SSNAP | Sentinel Stroke National Audit Programme

KING'S College LONDON

Sentinel Stroke National Audit Programme (SSNAP)

Acute Organisational Audit

Executive summary for Taunton and Somerset NHS Foundation Trust

This executive summary has been compiled for executives, managers, commissioners and clinicians involved in stroke services. It is based on data submitted for the organisational component of the Sentinel Stroke National Audit Programme (SSNAP) by 183 (100% of eligible) acute stroke services. All data were submitted and validated by the lead clinician from your trust.

It presents results for how stroke services are organised in your hospital based on 10 Key Indicators of acute stroke care organisation. These Key Indicators cover important aspects of the organisation of stroke services and are based on up to date guidance, research and evidence. They cover areas such as specialist staffing and workforce planning, seven day working, access to specialist treatment and support such as specialist early supported discharge (ESD), patient and carer engagement, Transient Ischaemic Attack (TIA) services and quality improvement, training and leadership. Clinical commentary written by the SSNAP clinical director is provided throughout.

This report compares your performance against national averages, and enables you, together with your clinicians and management team, to discuss areas of good practice and identify areas where change may be required. Participating sites have also been given their site-specific result portfolios. Both of these should be read in conjunction with the national report when it becomes available via the SSNAP Results Portal.

The following results reflect the organisation of stroke services as of the **3rd of June 2019**. All available results can be found at the SSNAP Results Portal – Acute Organisational Audit Results.

The SSNAP acute organisational audit complements the continuous SSNAP clinical audit which

reports every 3 months on the processes of care and clinical outcomes of stroke care. Clinical audit results for April - June 2019 were made available for teams in September, with results made publically available in the week commencing on the 10th of October 2019. Results for January - March 2019 are publically available via the SSNAP Results Portal.

Overview of the Sentinel Stroke National Audit Programme (SSNAP)

The Sentinel Stroke National Audit Programme (SSNAP) is commissioned by the Healthcare Quality Improvement Partnership (HQIP) as part of the National Clinical Audit and Patient Outcomes Programme (NCAPOP) and is run by the Stroke Programme at the School of Population Health and Environmental Sciences (SPHES) at King's College London. In a collaboration with the NHSE/I initiative Getting It Right First Time (GIRFT), new questions were added to provide additional detail on staffing structures, diagnostics access and use and other aspects of the acute stroke service. Data were collected at site level within trusts (or Health Boards in Wales) using a standardised method.

The audit was overseen at site level by a lead clinician for stroke who was responsible for the quality of data supplied. Data were entered between the 3rd and 28th of June 2019 with a data checking week from the 1st to the 5th of July for affirming the accuracy of the data. 100% of all eligible trusts admitting stroke patients in England, Wales and Northern Ireland participated. The audit is guided by a multi-disciplinary steering group responsible for the Sentinel Stroke National Audit Programme – the Intercollegiate Stroke Working Party (ICSWP).

Availability of these results in the public domain

A full results portfolio and national report will be made available to the wider NHS, including NHS England and the Care Quality Commission in England, NHS Wales (Welsh Assembly Government) and the Department of Health, Social Services and Public Safety in Northern Ireland by October 2019. All named site results will be published in December 2019 in line with the transparency agenda subject to HQIP's standard reporting process.

Definitions

Site

Lead clinicians were asked to collect data on the basis of a unified service typically within a trust. For most trusts the 'site' was the trust. For some trusts, however, there were several 'sites', each offering a discrete service. A site may include several hospitals.

Please note the term 'trust' is used as a generic term; however, it is acknowledged that in Wales, these are Health Boards.

Stroke Unit and Bed Types

The definition used in this document for *stroke unit* is: A multi-disciplinary team including specialist nursing staff based in a discrete ward which is geographically defined and has been designated for stroke patients.

