Sentinel Stroke National Audit Programme (SSNAP)

Help notes for Acute Organisational Audit 2021

Department of Population Health Sciences, King's College London

On behalf of the Intercollegiate Stroke Working Party

Introduction

The Sentinel Stroke National Audit Programme (SSNAP) is a major national healthcare quality improvement programme based in the School of Population Health and Environmental Studies at King's College London. SSNAP measures the quality and organisation of stroke care in the NHS and is the single source of stroke data in England, Wales, and Northern Ireland. SSNAP measures both the processes of care (clinical audit) provided to stroke patients, as well as the structure of stroke services (organisational audit) against evidence based standards, including the 2016 National Clinical Guideline for Stroke. The overall aim of SSNAP is to provide timely information to clinicians, commissioners, patients, and the public on how well stroke care is being delivered so it can be used as a tool to improve the quality of care that is provided to patients.

Definition of a site

Historically some larger trusts with several disparate sites may have registered each site separately to identify the differences between them. A site may include several hospitals, and some include more than one trust. The term "site" is used throughout the proforma and questions relate to services across the site as constituted by the registration form and name of the site. They will receive individualised reports indicating their trust name and the site name. Where there is collaboration between trusts the name of the collaborating trust will also appear on the report.

The audit tool

The organisational audit data will be collected via a web-based form on the internet to provide good quality data, and to speed up the analysis and reporting. There will be data validation checks to the system.

Data sources

The organisational audit uses hospital admissions data and management information. It requires the auditor to have access to information regarding the organisation of stroke services and **it should reflect the organisation of the service on 1 October 2021.**

COVID-19 response

You should complete the audit questionnaire describing your service on the 1 October 2021. If you have had to reorganise as a temporary or permanent response to COVID-19 then please report this reorganised service and not as per your previously commissioned service.

Data collection

Data collection will take place between 1 October and 29 October 2021. A checking week will take place between 1-5 November 2021; sites must lock and export their data by the 29 October deadline. Once data are exported centrally on 5 November for analysis, it will not be possible to change answers. Notify the helpdesk immediately if you anticipate any potential delays by email: ssnap@kcl.ac.uk.

Auditors

As previously, data will be collected by local trust or health board staff. The proforma should be completed by anyone in a position senior enough to have access to the information. This would normally be a clinical manager or senior member of the clinical staff. In order to promote the reliability of the results anyone completing the audit proforma should have access to the Help Booklet and the advice on screen accessed via the Help Button in the online version. The discipline and identity of the auditor will be known due to webtool registration.

Data quality

Clinical involvement and supervision - Each trust will have a designated lead clinician who will have overall responsibility with the audit department for the data quality from their trust.

Data analysis and reporting

As for the previous rounds of the audit, data analysis would be carried out with full statistical support at the Department of Population Health Sciences, King's College London.

For further information please contact the SSNAP Helpdesk

ssnap@kcl.ac.uk

SECTION ONE: ACUTE PRESENTATION

Question No	Data Item	Answer options	Audit Help Notes
1.1	Which of the following options best describes the service at your site for patients during the first 72 hours after stroke? (i) We treat all of these patients (ii) We treat some of these patients (iii) We treat none of these patients		This question has been included to take account of formal regional arrangements by which ALL patients are treated at another site for the first 72 hours before being repatriated for post 72hour care. This is a very specific category of hospitals. This question should be answered on the basis of what happens generally, not what happens in exceptional examples. Please select one option only. • Option (i) will be chosen by the majority of hospitals. • Option (ii) will be chosen only by hospitals which have formal arrangements by which they treat patients for the first 72 hours 'some' of the time e.g. on a rotational basis. • Option (iii) will be chosen only by hospitals which have formal arrangements by which they do not treat patients during the first 72 hours e.g. London SUs.
1.1(a)	If 1.1(iii) is chosen: Give the SSNAP site code of the main hospital treating your patients for the first 72 hours		If 1.1(iii) is chosen, you are asked to select the MAIN hospital treating your patients for the first 72 hours. NB Your site code (for the Organisational Audit) will differ from your SSNAP team code (for the clinical audit). If 1.1(iii) is chosen, you will not be able to answer any questions related to pre-72hour care i.e. the remainder of Section 1 (Q1.2-1.22), Section 2A (Q2.2-2.7a) and Section 2C (Q2.14-2.19a). If more than one hospital provides care for your patients for the first 72 hours, please select the site from which the majority of patients are repatriated. Please contact the SSNAP helpdesk if you have queries about how to answer this question.

Question No	Data Item	Answer options	Audit Help Notes
1.2	Have you made any changes to your stroke service as part of the response to the COVID pandemic?		Must answer either yes/no.
1.2(a)	If yes to 1.2: Which of the following were made?	Virtual assessment by a stroke clinician in the pre-hospital setting; 24/7 virtual assessment (on arrival at acute hospital) by a stroke physician; Tele-stroke network; Separate pathways for COVID-19 positive and negative stroke patients (across several hospitals) for virtual assessment; Virtual ward rounds or multidisciplinary team (MDT) meetings; Decision support software (AI) use; Virtual triage of patients with suspected TIA or minor stroke; Use of one-lead ECG devices to assess heart rhythm; Patient self-reporting of blood pressure readings; Other	Can select multiple options but at least one option must be selected. Virtual assessment via telemedicine must include the option to view the patient via video if required.
1.2(b)	If yes to 1.2: As of 1 October 2021, are any of these changes still in place?		Must answer either yes/no.

Question No	Data Item	Answer options	Audit Help Notes
1.3	Most of the time, who is the first person **from any team** to review a patient presenting to hospital with a suspected stroke?	(i) Stroke Specialist Nurse (ii) Stroke Junior Doctor (CMT/Foundation Trainee) (iii) Stroke trained Registrar/Fellow (iv) General Medical Registrar (v) Stroke Specialist / General Neurology Consultant (vi) Other Medical Specialty Consultant (vii) ED Consultant (viii) ED Junior Doctor/Registrar (ix) Neurology Junior Doctor/Registrar (x) Telemedicine link to own Trust Stroke Consultant (xi) Telemedicine link to regional network Consultant	In hours is between 08.00-18.00 Monday to Friday. Out of hours is all days and times outside this range. Select one option for in hours and one option out of hours. If more than one option is applicable, please select the most frequent.
1.4	Most of the time, who is the first person **from the stroke team** to review a patient presenting to hospital with a suspected stroke?	(i) Stroke Specialist Nurse (ii) Stroke Junior Doctor (CMT/Foundation Trainee) (iii) Stroke trained Registrar/Fellow (iv) General Medical Registrar (v) Stroke Specialist / General Neurology Consultant (vi) Other Medical Specialty Consultant (vii) ED Consultant (viii) ED Junior Doctor/Registrar (ix) Neurology Junior Doctor/Registrar (x) Telemedicine link to own Trust Stroke Consultant (xi) Telemedicine link to regional network Consultant	Select one option in hours and one option out of hours. In hours is between 08.00-18.00 Monday to Friday Out of hours is all days and times outside this range If more than one option is applicable, please select the most frequent.

