

Ambulance Linkage Project help notes

Introduction

NHS England (NHSE) have commissioned this linkage project which will enable linkage at patient level between the Sentinel Stroke National Audit Programme (SSNAP) data and additional data to be submitted by key participants registered on a password protected webtool. Eleven Ambulance services in England will retrospectively enter key pre-hospital timings for patients who have a confirmed stroke diagnosis after hospital admission, i.e. those patients already entered on SSNAP by inpatient teams. The dataset collected has been agreed by the Ambulance steering group. This linkage will allow the collection of Ambulance Quality Indicators (AQI) <https://www.england.nhs.uk/statistics/statistical-work-areas/ambulance-quality-indicators/>

The purpose of the AQI are for:

(As taken from: <https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2013/04/AQI-Quality-Statement-2015-v1.2.pdf>)

- Ambulance Services to manage the service they provide;
- NHS England to monitor the service, and respond to enquiries from the media and the public;
- Department of Health to brief ministers on performance and account to Parliament;
- Parliament, the media and the public to hold the public service organisations to account; and
- Clinical Commissioning Groups to commission services

Overall the AQI help in improving care for stroke patients conveyed to hospital by ambulance.

SSNAP

- Builds on the work of the National Sentinel Stroke Audit and the Stroke Improvement National Audit Programme (SINAP)
- Prospectively collects a minimum dataset for every stroke patient admitted to hospital
- Enables patients care to be followed through the entire stroke pathway from acute care to the community and 6-month follow-up assessment
- Collects outcome measures
- Provides regular, routine, reliable data to:
 - benchmark services nationally and regionally
 - monitor progress against a background of change
 - support clinicians in identifying where improvements are needed, lobbying for change and celebrating success

- empower patients to ask searching questions

The aims of the SSNAP/Ambulance Linkage Project are to:

- Report and benchmark the call-to-care process measures by ambulance service and acute inpatient providers
- Report the call-to-door times for different sub-groups of patients to identify any inequalities
- Encourage system-wide collaboration in stroke care by reporting system-wide indicators
- Report on patient characteristics potentially associated with slower call-to-hospital door or call-to-care process measures, thereby helping to identify areas for ambulance services to focus on Quality Improvement
- Identify potential causes of delay that result in patients arriving outside the window for time limited treatments (thrombolysis/thrombectomy/BP lowering)
- To assess the real-world impact of reorganisations on travel times, and model future impacts
- Report on a timely and monthly basis to NHS England:
 - Time from 999 call to time of arrival at stroke unit for patients in the SSNAP database regardless of pre-hospital impression
 - Time from 999 call to time of CT scan for patients in the SSNAP database regardless of pre-hospital impression
 - Time from 999 call to time of thrombolysis for patients receiving thrombolysis (and thrombectomy once this procedure becomes more established) in the SSNAP database regardless of pre-hospital impression

Ambulance services

Each ambulance service will be responsible for completing data on linked patients from the acute teams and submitting regular uploads/entry of relevant patient level stroke data (timeframes to be agreed) in the correct format to the new area of the SSNAP webtool. Ambulance regional leads will share responsibility in ensuring data quality protocols and timeframes are adhered to.

Ambulance teams will be able to view:

- The time from 999 call to the provision of care processes in hospital broken down by pre-hospital characteristics
- Pre-hospital clinical impression mismatch and areas where pre-hospital assessments could be improved

In the future, ambulance services at a local level could supplement the data produced with other measures to analyse the proportion of patients with a pre-hospital impression of stroke who go on to have a stroke diagnosis confirmed in hospital who are on the SSNAP database.

Data collection process

The data is collected via a new feature of the SSNAP webtool to provide good quality, patient level, complete data. This webtool helps to speed up the analysis and reporting. There are in-built data validation checks. Ambulance users will enter data retrospectively on confirmed stroke cases that have been entered on SSNAP, this data must be signed off and locked.

Although this data can be collected under section 251, and participants can see patient identifiers; patients should not be contacted directly. Details can be shared with the appropriate acute inpatient Trust however; this information is not to be shared with the helpdesk.

Data collection time frame

Data collection is expected to begin from April 2019 and will be ongoing

Inclusion Criteria

- The denominator would be those patients with a stroke diagnosed at hospital (therefore included in the SSNAP database) who have arrived by ambulance

Exclusion Criteria

- Those who self-present and those considered FAST positive by ambulance crews subsequently not diagnosed will be excluded
- Patients transferred by ambulance from one hospital to another would also be excluded

Clinical involvement and supervision

We encourage ambulance services to designate a clinical lead for SSNAP who will have overall responsibility for data quality and will sign off that the processes for collecting and entering the data are robust. A deputy (second lead) should also be designated (who may or may not be a clinician). The second lead should be the user most responsible for the day to day submission of SSNAP data. This user will also serve as the first point of contact for SSNAP. Continuous collaborative work from both the acute teams and ambulance groups is important to ensure smooth linkage.

On behalf of the Ambulance Steering Group

SSNAP helpdesk Mon-Fri 09:00-17:00 Tel: 0116 464 9901 E-mail: ssnap@kcl.ac.uk

Dataset Guidance

Below is the dataset collected via the webtool. These questions are required to be completed for each patient; this can be done by going to Clinical> Ambulance data>Select patient>Enter ambulance data.

