



Royal College  
of Physicians

SSNAP

# Sentinel Stroke National Audit Programme (SSNAP)

Clinical audit

December 2016 – March 2017

Public Report

## National results

June 2017

**Based on stroke patients admitted to and/or  
discharged from hospital between  
December 2016 - March 2017**

**Prepared by**

Royal College of Physicians, Clinical Effectiveness and  
Evaluation Unit on behalf of the Intercollegiate  
Stroke Working Party

Clinical audit



Document purpose	To disseminate results for the process of stroke care for patients admitted and/or discharged in the period between December 2016 – March 2017
Title	Sentinel Stroke National Audit Programme (SSNAP) Clinical Audit December 2016 – March 2017 Public Report
Author	Royal College of Physicians, Clinical Effectiveness and Evaluation Unit on behalf of the Intercollegiate Stroke Working Party
Publication	June 2017
Target audience	General public, stroke survivors and carers, health and social care professionals, stroke researchers
Description	This is a public report on the clinical component (process of care) of the national stroke audit, the Sentinel Stroke National Audit Programme (SSNAP). It publishes national and named team results on the quality of stroke care for patients admitted and/or discharged between 1 December 2016 and 30 March 2017. It covers many processes of care across the entire inpatient stay including comparisons with most recent reporting periods. The report findings enable the processes of stroke services at national level to be compared with national standards outlined in the fifth edition of the National Clinical Guideline for Stroke (2016) published by the Intercollegiate Stroke Working Party, the NICE (National Institute for Health and Clinical Excellence) Clinical Guidelines, the National Stroke Strategy 2007 and the NICE Quality Standards for Stroke (2016).
Supersedes	SSNAP Clinical Audit August – November 2016 public report
Related publications	<p>National clinical guideline for stroke 5<sup>th</sup> edition (Royal College of Physicians, 2016):  <a href="http://www.strokeaudit.org/guideline">www.strokeaudit.org/guideline</a></p> <p>National clinical guideline for stroke 5<sup>th</sup> edition patient version  <a href="http://www.strokeaudit.org/Guideline/Patient-Guideline.aspx">http://www.strokeaudit.org/Guideline/Patient-Guideline.aspx</a></p> <p>SSNAP Clinical audit public report – August-November 2016  <a href="http://www.strokeaudit.org/results/National-Results.aspx">http://www.strokeaudit.org/results/National-Results.aspx</a></p> <p>SSNAP Post-Acute Stroke Service Provider Audit  <a href="https://www.strokeaudit.org/results/PostAcute/National.aspx">https://www.strokeaudit.org/results/PostAcute/National.aspx</a></p> <p>SSNAP Acute Organisational Audit Report – November 2016  <a href="https://www.strokeaudit.org/results/Organisational/National-Organisational.aspx">https://www.strokeaudit.org/results/Organisational/National-Organisational.aspx</a></p> <p>NICE Quality Standard for Stroke 2016:  <a href="https://www.nice.org.uk/guidance/qs2">https://www.nice.org.uk/guidance/qs2</a></p> <p>National Stroke Strategy (Department of Health, 2007):  <a href="http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_081062">http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_081062</a></p> <p>Department of Health: Progress in improving stroke care (National Audit Office, 2010):  <a href="http://www.nao.org.uk/publications/0910/stroke.aspx">http://www.nao.org.uk/publications/0910/stroke.aspx</a></p> <p>National Cardiovascular Outcomes Strategy:  <a href="https://www.gov.uk/government/publications/improving-cardiovascular-disease-outcomes-strategy">https://www.gov.uk/government/publications/improving-cardiovascular-disease-outcomes-strategy</a></p> <p>CCG Outcomes Indicator Set 2015-16  <a href="https://www.england.nhs.uk/resources/resources-for-ccgs/ccg-out-tool/ccg-ois/">https://www.england.nhs.uk/resources/resources-for-ccgs/ccg-out-tool/ccg-ois/</a></p>
Contact	<a href="mailto:ssnap@rcplondon.ac.uk">ssnap@rcplondon.ac.uk</a>

**Report prepared by:****Ms Anna Argyrides BA**

SSNAP Project Coordinator, Clinical Effectiveness and Evaluation Unit CEEu, Royal College of Physicians

**Ms Lizz Paley MSc**

Stroke Programme Intelligence Manager—Data, CEEu, Royal College of Physicians

**Mr Mark Kavanagh BA**

SSNAP Programme Manager, CEEu, Royal College of Physicians

**Ms Victoria McCurran MPH**

SSNAP Data Analyst, CEEu, Royal College of Physicians

**Mrs Rachael Andrews**

SSNAP Project Manager, CEEu, Royal College of Physicians

**Ms Emma Vestesson MSc**

SSNAP Senior Data Analyst, CEEu, Royal College of Physicians

**Mrs Alex Hoffman MSc**

Stroke Programme Manager, CEEu, Royal College of Physicians

**Professor Anthony Rudd FRCP CBE**

Chair of the Intercollegiate Stroke Working Party, Associate Director for Stroke (CEEu)

Consultant Stroke Physician, Guy's and St Thomas' Hospital, London

**Supported by:****Mr Angus Waite BA**

SSNAP Project Coordinator, CEEu, Royal College of Physicians

**Mr George Dunn BA**

SSNAP Senior Project Coordinator, CEEu, Royal College of Physicians

**Dr Martin James FRCP**

Associate Director for Stroke (CEEu)

Consultant Stroke Physician, Royal Devon and Exeter Hospital, Devon

**Professor Pippa Tyrrell FRCP**

Associate Director for Stroke (CEEu)

Professor of Stroke Medicine, University of Manchester; Consultant Stroke Physician, Salford Royal NHS Foundation Trust

## Table of Contents

Foreword.....	8
Introduction to SSNAP .....	9
How to read this report .....	9
Background .....	10
Aims of this report .....	10
Organisation of this report.....	10
Supplementary reporting outputs .....	11
Key indicators, domains and scoring .....	11
Evidence based standards and indicators.....	11
Datasets and methodology .....	12
Eligibility and audit scope .....	12
Section 1: Executive Summary: summary of domain and key indicator results.....	13
SSNAP Level.....	14
Domain 1: Scanning .....	16
Domain 2: Stroke Unit.....	18
Domain 3: Thrombolysis .....	20
Domain 4: Specialist Assessments .....	22
Domain 5: Occupational Therapy .....	24
Domain 6: Physiotherapy.....	26
Domain 7: Speech and Language Therapy.....	28
Domain 8: Multidisciplinary team working.....	30
Domain 9: Standards by Discharge .....	32
Domain 10: Discharge Processes .....	34
Section 2: Casemix .....	36
2.1 Patient Numbers .....	36
2.2 Gender .....	36
2.3 Age .....	36
2.4 Co-morbidities.....	36
Atrial Fibrillation: In focus.....	37
2.5 Stroke Type .....	39
2.6 Modified Rankin Scale scores before stroke.....	39
2.7 Completion rate of NIHSS items .....	39
2.8 Summary of total NIHSS score .....	40
2.9 Palliative Care within 72h .....	40

2.10 Onset of symptoms .....	41
2.11 Ethnicity .....	42
Section 3: Acute Stroke Care Processes of care in the first 72 hours .....	43
3.1 Timings from onset .....	43
3.2 Arrival by ambulance .....	44
3.3 Timings from Clock Start .....	44
3.4 Period of Arrival Arriving In Hours v Out of hours .....	44
3.5 Brain Scanning (Domain 1).....	44
3.6 Stroke Unit Admission (Domain 2).....	45
3.7 First ward of admission .....	46
3.8 Thrombolysis (Domain 3) .....	46
3.8.1 Thrombolysis timings .....	47
3.8.2 Thrombolysis based on eligibility.....	49
3.8.3 Complications following thrombolysis.....	49
3.8.4 NIHSS 24 hours after thrombolysis .....	50
3.8.5 Emerging treatment: Thrombectomy .....	51
3.9.1 Swallowing screening and assessments.....	53
3.9.2 Assessment by nurse.....	54
3.9.3 Assessment by stroke specialist consultant.....	54
3.10 Therapy Assessments in first 72 hours (Part of Domain 8).....	54
3.10.1 Occupational Therapy Assessments in first 72 hours .....	55
Section 4: Therapy provision.....	56
4.1 Occupational Therapy (Domain 5) .....	57
4.2 Physiotherapy (Domain 6) .....	58
4.3 Speech and Language Therapy (Domain 7) .....	58
4.4 Psychology.....	59
5.1 Multidisciplinary Working (part of Domain 8) .....	60
5.2 Standards by Discharge (Domain 9).....	60
5.3 Patient Condition up to discharge .....	63
5.3.1 Worst Level of consciousness in first 7 days.....	63
5.3.2 Urinary tract infection in first 7 days .....	63
5.3.3 Pneumonia in first 7 days.....	63
5.4.4 Modified Rankin Scale score at discharge .....	64
5.5.5 Palliative care .....	64
5.6.6 Intermittent Pneumatic Compression (IPC).....	64

5.5.7 Mortality Data on SSNAP .....	66
5.6 Discharge Processes (Domain 10) .....	66
5.7 Length of Stay .....	70
Section 6: Early supported discharge and community rehabilitation preliminary results .....	72
6.1 Introduction .....	72
6.1.1 Domiciliary teams and SSNAP .....	72
6.1.2 Early supported discharge and community rehabilitation .....	72
6.1.3 Interpreting the SSNAP results .....	73
6.2 Results for Domiciliary Teams.....	74
6.2.1 Therapy results.....	75
Section 7: Six month follow up assessments .....	78
7.1 Interpreting the Results .....	79
7.2 Preliminary Results .....	81
Section 8: SSNAP Performance Tables (by named team) .....	86
Conclusion .....	106
Availability of SSNAP reports in the public domain .....	107
Glossary .....	109
Glossary .....	109

## **Appendices**

Appendix 1: Membership of the Intercollegiate Stroke Working Party .....	113
Appendix 2: SSNAP Core Dataset.....	117
Appendix 3: Changes over time data .....	127

## Foreword

This report on the Sentinel Stroke National Audit Programme (SSNAP) uses data collected between. It includes named hospital results for the entire inpatient care pathway, where the numbers of patients entered in SSNAP for this period make this viable.

In this reporting period, 36 teams achieved an overall 'A' score in SSNAP, which indicates a world-class stroke service. That services are continually improving the stroke care provided to patients is evident from the fact for the January-March 2016 reporting period only 25 teams achieved an A grade.

The improvements in results are symptomatic of the continued efforts made by teams to use SSNAP data as a tool for continuously improving the quality of the stroke services they provide to patients. The genuine commitment to submitting timely and complete data each reporting period and acting on audit results to improve clinical care should be celebrated. Even more teams would have scored an 'A' if they had not been marked down because of issues around the timeliness and quality of data submission, which should be fairly easily solvable. These latest audit results reinforce our belief that although SSNAP has set stringent, aspirational targets the top score is achievable and sustainable over time.

It is encouraging to see that steady and continuous improvements are being made across each scoring level. SSNAP reports audit results in absolute terms which means that all teams are capable of showing improvement. The quality of data submitted to SSNAP, measured in terms of audit compliance, has also improved each reporting period, which is essential in providing meaningful audit results.

At national level, we are seeing improvements period-on-period in the results for stroke care, both in the acute processes of care, including rapid scanning, thrombolysis provision, and access to a stroke unit, and in the standards and processes of care by discharge. However, there is unacceptable variation across the country. Six month assessments after stroke are not available to all patients and the number of cases completed to six months remains low when compared to the levels of case ascertainment in the acute phase of SSNAP. This is concerning and something that should be continuously monitored. Section 7 reports on six month assessment provision in more detail.

Congratulations to everyone who has contributed to the data presented in this report. It is a fantastic achievement that roughly 28,000 patient records are available for analysis this reporting period. We estimate that approximately 85,000 patients are admitted to hospital with stroke per year so we are achieving very high levels of case ascertainment. Complete and high quality data will be extremely powerful in shaping the future developments in stroke care in England, Wales and Northern Ireland. They will enable a much stronger case to be made for improvements and greatly help patients, commissioners and clinicians alike get the best out of the services.

We have received numerous case studies from stroke care providers outlining how they have used the data to improve their services. It is motivating and encouraging to see that our reporting outputs are valued and we hope to see continued improvements in results in future reporting periods.

**Professor Anthony Rudd FRCP CBE**

Clinical Director of RCP Stroke Programme



## Introduction to SSNAP

The Sentinel Stroke National Audit Programme (SSNAP) is the single source of stroke data in England, Wales and Northern Ireland. There are three main components of SSNAP, the clinical audit, acute organisational audit and post-acute organisational audit. This document outlines findings from the clinical audit and through clinical commentary, contextualises this data. This report presents a national overview of stroke care across England, Wales and Northern Ireland and is intended to be accessed by members of the public with an interest in stroke care as well as by health care professionals.

## How to read this report

**National results (out of all patients submitted to the audit in England, Wales, Northern Ireland and the Islands):** In this report national results are presented as percentages, medians and interquartile ranges (IQR). The median is the middle point of the data; 50% of patients' results lie on either side. The interquartile range is the middle half of values; the bottom 25% of patients' results are below this range and the top 25% of patients' results are above this range. Unless otherwise stated in the report, 100% is the optimal performance and the higher the percentage, the higher the quality of care. For timings, the shorter the median time to intervention the better the care.

**Clinical Commentary:** This report contains clinical commentary from the Stroke Programme Clinical Director, Professor Tony Rudd.

**No, but...answers:** The diversity of effects from a stroke creates difficulties for clinical management and for determining overall standards of care. The audit therefore designated specified circumstances where standards would not be applicable. The full wording of questions can be found in Appendix 2.

**Compliance rates:** The compliance rate is recorded as a percentage, with 100% being optimal (unless otherwise stated). The denominators for the compliance rates are those cases for whom the standards applied, i.e. any *No, but...* exceptions have not been included in the calculations of compliance. There are some time-points along the stroke pathway at which the concept of applicability is not relevant (i.e. when all patients are deemed applicable for a standard). Please see the technical guidance on the final tab of the 'Full results portfolio' for more details ([www.strokeaudit.org/results/national](http://www.strokeaudit.org/results/national)).

**Reference numbers:** These refer to the position in the accompanying MS Excel spreadsheets where individual team level results for standards and indicators can be found.

**'Patient-centred' and 'team-centred' results:** SSNAP reports on the processes of care and patient outcomes in two ways; 'patient centred' and 'team centred'. 'Patient centred' attribute the results to every team which treated the patient at any point in their care. A team's patient-centred results demonstrate the quality of care that their patients received across the whole inpatient care pathway, regardless of how many teams each patient went to, or which of the teams provided each aspect of care. 'Team centred' attribute the results to the team considered to be most appropriate to assign the responsibility for the measure to. In Section 1 (national level domains and scoring), it is clearly stated whether team- or patient-centred results are being presented. In Section 8 (domains and scoring by named team), both team- and patient-centred results are provided.

Both patient-centred and team-centred results are presented on separate tabs in the accompanying full results portfolio. For the majority of cases, the national level results in this PDF report will match those in *both* the patient-centred and team-centred results tab in the portfolio. One exception is therapy provision, where the national level patient-centred and team-centred results differ. National level results for therapy intensity in Section 5 of this report are patient centred. For comparisons between an individual team's performance (team-centred results) with the national, please refer to the team-centred national results in the post 72 hour 'team centred' tab of the portfolio.

**Team type:** This report includes data from the following types of team and highlights which team type data are used when appropriate. The team types are as follows:

- **Routinely admitting acute teams** (teams which admit stroke patients directly for acute stroke care)
- **Non-routinely admitting acute teams** (teams which do not generally admit stroke patients directly but continue to provide care in an acute setting when patients have been transferred from place of initial treatment)
- **Non-acute inpatient teams** (teams which provide inpatient rehabilitation in a post-acute setting e.g. community hospitals)
- **Post-acute non inpatient teams** (these teams include early supported discharge and community rehabilitation teams)
- **Six month assessment providers** (community based teams that provide six month reviews)

100% of routinely admitting teams and non-routinely admitting acute teams in England, Wales, Northern Ireland, and the Islands are registered on SSNAP. Recruitment of post-acute teams and teams providing six month assessments is continuing.

## Background

The Sentinel Stroke National Audit Programme (SSNAP) has been collecting and reporting on the processes of stroke care since June 2013. The Clinical Effectiveness and Evaluation Unit (CEEu) in the Care Quality and Improvement Department of the Royal College of Physicians first conducted the National Sentinel Stroke Audit (NSSA) in 1998 ([www.rcplondon.ac.uk/sentinel](http://www.rcplondon.ac.uk/sentinel)) and subsequently a total of 7 rounds were undertaken with 100% participation achieved since 2006. SSNAP combines the NSSA and the Stroke Improvement National Audit Programme (SINAP) which audited care in the first 72 hours after stroke between 2010 and 2012. ([www.rcplondon.ac.uk/sinap](http://www.rcplondon.ac.uk/sinap)).