Question No	Data Item	Answer options	Audit Help Notes
1.5	What initial acute brain imaging do you request for the following?	(i) Clinical suspicion of stroke eligible for thrombolysis (ii) Clinical suspicion of stroke eligible for thrombolysis & possible thrombectomy (iii) Clinical suspicion of stroke but over 4.5 hours since onset of symptoms (iv) Clinical suspicion of posterior circulation stroke but not a thrombolysis candidate (v) Clinical suspicion of alternative neurological diagnosis	CT = Computerised tomography CTA =CT angiography CTP= CT perfusion MRI= Magnetic resonance imaging Select only one option for each of i-v.
1.6	Who is ultimately responsible for initial review of brain imaging to inform decisions about thrombolysis / referral for thrombectomy?	(i) Stroke Consultant on site (ii) Stroke Consultant remotely via PACS (iii) Stroke Registrar (iv) Stroke Junior Doctor (v) Neuroradiologist (vi) General Radiologist (vii) "Reporting Hub" (viii) ED Consultant/Registrar (ix) Medical Consultant/Registrar (x) Stroke consultant at own Trust via telemedicine link (xi) Stroke consultant in region/network via telemedicine link	Select one option for in hours and one option for out of hours. In hours is between 08.00-18.00 Monday to Friday Out of hours is all days and times outside this range.
1.6(a)	Are you using artificial intelligence software for any part of the interpretation of your acute stroke imaging?		Artificial Intelligence (AI) is the use of a non-human software package to interpret brain imaging, even if the imaging is also subsequently interpreted by a radiologist. Examples of AI used in acute stroke imaging are Brainomix, RAPID, OLEA, MiSTAR, NICOLab, etc.

Question No	Data Item	Answer options	Audit Help Notes
1.7	If not during initial assessment, is brain imaging subsequently reviewed by a radiologist with a specific competency in neurovascular imaging in the following patient groups?	a) Thrombolysis patients b) Large Vessel Occlusion c) All stroke patients Yes, always; Yes, sometimes; Yes, rarely; No	Must select one option only for each column (Thrombolysis patients, Large Vessel Occlusion, all stroke patients) A radiologist with specific competency in neurovascular imaging is: a doctor that the trust Medical Director is satisfied has competency in neurovascular imaging as judged by their annual appraisal and revalidation process.
1.8	Do you have stroke specialist nurses (band 6 or above) who undertake hyper-acute assessments of suspected stroke patients in ED?		Select one option for in hours and one option for out of hours. In hours is between 08.00-18.00 Monday to Friday Out of hours is all days and times outside this range.

Question No	Data Item	Answer options	Audit Help Notes
1.9	Are your stroke specialist nurses counted within your ward based nurse establishment? *(i.e. they are not supernumerary to your ward based nurses)?* *(Select one option for in hours and one option for out of hours)*		Select one option for in hours and one option for out of hours In hours is between 08.00-18.00 Monday to Friday Out of hours is all days and times outside this range. These are specialist nurses whose clinical responsibilities are outside the stroke unit. Must select one option only for each column in hours and out of hours
1.10	Do you ever use video telemedicine to review patients with your ambulance crews?		Must answer either yes/no.

Question No	Data Item	Answer options	Audit Help Notes
1.11	Do the stroke team receive a pre-alert (telephone or video call) from your ambulance crews for suspected stroke patients?	Thrombolysis candidates only; All FAST positive; All other suspected stroke;	Must answer either yes/no/sometimes for each type of stroke.
1.12	If the stroke team receive a pre-alert, who is the call usually made to?	Stroke Specialist Nurse; Directly to the Emergency Department; Stroke Junior Doctor on call; Stroke Consultant on call; CT control room; Call to Stroke ward / HASU;	Must select one option only. If more than one option is applicable, please select the most frequent.

Question No	Data Item	Answer options	Audit Help Notes
1.13	If the stroke team receive a pre-alert, what information are they usually given by the paramedic crew?	Name; Date of birth; Symptoms; Time of onset; BP measurement by Paramedics; List of medications; NHS number; Only that patient is on their way;	Can select multiple options but at least one option must be selected

Question No	Data Item	Answer options	Audit Help Notes
1.14	Where are suspected stroke patients that arrive by ambulance usually taken for assessment?	Emergency Department ; HASU/ASU ; Neurology Ward ; Combined stroke/neurology ward ; Acute Medical Unit ; HDU/ITU/CCU ; CT scan ;	Select one option for potential thrombolysis patients and one option for all other suspected stroke patients.
1.15	Do you routinely admit patients with subarachnoid haemorrhage to your stroke unit?		Must select one option only Routinely means these patients are specifically included in the stroke pathway, as opposed to opportunistically if there is the need for a bed

Question No	Data Item	Answer options	Audit Help Notes
1.16	Do you routinely admit patients with subdural haematoma to your stroke unit?		Must select one option only Routinely means these patients are specifically included in the stroke pathway, as opposed to opportunistically if there is the need for a bed
1.17	Does the stroke service at your site use telemedicine to allow remote access for the management of acute stroke care?		Must select one option only Telemedicine: must include the option to view the patient via video if required
1.18	Which of the following do you use:	i. Remote viewing for brain imaging ii. Video enabled clinical assessment	Tick all that apply
1.19	Do you operate a telemedicine rota with other hospitals?		Must select one option only Telemedicine: must include the option to view the patient via video if required

Question No	Data Item	Answer options	Audit Help Notes
1.20	Which of the following groups of patients are assessed using telemedicine?	Only patients potentially eligible for thrombolysis ; Some patients (regardless of eligibility for thrombolysis) ; All patients (who require assessment during times when telemedicine is in use) ;	Must select one option only Telemedicine: must include the option to view the patient via video if required
1.21	How many acute stroke mimics have been seen by the stroke team in ED or any non-stroke emergency admissions area during the past month?		Stroke mimics are patients who are assessed by the stroke team as a suspected stroke but whose final diagnosis is not a stroke. Please answer within a range of 0-999. Past month is 1-30 September 2021. If the exact number is not known, please provide an estimate
1.22	In the last three months, how many stroke mimics have received thrombolysis?		Stroke mimics are patients who are assessed by the stroke team as a suspected stroke but whose final diagnosis is not a stroke. Please answer within a range of 0-999. If the exact number is not known, please provide an estimate

SECTION TWO: STROKE UNITS

Question No	Data Item	Answer options	Audit Help Notes
2.1	Please give the following details on type and number of stroke unit beds for each of these hospitals:	a) Full name of hospital b) Total number of stroke unit beds (can be 0) c) **Type 1 beds**: Number of stroke unit beds **solely** for patients in first 72 hours after stroke d) **Type 2 beds:** Number of stroke unit beds **solely** for patients beyond 72 hours after stroke e) **Type 3 beds**: Number of stroke unit beds used for **both** pre- and post-72 hour care	Please give details for each of the acute hospitals entered for A.1 See definition of acute hospitals in A.1 Stroke unit beds solely for patients in first 72 hours after stroke – **Type 1 bed** Stroke unit beds solely for patients beyond 72 hours after stroke – **Type 2 beds** Stroke unit beds used for both pre- and post-72-hour care – **Type 3 beds**
SECTION 2A: STROKE UNITS – Beds for patients in *first 72 hours* after stroke (Type 1 beds). Care on stroke unit beds used solely for patients in the first 72 hours after stroke (please answer based on ALL beds noted in 2.1 (c) TYPE 1 beds			
2.2	How many of these beds have continuous physiological monitoring (ECG, oximetry, blood pressure)?		Please answer within a range of 0-200. If monitors are not fixed, answer according to the number of beds which can have concurrent use of mobile monitors. Ensure the figure entered is not more than total for 2.1(c).

Question No	Data Item	Answer options	Audit Help Notes
2.3	How many stroke consultant ward rounds are conducted on your acute stroke ward per week?		**Stroke specialist consultant** – A consultant with specialist skills in stroke. A stroke specialist has expertise in all 3 principal areas of stroke management (Prevention, Acute Stroke, Stroke Rehabilitation). This question reflects the NHS England 7 day working standard for acute care. This question should reflect the number of times a week a specialist stroke consultant ward round is carried out directly review stroke patients. If you have 2 consultant ward rounds 7 days a week, please enter 14. If there is more than one location for these beds, please give an average e.g. if there are 20 beds overall and 10 have ward rounds 7 times a week and the other 10 have ward rounds 5 times a week, you should put 6. If you have any permutations outside of this, please contact the SSNAP helpdesk ssnap@kcl.ac.uk). Please answer within a range of 0-21.
2.4	How many of the following nursing staff are there usually on duty at 10AM for these beds?	i. Registered nurses ii. Care assistants	This question refers to the number of *individuals* on the ward at 10am. Registered nurses are defined as those registered with the NMC as Registered Nurses (Adult). Care assistant includes the terms “health care support worker”, “nursing auxiliary”, or “generic worker”. Enter 0 if no staff of that grade. However, the total number of nursing staff (registered nurses and/or care assistants) must be more than 0 for each time period.