There are three categories of stroke unit beds used at different parts of the care pathway which are referenced in this report:

Type 1 beds - used solely used for patients in the first 72 hours after stroke

Type 2 beds - solely used for patients beyond 72 hours after stroke

Type 3 beds - beds used for both the first 72 hours of care and beyond

Key National Recommendations

1. All hospitals providing hyperacute stroke care should ensure that they are providing sufficient specialist nursing staff on their hyperacute stroke unit – at least 3 registered nurses per 10 beds, all of whom have received training in swallowing assessments. Patients with acute stroke should be admitted to such an appropriately staffed unit within 4 hours of hospital arrival.

Evidence:
Paley et al, 2018;
Bray et al, 2014;
RCP National Clinical Guideline 2016;
NICE Quality Standard QS2, 2016

2. All hospitals providing hyperacute stroke care should have a system for the pre-alert of cases of suspected stroke by pre-hospital clinicians directly to the stroke team who are then able to rapidly assess patients in the emergency department. This assessment should include rapid, round-the- clock access to diagnostics, assessment for reperfusion treatments and direct admission to a specialist stroke unit.

Evidence:
RCP National Clinical Guideline 2016;
NICE Guideline for stroke and transient ischaemic attack in over 16s: diagnosis and initial management, NG128, 2019

3. All hospitals providing stroke rehabilitation should provide at least two types of qualified therapy for 7 days/week. Those that presently do not should examine their traditional working practices and learn from centres that have successfully implemented 7-day working.

Evidence:
RCP National Clinical Guideline 2016;
Clarke et al, 2018

4. All hospitals providing stroke rehabilitation should have access to clinical psychology as a member of the multidisciplinary rehabilitation team – at least 1 whole time equivalent qualified psychologist per 30 stroke unit beds.

Evidence:
RCP National Clinical Guideline 2016;
NICE Quality Standard QS2, 2016

5. All comprehensive stroke services should include specialist stroke rehabilitation at home, including an early supported discharge team with full coverage of the population.

Evidence:
RCP National Clinical Guideline 2016;
NICE Quality Standard QS2, 2016

6. All stroke services should regularly review the service they provide in the light of information on the experience of patients and carers using their service. These views should be incorporated into the strategic planning for their service, with patient representation on key decision-making groups.

Evidence:
NICE Clinical Guideline CG138, 2012;
NICE Quality Standard QS15, 2019

7. All services for people with suspected TIA and minor (non-hospitalised) stroke should provide a diagnostic service that includes same-day access to specialist assessment and MRI scanning including diffusion-weighted and blood-sensitive sequences.

Evidence:
NICE Clinical Guideline NG128, 2019

8. All comprehensive stroke services should include appropriate governance oversight of the service, including as a minimum regular review of comparative national audit (SSNAP) reports by an individual with board-level responsibility for stroke governance. All services providing stroke care should have a member of their board who has specific responsibility for stroke.

Evidence:
The Healthy NHS Board, A review of guidance and research evidence, 2010;
The Foundations of Good Governance, NHS Providers 2015

9. All local health systems and stroke networks should work urgently to improve access to reperfusion treatments for acute ischaemic stroke for their population, by reducing variation in the delivery of thrombolysis and extending out-of-hours coverage of regional thrombectomy services.

Evidence:
NICE Clinical Guideline NG128, 2019;
RCP National Clinical Guideline 2016;
Bray et al, 2016

10. Health Education England and regional postgraduate deans should take urgent action to reverse the decline in training in stroke medicine, as one step to rectify a situation in which nearly half of all stroke services are carrying a vacant consultant post for a median of 12 months. Without immediate action to improve the supply of trainee and consultant stroke physicians, the continuation of some stroke services will be jeopardised by the absence of consultants to deliver the service.