## Aims of this report

- To publish national and team level results for the entire inpatient stroke care pathway in the public domain.
- To allow comparisons to be made between the latest results and the previous three reporting periods.
- To describe the methods for calculating the pre-existing or upcoming national measures for stroke in England: the CCG Outcomes Indicator Set; and NICE Quality Standard for Stroke measures.

## Organisation of this report

- Summary of overall performance by domains and key indicators (Section 1)

- National level results for patient casemix (Section 2)
- National level results for processes of acute stroke care in the first 72 hours (Section 3)
- National level results for therapy provision (Section 5)
- National level results for processes of care by discharge (Section 5)
- Early Supported Discharge and Community Rehabilitation Results (Section 6)
- Six month follow-up assessments (Section 7)
- SSNAP Performance Tables (by named team) (Section 8)

### Supplementary reporting outputs

With the exception of Section 8, this PDF report presents national level results. Detailed results by named teams are available on the SSNAP Reporting Portal [www.strokeaudit.org/Results/National](http://www.strokeaudit.org/Results/National) including:

- **Summary results spreadsheet:** An overview of performance by reporting 44 Key Indicators within 10 domains of care by named team.
- **Full results portfolio:** A very detailed reference document which includes 72 hour and discharge results for SSNAP data item by named team in addition to information about casemix, patient cohorts and pathways, and inter-team variation.
- **Regional slideshows:** Hospital and ESD/CRT results are grouped by region and presented in graphs.
- **Dynamic maps:** Allow you to find information about stroke services for your local provider. You can compare different standards of care within your team, and compare your local provider to other providers and against regional and national averages. [www.strokeaudit.org/results/Clinical-audit/maps](http://www.strokeaudit.org/results/Clinical-audit/maps)

### Key indicators, domains and scoring

**44 Key Indicators** have been chosen by the ICSWP as representative of high quality stroke care. These include data items included in the CCG Outcomes Indicator Set and NICE Quality Standards (covering England only). The key indicators are grouped into **10 domains** covering key aspects of the process of stroke care. Both patient-centred domain scores (whereby scores are attributed to every team which treated the patient at any point in their care) and team-centred domain scores (whereby scores are attributed to the team considered to be most appropriate to assign the responsibility for the measure to) are calculated.

### Evidence based standards and indicators

SSNAP is the single source of data for stroke in England and Wales. It provides the data for all other statutory data collections in England including the NICE Quality Standard and is the chosen method for collection of stroke measures in the NHS Outcomes Framework and the CCG Outcomes Indicator Set. SSNAP metrics are aligned with those in the Cardiovascular Disease Outcomes Strategy. SSNAP data are being used as risk indicators for Care Quality Commission's Intelligent Monitoring and for the Stroke Care in England NHS Marker.

The results from this clinical audit compare delivery of care with standards derived from systematically retrieved and critically appraised research evidence and agreed by experts in all disciplines involved in the management of stroke. The strength of evidence is outlined in the guidelines. No references have been quoted in this report for reasons of space. All relevant evidence and standards are available in the following:

- National clinical guideline for stroke 5<sup>th</sup> edition (Royal College of Physicians, 2016) [www.strokeaudit.org/guideline](http://www.strokeaudit.org/guideline)
- National clinical guideline for diagnosis and initial management of acute stroke and transient ischaemic attack (NICE, 2008) <https://www.nice.org.uk/guidance/CG68>
- Stroke rehabilitation: Long-term rehabilitation after stroke (NICE 2013): [www.nice.org.uk/CG162](http://www.nice.org.uk/CG162)
- NICE Quality Standard for Stroke 2016 <https://www.nice.org.uk/guidance/qs2>

### Datasets and methodology

A core, minimum dataset (Appendix 2) was developed by the ICSWP in collaboration with key stakeholders. Prospective data were collected via a secure web-based tool provided by Net Solving Ltd. Security and confidentiality are maintained through the use of passwords and a person specific registration process. Detailed help notes and FAQs are provided to ensure standard interpretation of the dataset questions across all participants. Data are analysed by the Stroke Programme at the Royal College of Physicians.

Only 'locked' data are included in SSNAP analysis. The process of locking ensures high data quality and signifies that the data have been signed off by the lead clinician and are ready for central analysis.

To view the SSNAP core dataset and help-notes, and for more details about the methods of data collection, submission and analysis, please visit <https://www.strokeaudit.org/Support/Datasets.aspx>

### Eligibility and audit scope

SSNAP aims to measure the quality of stroke care along the patient pathway from initial admission, through all subsequent locations, up to and including six month assessment. Teams which treat at least 10 stroke patients a year at any point up to six months are eligible to participate. Data are therefore collected by different types of teams along the stroke pathway. These include:

- Routinely admitting acute teams (teams which admit stroke patients directly for acute stroke care)
- Non-routinely admitting acute teams (teams which do not generally admit stroke patients directly but continue to provide care in an acute setting when patients have been transferred from place of initial treatment)
- Non-acute inpatient teams (teams which provide inpatient rehabilitation in a post-acute setting e.g. community hospitals)
- Post-acute non inpatient teams (these teams include early supported discharge and community rehabilitation teams)
- Six month assessment providers.

100% of routinely admitting teams and non-routinely admitting acute teams in England, Wales, Northern Ireland, and the Islands are registered on SSNAP. Recruitment of post-acute teams and teams providing six month assessments is continuing. Given the fact that these teams have not previously participated in national stroke audit there has been a slower uptake but more post-acute teams are submitting data to the audit each reporting period.

## Section 1: Executive Summary: summary of domain and key indicator results

This section provides a summary of performance at national level. It is based upon results for **44 key indicators** which are grouped into **10 domains** covering key aspects of stroke care (for more information see the section at the end of the report).

The section begins with the **overall SSNAP score** calculated as follows:

- **Domain levels** are combined into separate patient-centred and team-centred **total key indicator scores**
- A **combined total key indicator score** is derived from the average of these two scores
- This combined score is adjusted for **case ascertainment** and **audit compliance**

Themes covered by the SSNAP domains:

- Domain 1: Scanning
- Domain 2: Stroke unit
- Domain 3: Thrombolysis
- Domain 4: Specialist assessments
- Domain 5: Occupational therapy
- Domain 6: Physiotherapy
- Domain 7: Speech & language therapy
- Domain 8: MDT working
- Domain 9: Standards by discharge
- Domain 10: Discharge processes

Unless otherwise stated, 100% is the optimal performance. For timings, the shorter the median time to intervention the better. More information is available in the technical annex of the full results portfolio.

## SSNAP Level

### Distribution of SSNAP levels across inpatient teams

	Three month reporting	Four month reporting		
SSNAP levels:	Jan-Mar 2016 213 teams	Apr-Jul 2016 228 teams	Aug-Nov 2016 218 teams	Dec 16-Mar 17 225 teams
A	25 (12%)	42 (18%)	41 (19%)	36 (16%)
B	46 (22%)	59 (26%)	60 (28%)	60 (27%)
C	50 (23%)	53 (23%)	64 (29%)	61 (27%)
D	77 (36%)	62 (27%)	49 (22%)	56 (25%)
E	15 (7%)	12 (5%)	4 (2%)	12 (5%)

### Explanation of grading:

A = First class service

B = good or excellent in many aspects

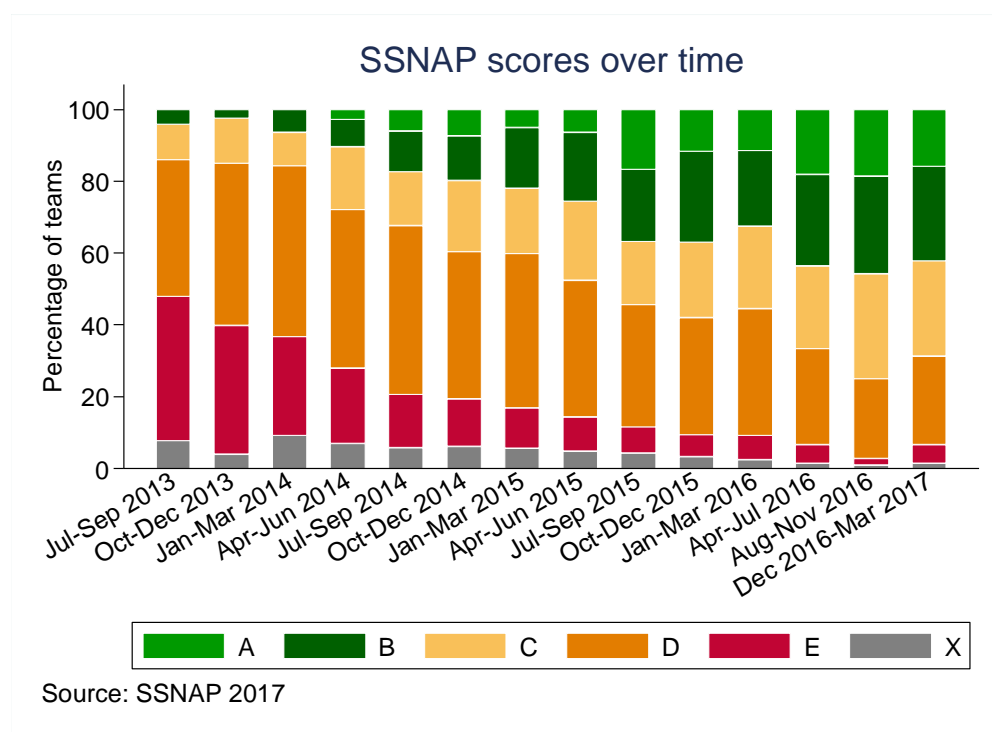
C = reasonable overall - some areas require improvement

D = several areas require improvement

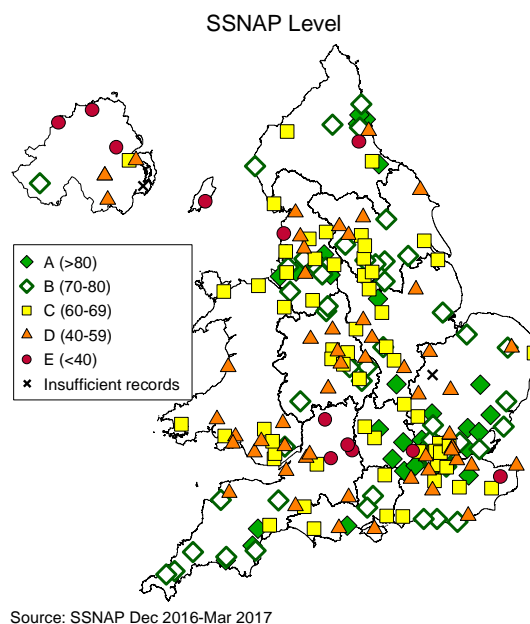
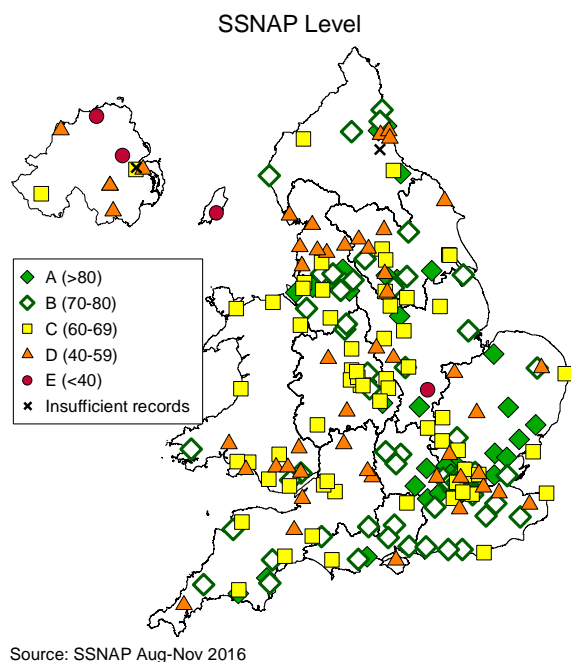
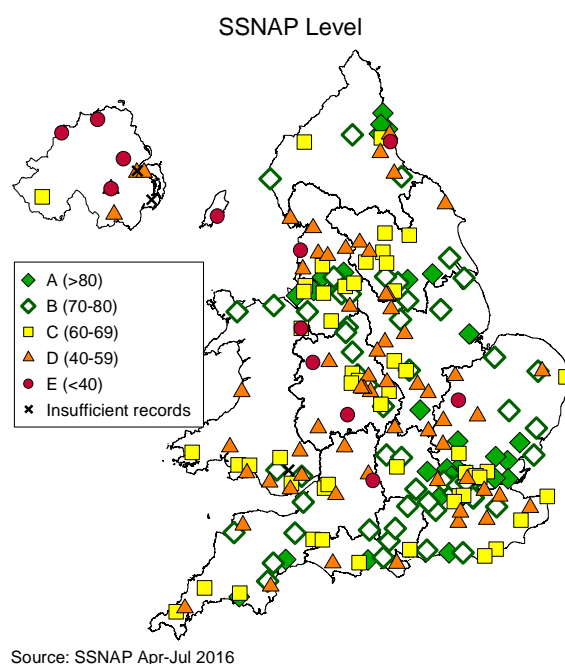
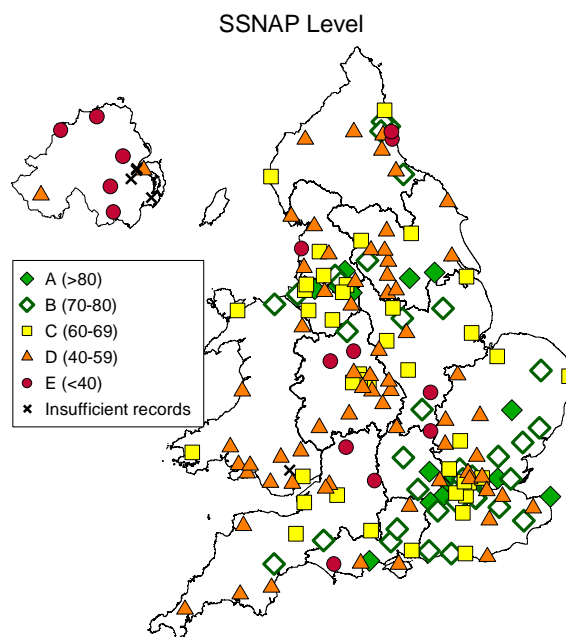
E = substantial improvement required

### National expectation:

Teams are expected to achieve an A or B SSNAP grade, such scores are indicative of world-class stroke care and a good or excellent service in many aspects respectively. A SSNAP score of a C or less would suggest that some or several areas of care require improvement.



The maps below show the SSNAP level achieved by all *inpatient teams* in England, Wales, and Northern Ireland for the last four reporting periods. Each symbol represents a team, colour coded by the overall score achieved. Teams with insufficient or no records are highlighted with an X.



You may also be interested in...

SSNAP domain and key indicator results are also available in the form of interactive maps on the SSNAP Reporting Portal ([www.strokeaudit.org/results/Clinical-audit/maps](http://www.strokeaudit.org/results/Clinical-audit/maps)). These dynamic maps enable comparisons between standards of care within teams, and compare local providers against regional and national averages.

## Domain 1: Scanning

### What should be done?

*RCP National Clinical Guideline for Stroke, 5<sup>th</sup> Edition*

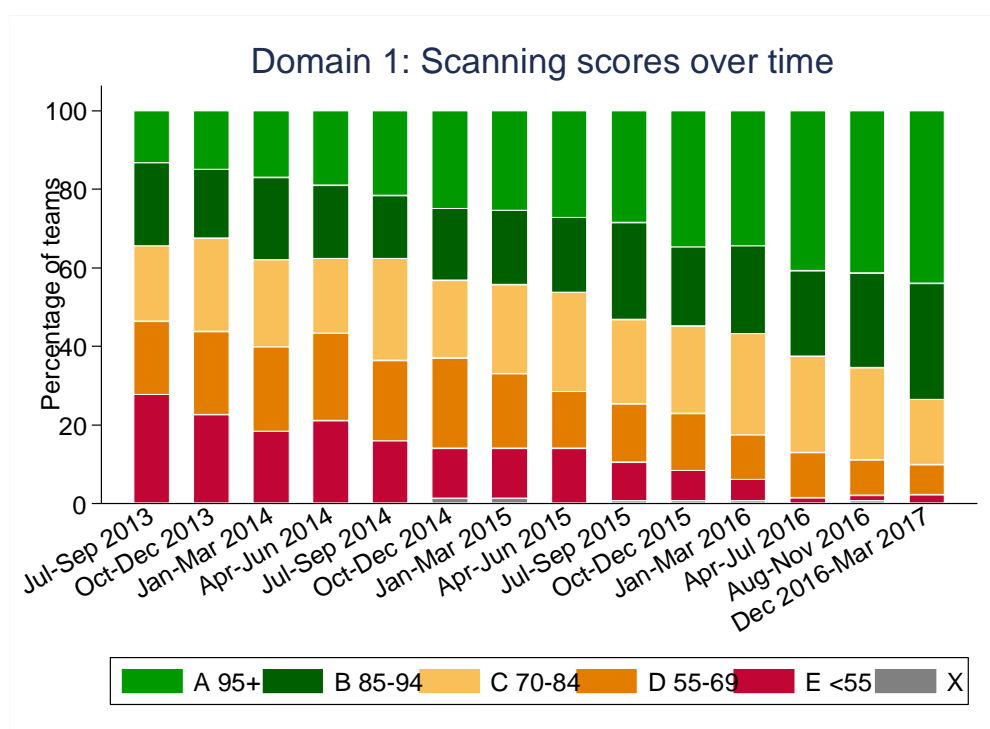
#### 2.3.1

**E** Acute stroke services should have continuous access to brain imaging including CT angiography and should be capable of undertaking immediate brain imaging when clinically indicated.