Question No	Data Item	Answer options	Audit Help Notes
			As this question refers to individuals, only whole numbers are permitted. Only the nursing staff for the beds which are solely used for patients in the first 72 hours after stroke (i.e. the total entered for 2.1(c)) *(N.B Do not double count nurses entered into 2.09 or 2.16)*
2.5	How many nurses are there usually on duty for these beds at 10AM who are trained in the following?	i. Swallow screening ii. Stroke assessment and management	Swallow screening refers to a formal swallow screen (performed by any member of the team). Presence or absence of the gag reflex is not sufficient as it is proven to be of little prognostic value for the ability to swallow. A nurse trained in 'stroke management' would have stroke specific clinical experience i.e. can monitor for deterioration of symptoms and take necessary steps.. Enter 0 if no nursing staff with this specific training are on duty at 10am. As this question refers to individuals, only whole numbers are permitted. Only the nursing staff for the beds which are solely used for patients in the first 72 hours after stroke (i.e. the total entered for 2.1(c)). Cannot be more than 2.4(i) for each time period. *Please do not double count any nurses listed in 2.10 and 2.17*
2.6	How many of the nurses are there usually on duty for these beds at 10PM?	i. Registered nurses ii. Care assistants	This question refers to the number of *individuals* on the ward at 10pm. Registered nurses are defined as those registered with the NMC as Registered Nurses (Adult) Care assistant includes the terms "health care support worker", "nursing auxiliary", or "generic worker".

Question No	Data Item	Answer options	Audit Help Notes
			Enter 0 if no staff of that grade. However, the total number of nursing staff (registered nurses and/or care assistants) must be more than 0 for each time period. Only the nursing staff for the beds which are solely used for patients in the first 72 hours after stroke (i.e. the total entered for 2.1(c)). As this question refers to individuals, only whole numbers are permitted. *Please do not double count any nurses/care assistants listed in 2.11 and 2.18*
2.7	What is the total establishment of whole-time equivalents (WTEs) of the following bands of nurses for your Type 1 beds (beds solely for patients in the first 72 hours after stroke) in your site?	Band 1 ; Band 2 ; Band 3 ; Band 4 ; Band 5 ; Band 6 ; Band 7 ; Band 8a ; Band 8b ; Band 8c	**WTEs** - Whole Time Equivalent An WTE of 1.0 means that the person is equivalent to a full-time worker, while an WTE of 0.5 signals that the worker is half-time etc. This should exclude stroke specialist nurses who spend the majority of their shift in clinical areas other than the stroke unit, e.g., Emergency Department or other acute admissions areas. Answer required for all Bands (1-8c) Enter 0 if no establishment. Must be a number, can be up to 3 decimal places.
2.7a	How are your type 1 beds currently funded?	Block contract ; Payment by results (PBR) ; Uplifted/enhanced tariff ; Unfunded (at risk) ; Not known ;	Select only one option

Question No	Data Item	Answer options	Audit Help Notes
		Site in Wales or N/Ireland (N/A) ;	
SECTION 2B: STROKE UNITS – Beds for patients *beyond 72 hours* after stroke (Type 2 beds) Care on stroke unit beds used solely for patients beyond 72 hours after stroke (please answer based on ALL beds noted in 2.1 (d).			
2.8	How many days per week is there a stroke specialist consultant ward round for these beds?		**Stroke specialist consultant** – A consultant with specialist skills in stroke. A stroke specialist has expertise in all 3 principal areas of stroke management (Prevention, Acute Stroke, Stroke Rehabilitation). If there is more than one location for these beds, please give an estimated average e.g. if there are 20 beds overall and 10 have ward rounds 7 times a week and the other 10 have ward rounds 5 times a week, you should put 6. If you have permutations outside of this, please contact the SSNAP helpdesk. Please answer within a range of 0-7.
2.9	How many of the following *nursing* staff are there usually on duty at 10AM for these beds?	i. Registered nurses ii. Care assistants	This question refers to the number of individuals on the ward at 10am. Registered nurses are those defined as registered with the NMC as Registered Nurses (Adult) Care assistant includes the terms “health care support worker”, “nursing auxiliary”, or “generic worker”. Please enter 0 if no staff of that grade on duty at 10am. However, the total number of nursing staff (registered nurses and/or care assistants) must be more than 0 for each time period. Only the nursing staff for the beds which are solely used for patients beyond the first 72 hours after stroke (i.e. the total entered for 2.1(d)/ do not double count any nurses/care assistants listed in 2.4 and 2.16)

Question No	Data Item	Answer options	Audit Help Notes
			As this question refers to individuals, only whole numbers are permitted. Please answer within a range of 0-99 for each of weekdays, Saturdays, Sundays/bank holidays.
2.10	How many nurses are there usually on duty for these beds at 10AM who are trained in the following?	i. Swallow screening ii. Stroke assessment and management	Swallow screening refers to a formal swallow screen (performed by any member of the team). Presence or absence of the gag reflex is not sufficient as it is proven to be of little prognostic value for the ability to swallow. A nurse trained in 'stroke management' would have stroke specific clinical experience i.e. can monitor for deterioration of symptoms and take necessary steps. Please enter 0 if no nursing staff with this specific training are on duty at 10am. As this question refers to individuals, only whole numbers are permitted. Only the nursing staff for the beds which are solely used for patients beyond the first 72 hours after stroke (i.e. the total entered for 2.1(d)). Please *do not double count any nurses listed in* listed in 2.5 and 2.17. Please answer within a range of 0-99 for each of weekdays, Saturdays, Sundays/bank holidays.
2.11	How many of the following nursing staff are there usually on duty at 10PM for these beds?	i. Registered nurses ii. Care assistants	This question refers to the number of *individuals* on the ward at 10pm. Registered nurses are defined as those registered with the NMC as Registered Nurses (Adult)

Question No	Data Item	Answer options	Audit Help Notes
			Care assistant includes the terms “health care support worker”, “nursing auxiliary”, or “generic worker”. Please enter 0 if no staff of that grade. on duty at 10pm. However, the total number of nursing staff (registered nurses and/or care assistants) must be more than 0 for each time period. As this question refers to individuals, only whole numbers are permitted. Only the nursing staff for the beds which are solely used for patients beyond the first 72 hours after stroke (i.e. the total entered for 2.1(d)). Please do not double count any nurses/care assistants listed in 2.6 and 2.18.
2.12	What is the total establishment of whole-time equivalents (WTEs) of the following bands of nurses for Type 2 beds? (beds solely for patients beyond 72 after stroke) in your site?	Band 1 ; Band 2 ; Band 3 ; Band 4 ; Band 5 ; Band 6 ; Band 7 ; Band 8a ; Band 8b ; Band 8c	**WTEs** - Whole Time Equivalent An WTE of 1.0 means that the person is equivalent to a full-time worker, while an WTE of 0.5 signals that the worker is half-time etc. This should exclude stroke specialist nurses who spend the majority of their shift in clinical areas other than the stroke unit, e.g., Emergency Department or other acute admissions areas. Answer required for all Bands (1-8c) Enter 0 if no establishment. Must be a number, can be up to 3 decimal places.
2.13	How are your type 2 beds currently funded?	Block contract ; Payment by results (PBR) ; Uplifted/enhanced tariff ; Unfunded (at risk) ;	Select only one option