Evidence:
Meeting the Future Consultant Workforce Challenges 2019-22

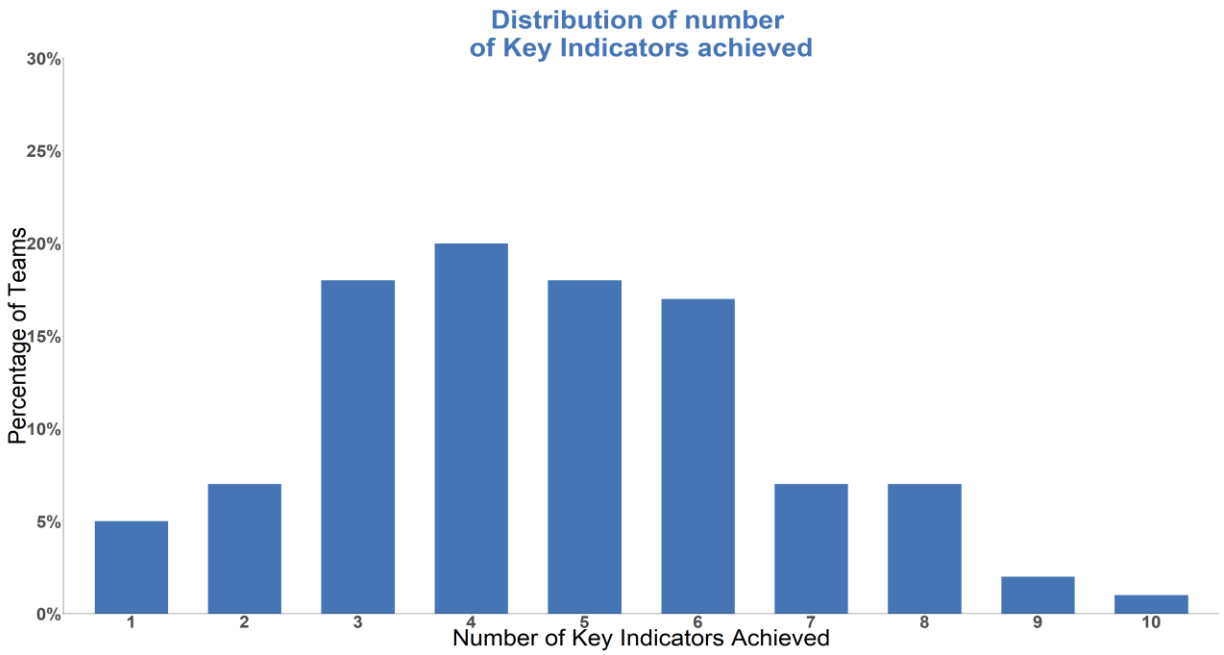
This report contains information on the following hospital(s):