#### 3.4.1

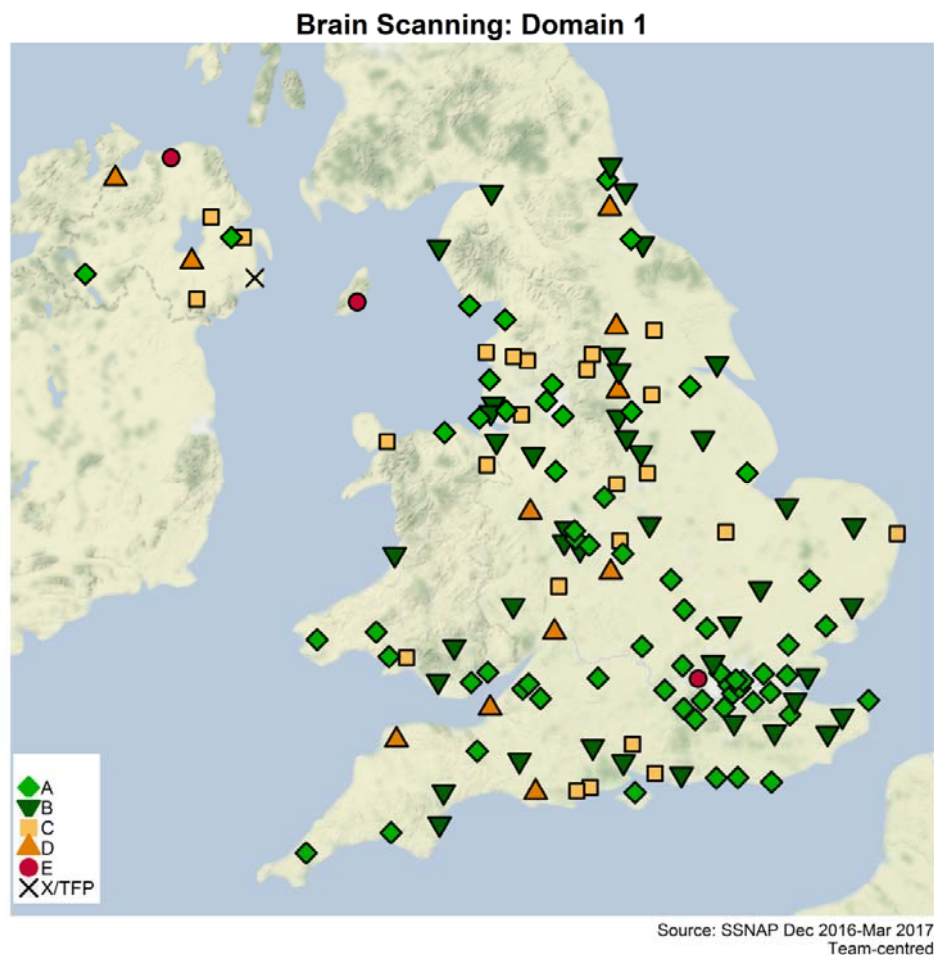
**B** Patients with suspected acute stroke should receive brain imaging urgently and at most within 1 hour of arrival at hospital.

### Distribution of scores across all inpatient teams for Domain 1 (143 teams)





The map below shows the team centred performance of all *routinely admitting teams* for Domain 1. Each symbol represents a team, colour coded by the overall score achieved.



### Quality Improvement Case Study

A good example of how SSNAP data have been used to improve the timeliness of brain scanning has been provided by Mid Yorkshire Hospitals NHS Trust. The model the stroke team implemented to ensure rapid brain scanning of suspected stroke patients could be adapted by other stroke services.

It is available to read here: <https://www.strokeaudit.org/AnnualReport/Case-Studies.aspx>

## Domain 2: Stroke Unit

### What should be done?

*RCP National Clinical Guideline for Stroke, 5<sup>th</sup> Edition*

#### 2.2.1

**B** People with an acute neurological presentation suspected to be a stroke should be admitted directly to a hyperacute stroke unit which cares predominantly for stroke patients.

**C** Acute hospitals receiving medical admissions that include people with suspected stroke should have arrangements to admit them directly to a hyperacute stroke unit on site or at a neighbouring hospital, to monitor and regulate basic physiological functions such as neurological status, blood glucose, oxygenation, and blood pressure.

**D** Acute hospitals that admit people with stroke should have immediate access to a specialist stroke rehabilitation unit on site or at a neighbouring hospital.

#### 2.3.1

**B** People with suspected acute stroke (including when occurring in people already in hospital) should be admitted directly to a hyperacute stroke unit and be assessed for emergency stroke treatments by a specialist physician without delay.

#### 2.4.1

**A** People with stroke should be treated on a specialist stroke unit throughout their hospital stay unless their stroke is not the predominant clinical problem.

**K** A facility that provides treatment for in-patients with stroke should include:

- a geographically-defined unit;
- a co-ordinated multi-disciplinary team that meets at least once a week for the exchange of information about in-patients with stroke;
- information, advice and support for people with stroke and their family/carers;
- management protocols for common problems, based upon the best available evidence;
- close links and protocols for the transfer of care with other in-patient stroke services, early supported discharge teams and community services;
- training for healthcare professionals in the specialty of stroke.

#### NICE Quality Standards

Statement 1: Adults presenting at an accident and emergency (A&E) department with suspected stroke are admitted to a specialist acute stroke unit within 4 hours of arrival.

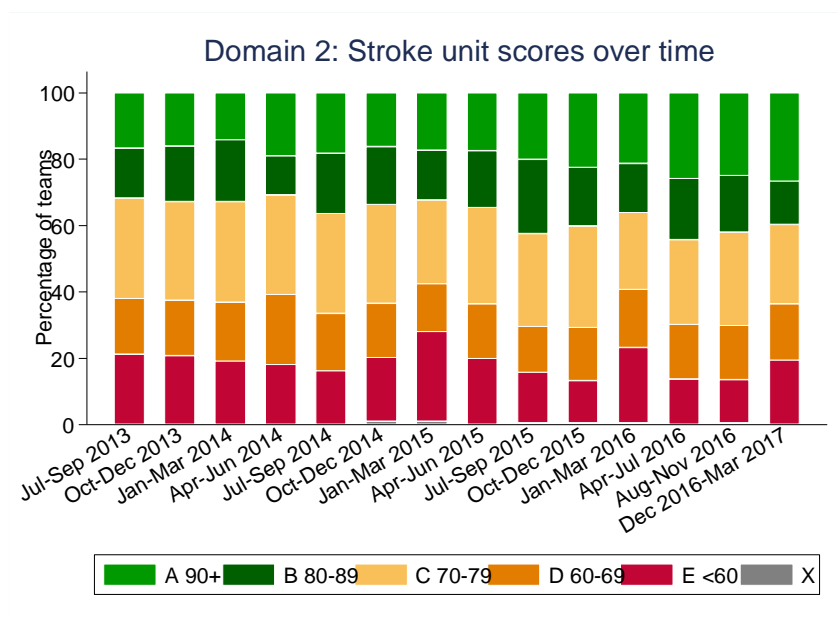
[2010, updated 2016]

### Quality Improvement Case Study on improving stroke unit management

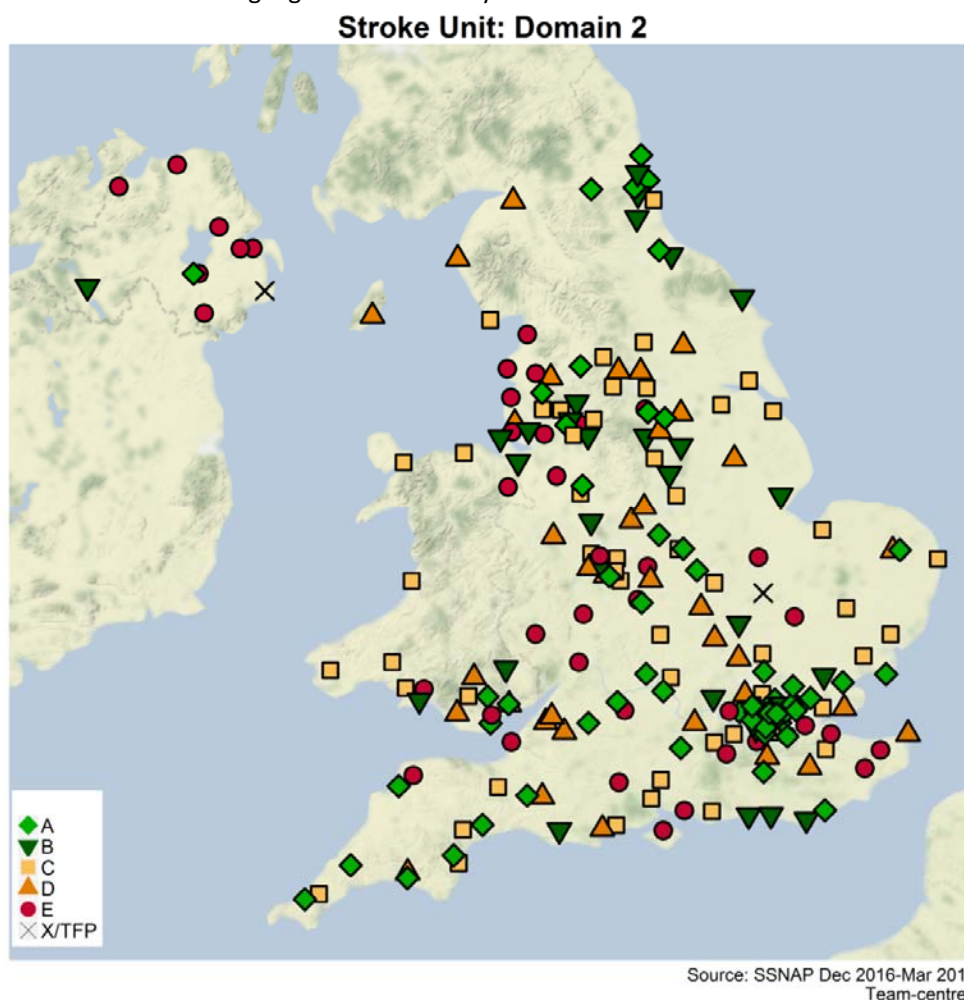
Dr Andrew Hill, Stroke Consultant at Hospital St Helens and Knowsley NHS Trust, provides a powerful example of how SSNAP data have been used to explain locally why there were delays in stroke unit admission and subsequent acute assessments, and describes simple ways in which the stroke team were able to improve their performance without requiring additional resources. It is available here: <https://www.strokeaudit.org/AnnualReport/Case-Studies/Using-SSNAP-Data.aspx>

SSNAP Dec 2016 – Mar 2017 Public Report (June 2017)

## Distribution of scores across all inpatient teams for Domain 2 (226 teams)



The map below shows the team centred performance of all *inpatient teams* for Domain 2. Each symbol represents a team, colour coded by the overall score achieved. Teams with insufficient or too few records submitted are highlighted with an X symbol.



## Domain 3: Thrombolysis

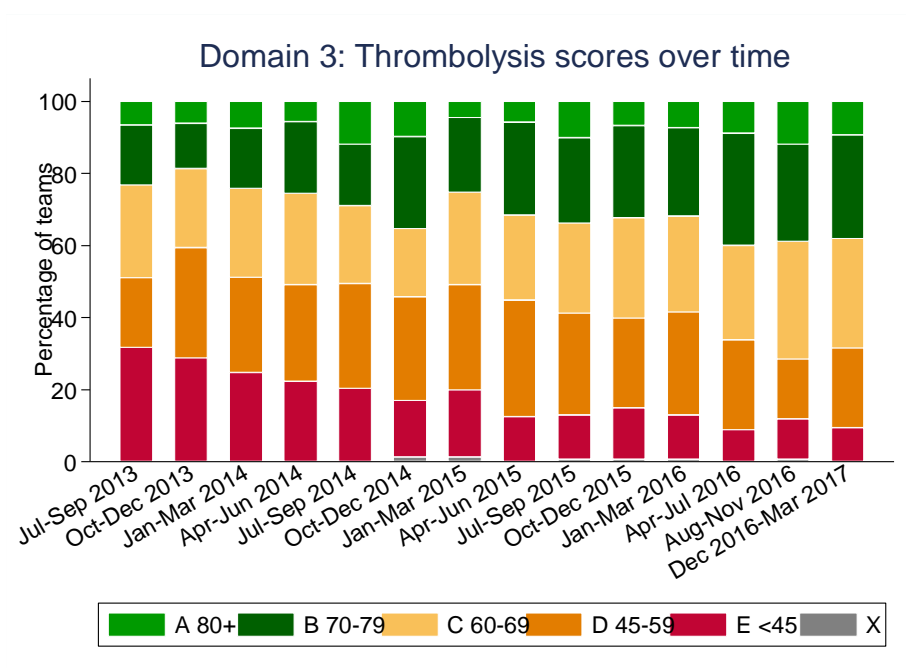
### What should be done?

*RCP National Clinical Guideline for Stroke, 5<sup>th</sup> Edition*

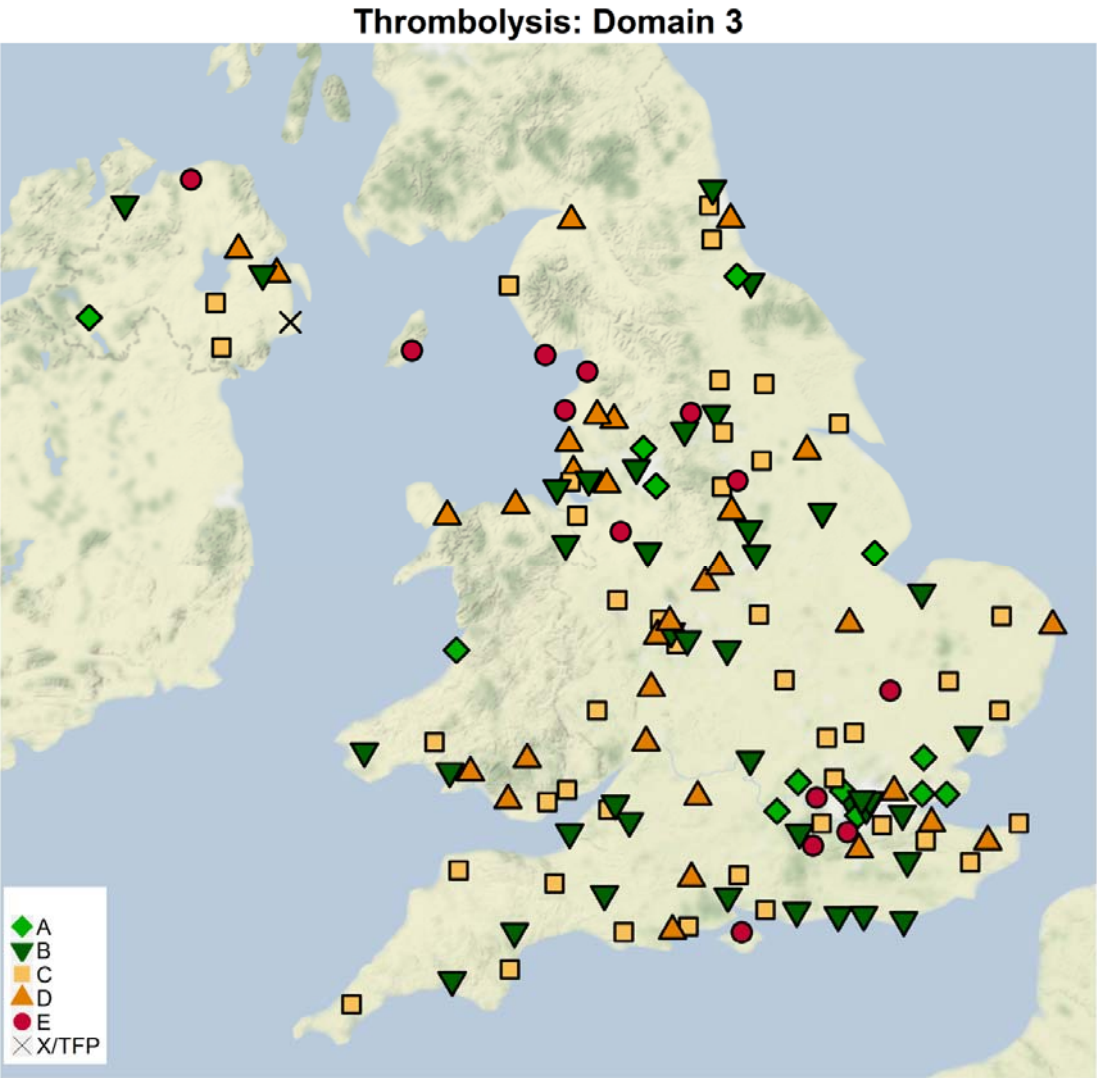
**3.5.1A** Patients with acute ischaemic stroke, regardless of age or stroke severity, in whom treatment can be started within 3 hours of known onset should be considered for treatment with alteplase.