Question No	Data Item	Answer options	Audit Help Notes
		Not known ; Site in Wales or N/Ireland (N/A) ;	
SECTION 2C: STROKE UNITS – Beds for both *pre and post-72-hour care (Type 3 beds)* Care on stroke unit beds which are used for both pre and post-72 hour care (please answer based on ALL beds noted in 2.1(e).			
2.14	How many of these beds have continuous physiological monitoring (ECG, oximetry, blood pressure)?		If monitors are not fixed, answer according to the number of beds which can have concurrent use of mobile monitors. Please answer within a range of 0-200. Ensure the figure entered is not more than total for 2.1(e).
2.15	How many stroke consultant ward rounds are conducted on your acute stroke ward per week?		**Stroke specialist consultant** – A consultant with specialist skills in stroke. A stroke specialist has expertise in all 3 principal areas of stroke management (Prevention, Acute Stroke, Stroke Rehabilitation). This question reflects the NHS England 7 day working standard for acute care. This question should reflect the number of times a week a specialist stroke consultant ward round is carried out directly review stroke patients. If you have 2 consultant led ward rounds 7 days a week please enter 14. If there is more than one location for these beds, please give an estimated average e.g. if there are 20 beds overall and 10 have ward rounds 7 times a week and the other 10 have ward rounds 5 times a week, you should put 6. If you have permutations outside of this please contact the SSNAP helpdesk. Please answer within a range of 0-21.

Question No	Data Item	Answer options	Audit Help Notes
2.16	How many of the following nursing staff are there usually on duty at 10AM for these beds?	i. Registered nurses ii. Care assistants	This question refers to the number of individuals on the ward at 10am. Registered nurses are defined as those registered with the NMC as Registered Nurses (Adult) Care assistant includes the terms “health care support worker”, “nursing auxiliary”, or “generic worker”. Enter 0 if no staff of that grade. *(N.B. Please do not double count any nurses/care assistants listed in 2.4 and 2.9. Only the nursing staff for the beds which are solely used for patients' pre and post 72 hour care (i.e. the total entered for 2.1e.)* Please answer within a range of 0-99.
2.17	How many nurses are there usually on duty at 10AM for these beds who are trained in the following?	i. Swallow screening ii. Stroke assessment and management	Swallow screening refers to a formal swallow screen (performed by any member of the team). Presence or absence of the gag reflex is not sufficient as it is proven to be of little prognostic value for the ability to swallow. A nurse trained in ‘stroke management’ would have stroke specific clinical experience i.e. can monitor for deterioration of symptoms and take necessary steps.. Please do not double count any nurses listed in 2.5 or 2.10. Enter 0 if no nursing staff with this specific training are on duty at 10am, As this question refers to individuals, only whole numbers are permitted. Cannot be more than 2.16(i) for each time period.

Question No	Data Item	Answer options	Audit Help Notes
2.18	Type 3 beds (beds used for pre and post-72 hours only). How many of the following *nursing* staff are there usually on duty at 10PM for these beds?	i. Registered nurses ii. Care assistants	This question refers to the number of individuals on the ward at 10am. Registered nurses are defined as those registered with the NMC as Registered Nurses (Adult) Care assistant includes the terms “health care support worker”, “nursing auxiliary”, or “generic worker”. Please do not double count any nurses listed in 2.6 or 2.11 – if the nurses are across both types of bed, please estimate. Please enter 0 if no nursing staff on duty at 10am. However, the total number of nursing staff (registered nurses and/or care assistants) must be more than 0 for each time period. As this question refers to individuals, only whole numbers are permitted.
2.19	What is the total establishment of whole-time equivalents (WTEs) of the follow band of nurses for Type 3 beds? (beds for both pre and post-72 hour care) (enter 0 of no establishment)	Band 1 ; Band 2 ; Band 3 ; Band 4 ; Band 5 ; Band 6 ; Band 7 ; Band 8a ; Band 8b ; Band 8c	**WTEs** - Whole Time Equivalent An WTE of 1.0 means that the person is equivalent to a full-time worker, while an WTE of 0.5 signals that the worker is half-time etc. This should exclude stroke specialist nurses who spend the majority of their shift in clinical areas other than the stroke unit, e.g., Emergency Department or other acute admissions areas. Answer required for all Bands (1-8c) Enter 0 if no establishment. Must be a number, can be up to 3 decimal places.

Question No	Data Item	Answer options	Audit Help Notes
2.19(a)	How are your type 3 beds currently funded?	Block contract ; Payment by results (PBR) ; Uplifted/enhanced tariff ; Unfunded (at risk) ; Not known ; Site in Wales or N/Ireland (N/A) ;	Select only one option

SECTION THREE: THROMBOLYSIS AND THROMBECTOMY

Question No	Data Item	Answer options	Audit Help Notes
3.1	Where are the majority of your patients thrombolysed for each procedure?	Emergency Department ; In the CT scanner ; Where your Type 1 or Type 3 beds are based ; CCU/ITU/HDU ; Acute Medical Unit /Medical Ward ; Neurology ward ;	Select one option for bolus and one for infusion
3.2	Are you a thrombectomy centre?		Select only one option
3.3	What are the hours of operation for your thrombectomy service?	Monday ; Tuesday ; Wednesday ; Thursday ; Friday ; Saturday and Sunday ;	Enter a value from 0-24 for each day. Each day must have an answer – it can be 0.
3.4	How many consultant level doctors from your site carry out thrombectomy?		Please answer within a range of 0-10. Please do not include doctors who work primarily at other sites - each doctor should only be counted at one site. Please include doctors who have performed 1 or more thrombectomy procedures.

3.4(a)	For each consultant performing thrombectomy, please state their specialty.	Interventional neuroradiology ; Vascular interventional neuroradiology ; Non-vascular interventional neuroradiology ; Cardiologist ; Neuro-surgeon ; Stroke Physician ; Other ;	If more than 10 consultant level doctors on the thrombectomy rota, please answer according to the 10 most frequently on the rota and include a comment indicating the precise number. Each row represents one speciality. Please select the speciality of each consultant by column, making sure that the number of columns completed matches the number of consultants entered in 3.4.
3.5	Do you refer appropriate patients to a thrombectomy centre?		Select only one option
3.6	Which centre do you refer patients to for thrombectomy?		If you refer patients to multiple thrombectomy centres, please select the centre which the majority of your patients are referred to from the supplied list.
3.7	For how many hours can you refer patients for thrombectomy each day?	Monday ; Tuesday ; Wednesday ; Thursday ; Friday ; Saturday and Sunday ;	Enter a value from 0-24 for each day. Each row must have an answer – it can be 0. This question refers to the hours within which your site can make a new referral to your receiving thrombectomy/Comprehensive Stroke centre. If you refer patients to multiple thrombectomy centres, please select the centre which the majority of your patients are referred to from the supplied list.
3.8	How many patients have you transferred to a thrombectomy centre that did not have the procedure in the 12 months prior to October 2021?		A patient is recorded as having had a thrombectomy if the procedure got to the point of groin puncture, even if the procedure failed, was abandoned or was discontinued. Range: 0-50