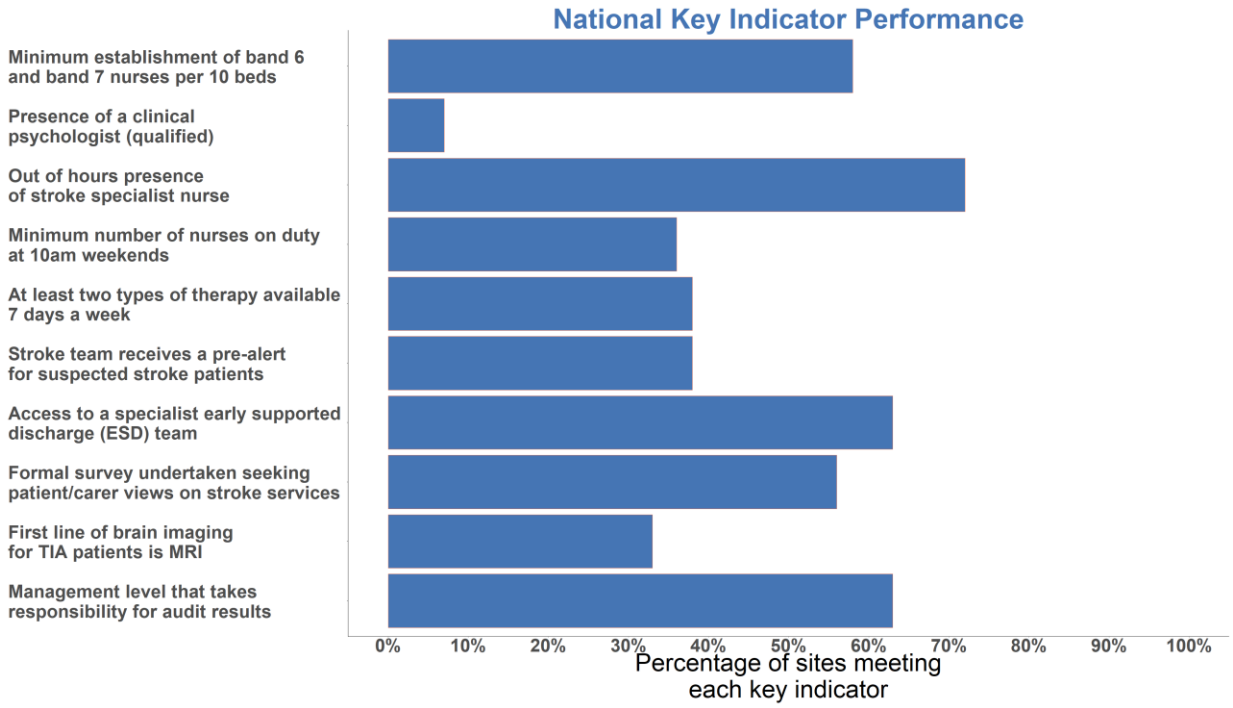
Musgrove Park Hospital

Overall achievement

Your site achieved: **6 out of 10 Key Indicators**

Nationally, the distribution of Key Indicators achievement is as follows:





Staffing/Workforce

Key Indicator 1: Minimum establishment of band 6 and band 7 nurses per 10 beds

	National	Your site
	58% (98/169)	Yes
Band 6 nurses WTE per 10 beds	1.9 (1.4-2.9) Median (IQR)	3.13
Band 7 nurses WTE per 10 beds	0.5 (0.4-0.8) Median (IQR)	1.65

This Key Indicator is achieved if the sum of band 6 and 7 (WTE) nurses per 10 stroke unit beds is equal to/above 2.375 per 10 beds.

Key Indicator 1

There has been an encouraging rise in the number of senior nurses on the establishment of stroke units, although there are still substantial differences within the UK, with fewer whole time equivalent senior nurses in stroke units in Wales and Northern Ireland than in England.

Many of the components of the effective intervention that is stroke unit care depend upon nursing skills (detection and monitoring of unstable or deteriorating patients, and the promotion of continence being just two examples) and so senior clinical leadership among stroke-skilled nurses is critical to reducing the population burden of disability after stroke.

There is now clear multi-professional guidance regarding nurse staffing for hyperacute and acute stroke units (available in the 2016 National Clinical Guideline for Stroke) and the competencies that they should possess, and hospitals should be following this guidance if they are to maximise the patient and organisational benefits of specialist stroke unit care.

Key Indicator 2: Presence of a qualified clinical psychologist

	National	Your site
	7% (12/169)	No
Clinical psychologist WTE per 30 beds (qualified)	0.1 (0-0.3) Median (IQR)	0

This Key Indicator is achieved if there is the presence of at least one (WTE) qualified clinical psychologist per 30 stroke unit (SU) beds.

Key Indicator 2

Unfortunately, there has been no change in the access that people with stroke, and complex cognitive and psychological needs have to expertise in clinical psychology, and this remains poor for the great majority. The median number of clinical psychologists working on UK stroke units in 2019 is unchanged from 2014 at 0.00.

The importance of clinical psychology within the stroke multidisciplinary team has been reiterated in recent national guidelines (RCP, 2016), but there remain what appear to be insurmountable barriers to improving access to psychological therapies for people with significant physical, psychological and cognitive disabilities as a result of stroke. A new approach may be required if this shortfall in provision is going to be rectified in the foreseeable future.

Seven Day Working

Key Indicator 3: Out of hours presence of stroke specialist nurse

	National	Your site
	71% (101/142)	Yes
Do you have stroke specialist nurses (band 6 or above) who undertake hyper-acute assessments of suspected stroke patients in A&E? (Out of hours)	71% (101/142)	Yes

This Key Indicator is achieved if "Yes" to Question 1.7, and congruent responses to Questions: 2.4, 2.6, 2.16, 2.18 (i.e. at least one nurse per 10 beds on 10pm weekdays, and 10am and 10pm. weekends).