- **3.5.1E** Alteplase should only be administered within a well-organised stroke service with:
  - processes throughout the emergency pathway to minimise delays to treatment, to ensure that thrombolysis is administered as soon as possible after stroke onset;
  - staff trained in the delivery of thrombolysis and monitoring for post-thrombolysis complications;
  - nurse staffing levels equivalent to those required in level 1 or level 2 nursing care with training in acute stroke and thrombolysis;
  - immediate access to imaging and re-imaging, and staff appropriately trained to interpret the images;
  - protocols in place for the management of post-thrombolysis complications.

### Distribution of scores across all inpatient teams for Domain 3 (139 team)



The map below shows the team centred performance of all *routinely admitting teams* for Domain 3. Each symbol represents a team, colour coded by the overall score achieved. Teams with insufficient or too few records submitted are highlighted with an X symbol.



Source: SSNAP Dec 2016-Mar 2017  
Team-centred

## Domain 4: Specialist Assessments

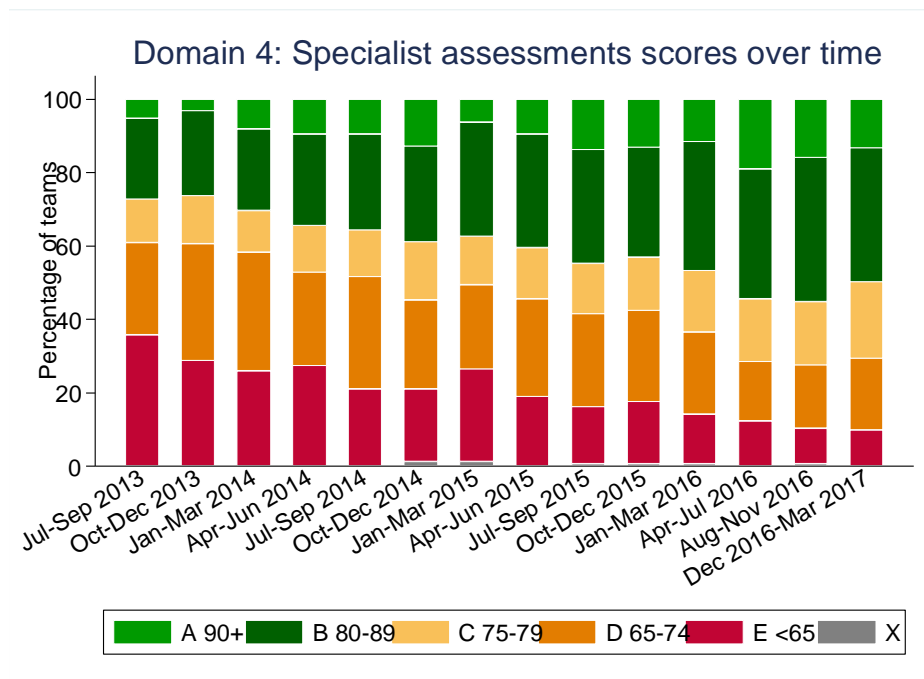
### What should be done?

*RCP National Clinical Guideline for Stroke, 5<sup>th</sup> Edition*

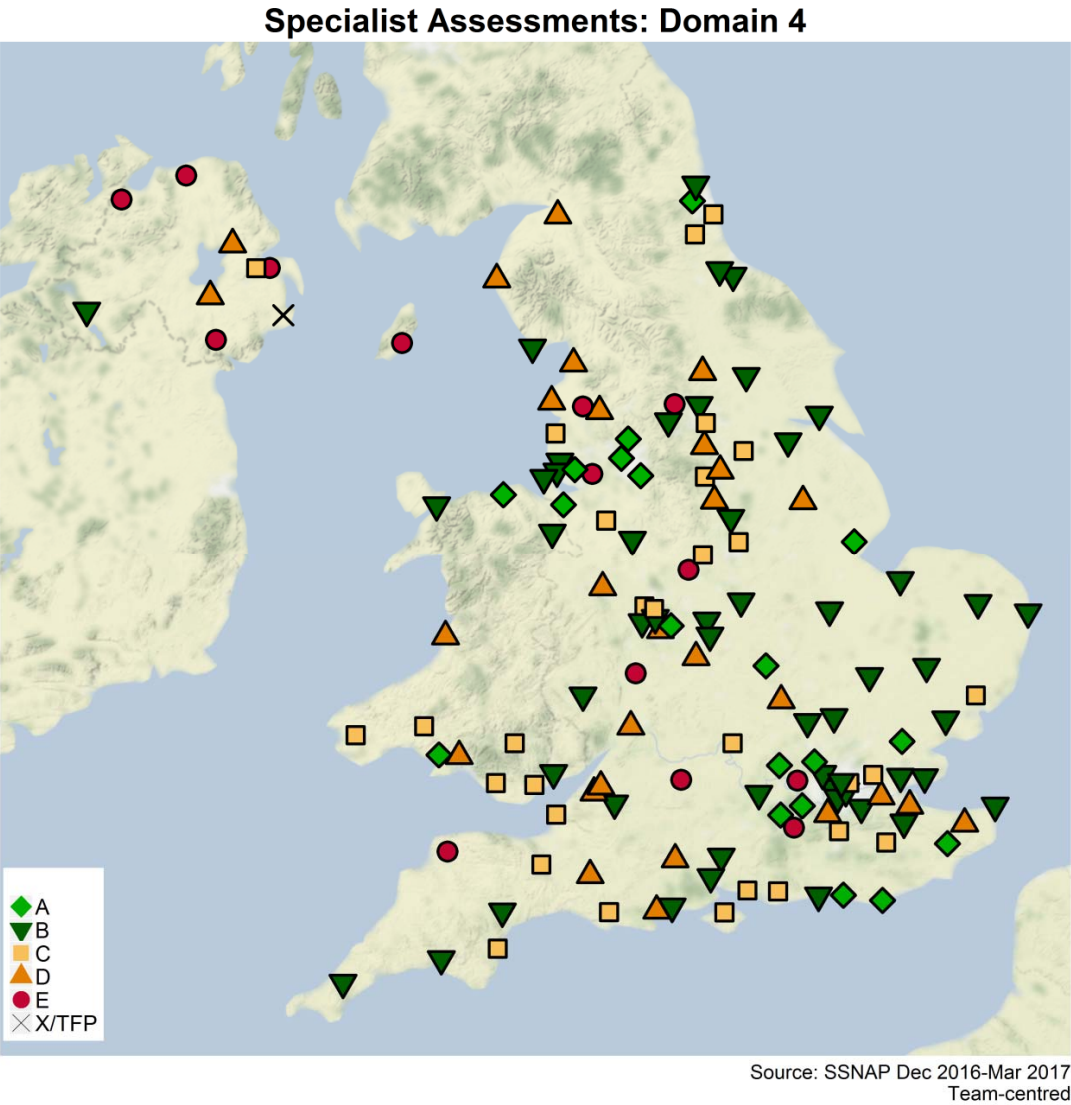
**2.3.1B** People with suspected acute stroke (including when occurring in people already in hospital) should be admitted directly to a hyperacute stroke unit and be assessed for emergency stroke treatments by a specialist physician without delay.

**3.10.1E** Patients with acute stroke should have their swallowing screened, using a validated screening tool, by a trained healthcare professional within four hours of arrival at hospital and before being given any oral food, fluid or medication.

### Distribution of scores across all inpatient teams for Domain 4 (143 teams)



The map below shows the team centred performance of all *routinely admitting teams* for Domain 4. Each symbol represents a team, colour coded by the overall score achieved. Teams with insufficient or too few records submitted are highlighted with an X symbol





## Domain 5: Occupational Therapy

### What should be done?

*RCP National Clinical Guideline for Stroke, 5<sup>th</sup> Edition*

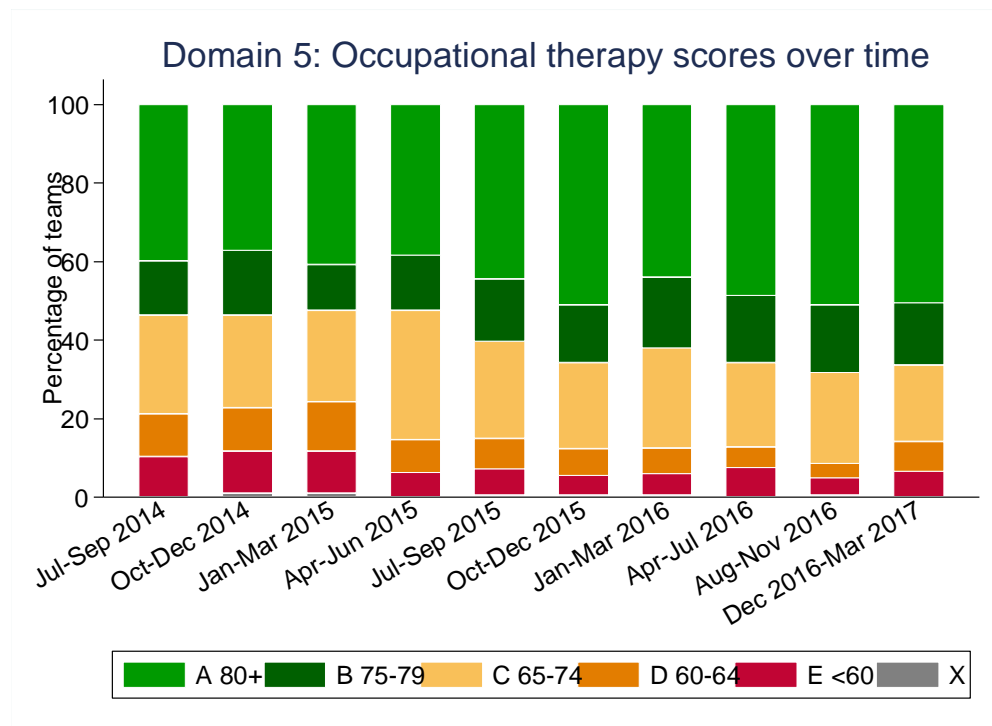
**2.11.1A** People with stroke should accumulate at least 45 minutes of each appropriate therapy every day, at a frequency that enables them to meet their rehabilitation goals, and for as long as they are willing and capable of participating and showing measurable benefit from treatment.

*NICE Quality Standards*

Statement 2: Adults having stroke rehabilitation in hospital or in the community are offered at least 45 minutes of each relevant therapy for a minimum of 5 days a week.

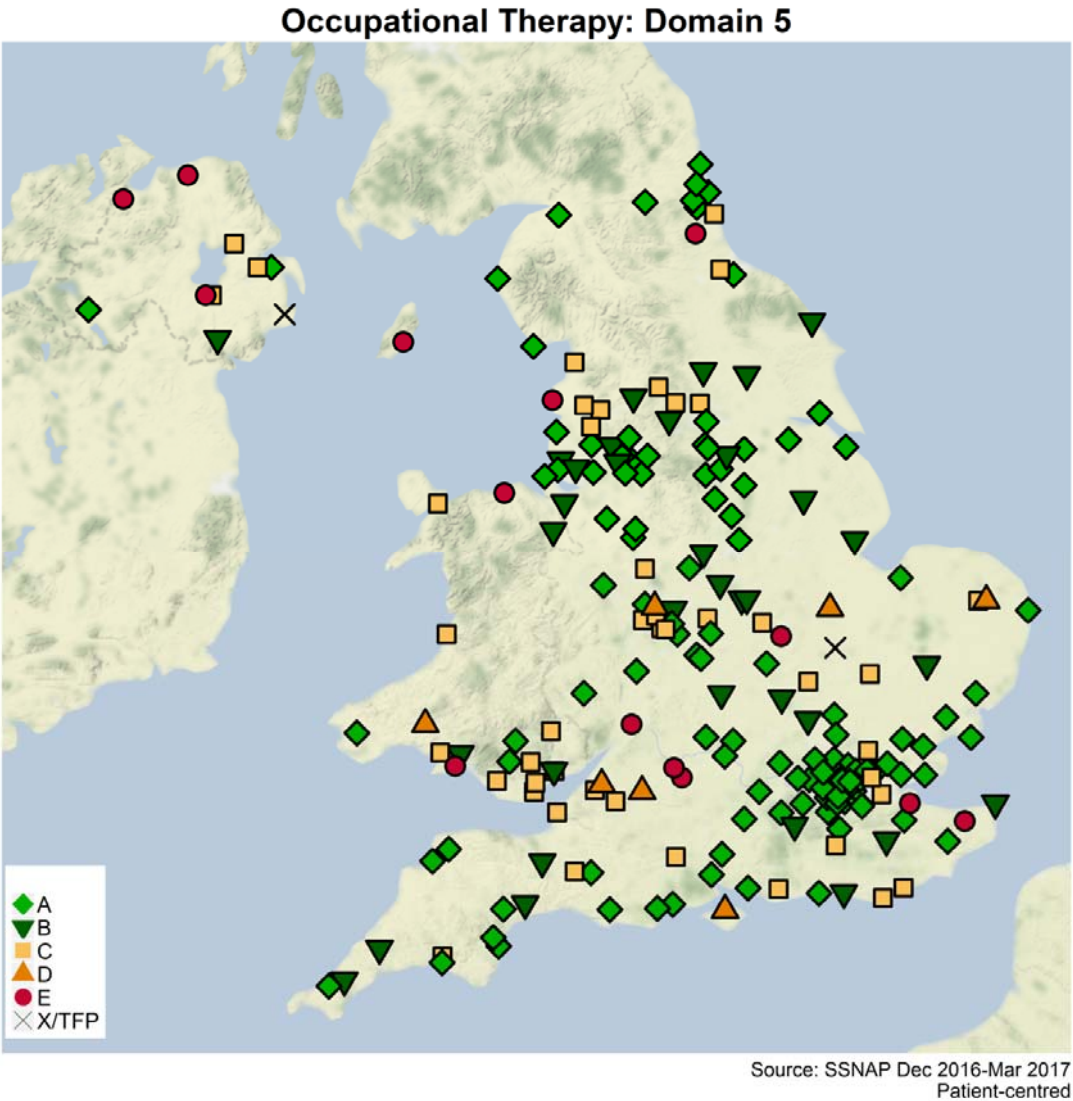
[2010, updated 2016]

### Distribution of scores across all inpatient teams for Domain 5 (226 teams)





The map below shows the patient centred performance of all *inpatient teams* for Domain 5. Each symbol represents a team, colour coded by the overall score achieved. Teams with insufficient or too few records submitted are highlighted with an X symbol.



## Domain 6: Physiotherapy

### What should be done?

*RCP National Clinical Guideline for Stroke, 5<sup>th</sup> Edition*

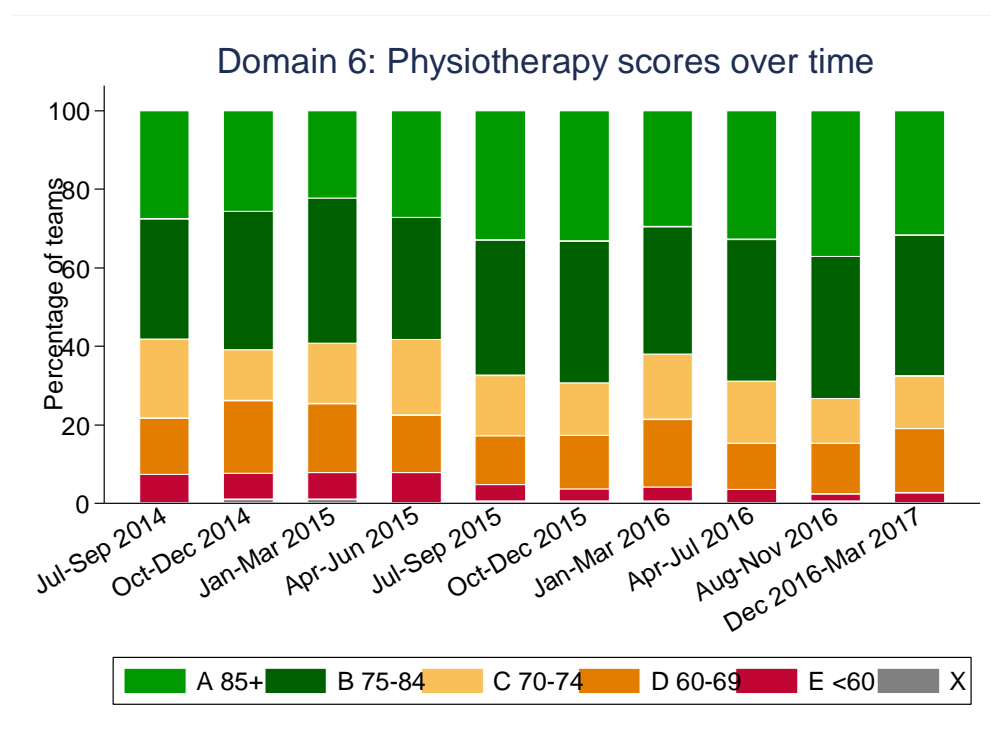
**2.11.1A** People with stroke should accumulate at least 45 minutes of each appropriate therapy every day, at a frequency that enables them to meet their rehabilitation goals, and for as long as they are willing and capable of participating and showing measurable benefit from treatment.