3.9	What is your usual process for IV thrombolysis prior to transfer for thrombectomy?	Give bolus and full infusion before transfer ; Give bolus and infusion but stop infusion at point patient ready to be transferred ; Give bolus and infusion which is continued in ambulance with support ; of stroke nurse on transfer ; Give bolus and infusion which is continued in ambulance with support ; of ED nurse on transfer ; Give bolus and infusion which is continued in ambulance with support ; from paramedic crew ; Process depends on ambulance service conveying patient ; (i.e. different protocols for different services) ;	Select one option only
3.10	Who usually makes the decision that there is a large vessel occlusion on CTA imaging prior to transferring for thrombectomy?	Stroke Junior Doctor making referral ; Stroke Consultant ; General Radiologist ; Neuroradiologist at your hospital ; Neuroradiologist at IAT Centre (if different) ; Stroke team at thrombectomy centre ; Remote tele-radiology service off site ; No service ;	In hours is between 08.00-18.00 Monday to Friday Out of hours is all days and times outside this range You must select one option for in hours and one option for out of hours.
3.11	When a patient requires conveyance to thrombectomy centre at what point do you call the first responder ambulance service?	Paramedic crew are kept on standby and not released from initial call ; At the point IV thrombolysis is complete ; At the point CTA suggests occluded vessel ; When accepted by thrombectomy centre ;	Select one option If multiple options are applicable, please select the most frequently used.
3.12	Do the stroke team use helicopter transfers for thrombectomy patients?		Select one option

3.13(a)	What is the average time between call to ambulance from acute hospital to arrival of ambulance crew at acute hospital for your last 5 cases / over last 12 months?	10-30mins ; 31-60mins ; 61-90mins ; 91-120mins ; >120 mins ;	Select one option
3.13(b)	What is the average time between arrival of the ambulance at the acute hospital to departure from acute hospital for your last 5 cases / over last 12 months?	10-30mins ; 31-60mins ; 61-90mins ; 91-120mins ; >120 mins ;	Select one option
3.14	What are your arrangements (governance processes) for discussion of patients referred for thrombectomy?	Most patients referred reviewed with thrombectomy centre as part of regional MDT ; Most patients referred reviewed locally as part of local MDT ; Informal feedback ; No regular discussion ;	Select one option

SECTION FOUR: SPECIALIST INVESTIGATIONS

Question No	Data Item	Answer options	Audit Help Notes
4.1	What is the usual inpatient waiting time for patients to receive carotid imaging?	(i) The same day (7 days a week) ; (ii) The same day (5/6 days a week) ; (iii) The next day ; (iv) The next weekday ; (v) Within a week ; (vi) Longer than a week ;	Select one option only Select the average waiting time for patients to receive carotid imaging
4.2	What is the usual inpatient waiting time for patients to receive carotid endarterectomy?	(i) The same day (7 days a week) ; (ii) The same day (5/6 days a week) ; (iii) The next day ; (iv) The next weekday ; (v) Within a week ; (vi) Longer than a week ;	Select one option only. Select the average waiting time for patients to receive carotid endarterectomy. Please provide an estimate if the exact number is not known.
4.3	Do you ever image intra-cranial vessels for your ischaemic stroke patients?	Yes; no	Select one option only
4.3a	If yes, to 4.3: Which of the following best describes your practice for imaging these vessels?	It is a routine investigation ; Only for patients that would be amenable to specific treatment if abnormality detected ;	Select one option only

Question No	Data Item	Answer options	Audit Help Notes
4.3b	If yes to 4.3: Which of the following methods do you usually use first line?	CTA ; MRA – (CEMRA) ; MRA – (ToF) ; No service ;	Select one option for in hours and one option for out of hours. In hours is between 08.00-18.00 Monday to Friday Out of hours is all days and times outside this range CTA – CT angiography MRA – CEMRA: Contrast enhanced magnetic resonance imaging, MRA - ToF: Time of flight magnetic resonance imaging
4.4	Do you image extra cranial vessels for your ischaemic stroke patients?	Yes; no	Select one option only
4.4a	If yes to 4.4: Which of the following best describes your practice for imaging these vessels?	It is a routine investigation ; Only for patients that would be amenable to specific treatment if abnormality detected ;	Select one option only

Question No	Data Item	Answer options	Audit Help Notes
4.4b	If yes to 4.4: Which imaging modality do you use as a first line to image extra-cranial vessels?	Doppler Ultrasound ; CTA ; MRA – (CEMRA) ; MRA – (ToF) ; No service ;	Select only one option for in hours and one option for out of hours In hours is between 08.00-18.00 Monday to Friday Out of hours is all days and times outside this range CTA – CT angiography MRA – CEMRA: Contrast enhanced magnetic resonance imaging, MRA - ToF: Time of flight magnetic resonance imaging
4.5	What is your usual pathway for detecting paroxysmal atrial fibrillation?	HASU telemetry monitoring ; Inpatient 24 hour tape ; Outpatient 24 hour tape ; Extended cardiac recording: 48 hours ; Extended cardiac recording: 5- 7 days ; Implantable loop recorder ; Transdermal patch (e.g. Ziopatch) ; Repeat extended 5-7 days cardiac monitor ;	If the pathway differs, please record the most common pathway List in the sequence of investigations you apply i.e. 1=1st, 2= 2nd etc. Choose " not available" if not available. You must answer every question with a number between 1 and 7,or "not available".
4.6	In which stroke patients do you normally perform echocardiography?	In the majority of patients post stroke ; Patients suggestive of cardioembolic source on brain imaging ; Patients with an abnormal ECG ; Patients with suspected valvular lesions ; Patients with new heart failure ; Patients with known heart failure ; We rarely do echocardiography (N/A) ;	Select all that apply, must choose at least one option.

Question No	Data Item	Answer options	Audit Help Notes
4.7	In which patients do you request a bubble contrast echocardiography?	All patients post stroke ; All patients with suspected cardioembolic source on brain imaging ; Patients with suspected cardioembolic source but initial ; transthoracic echocardiogram (TTE) normal ; We rarely do bubble contrast echocardiography (N/A) ;	Select all that apply, must choose at least one option
4.8	In which patients do you request a TOE (trans-oesophageal echo)?	All patients post stroke ; All patients with suspected cardioembolic source on brain imaging ; Patients with suspected cardioembolic source but initial ; transthoracic echocardiogram (TTE) normal ; We rarely do bubble contrast echocardiography (N/A) ;	Select all that apply, must choose at least one option.
4.9	Is PFO closure available locally for your stroke patients? (this refers to NHS rather than private provision)	Yes; no	Must select one option only
4.9a	If yes to 4.9: Are all patients discussed at a specialist stroke/cardiology MDT before PFO closure is offered?	Yes; no	Must select one option only

Question No	Data Item	Answer options	Audit Help Notes
4.10	Which imaging modality do you most frequently use in your neurovascular clinic for suspected TIAs?	a. First line brain imaging: CT; MRI; Rarely image TIAs b. First line carotid imaging Carotid Doppler ; CTA ; MRA – (CEMRA) ; MRA – (ToF) ; Rarely image TIAs ;	Select one option for First line brain imaging and one option for First line carotid artery imaging If you use more than one imaging modality, select the most commonly used CTA – CT angiography MRA – CEMRA: Contrast enhanced magnetic resonance imaging, MRA - ToF: Time of flight magnetic resonance imaging
4.11	How frequently do you use this first line brain imaging modality in your neurovascular clinic for suspected TIAs?	Brain; Carotid arteries: Frequently (>70%) Sometimes (30-70%) Rarely (<30%)	Select one option for brain and one option for carotid arteries A neurovascular clinic is defined as: A service for outpatient assessment and management of people presenting with suspected TIA or minor stroke, not requiring admission to hospital.

SECTION FIVE: SERVICES AND STAFF ACROSS ALL STROKE UNIT BEDS

Question No	Data Item	Answer options	Audit Help Notes
5.1	Does your stroke unit have access to the following within 5 days of referral? a. Social work b. Orthotics c. Orthoptics d. Podiatry/foot health	Social work Orthotics Orthoptics Podiatry/foot health	Can only tick one option for each (a), (b), (c) and (d) – must tick on for each This refers to 5 consecutive days (i.e. not working days).