Key Indicator 3

This is a new Key Indicator for this year's Acute Organisational Audit, and reflects the importance both of out-of-hours care and of getting access to stroke-specialist expertise at the first opportunity – the assessment of suspected stroke patients in Emergency departments by stroke specialist nurse(s) with appropriate seniority. This year the indicator is interpreted fairly liberally, in that any out-of-hours provision will qualify for the indicator, but centres intending to provide round-the-clock hyperacute stroke care should in reality be making provision for 24/7 access to specialist assessments at the front door. Without this, people with acute stroke being admitted to Emergency departments that are getting steadily busier year-on-year will face delays in assessment, diagnostic tests and critical early interventions such as stroke unit admission that will contribute to greater disability and poorer outcomes. Despite this, somehow 41 hospitals in the UK are ostensibly providing hyperacute stroke care with no access to early specialist nursing assessment for half of all their patients.

Key Indicator 4: Minimum number of nurses on duty at 10am weekends		
	National	**Your site**
	30% (42/142)	No
Nurses per 10 type 1 beds 10am Saturdays	3.3 (2.5-4.8) Median (IQR)	5
Nurses per 10 type 1 beds 10am Sundays	3.3 (2.5-4.8) Median (IQR)	5
Nurses per 10 type 3 beds 10am Saturdays	1.7 (1.4-2.1) Median (IQR)	1.58
Nurses per 10 type 3 beds 10am Sundays	1.8 (1.5-2.1) Median (IQR)	1.58
This Key Indicator is achieved if there are at least 3.0 nurses per 10 type 1 and 3 beds (average number of nurses on duty on type 1 and type 3 beds).		

Key Indicator 4

There is strong observational evidence from very large datasets that the ratio of registered nurses to patients on an acute stroke unit is a key determinant of early survival for people with stroke (Bray et al, 2014; Paley et al, 2018), even after adjustment for a range of other organisational factors that might be considered to contribute, including the number of consultant ward rounds. The strongest relationship is with the ratio of registered nurses at the weekend, which almost certainly reflects an organisation's commitment to provide round-the-clock care and remove fluctuations in care quality within and outside office hours.

Although there has been an encouraging increase in the number of hospitals that are taking this issue seriously and implementing the evidence, the proportion overall remains low at 30% and this leaves precisely 100 acutely admitting sites providing care with inadequate staffing levels to achieve the best outcomes for their hyperacute stroke patients.

Key Indicator 5: At least two types of therapy available 7 days a week		
	National	**Your site**
	38% (65/169)	Yes
Occupational Therapy (qualified)	5 days: 42% (71/169) 6 days: 20% (34/169) 7 days: 38% (64/169)	7
Physiotherapy (qualified)	5 days: 38% (64/169) 6 days: 16% (27/169) 7 days: 46% (78/169)	7
Speech & Language Therapy (qualified)	5 days: 78% (129/165) 6 days: 12% (19/165) 7 days: 10% (17/165)	5

This Key Indicator is achieved if there is 7-day working for at least two types of qualified therapy. Includes occupational therapy, physiotherapy and speech and language therapy.

Key Indicator 5

There has been an encouraging increase in access to physio, occupational and speech therapy at weekends over the last three years, allied to an increase in qualified therapist numbers on stroke units.

62% of units are providing physiotherapy (PT) on 6 or 7 days/week and 58% providing occupational therapy (OT). There is still substantial room for improvement in weekend speech and language therapy (SLT) provision, with only 22% of units providing SLT at weekends when there may be a greater opportunity to train visiting spouses and families in communication with people with aphasia.

These trends correspond with the change in the national guideline for stroke rehabilitation in 2016, which includes the recommendation that all appropriate therapies are offered not 5 but 7 days/week (National Clinical Guideline for Stroke, 2016), but it still leaves 90 stroke units with the overdue need to scrutinise their traditional rotas and working practices in order to improve therapy access across the whole week.