*NICE Quality Standards*

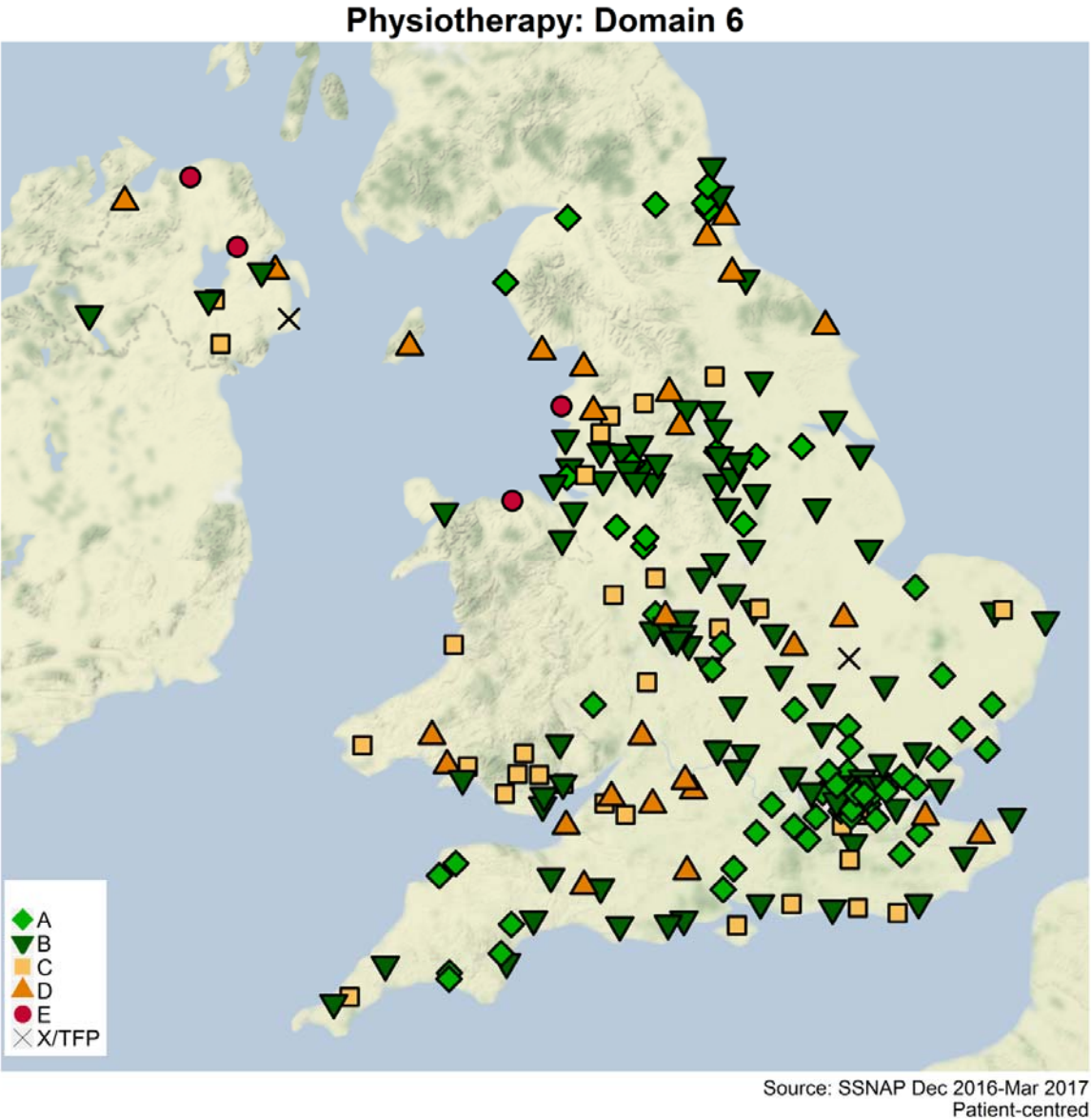
Statement 2: Adults having stroke rehabilitation in hospital or in the community are offered at least 45 minutes of each relevant therapy for a minimum of 5 days a week.

[2010, updated 2016]

### Distribution of scores across all inpatient teams for Domain 6 (226 teams)



The map below shows the patient centred performance of all *inpatient teams* for Domain 6. Each symbol represents a team, colour coded by the overall score achieved. Teams with insufficient or too few records submitted are highlighted with an X symbol.



## Domain 7: Speech and Language Therapy

### What should be done?

*RCP National Clinical Guideline for Stroke, 5<sup>th</sup> Edition*

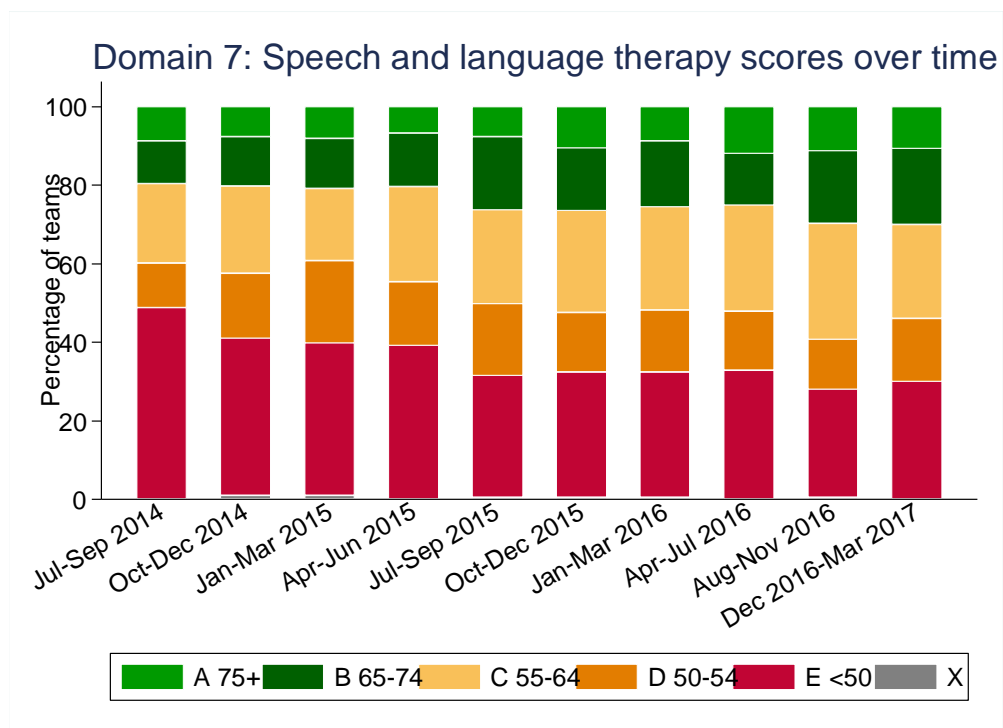
**2.11.1A** People with stroke should accumulate at least 45 minutes of each appropriate therapy every day, at a frequency that enables them to meet their rehabilitation goals, and for as long as they are willing and capable of participating and showing measurable benefit from treatment.

*NICE Quality Standards*

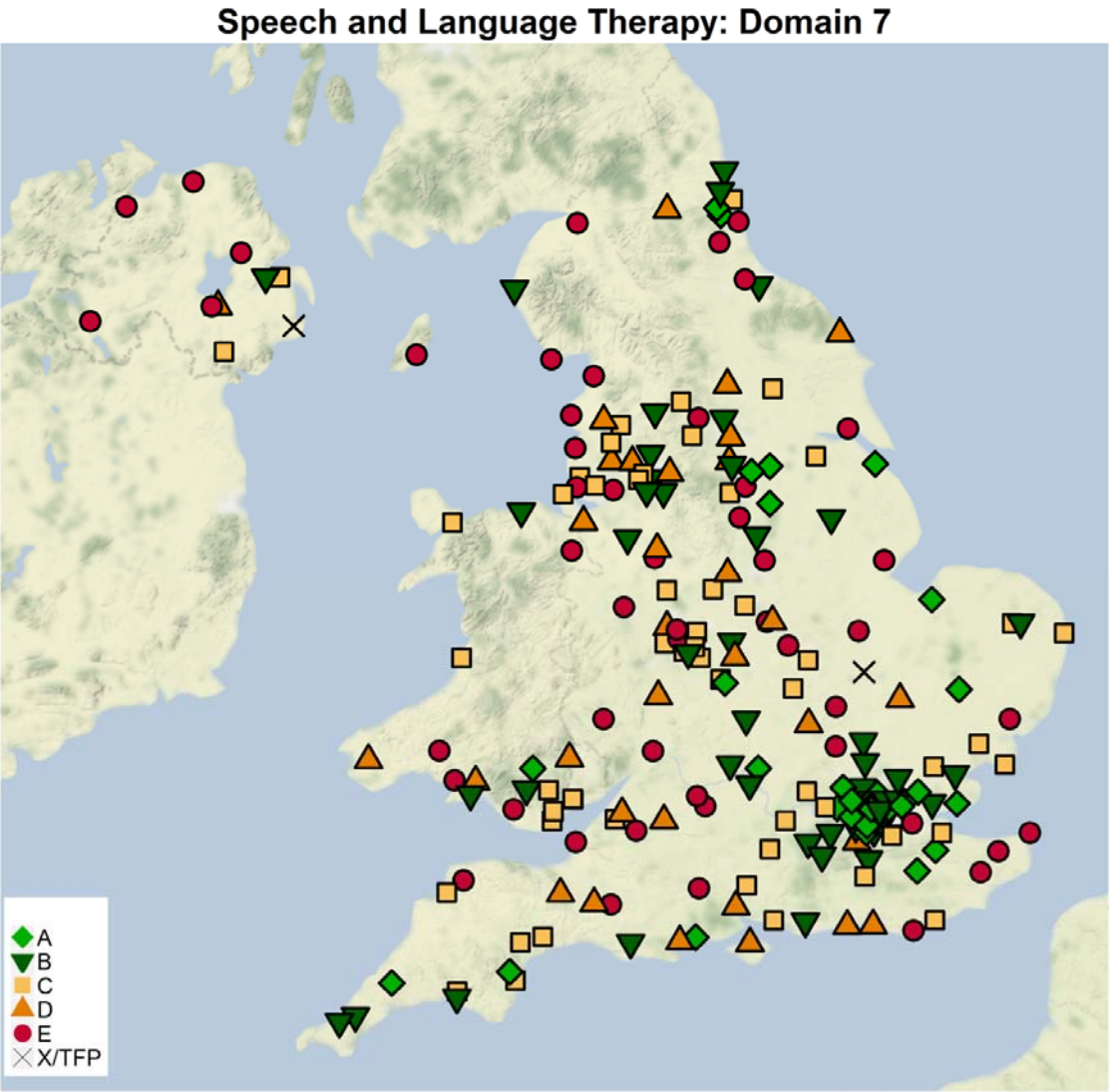
Statement 2: Adults having stroke rehabilitation in hospital or in the community are offered at least 45 minutes of each relevant therapy for a minimum of 5 days a week.

[2010, updated 2016]

### Distribution of scores across all inpatient teams for Domain 7 (226 teams)



The map below shows the patient centred performance of all *inpatient teams* for Domain 7. Each symbol represents a team, colour coded by the overall score achieved. Teams with insufficient or too few records submitted are highlighted with an X symbol.



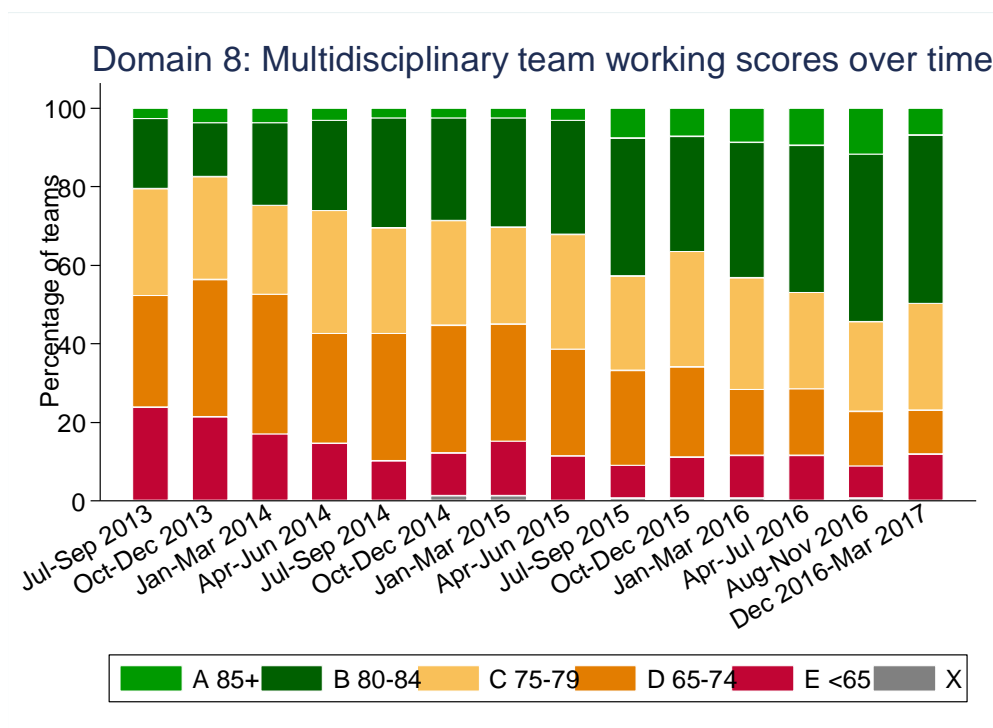
Source: SSNAP Dec 2016-Mar 2017  
Patient-centred

## Domain 8: Multidisciplinary team working

*RCP National Clinical Guideline for Stroke, 5<sup>th</sup> Edition*

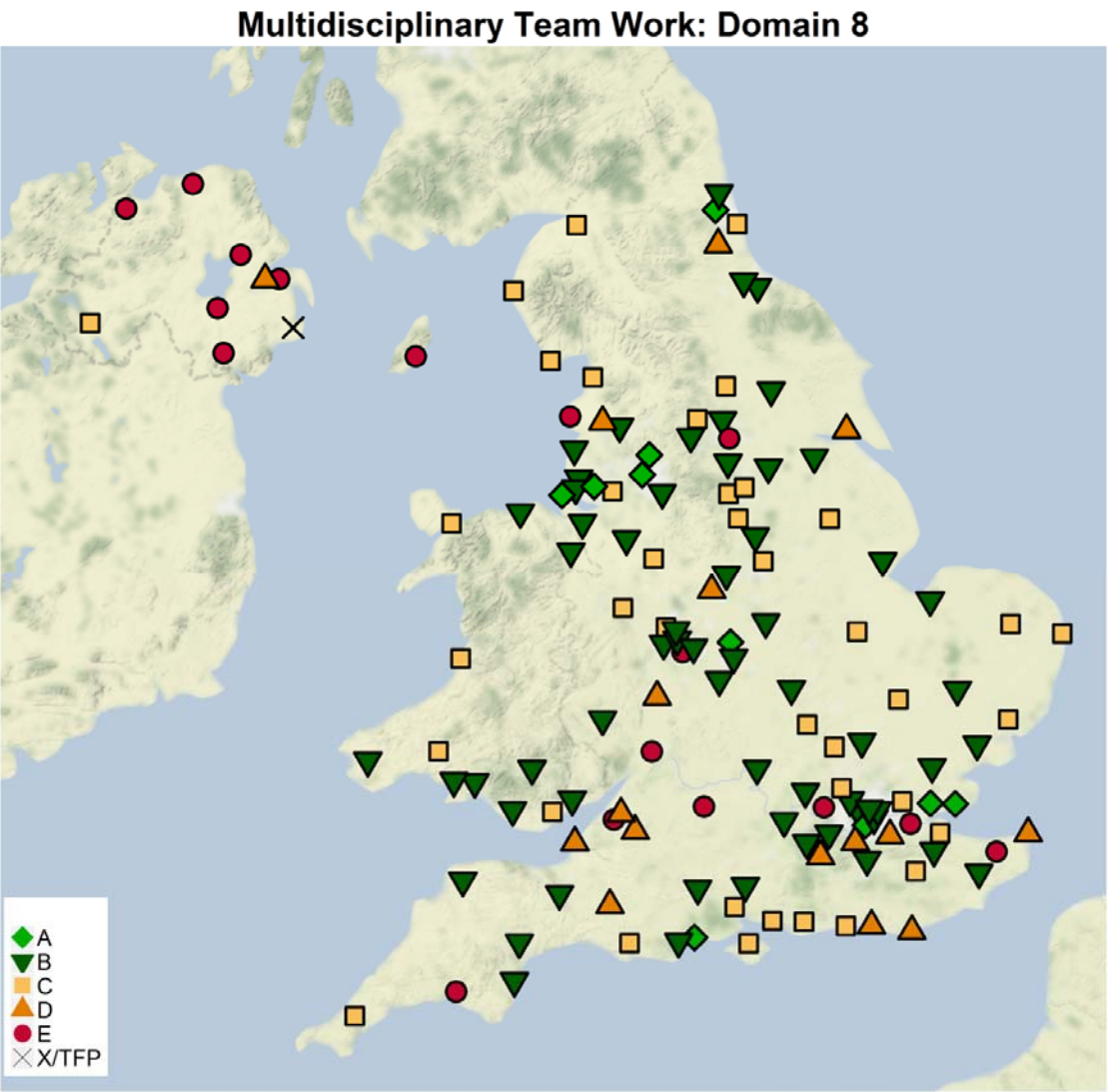
**4.4.1.1A** People with communication problems after stroke should be assessed by a speech and language therapist to diagnose the problem and to explain the nature and implications to the person, their family/carers and the multidisciplinary team. Reassessment in the first four months should only be undertaken if the results will affect decision making or are required for mental capacity assessment.