Question no	Question	Answer options	Guidance / definitions
1.12.0	Is this the recorded hospital according to the ambulance trust’s records?	Yes or No	<p>This should be the hospital your ambulance team conveyed the patient to.</p> <p>If No, select the hospital that the patient was taken to according to ambulance records in 1.12.0 b. Option b is only available if ‘No’ is selected.</p> <p>This is to identify discrepancies in data.</p>
1.12.2	Is the CAD number entered in SSNAP correct?	Yes or No	<p>The Computer Aided Dispatch (CAD) displayed will have been provided by the hospital that the patient was admitted to. If the CAD matches on the webtool matches ambulance records, then ‘Yes’ should be selected. If the CAD does not match, then ‘No’ should be selected.</p> <p>If No, Enter the correct CAD number according to ambulance records in 1.12.2 b. Option b is only available if ‘No’ is selected. If CAD is not the same but patient matched on other criteria, then enter CAD number according to ambulance record. The webtool will allow a CAD number of up to 11 characters.</p> <p>This is to check whether a hospital’s CAD number matches with the Ambulance Trust’s CAD number, so data quality of patient records on SSNAP can be measured.</p>

Question no	Question	Answer options	Guidance / definitions
1.12.3	<p>Date and time of 999 call being connected to the ambulance service by the operator</p> <p><i>(This is defined as call connect)</i></p>	<p>dd/mm/yyyy hh:mm</p>	<p>Call connect is the time at which the call is connected to the Emergency Operations Centre switch by the operator (as defined in the Ambulance Quality Indicator specification: https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2018/07/20180525-Ambulance-System-Indicators-specification.pdf)</p> <p>This information is available on the ambulance CAD systems. It may be labelled slightly differently e.g. 'call to performance'. Call connect is used to calculate the "ambulance clock start" for all patients.</p> <p>NB this ambulance clock start is different to SSNAP clock start which is defined by arrival or for inpatients, onset of symptoms.</p> <p>Where the date and/or time is unavailable, ambulance services should not enter these cases, but a record should be kept, and this issue should be highlighted when submitting a return.</p>
1.12.4	<p>Date and time of arrival at patient location</p>	<p>dd/mm/yyyy hh:mm</p>	<p>Arrival of first vehicle of the type that transports the patient. This is the response time clock stop recorded on the CAD system and defined in the Ambulance Quality Indicator specification: https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2018/07/20180525-Ambulance-System-Indicators-specification.pdf</p> <p>This data can be found using multiple sources e.g. the ambulance CAD system, MDT (Mobile Data Terminals) and patient records.</p> <p>Where the date and/or time is unavailable, ambulance services should not enter</p>

Question no	Question	Answer options	Guidance / definitions
			these cases, but a record should be kept, and this issue should be highlighted when submitting a return.
1.12.5	Date and time of departure from patient location	dd/mm/yyyy hh:mm	<p>This is the departure time that is recorded on the ambulance CAD system, MDT and patient records. This relates to the vehicle transporting the patient.</p> <p>Where the date and/or time is unavailable, ambulance services should not enter this case, but keep record of these cases and highlight this issue when submitting a return.</p>
1.12.6	What data and time did the ambulance arrive outside the hospital?	<p>a. As measured by the time at which the wheels stop: dd/mm/yy yy hh:mm) or Not known</p> <p>b. If wheels stop time is not known, as measured by mobile</p>	<p>This is the arrival time that is recorded on the ambulance CAD system, MDT, patient records and paperwork completed by the crew can be used to answer this question.</p> <p>This relates to the vehicle transporting the patient. Date and time of the ambulance arrival outside the hospital is when the wheels have stopped.</p> <p>Option b is only available if response given above is 'don't know'. Where the wheels stop time is not available, the estimate time captured by the mobile data terminals should be used.</p> <p>Where the date and/or time is unavailable, ambulance services should not enter these cases, but a record should be kept, and this issue should be highlighted when submitting a return.</p>

Question no	Question	Answer options	Guidance / definitions
		data terminals: dd/mm/yy yy hh:mm)	
1.12.7	Was the patient FAST positive at any time during the incident?	Yes; No; Unable to assess; Not recorded	<p>This question will assist in identifying stroke patients who present as having facial weakness, arm weakness and speech problems (FAST positive).</p> <p>Selecting 'yes' would mean that the patient present with FAST positive symptoms at some point during the incident.</p> <p>Selecting 'No' would mean that the patient was not FAST positive at any point during the incident.</p> <p>To select 'Not recorded' means that no documented information can be found.</p> <p>To select 'Unable to assess' means there is documented evidence that ambulance clinicians were unable to assess due to the patient's condition e.g. unconscious or pre-existing deficit and the crew are unable to make a distinction between any new onset of symptoms.</p> <p>If either 'No, Not recorded or Unable to assess' is selected, the FAST positive option in 1.12.8 will become unavailable.</p>
1.12.8	Pre-hospital clinical	FAST positive/FAST	'FAST positive' should be selected if the patient presents as having new onset of facial weakness, arm weakness or speech problems. The presence of any one of

Question no	Question	Answer options	Guidance / definitions
	impression	negative (suspected stroke) / Other	<p>these three features represents a positive test and the patient should follows the stroke pathway. Generally, If the patient was identified as FAST positive by your ambulance team FAST positive should be selected*.</p> <p>‘FAST negative (suspected stroke)’ should be selected if there is a suspected diagnosis of stroke, but the patient is FAST negative, or it was not possible to assess using FAST.</p> <p>‘Other’ should be selected if a different clinical impression than that outlined above is suspected. Additionally, *If a patient is identified as Fast Positive but does not follow the stroke pathway because your ambulance team suspects it to be another health issue this should also be selected.</p> <p>This data is only completed on confirmed stroke cases. This is to enable local clinical audit within ambulance trusts. Cases that were not recorded as suspected stroke or FAST positive for pre-hospital assessment but are subsequently confirmed as stroke may identify Quality Improvement issues e.g. areas where pre-hospital assessments could be improved.</p>

Each record should be locked by the ambulance team once data is complete. By locking the record, you are signing off that the data entered is accurate.