Access to specialist treatment and support

Key Indicator 6: Pre-alert to a relevant member of the stroke team

	National	Your site
	38% (54/142)	No
Do the stroke team receive a pre-alert from your ambulance crews for suspected stroke patients?		
Thrombolysis candidates	Yes: 80% (113/142) No: 11% (16/142) Sometimes: 9% (13/142)	Yes
All FAST positive	Yes: 69% (98/142) No: 11% (15/142) Sometimes: 20% (29/142)	Yes
All other suspected strokes	Yes: 37% (52/142) No: 15% (22/142) Sometimes: 48% (68/142)	Yes
If the stroke team receive a pre-alert, who is the call usually made to?		
Stroke Specialist Nurse	44% (63/142)	No
Stroke Junior Doctor on call	13% (19/142)	No
Stroke Consultant on call	12% (17/142)	No
This Key Indicator is achieved if the site pre-alerts for all stroke patients AND the individual pre-alerted is a stroke nurse, stroke consultant or junior stroke doctor.		

Key Indicator 6

This is another new Key Indicator in this year's audit, which again reflects the importance of the earliest possible access for people with suspected stroke to specialist expertise in the pre-hospital phase.

The number of conditions that require a pre-alert to Emergency Departments by an ambulance crew increases all the time, with the result that a pre-alert that goes only to the ED risks delay in onward transmission or being deprioritised among all the other competing urgencies in the ED. Direct communication between an ambulance crew and the stroke team allows the exchange of important clinical information and should expedite assessment and diagnosis for all cases of suspected stroke, not just those eligible for thrombolysis.

However, even with a fairly liberal interpretation of this indicator to include any grade of stroke junior doctor, fewer than 4 in 10 hyperacute sites are providing the sort of direct link with ambulance crews that should improve early specialist access for all suspected stroke and help to reduce door-to-needle time for thrombolysis cases. With the increasing importance of pre-hospital diagnostics in patient selection and the potential for diversion of suspected large artery occlusions, improving the direct access of pre-hospital clinicians to an appropriate hospital specialist is going to become an increasingly important aspect of everyday hyperacute stroke care.

Key Indicator 7: Access to a specialist (stroke/neurological specific) early supported discharge team		
	Overall	**Your site**
	63% (107/169)	Yes
Do you have access to at least one stroke/neurology specific early supported discharge multidisciplinary team?	85% (143/169)	Yes
What percentage of your patients has access to at least one of these teams if needed?	100 (67-100) Median (IQR)	100%
This Key Indicator is achieved if the hospital has access to at least one stroke/neurology specific early supported discharge multidisciplinary team AND at least 66% of patients have access to at least one of the teams if needed.		

Key Indicator 7

Access for people with stroke to early supported discharge, at a level of therapy intensity that is equivalent or better than that available by remaining as an in-patient, is a key intervention in stroke rehabilitation with benefits for patients and for organisations. As such, it is recommended by expert guidelines (RCP, 2016) and the 2016 NICE Quality Standard as a key component of a comprehensive stroke service.

For this year's audit, the threshold has been raised by linking the Key Indicator to population coverage – only those services with coverage of at least two-thirds of their population are considered to have achieved the indicator. Given the length of time that the evidence of benefit from early supported discharge has been available and the strength and breadth of the evidence base, all stroke services should be providing full coverage, but despite this, over a third of services are still not doing so and this situation needs to be remedied urgently so that all patients have equal access to this effective intervention.

Patient and carer engagement

Key Indicator 8: Formal survey undertaken seeking patient/carer views on stroke services

	Overall	Your site
	56% (95/169)	Yes
How often is there a formal survey seeking patient/carer views on stroke services? (This does not include the Friends and Family Test)	Never: 21% (35/169) <1/year: 23% (39/169) 1-2/year: 20% (33/169) 3-4/year: 4% (6/169) >4/year: 8% (14/169) Continuous: 25% (42/169)	More than 4 a year

This Key Indicator is achieved if a formal survey is undertaken seeking patient/carer views on stroke services at least once a year.