Question No	Data Item	Answer options	Audit Help Notes
5.2	What is the total establishment of whole-time equivalents (WTEs) of the following qualified professionals and support workers for all your stroke unit beds? (Enter 0 if no establishment).	Enter total for both individual numbers and the WTE for the total establishment of these professionals and support staff. Total establishment being all roles fully staffed, including those currently unfilled. WTE can be up to 3 decimal points but if number of individuals 0 then WTE must also be 0. If professionals and support workers are generic i.e. cover non-stroke beds as well, please calculate proportion of time spent on stroke beds. E.g. WTE hours for a nurse overseeing a ward of 30 beds 10 of which are designated for stroke patients would be 1/3. Similarly, if professionals and support workers have allocated hours to spend solely with stroke patients, please indicate WTE hours as a proportion of total hours worked. Only tick the 6 day working or 7 day working if these professionals treat stroke patients **in relation to stroke management** at weekends **on the stroke unit.** Enter 0 if no establishment. **Clinical Psychology** – a person with a postgraduate qualification in clinical psychology trained in assessment and treatment of neurological impairments. **Dietetics –** A senior dietician with at least 2 years' experience. **Occupational Therapy -** The occupational therapy stroke service is under the overall supervision of an occupational therapist experienced in stroke rehabilitation supervising provision of the occupational therapy stroke service. Suggested guideline: five years' experience of which two will include stroke rehabilitation with evidence of continued professional development relating to stroke." **Physiotherapy -** Senior physiotherapist experienced in stroke rehabilitation or with access to specialist supervision as per CSP guidance **Speech & Language Therapy** - specialist in acquired neurological communication and swallowing difficulties **or** with access to specialist supervision. **Pharmacy** – a person who is qualified as a pharmacist. **Nursing staff (bands 6-8c)** - Qualified nurses are those defined as registered with the NMC as Registered Nurses (Adult) and specified by band. This should exclude stroke specialist nurses who spend the majority of their shift in clinical areas other than the stroke unit, e.g., Emergency Department or other acute admissions areas.	

Question No	Data Item	Answer options	Audit Help Notes
5.2(a)	How many MDT staff members are there usually on duty across all stroke beds at 10am who are trained in Level 1 & 2 psychological interventions (Enter 0 if none) in the following? (Enter 0 if none)	Weekdays; Saturdays; Sundays/Bank Holidays	Must enter a number for each of weekdays, Saturdays, Sundays/bank holidays. Please answer within a range of 0-99. Enter 0 if none on duty.

Question No	Data Item	Answer options	Audit Help Notes
5.3	How many sessions of junior doctor time are there per week in total for all stroke unit beds? a. Specialty trainee 3(ST3)/registrar grade or above b. Foundation years/core training/ST1/ST2 or below c. Non training grade junior doctor		Please answer within a range of 0-99 sessions. 1 session represents half a day.

Question No	Data Item	Answer options	Audit Help Notes
5.4	Do you have Physician Associates as part of your clinical team?	Yes; no	These could also be known as Physician Assistants. Must select one option only. Physician associates (formerly known as Physician assistants) support doctors in the diagnosis and management of patients. They are trained to perform a number of roles including: • taking medical histories • performing examinations • diagnosing illnesses • analyzing test results • developing management plans. They work under the direct supervision of a doctor.

Question No	Data Item	Answer options	Audit Help Notes
5.4(a)	**If yes:** How many whole-time equivalents (WTEs) do these Physicians Associates (Physician Assistants) work across your stroke service?		Please answer within a range of 0-99 and can be up to 3 decimal places. **WTEs** - Whole Time Equivalents An WTE of 1.0 means that the person is equivalent to a full-time worker, while an WTE of 0.5 signals that the worker is half-time etc. Physician associates (formerly known as Physician assistants) support doctors in the diagnosis and management of patients. They are trained to perform a number of roles including: • taking medical histories • performing examinations • diagnosing illnesses • analyzing test results • developing management plans. They work under the direct supervision of a doctor.

Question No	Data Item	Answer options	Audit Help Notes
5.5	What is your first line treatment for preventing venous thromboembolism for patients with reduced morbidity?	i) Short or long compression stockings ; ii) Intermittent pneumatic compression (IPC) device ; iii) Low molecular weight heparin ; iv) None of the above ;	Select one option only

5.5(a)	Which of the 7 site-level practices set out in the 'HSIB Best Practice Consensus for reducing Venous Thromboembolism post-stroke' do you employ at your site?	Generic Trust VTE assessment within 24 hours of admission with daily ward round review and/or whenever clinical situation changes ; If high risk of VTE, IPC are used within first 3 days of acute stroke for up to 30 days or until mobile or discharged ; IPC devices prescribed on electronic or paper prescription charts and are reviewed on a daily basis by medical, nursing and pharmacy teams ; Information provided to patient/family/carer of the risk of hospital acquired VTE and benefits of IPC in reducing risk of DVT and improving survival ; All members of multi-disciplinary team are trained in awareness and benefits of IPC, and in the application of IPC sleeves after therapy, nursing interventions or investigations ; If patients cannot tolerate IPC, discussion with a senior member of the clinical team to document consideration of alternative treatments, e.g. earlier use of Low Molecular Weight Heparin ; Regular review of SSNAP data on IPC use through clinical governance programmes to maintain and improve compliance with VTE pathways and use of IPC devices ; None of the above ;	Can select all that apply but must choose at least one option.

Question No	Data Item	Answer options	Audit Help Notes
5.6	Do patients receive specific falls prevention advice or training before discharge?	Yes; no	Select one option only – this should be answered yes if it is standard practice and the majority of patients receive such.
5.7	Do you provide personalised stroke information to patients before discharge (e.g. Stroke Passport)?	Yes; no	Select one option only

Question No	Data Item	Answer options	Audit Help Notes
5.8	Do you routinely collect patient-reported experience measures (PREMs) at any point before or after discharge?	Yes; no	Select one option only Routinely means this is done as part of practice for the majority of patients, as opposed to opportunistically.
5.9	Do you regularly refer to voluntary sector services before or at discharge? (e.g. Stroke Connect in England)	Yes; no	Select one option only Regularly means this is done as part of practice for the majority of patients, as opposed to opportunistically. Stroke Connect is a post discharge telephone service offered to some stroke units in England who do not have a commissioned life after stroke service from the Stroke Association.

Question No	Data Item	Answer options	Audit Help Notes
5.9(a)	What proportion of your patients have access to at least one of these voluntary sector services if needed?		Must be a whole number. Please answer within a range of 0-100%. In the instance where a voluntary sector service does not cover the entire catchment population, please provide an estimate of the percentage of population that is served by such a service. This is not how many used the service, but how many have access at discharge.
5.10	Do you offer your stroke patients a post discharge review within ***6 weeks*** of discharge from hospital?	Yes; no	Select one option only
5.11	If yes: Who usually completes the ***6 week*** reviews post discharge from hospital? *Select only one option*	Primary care ; Acute trust stroke team consultant/registrar ; Stroke Nurse in hospital/community ; Voluntary sector e.g. Stroke Association ; ESD team ; Community therapy team ; Not routinely arranged ;	Select one option only
5.12	Are you commissioned (or in Wales and Northern Ireland expected) to carry out ***6 month*** reviews?	Yes; no	Select one option only
5.13	Are the patients that you discharge given a ***6 month*** post stroke review?	All; some; none	Select one option only