### Distribution of scores across all inpatient teams for Domain 8 (143 teams)





The map below shows the team centred performance of all *routinely admitting* teams for Domain 8. Each symbol represents a team, colour coded by the overall score achieved.



Source: SSNAP Dec 2016-Mar 2017  
Team-centred

## Domain 9: Standards by Discharge

### What should be done?

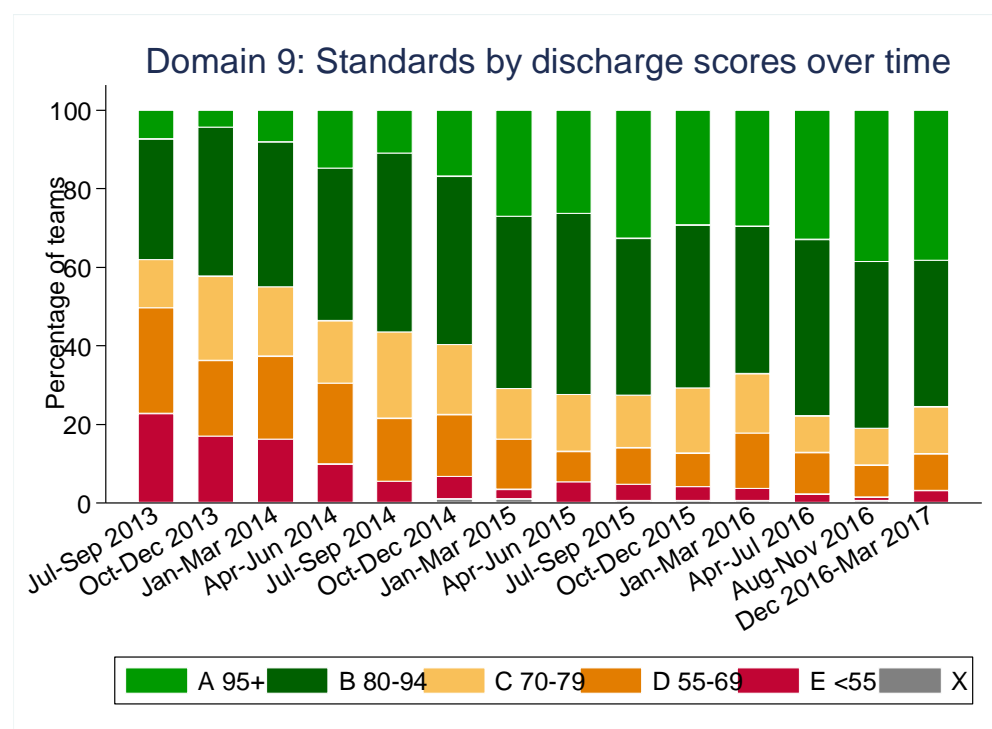
*RCP National Clinical Guideline for Stroke, 5<sup>th</sup> Edition*

**2.12.1F** Services for people with stroke should include specialist clinical neuropsychology/clinical psychology provision for severe or persistent symptoms of emotional disturbance, mood or cognition.

**4.7.1F** Patients with stroke who are unable to maintain adequate nutrition and fluids orally should be:

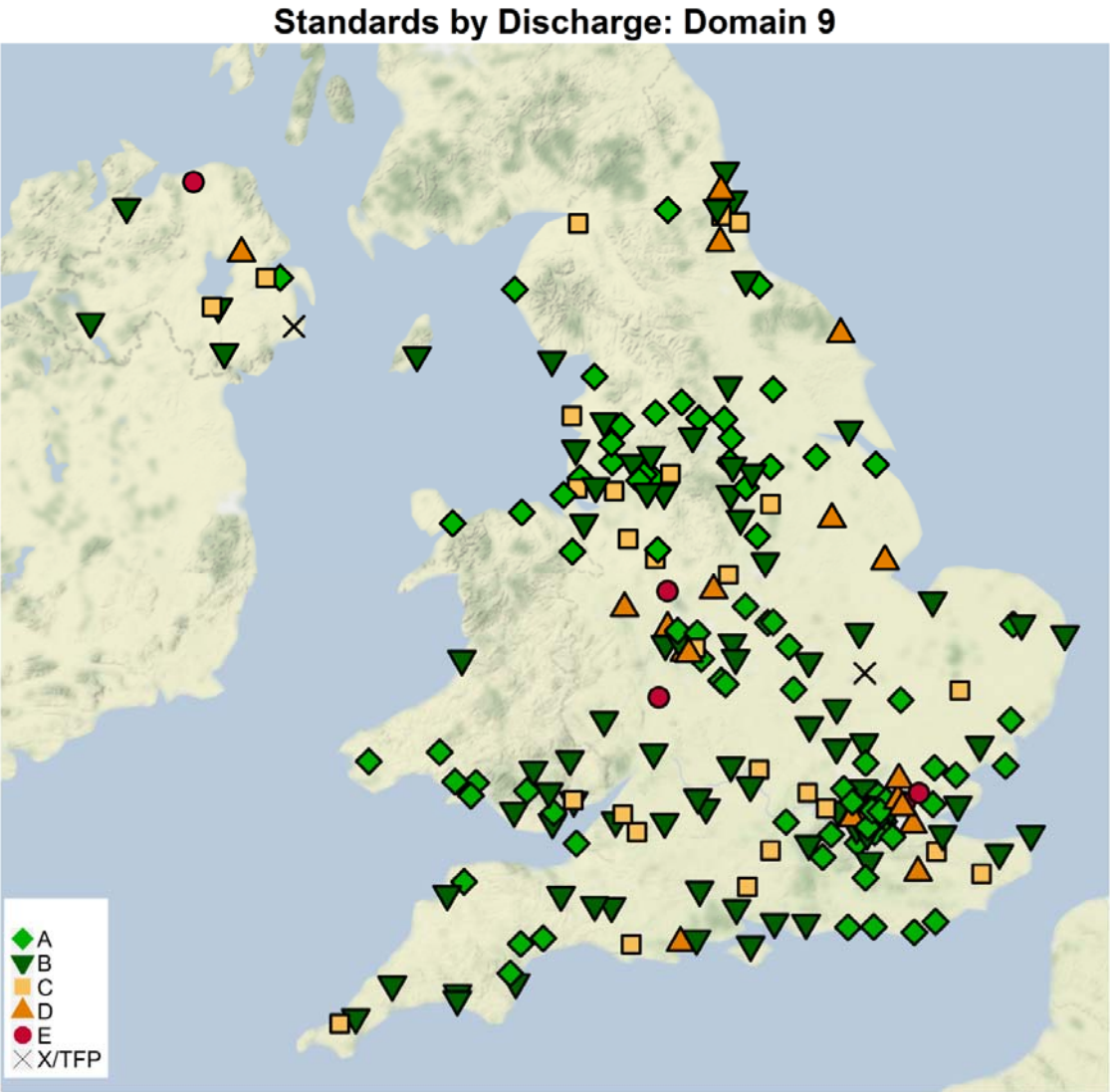
- referred to a dietitian for specialist nutritional assessment, advice and monitoring;
- be considered for nasogastric tube feeding within 24 hours of admission;
- assessed for a nasal bridge if the nasogastric tube needs frequent replacement, using locally agreed protocols;
- Assessed for gastrostomy if they are unable to tolerate a nasogastric tube with nasal bridge.

### Distribution of scores across all inpatient teams for Domain 9 (225 teams)





The map below shows the team centred performance of all *inpatient teams* for Domain 9. Each symbol represents a team, colour coded by the overall score achieved. Teams with insufficient or too few records submitted are highlighted with an X symbol.



Source: SSNAP Dec 2016-Mar 2017  
Team-centred

## Domain 10: Discharge Processes

### What should be done?

*RCP National Clinical Guideline for Stroke, 5<sup>th</sup> Edition*

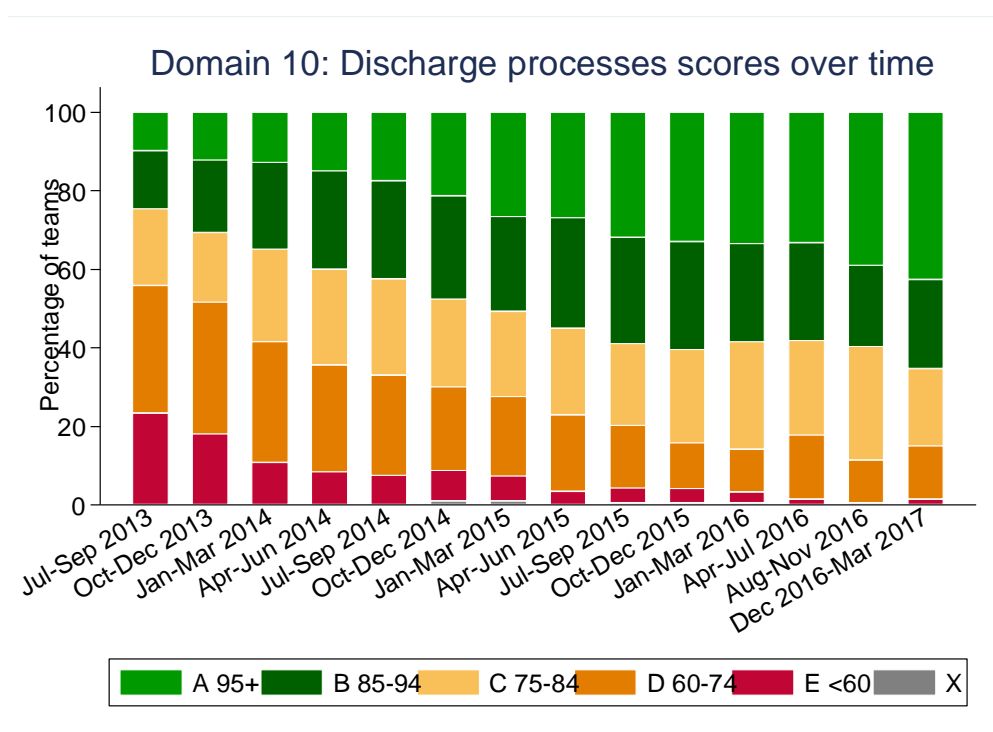
**2.7.1A** Hospital in-patients with stroke who have mild to moderate disability should be offered early supported discharge, with treatment at home beginning within 24 hours of discharge

*NICE Quality Standards*

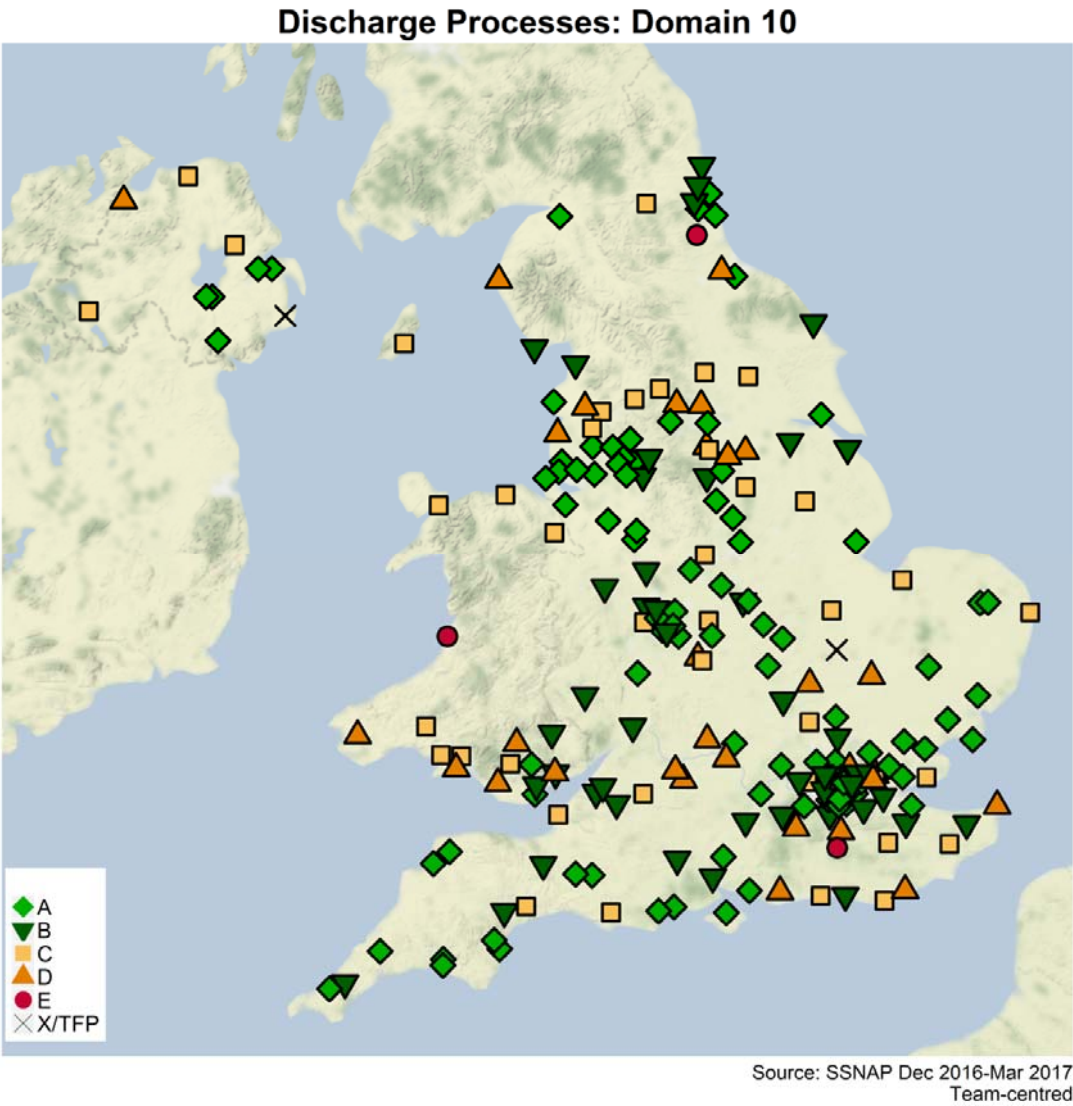
Statement 4: Adults who have had a stroke are offered early supported discharge if the core multidisciplinary stroke team assess that it is suitable for them.

[2016]

### Distribution of scores across all inpatient teams for Domain 10 (225 teams)



The map below shows the team centred performance of all *inpatient teams* for Domain 10. Each symbol represents a team, colour coded by the overall score achieved. Teams with insufficient or too few records submitted are highlighted with an X symbol.



## Section 2: Casemix

Casemix describes the characteristics of the group (or cohort) of stroke patients treated by a team. It includes demographics and type of stroke. The figures for casemix are used in other reports to adjust for patient outcomes including mortality. It is therefore extremely important that the casemix data entered is of the highest quality and validated by the lead clinical contact. The casemix figures in this section relate to those patients admitted between April 2016 and March 2017. The casemix of the patients discharged during the same time period are very similar and have not been included in this public report. Comprehensive tables outlining casemix data for the past four reporting periods can be found in the appendix of this report. Teams have the ability to analyse their own casemix during interim periods, they can do so via the downloadable casemix tool.

In April 2016- March 2017, the percentage of patients newly arriving in hospital was 94.3% and the number of patients that were inpatients at the time of stroke was at 5.7%.

### 2.1 Patient Numbers

85,122 patients were included in the April 2016 – March 2017 report. Of these 80,235 (94.3%) patients were newly arriving in hospital and 4,887 (5.7%) patients were already in hospital at the time of stroke.