Key Indicator 8

It is disappointing to find this year that the proportion of sites that are seeking the views of patients and carers, even as infrequently as once a year, has fallen to little over a half.

At the same time fewer than half of sites have patient or carer representation on their strategic planning group.

Learning from the experiences of people with stroke and their carers takes time and effort and is rarely afforded the resources needed to be done properly. However, for patient-centred care to be anything more than mere tokenism, that effort is needed and typically more than pays off in the insight that it yields into the lived experience of being a person with stroke and will contribute to improvements in the patient and carer experience of stroke services.

Transient Ischaemic Attack (TIA) service

Key Indicator 9: First line of brain imaging for TIA patients is MRI

	Overall	Your site
	33% (56/169)	No
Which imaging modality do you most frequently use in your neurovascular clinic for suspected TIAs?		
First line brain imaging	CT: 50% (85/169) MRI: 45% (76/169) Rarely: 5% (8/169)	Magnetic Resonance Imaging
Within what timescale can you see, investigate and initiate treatment for ALL your TIA patients?		
Outpatient	99% (160/162)	Yes
Outpatient timescale	Same day: 31% (50/160) Same weekday: 26% (41/160) Next day: 14% (23/160) Next weekday: 8% (13/160) Within a week: 19% (31/160) Within a month: 1% (2/160) More than a month: 0% (0/160)	Within a week

This Key Indicator is achieved if the answer to question 4.10a is MRI, and question 7.11 is next weekday, the next day, the same day (5 days a week) or the same day (7 days a week).

Key Indicator 9

This new Key Indicator for 2019 reflects the recommendation from the 2019 NICE Guidelines for acute stroke and TIA (NG128) that if brain imaging is to be used in TIA, then it should be same-day MRI and include diffusion-weighted and blood-sensitive sequences. The NICE Guideline specifically advises against the use of CT as first-line imaging other than in specific circumstances.

45% of sites providing TIA services are now using MRI as first-line brain imaging, but the proportion meeting this standard to just over a third when applying the relatively liberal criterion that MRI should be performed at least by the next working day. The argument that scarcity of MRI, or other competing demands, precludes its use for TIA clinics is undermined by the experience of a significant number of TIA services, and rapid progress is now required to ensure that MRI becomes universally available in support of all TIA services.

Quality Improvement and Leadership

Key Indicator 10: Management level that takes responsibility for audit results

	Overall	Your site
	63% (106/169)	Yes
What level of management takes responsibility for the follow-up of the results and recommendations of the Sentinel Stroke Audit?		
Executive on the Board	58% (98/169)	Yes
Non-executive on the Board	17% (28/169)	No
Chairman of Clinical Governance (or equivalent)	25% (43/169)	Yes

This Key Indicator is achieved if the answer to question 9.1 is one of Executive on the Board, Non-executive on the Board, or Chairman of Clinical Governance.

Key Indicator 10

Achieving sustained quality improvement in stroke services depends critically on the highest level organisational commitment, something which varies significantly across the UK. There has been a concerning decline in the involvement of board-level officers (executive and non-executive board members) in strategic planning for stroke services and in taking responsibility for the implementation of findings from national comparative audit.

At the very least, it should be essential for the Chairman of Clinical Governance to have oversight of national stroke audit at least once a year, and it is disconcerting to see that for over a third of stroke services, visibility of comparative audit in stroke does not rise above directorate level. Although it is a responsibility on clinical leads of stroke services to pursue board-level understanding of and commitment to such an important area of any hospital's activity, if this is met by disengagement from senior decision makers it is sure to create problems with quality improvement in stroke when set against the multitude of other competing organisational pressures. We must hope that the significance given to stroke (at least in England) in the NHS Long Term Plan reverses this decline and leads to renewed board-level engagement with stroke services and planning as this is critical to national quality improvement and the reductions in clinical variation that we all want to see.