** medical consultants, nurses and therapists specialised in stroke care.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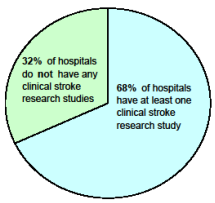
There are still **not enough** to provide well organised stroke care.

Training and Research

- **Most stroke units** now **provide training** for staff in the management of stroke

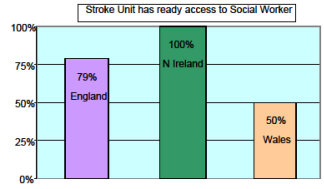
Training programme for **Stroke Unit Staff**	2004	2006	2008
	79%	92%	94%

More patients are being offered the **chance to take part** in stroke research, as shown in this chart:



Social workers

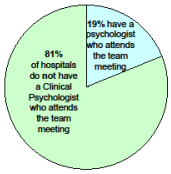
Stroke unit access to social workers varies between the nations:



Team working

- **All hospitals** now have team meetings at least once a week
- **More professions** attend meetings:
  - all meetings have representation from **Occupational Therapy** and **Physiotherapy**
  - nearly all have a **Senior Doctor** and a **Nurse**
  - most have a **Speech & Language Therapist**
  - it is also very common to have a **Social Worker** attend

Psychologists are rarely represented at team meetings, as shown in this chart:



Patients and Public

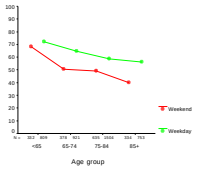
– Harnessing the press

- Identifying the key areas aiming to change this year e.g. Poor quality of care in Wales
- Developing the skills of spin
- Bad publicity more powerful than good publicity

"I've been trying to get the trust to offer scanning for stroke patients for 5 years, within a day of receiving the audit report the chief executive had convened a meeting with stroke service and radiology"

Advancing the Evidence

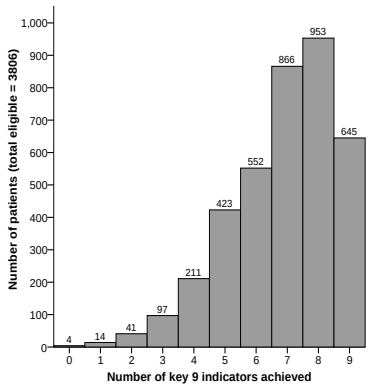
- Publications in peer reviewed journals. E.g.
  - The benefits of stroke units in reality compared to the randomised trials
  - Inequalities in stroke care
    - Age
    - Having a stroke at weekends
  - Using institutionalisation rate as an outcome measure



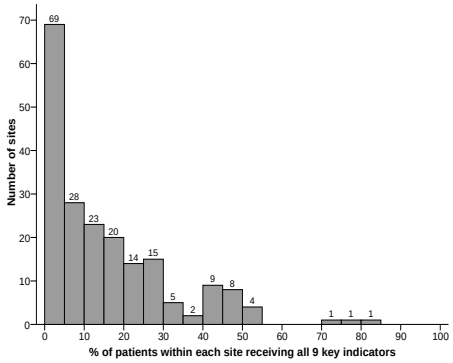
Raising the bar

- Changing the criteria to reflect changing evidence
- Development of the concept of 'Bundles of Care'

2008 Audit. Number of key Indicators Achieved per patient



Bundles of Care: % of patients Achieving all 9 Key Indicators per Site



The Future

- Uncertain with financial pressures
- Burden of data collection on hospitals
- Delay in developing electronic patient records so difficulty with prospective data collection
- Political pressures to report outcomes
- Vital that audit continues at a time of radical restructuring of services

Conclusions

- High quality data can be an extremely powerful tool
- The stroke audit has been successful because run by clinicians, for clinicians and it has been the sole source of high quality national data
- Keeping the audit going for 12 years has been valuable to maintain the pressure for change