### 2.2 Gender

Of all stroke patients admitted and discharged between April 2016 to March 2017 48.8% have been female and 51.2% have been male.

### 2.3 Age

The median age for April 2016-March 2017 is 77 years.

**Comment** The patients being entered onto SSNAP appear to be very similar in terms of age to previous audits that we have conducted (Sentinel and SINAP).

### 2.4 Co-morbidities

The types of co-morbidities for April 2016 – March 2017 are as follows.

- 5.4% Congestive Heart Failure
- 53.3% Hypertension
- 20.8% Diabetes
- 26.1% Stroke/TIA
- 19.7% Atrial Fibrillation

SSNAP collects information on the type of co-morbidity of patients that are admitted with stroke. Data for the last four reporting periods suggest that there is very little change in this area (See appendix).

## Atrial Fibrillation: In focus

### Overview

The following section discusses atrial fibrillation as reported by SSNAP. Atrial fibrillation, or AF, is a heart condition that causes an irregular and often abnormally fast heartbeat. SSNAP reports on AF status upon admission to hospital, on leaving hospital, and at six months after stroke. SSNAP also provides information on provision of anti-coagulation medication. These are medicines that help prevent blood clots by interrupting the process involved in their formation. Increasing the proportion of people with AF on anticoagulants will reduce the number of people having stroke.

#### Atrial Fibrillation on admission

About 20% of patients have been reported as being in AF before their stroke and this has been largely consistent across the four years of SSNAP reporting. Increasingly fewer patients are being prescribed anti-platelet medication deemed ineffectual for patients with AF which is reassuring. Conversely more than 50% of patients with AF are now on anticoagulant medication, which reduce risk of stroke. This is a substantial increase from only 38% in the first year of SSNAP reporting but much work still needs to be done to ensure all patients who would benefit from anti coagulant medication are prescribed them.

More detailed information on atrial fibrillation is provided in the appendix.

#### Atrial Fibrillation on admission

	Three month reporting	Four month reporting			
If patient has Atrial Fibrillation, was the patient on antiplatelet medication prior to admission? (Q2.1.6)	Jan-Mar 2016  N=4103	Apr-Jul 2016  N=5401	Aug-Nov 2016  N=5313	Dec 2016-March 2017  N=5739	Ref
Yes	27.2%	25.5%	22.5%	21.1%	F6.6
No	58.3%	60.5%	64.9%	65.2%	F6.8
No but	14.4%	14.0%	12.6%	13.6%	F6.10

	Three month reporting	Four month reporting			
If patient had Atrial Fibrillation, was the patient on anticoagulant medication prior to admission? (Q2.1.7)	Jan-Mar 2016  N=4103	Apr-Jul 2016  N=5401	Aug-Nov 2016  N=5313	Dec 2016-March 2017  N=5739	Ref
Yes	50.1%	51.4%	53.8%	54.0%	F6.13
No	38.5%	36.0%	35.5%	35.1%	F6.15
No but	11.5%	12.6%	10.7%	10.9%	F6.17

	Three month reporting	Four month reporting			
If patient had Atrial Fibrillation, what combination of anticoagulant and antiplatelet medication was the patient on prior to admission?	Jan-Mar 2016  N=4103	Apr-Jul 2016  N=5401	Aug-Nov 2016  N=5313	Dec 2016-March 2017  N=5739	Ref
Anticoagulant AND antiplatelet medication	4.1%	3.9%	3.3%	3.4%	F6.20
Anticoagulant medication only	46.0%	47.5%	50.5%	50.6%	F6.22
Antiplatelet medication only	23.2%	21.7%	19.1%	17.8%	F6.24
Neither medication	26.8%	27.0%	27.1%	28.2%	F6.26

**Comment:** These data are similar to the last National Sentinel Stroke Audit and reveal that there are still major issues in primary and secondary care about ensuring that patients have effective stroke prevention. Approximately one fifth of patients are in atrial fibrillation (AF) on admission. Over 50% of patients in AF on admission are taking anticoagulants with almost 20% taking only antiplatelet drugs which are considered ineffective for patients in AF. Over a quarter of patients have had a prior stroke or TIA.

### Atrial Fibrillation on discharge

About 20% of patients are recorded as being in AF upon leaving hospital. Over 95% of patients deemed applicable for anti-coagulant medication are being prescribed these drugs upon leaving hospital which is reassuring. This also represents a 5% increase in anti-coagulation provision since the first year of SSNAP reporting in 2013/14.

### Atrial Fibrillation at six months

SSNAP provides an opportunity to measure the number of patients identified as being in AF six months post admission. From April 2014 a “not known” option was added to the dataset for the following questions, however the percentage of patients for whom “not known” was answered is less than 8. It is important to note that SSNAP only has information on a subset of patients at 6 months, approximately 30-35% of all patients deemed applicable for a six month assessment due to low case ascertainment levels. More details on the rationale and methodology for collecting data on patients at six months after stroke is provided in the six month section of this report.

Between 20-25% of patients are reported to be in AF at six months, with about 80% of these patients taking anti-coagulant medication. However close to 20% of patients who were prescribed anti-coagulant medication upon leaving hospital were no longer taking them at six months. This is concerning particularly as the percentage has remained quite stable over time. More details on medication at six months including anti-platelets, lipid lowering and anti-hypertensive is provided in the appendix of this report.

## 2.5 Stroke Type

	Three month reporting	Four month reporting			
Stroke Type (Q2.5)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-March 2017	Ref
Infarction	86.8%	87.4%	87.1%	87.2%	F7.3
Intracerebral Haemorrhage	12.8%	12.1%	12.5%	12.3%	F7.5
Unknown (not scanned)	0.4%	0.5%	0.4%	0.5%	F7.7

**Comment:** The distribution of haemorrhage and infarction is as expected from UK stroke epidemiology supporting the impression that there has not been significant case selection bias in terms of cases submitted to the audit.

## 2.6 Modified Rankin Scale scores before stroke

This is fully recorded for all patients in this cohort.

	Three month reporting	Four month reporting			
Modified Rankin Scale score before stroke (Q2.2)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-March 2017	Ref
0 (no symptoms)	54.6%	54.9%	55.0%	54.2%	F8.3
1 (no significant disability)	15.1%	14.9%	14.7%	15.0%	F8.5
2 (slight disability)	10.7%	10.1%	10.3%	10.7%	F8.7
3 (moderate disability)	11.8%	12.2%	12.0%	12.1%	F8.9
4 (moderately severe disability)	6.1%	6.2%	6.2%	6.4%	F8.11
5 (severe disability)	1.7%	1.7%	1.8%	1.6%	F8.13
<b>Groups</b>					
1 or 2	25.8%	25.0%	25.0%	25.7%	H1.12
3, 4 or 5	19.6%	20.1%	20.0%	20.1%	H1.13

**Comment:** These data reinforce the message that stroke often occurs in frail patients. Approximately half of the cohort had restriction of activity before their stroke (Rankin score greater than 0) with nearly one fifth having very significant pre-stroke problems (Rankin Score greater than 2). These data will be used in the future to evaluate stroke outcomes at six months to assess how effective treating the stroke has been.

## 2.7 Completion rate of NIHSS items

High quality data are needed to assess the severity of stroke at admission. The best way of doing this is by using the National Institutes of Health Stroke Scale (NIHSS). It is a 15 item scale with one item that is mandatory on SSNAP (level of consciousness (LOC)). NIHSS completion is included in the audit compliance score for individual teams with the expectation that completion rates will continue to improve.

	Three month reporting	Four month reporting			
Number of NIHSS components completed (Q2.3)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-March 2017	Ref
1 (only the compulsory LOC)	6.7%	5.1%	4.2%	4.2%	F9.12
2-14	5.1%	4.9%	3.9%	3.6%	F9.14
15 (all components)	88.2%	90.0%	91.9%	92.2%	F9.16

**Comment:** It is encouraging to see a consistent increase in the rate of NIHSS completion each reporting period. Completing an NIHSS for all stroke patients is fundamental in quantifying the level of impairment caused by a stroke and we would expect the level of completion to continue to increase in future reporting periods.

## 2.8 Summary of total NIHSS score

	Three month reporting	Four month reporting			
<i>If NIHSS fully completed, severity groups:</i>	Jan-Mar 2016 N=18517	Apr-Jul 2016 N=25197	Aug-Nov 2016 N=25106	Dec 2016-March 2017 N=26333	Ref F9.17
0	6.8%	7.0%	7.0%	6.8%	F9.19
1-4= minor stroke	42.1%	42.6%	42.1%	41.0%	F9.21
5-15= moderate stroke	35.4%	34.8%	35.0%	35.7%	F9.23
16-20= moderate/severe stroke	7.5%	6.9%	7.4%	7.6%	F9.25
21-42= severe stroke	8.2%	8.7%	8.5%	8.9%	F9.27

Median and mean NIHSS scores are publicly available in the full results portfolio, which is available at the link below.

<https://www.strokeaudit.org/results/Clinical-audit/National-Results.aspx>

**Comment:** A score of 0 does not mean that the patient did not have a stroke. There are deficits that are unrecorded by the score and some patients will have presented after the first 24 hours following stroke and have made a complete recovery. The distribution of the NIHSS scores is in line with what we expected again reassuring us that a representative sample of stroke patients is being submitted to SSNAP.

## 2.9 Palliative Care within 72h

All data items collected regarding palliative care can be found within the Full Results Portfolio within the casemix tab. <https://www.strokeaudit.org/results/Clinical-audit/National-Results.aspx>



	Three month reporting	Four month reporting			
Palliative Care Decisions	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-March 2017	Ref
Has it been decided in the first 72 hours that the patient is for palliative care? (Q3.1)	5.2%	5.5%	5.5%	5.7%	F10.3

**Comment:** About 6% of patients have such severe strokes that a decision is made within the first 72 hours to palliate.

## 2.10 Onset of symptoms

The provision of standards of care within a specific timeframe depends on whether or not the day and time of onset can be obtained. The audit recognises that it may not be possible to identify a precise time for all patients, in which case the 'best estimate' is used.

	Three month reporting	Four month reporting			
Date of symptom onset (Q1.11.1)	Oct-Dec 2015	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-March 2017	Ref
Precise	67.2%	66.5%	66.1%	66.1%	H2.3
Best estimate	19.7%	21.1%	21.6%	21.1%	H2.5
Stroke during sleep	13.1%	12.4%	12.3%	12.9%	H2.7

	Three month reporting	Four month reporting			
Time of symptom onset (Q1.11.2)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-March 2017	Ref
Known	67.8%	68.6%	68.4%	68.6%	H2.17
Precise	32.1%	32.7%	32.7%	33.0%	H2.10
Best estimate	35.7%	36.0%	35.8%	35.7%	H2.12
Not known	32.2%	31.4%	31.6%	31.4%	H2.14

Time of onset is an important measure of data quality as it reflects the care taken to ascertain the time of onset as accurately as possible. From a clinical perspective a known time of onset will determine whether patients are appropriate for thrombolysis and intra-arterial treatment.

**Comment:** It is notable that a low percentage of patients reported as having stroke during sleep. The data highlights how important it is that specialist services are available 24 hours a day and seven days a week.

## 2.11 Ethnicity

<b>Ethnicity (Q1.8)</b>	<b>April 2015-March 2016</b>		<b>April 2016-March 2017</b>	
Known	79069	93.9%	79922	93.9%
<i>White</i>	74408	88.4%	75216	88.4%
<i>Mixed / multiple ethnicity group</i>	374	0.4%	321	0.4%
<i>Asian / Asian British</i>	2381	2.8%	2342	2.8%
<i>Black / African / Caribbean / Black British</i>	1048	1.2%	1045	1.2%
<i>Other ethnic group</i>	858	1.0%	998	1.1%
Not known	5115	6.1%	5200	6.1%

Due to low numbers in some categories, the ethnicity data is reported on an annual cohort. The high proportion of not known responses indicates difficulties in collecting this data. Furthermore the low completion rate makes the results difficult to interpret.

## Section 3: Acute Stroke Care Processes of care in the first 72 hours

### Introduction: Getting to hospital FAST

It is important for patients to get to hospital as soon as possible following a stroke to ensure they receive the specialist care needed to reduce the impact of stroke and ensure the patient has the best possible chance of making a recovery. SSNAP reports timings from onset of stroke to arrival at hospital as well as timings for receiving key interventions such as scanning and thrombolysis. Since SSNAP started collecting data in April 2013, onset to arrival times at hospital have increased year on year at national level which is a cause for concern and will need to be continuously monitored. Median onset to arrival time for 2016/2017 was 2 hours and 50 minutes, an increase of 25 minutes from data reported in 2013/2014. It should be noted that the percentage of patients arriving on the same day as stroke has reduced year on year. The tables below provide latest periodic results.

### 3.1 Timings from onset

	Three month reporting	Four month reporting			
Timings from onset (using both precise and best estimate times) (Q1.11.1 and 1.11.2)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
	Median (IQR)	Median (IQR)	Median (IQR)	Median (IQR)	
Time from onset to arrival †	2h 49m (1h 28m – 8h 31m)	2h 49m (1h 26m – 8h 52m)	2h 54m (1h 30m – 08h 52m)	2h 50m (1h 28m – 08h 37m)	H3.1 H3.2 H3.3
Time from onset to stroke unit admission*	7h 53m (4h 23m – 20h 33m)	7h 20m (4h 09m – 20h 13m)	7h 33m (4h 18m – 20h 04m)	7h 56m (4h 20m – 21h 01m)	H3.4 H3.5 H3.6
Time from onset to scan*	4h 01m (2h 00m – 12h 05m)	3h 56m (1h 57m – 11h 57m)	4h 02m (2h 00m – 11h 56m)	3h 55m (1h 57m – 11h 23m)	H3.7 H3.8 H3.9
Time from onset to thrombolysis*	2h 25m (1h 53m – 3h 07m)	2h 23m (1h 48m – 3h 06m)	2h 25m (1h 50m – 3h 09m)	2h 25m (1h 51m – 3h 09m)	H3.10 H3.11 H3.12

†excluding in hospital stroke onset

\*including in hospital stroke onset

**Comment:** There are clearly major improvements to be made in terms of reducing the time from symptom onset to arrival in the hospital. This will require further campaigns such as the FAST campaign to improve the understanding of the public and also work with the ambulance services to reduce the time from call to hospital arrival.

### 3.2 Arrival by ambulance

Over 80% of patients newly arriving at hospital following their stroke arrival by ambulance. This percentage has been approximately 82% consistently over the four years of SSNAP reporting. Exact percentages on changes over time are provided in the appendix of this report.

**Comment:** As in previous audits, most patients arrive at hospital by ambulance, highlighting the importance of ensuring that paramedics are seen as an integral part of the stroke team and are included in training education and quality improvement. We aspire to link ambulance data to SSNAP so that we can report an accurate account of the whole acute care pathway.

### 3.3 Timings from Clock Start

Clock start is defined as the time of arrival for newly arrived patients, and the symptom onset time (precise and best estimate) for patients who have a stroke while in hospital. There have been continuous improvements in clock start to thrombolysis times and even more substantial improvements in clock start to scan times in the past four years as reported by SSNAP. Time to stroke unit admission has been more varied however and may reflect delays in A&E and as well as lack of available stroke unit beds. Most recent results are provided in the table below.

	Three month reporting	Four month reporting			
Timings from clock start (hours & minutes)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
	Median (IQR)	Median (IQR)	Median (IQR)	Median (IQR)	
Time from clock start to first arrival on a stroke unit	3h 51m (2h 14m – 8h 00m)	3h 35m (2h 03m – 6h 43m)	3h 38m (2h 07m – 6h 48m)	3h 47m (2h 11m – 7h 57m)	H7.4, H7.5, H7.6
Time from clock start to scan	1h 04m (26m – 2h 50m)	59m (24m – 2h 34m)	59m (23m – 2h 33m)	55m (23m – 2h 26m)	H6.4, H6.5, H6.6
Time from clock start to thrombolysis	54m (37m – 1h 19m)	52m (36m – 1h 16m)	51m (36m – 1h 15m)	52m (36m – 1h 15m)	H16.42, H16.43, H16.44

### 3.4 Period of Arrival Arriving In Hours v Out of hours

Arrival times have remained fairly consistent in recent years with slightly more patients arriving at hospital 'out of hours', approximately half of all patients, with about 45% arriving during 'normal hours. Between 5-6% of patients had their onset of stroke whilst already an inpatient. More details are available in the appendix.

### 3.5 Brain Scanning (Domain 1)

Contextualising information regarding brain scanning of stroke patients is provided in the 'executive summary' section of this report.