Question No	Data Item	Answer options	Audit Help Notes
5.14	If yes: Who usually carries out your ***6 month*** reviews post discharge from hospital? *Select only one option*	Specialist Stroke Nurses within hospital ; Specialist Stroke Nurses in community ; Stroke Association ; Other voluntary sector ; Primary care ; Stroke Consultant/registrar at Acute Trust ; MDT 6 month review clinic i.e. with therapy support ; Community Therapists ;	Select one option only
5.15	On the 1 October 2021, how many patients on your stroke ward are 'medically fit for discharge' (i.e., no longer requiring hospital bed based care)?		Total must not be greater than total number of stroke unit beds (2.1(b)). Medically fit for discharge: clinical condition dictates that they no longer need to remain in a building with 24-hour medical cover.
5.16	Do you move patients no longer receiving specific stroke intervention to other wards if you need the bed for another stroke patient?	Yes; no; only in exceptional circumstances	Select one option only

SECTION SIX: OTHER STROKE CARE MODELS

Question No	Data Item	Answer options	Audit Help Notes
6.1	Do you have access to at least one **stroke/neurology specific** early supported discharge multidisciplinary team?	Yes; no	Select one option only **Early supported discharge team** refers to a multidisciplinary team which provides rehabilitation and support in a community setting with the aim of reducing the duration of hospital care for stroke patients. A **stroke/neurology specific team** is one which treats stroke patients either solely or as well as general neurology patients. This question should not include non-stroke/neurology specific teams.
6.1a	If yes to 6.1: How many Specialist Early Supported Discharge (ESD) teams does your site have access to?		Only include teams which see more than 10 patients a year. Must be whole number 0-9
6.1b	If yes to 6.1: What percentage of your patients have access to at least one of these teams if needed?		Enter a number between 0-100
6.1c	For the ESD team that the majority of your patients attend, what duration of time	6 weeks ; 6 months ; 12 months ;	Select the option closest to the typical duration of treatment.

Question No	Data Item	Answer options	Audit Help Notes
	post discharge are they commissioned for? (please select option closest to the duration)	Needs based ; No time limit ;	Please answer for the team providing care for the majority of your patients if you have multiple providers.
6.2	Do you have access to specialist spasticity services for the majority of your patients?	Yes; no	Select only one option Specialist spasticity service: services able to provide specialist opinion and treatments for spasticity including delivery of Botulinum toxin (botox) and splinting
6.3	Do you have access to at least one **stroke/neurology specific** community rehabilitation team for longer term management?	Yes; no	Select only one option **Specialist Community Rehabilitation Team:** A stroke/neurology specific team is one which treats stroke patients either solely or as well as general neurology patients
6.3a	**If yes to 6.3:** How many specialist Community Rehabilitation teams does your site have access to?		Only include teams which see more than 10 patients a year. Enter a number between 1-25.
6.3b	**If yes to 6.3:** What percentage of your patients have access to at least one of these teams if needed?		Enter a number between 0-100.
6.4	Do you have access to a **non-specialist** community	Yes; no	Select only one option

Question No	Data Item	Answer options	Audit Help Notes
	rehabilitation team for longer term management?		**Non-specialist Community Rehabilitation Team:** A non-specialist team is one which treats stroke patients, general neurology patients and other types of patients.
6.4a	**If yes to 6.4:** How many non-specialist Community Rehabilitation teams does your site have access to?		Only include teams which see more than 10 patients a year. Enter a number between 1-25.
6.4b	What percentage of your patients have access to at least one of these teams if needed?		Enter a number between 0-100

SECTION SEVEN: TIA/ NEUROVASCULAR SERVICE

Question No	Data Item	Answer option	Audit Help Notes
7.1	Does your site have a neurovascular clinic?	Yes; no	Select one option only A neurovascular clinic is defined as: A service for outpatient assessment and management of people presenting with suspected TIA or minor stroke, not requiring admission to hospital.
7.2	**If no to 7.1:** If no, who provides this for your patients?	i) Another site within our trust ii) Another site not within our trust	Select one option only Please select from the dropdown list. Team codes and contact information can be found at: www.strokeaudit.org > Resources > Team codes and contact information.
7.3	**If yes to 7.1:** How many clinics within a 4 week period?		Please provide a value between 0-300.
7.4	How many new patients were seen during the past 4 weeks?		Please provide a value between 0-999.
7.4(a)	How many of these new patients had a final diagnosis of a TIA?		Please provide a value between 0-999. Cannot be more than value given for 7.4.

Question No	Data Item	Answer option	Audit Help Notes
			A neurovascular clinic is defined as: A service for outpatient assessment and management of people presenting with suspected TIA or minor stroke, not requiring admission to hospital.
7.5	What is the current average waiting time for an appointment from referral?		Check through the appointments for TIA/neurovascular clinic appointments made in the previous month to calculate the delay between referral and appointment for minor stroke/TIA. Please provide a range between 0-100.
7.6	How are patients referred into your TIA / neurovascular service?	Via email/electronic referral ; Fax ; Written referral via post to stroke team ; Written referral via post to Choose and Book ; Telephone referral to stroke team ;	Select one option only
7.7	Do the stroke team triage referrals to the TIA /neurovascular service?	Yes; no	Select one option only
7.8	**If Yes to 7.7:** Does this involve a telephone call to the patient?	Yes; no	Select one option only
7.9	Who triages the referrals?	Stroke Consultant ; Stroke Junior Doctor ; Stroke Specialist Nurse ; Stroke Specialist Nurse followed by Stroke Doctor ; Admin staff based on triage criteria ; Stroke team contact all patient (tele-triage) ;	Select one option for in hours and one option for out of hours. In hours is between 08.00-18.00 Monday to Friday Out of hours is all days and times outside this range

Question No	Data Item	Answer option	Audit Help Notes
		Other;	
7.10	Do you classify your patients as high risk or low risk of stroke using the $ABCD^2$ score?	Yes; no	Select one option only
7.11	Within what timescale can you typically see, investigate and initiate treatment for ALL your TIA patients?	(i) The same day (7 days a week) ; (ii) The same day (5 days a week) ; (iii) The next day ; (iv) The next weekday ; (v) Within a week ; (vi) Within a month ; (vii) Longer than a month ;	Select only one option for inpatient and one option for outpatient
7.12	What is the total number of inpatients with confirmed or suspected TIA across all primary admitting hospitals on 1st October 2021?		Please answer within a range of 0-999. This refers to the number of inpatients with a primary diagnosis of TIA across all the hospitals which were entered for A1, at the time the organisational audit form is completed.
7.13	**If 7.12>0:** How many inpatients with confirmed or suspected TIA are in **stroke unit beds** across all primary admitting hospitals on 1st October 2021?		Please answer within a range of 0-999. This should not be more than the number given for question 7.12, also cannot be greater than total number of stroke beds 2.1b, if 2.1b is less than 7.12. This refers to the number of inpatients with a primary diagnosis of TIA across who are in stroke beds across all the hospitals which were entered for A1, at the time the organisational audit form is completed.

SECTION EIGHT: SPECIALIST ROLES

Question No	Data Item	Answer options	Audit Help Notes
8.1	Do you have at least one accredited specialist registrar in post registered for stroke specialist training?	Yes; no	An accredited SpR will be a specialist registrar (doctor) who is in a post approved for stroke specialty training.
8.2	How many accredited specialist registrar posts to you have at your site?		Must be a whole number. Please answer within a range of 0-99. This is the total number of posts at your site, whether they are filled or unfilled.
8.3	How many of the posts in Q8.2 are currently filled?		Cannot exceed the number in 8.2 Can answer within a range of 0 - 99. A response is required in all fields; Enter 0 if appropriate.
8.4	Do you have any unfilled stroke consultant posts?	Yes; no	If 'no' questions 8.4(a) and 8.4(b) are not applicable. Answer should reflect service as on 1 October 2021. PA refers to Programmed Activities (or Sessions in Wales)
8.4(a)	If yes to 8.4: How many programmed activities (PAs) do these posts cover?		Whole number only. Please answer within a range of 1-999.
8.4(b)	If yes to 8.4: For how many months have these posts been funded but unfilled?		Whole number only. Please answer within a range covering months between 1-120.

Question No	Data Item	Answer options	Audit Help Notes
8.5	How many programmed activities (PAs) do you have in total for Stroke Consultant Physicians?		Please answer within a range of 0-999. 8.5(a) and 8.5(b) will be grey out if '0'. PA refers to Programmed Activities (or Sessions in Wales). This includes all stroke consultant physicians who have any component of stroke clinical time **Stroke Consultant Physician** – A physician with specialist skills in stroke. A stroke specialist has expertise in all three principal areas of stroke management (Prevention, Acute Stroke, Stroke Rehabilitation).
8.5(a)	How many consultants (individuals) are these PAs divided amongst?		Please answer within a range of 1-99.
8.5(b)	How many of these PAs are Direct Clinical Care (DCCs) for Stroke?		Please answer within a range of 1-99. Max 2 decimal places. 8.5(b) cannot be greater than 8.5. **Direct clinical care (DCCs**) refers to direct patient contact and/or management. DCC is work directly related to preventing, diagnosing or treating illness, including emergency work carried out during or arising from on-call work. This does not include time spent on audit, teaching, research etc.
8.6	How many new/additional programmed activities (PAs) do you plan to have for Stroke Consultant Physicians		Please answer within a range of 0-99. Max 2 decimal places.
8.6(a)	**If 8.6>0:**		Please answer within a range of 0-99. Must be a whole number.

Question No	Data Item	Answer options	Audit Help Notes
	How many new/additional consultants (individuals) will these PAs be divided amongst?		'New/Additional planned posts' refer to plans where the stroke team have been expected to have envisaged that the potential new post holder(s) would have some specific service advantages. In which case they should have planned i) a set number of PAs in their prospective job plan for stroke ii) the DCC PAs should have been considered and iii) there should be a plan for contribution to improvement to specific part(s) of the service, for example, the TIA clinic or the stroke unit. These planned posts should be the result of an official management plan with recognised funding identified.
8.6(b)	**If 8.6>0:** How many of these new/additional PAs will be for Direct Clinical Care (DCC) for stroke?		Please answer within a range of 0-99. Do not give an answer that is greater than that given for question 6.6. PA refers to Programmed Activities (or Sessions in Wales)

SECTION NINE: QUALITY IMPROVEMENT, TRAINING AND LEADERSHIP

Question No	Data Item	Answer options	Audit Help Notes
9.1	What level of management takes responsibility for the follow-up of the results and recommendations of the Sentinel Stroke Audit?	(i) Executive on the Board ; (ii) Non-executive on the Board ; (iii) Chair of Clinical Governance (or equivalent) ; (iv) Directorate Manager ; (v) Stroke Clinical Lead ; (vi) Other ; (vii) No specific individual ;	Select all that apply. Must select at least one option.
9.2	Is there a strategic group responsible for stroke?	Yes; no	If 'no' question 9.2(a) is not applicable. This group is defined as consisting of senior clinical and management representatives, who meet regularly, set and review targets, implement the stroke strategy and make plans for the future of the service.
9.2(a)	**If yes to 9.2:** Which of the following does it include?	(i) Ambulance trust representative ; (ii) Clinician ; (iii) Patient representative ; (iv) Commissioner ; (v) Social Services ; (vi) Stroke Network representative ; (vii) Trust board member ;	Select all that apply. Must select at least one option.
9.3	Do you have formal meetings with your coding department to improve the quality of stroke coding?	Yes; no	Select one option only

Question No	Data Item	Answer options	Audit Help Notes
9.3a	**If yes to 9.3:** How frequently are these formal meetings held?	(i) Weekly ; (ii) Monthly ; (iii) Quarterly ; (iv) Annually ; (v) Ad hoc/occasionally ;	Select one option only - the one which is closest to the timeframe
9.4	Do you have 'breach' meetings to review performance against SSNAP quality standards?	Yes; no	Select one option only. Breach meeting: multidisciplinary governance meeting to discuss patients that failed to meet agreed standard of care, e.g. door to needle times, stroke unit within 4 hours, rapid brain imaging, SSNAP therapy targets, etc.
9.4a	How frequently are these meetings held?	(i) Daily ; (ii) Weekly ; (iii) Monthly ; (iv) Quarterly ; (v) Annually ;	Select one option only
9.5	Do you have stroke specific mortality meetings within your Trust?	Yes; no	i.e. formal process to discuss all stroke deaths with stroke MDT team
9.5(a)	Which format is used?	Some deaths reviewed; all deaths reviewed	Select one option only
9.6	Is there funding for external courses available for nurses and therapists?	Yes; no	

Question No	Data Item	Answer options	Audit Help Notes
9.6(a)	If yes, how many sessions have these nurses and therapists attended in the last 12 months?		1 session = half day. Please answer within a range 0-99.
9.6(b)	How many of these sessions related specifically to psychological skills training?		1 session = half day. Please answer within a range 0-99.Cannot be more than 9.6a.
9.7	How often is there a formal survey seeking patient/carer views on stroke services?	(i) Never ; (ii) Less than once a year ; (iii) 1-2 times a year ; (iv) 3-4 times a year ; (v) More than 4 a year ; (vi) Continuous (every patient) ;	Select one option only. This refers to stroke-specific surveys and excludes 'the Friends and Family Test'.
9.8	What is the total number of WTEs allocated in your site for stroke data collection?		Please answer within a range of 0-50 with a maximum of 3 decimal points. **WTEs** - Whole Time Equivalent An WTE of 1.0 means that the person is equivalent to a full-time worker, while an WTE of 0.5 signals that the worker is half-time etc.
9.8 (a)	What disciplines are covered by the WTEs for stroke data collection?	Doctor ; Manager ; Nurse ; Therapist ; Clinical Audit/Clinical Governance staff member ; Data clerk/analyst with specific responsibility for stroke ;	Please tick all disciplines that have specific WTEs allotted for stroke data collection. Select all that apply. These questions related to stroke audit specifically.

Question No	Data Item	Answer options	Audit Help Notes
		Data clerk/analyst with general audit responsibilities ;	This can include routine data collection for internal and external purposes (e.g. SSNAP etc) (In somebody's job description).
9.9	Does the Stroke service have formal links with patients and carers organisations for communication on any of the following?		Select one option only. Structures which enable regular consultation with representatives from any of the following: a special group for stroke from Healthwatch or Patient Advocacy Liaison Service; or local groups which represent the views of people affected by stroke e.g. Stroke Association or Different Strokes.
9.9(a)	Which areas are included?	(i) Service provision ; (ii) Audit ; (iii) Service reviews and future plans ; (iv) Developing research ;	Select all that apply
9.10	Does the stroke service have formal links with community user groups for stroke?		This may be set up by the local team or in conjunction with local agencies. Terms include patients' representative group, patients' consultation group, support group.
9.11	How many open stroke research studies are registered with your Research & Development Department on 1 October 2021?		Please answer within a range 0-99.
9.11(a)	How many of the studies in 9.11 have enrolled at least 1 participant in the 12 months to 30 September 2021?		Cannot be more than 9.11.

Question No	Data Item	Answer options	Audit Help Notes
9.12	How many participants in total has your site recruited into NIHR portfolio research studies in the 12 months to 30 September 2021?		Please answer within a range 0-999.
9.12(a)	How many of the participants in 9.12 were recruited in a randomised controlled trial (RCT)? [ ] participants		Cannot be more than 9.12
9.13	Number of current Good Clinical Practice (GCP)-certified members of staff involved in delivering stroke research on the 1 October 2021?		Please answer within a range 0-99.
9.14	How many inpatients over the last 4 weeks had documented screening undertaken for inclusion in stroke specific clinical research trials?		Please answer within a range 0-999.