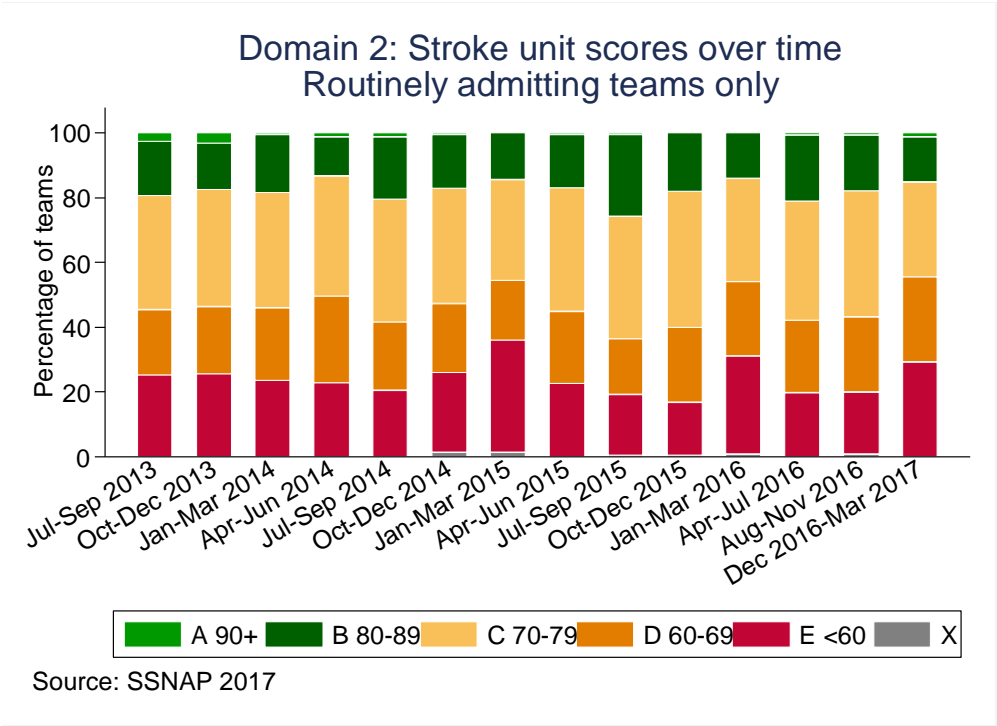
Virtually all patients are brain scanned during their hospital stay. The new RCP National Clinical Guideline for Stroke (fifth edition, 2016) recommends that all patients are scanned within 1 hour, and this is now being achieved for more than half of stroke admissions. It is appreciated that this change will take time to implement. The National Clinical Guideline for Stroke 2012 recommended that all patients are scanned within 12 hours of clock start; this standard has been achieved for more than 90% of all patients.

**Comment:** Improved access to scanning has been one of the main successes in stroke care over recent years, with over 90% of patients in the cohort for this report being scanned within 12 hours. Many services appear to be adopting the logical policy of scanning patients immediately on arrival at hospital. However SSNAP data has shown that there is a lower chance of patients being scanned at weekends than during the week and there are still relatively few patients scanned at night time.

3.6 Stroke Unit Admission (Domain 2)

Over 95% of applicable stroke patients now spend at least some of their time on a stroke unit. More information on the importance of stroke units is provided in the executive summary. Timings for onset and arrival to stroke unit admission are provided in the previous section.

The graph below demonstrates domain 2, stroke unit scores over time for routinely admitting teams. It is important to analyse routinely admitting teams and non-routinely admitting teams separately in the stroke unit domain, this is because non-routinely admitting teams are only measured on the 90% of stay on a stroke unit measure and not the speed at which a patient is directly admitted to their stroke unit.



### 3.7 First ward of admission

It is acknowledged that for a small proportion of patients direct admission to a stroke unit is not appropriate and the audit captures and differentiates between those who go to an acceptable other location (e.g. intensive care) compared to a 'non acceptable' location (e.g. generic admissions unit). It is encouraging that since 2013 a lower proportion of patients are being admitted to a general medical ward, 21% in 2013/2014 to fewer than 15% in 2016/2017, and that nearly 80% of patients are now admitted directly to a specialist stroke unit. Most recent results are provided in the table below. Despite these improvements there is wide hospital level variation in direct stroke unit admissions as reported in the SSNAP full results portfolio. More work is required to address this.

	Three month reporting	Four month reporting			
First ward of admission (at first admitting team) (Q1.14)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Stroke Unit	77.4%	78.4%	78.9%	77.8%	H7.11
Medical Assessment Unit / Acute Admissions Unit / Clinical Decisions Unit (unacceptable)	15.6%	14.7%	14.3%	14.8%	H7.9
Intensive Therapy Unit / Coronary Care Unit / High Dependency Unit (acceptable)	2.0%	2.1%	2.2%	2.3%	H7.13
Other (unacceptable)	5.0%	4.8%	4.6%	5.1%	H7.15

**Comment:** Almost all of this group of patients were treated at some time during their stay on a stroke unit although it is still of great concern that such a large percentage of patients are admitted initially to a general ward such as a medical admission unit. Direct admission to a stroke unit remains the most important intervention we have for acute stroke and so it is concerning that a significant number of patients are failed in this way. Correcting this part of the pathway should be a top priority for all hospitals operating such systems. In some cases this will be understandable if the patient has their stroke post-surgery or while on an intensive care unit, but we know that in-hospital stroke patients do tend to be identified and managed more slowly.

### 3.8 Thrombolysis (Domain 3)

Thrombolysis is a clot busting drug which can be a very effective way of treating ischaemic strokes (caused by blood clot). The eligibility criteria for thrombolysis are based on age, type of stroke and time lapse since stroke onset. Based on these criteria, it is expected that between 15 and 20% of patients would be eligible for thrombolysis. More details on thrombolysis are provided in the executive summary.

	Three month reporting	Four month reporting			
Was the patient given thrombolysis (Q2.6)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Yes	11.4%	11.9%	11.5%	11.6%	H16.3
No	1.0%	0.9%	1.0%	1.4%	H16.5
Thrombolysis not available at hospital	0.7%	0.5%	0.6%	0.4%	H16.14
Outside thrombolysis service hours	0.1%	0.1%	0.2%	0.5%	H16.16
Unable to scan quickly enough	0%	0%	0%	0%	H16.18
None	0.2%	0.3%	0.2%	0.5%	H16.20
No but*	87.7%	87.2%	87.5%	87.0%	H16.11

\*Since a patient can have more than one “no but” reason, the breakdown is given in the following table.

**Comment:** It is encouraging to see that a higher level of thrombolysis is being sustained compared to other high income countries.

‘No but’ is answered when there was a medical reason stated for not giving thrombolysis according to the hospital. The most common reasons are outlined below for April 2016 – March 2017 and year on year changes are available in the annual portfolio for 2016/2017.

- 32.4% Patient arrived outside the time window for thrombolysis
- 37.2% Wake up time unknown
- 13.7% Stroke too mild/severe
- 14.6% Haemorrhagic stroke

Other reasons for not giving thrombolysis were that the patient’s condition was improving, the patient had other co-morbidities and ‘other medical reasons’. Other less common ‘No but’ reasons were the patient’s age, medication, and patient refusal.

Further details of less common “No but” reasons, can be found within the results portfolio.

[www.strokeaudit.org/results/national](http://www.strokeaudit.org/results/national)

### 3.8.1 Thrombolysis timings

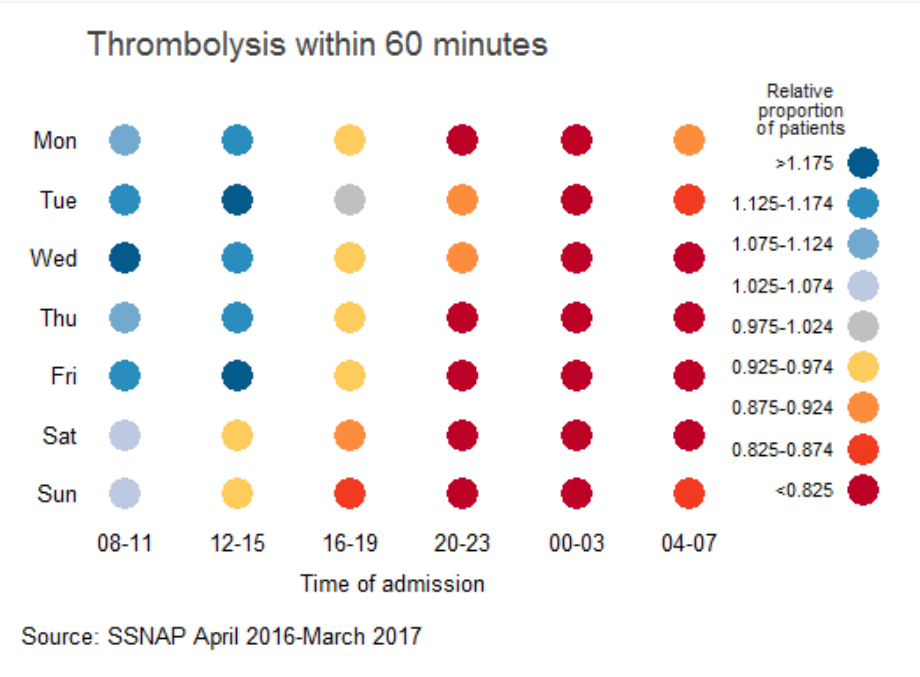
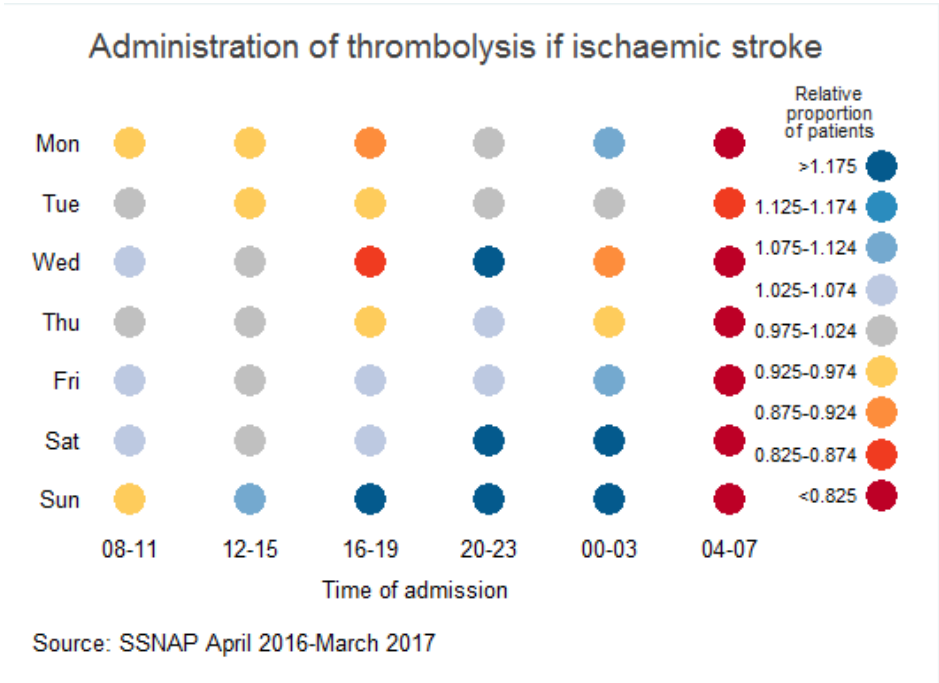
For patients who are thrombolysed SSNAP data from 2013-2017 have shown that:

- Onset to clock start has increased slightly from 1 hour 16 minutes to 1 hour 22 minutes
- Clock start to scan has reduced a few minutes from 23 minutes to 19 minutes
- Time from scan to thrombolysis has remained steady at approximately 30 minutes

Most recent data is available in the appendix.

**Comment:** These data show there are still improvements to be made in door to needle time for patients receiving thrombolysis. There are big variations between units demonstrating that it is possible to set services up to operate more efficiently.

The heatmaps below demonstrate the variation across time of day and day of week. The first of which highlights variation in the administration of thrombolysis if the patient has an ischaemic stroke. The second map highlights the day and time variation for thrombolysis to be administered within 60 minutes.





### 3.8.2 Thrombolysis based on eligibility

There are several reasons why thrombolysis might not be clinically appropriate for certain patients. This section presents results for eligible patients only. Eligibility is defined by the National Clinical Guideline for Stroke 2016 and includes:

Patients with a final diagnosis of stroke (Q1.9 recorded as 'Stroke'), and one of:

- newly arrived patients aged under 80 with an onset to arrival time of less than 3.5 hours
- newly arrived patients aged 80 or over with an onset to arrival time of less than 2 hours
- patients already in hospital at time of stroke

**except patients** with at least one medical reason for not giving thrombolysis that is **consistent** with information provided in other sections of the audit.

	Three month reporting	Four month reporting			
Minimum threshold for thrombolysis	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Percentage of patients eligible for thrombolysis (according to the RCP guideline minimum threshold)	11.8%	12.1%	11.6%	12.0%	H16.50
Percentage of eligible patients (according to above threshold) who were given thrombolysis	85.7%	87.7%	88.1%	85.5%	H16.55

See the 'Technical Information' section of the 'Full Results Portfolio' on the SSNAP reporting portal for more details about how eligibility is calculated.

### 3.8.3 Complications following thrombolysis

Thrombolysis carries two main risks, brain haemorrhage (bleeding into the brain which can be fatal) and swelling of the mouth and face. Swelling (AO) is more common in people taking one type of blood pressure lowering medicine (ACE inhibitor), it needs prompt recognition and treatment and resolves quite rapidly. Complication rates and type are provided in the tables below.

	Three month reporting	Four month reporting			
Thrombolysis complications (Q2.8) if patient received thrombolysis	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Patient had complications (Patients with complications/total number thrombolysed)	9.2% (220/2391)	8.6% (285/3331)	7.7% (243/3137)	7.5% (249/3309)	H17.3, H17.1, H17.2

	Three month reporting	Four month reporting			
Type of complication (as reported) (Q2.8.1)*	Jan-Mar 2016 N=2389	Apr-Jul 2016 N=3331	Aug-Nov 2016 N=3137	Dec 2016-Mar 2017 N=3309	Ref
Symptomatic intracranial haemorrhage (SIH)	4.4%	4.5%	3.8%	3.5%	H17.6
Angio oedema (AO)	0.5%	0.5%	0.8%	0.5%	H17.8
Extracranial bleed (EB)	0.4%	0.6%	0.5%	0.4%	H17.10
Other	4.0%	3.3%	2.8%	3.2%	H17.12

\*some patients had more than one type of complication

**Comment:** The symptomatic intracranial haemorrhage rate in patients treated with thrombolysis is in line with data from randomised controlled trials.

### 3.8.4 NIHSS 24 hours after thrombolysis (Measuring stroke severity/recovery? after thrombolysis)

Cases that do not report NIHSS 24h after thrombolysis cannot be used in analyses into clinical outcomes after thrombolysis. SSNAP therefore requires high completion rates of NIHSS scores 24 hours after thrombolysis. Teams with less than 90% completion rate of NIHSS score after 24 hours are excluded from the SSNAP Collaboration. The SSNAP collaboration is an acknowledgement for use in peer reviewed papers, more details of which can be found in the link below.

<https://www.strokeaudit.org/Research/SSNAP-Collaboration.aspx>

	Three month reporting	Four month reporting			
NIHSS 24h after thrombolysis, if patient received thrombolysis (Q2.9)	Jan-Mar 2016 N=2389	Apr-Jul 2016 N=3331	Aug-Nov 2016 N=3137	Dec 2016-Mar 2017 N=3121	Ref
Known	89.6%	90.8%	94.1%	94.3%	H18.3
Not known	10.4%	9.2%	5.9%	5.7%	

	Three month reporting	Four month reporting			
If NIHSS 24h after thrombolysis is known, severity groups:	Jan-Mar 2016 N=2140	Apr-Jul 2016 N=3070	Aug-Nov 2016 N=2951	Dec 2016-Mar 2017 N=3121	Ref
0	14.4%	15.2%	15.1%	15.2%	H18.6
1-4 (minor stroke)	32.7%	34.3%	33.8%	33.4%	H18.8
5-15 (moderate stroke)	34.4%	31.9%	33.5%	33.2%	H18.10
16-20 (moderate/severe stroke)	9.3%	8.9%	9.1%	9.0%	H18.12
21-42 (severe stroke)	9.1 %	9.6%	8.4%	9.2%	H18.14

**Comment:** A higher percentage of stroke admissions are thrombolysed than nearly every other country. The majority of patients not being thrombolysed, when there were no medical contraindications, were the result of services not being available on site or at the hour the patient arrived. Reorganisation of services is urgently needed in those areas that are still not providing specialist 24 hour hyperacute stroke care.

### 3.8.5 Emerging treatment: Thrombectomy

Thrombectomy is an emerging treatment in ischaemic stroke. It involves insertion of a guidewire catheter tube into an artery in the groin, and feeding this up into the blocked artery in the brain. The clot is then removed using a mechanical device with the aim of restoring blood and oxygen flow to the brain. If technically successful and done in time thrombectomy can greatly improve the outcome of the brain injury due to stroke in selected patients.

The evidence base for using thrombectomy in treating ischaemic stroke has expanded enormously over the past 2 years but the implications for implementation in routine clinical practice are still emerging. For any service providing thrombectomy, ensuring that treatment is provided safely and effectively is of the highest clinical importance. For this reason SSNAP added questions on intra-arterial therapy to the mandatory core dataset on 1 October 2015. Between August and November 2016, it was reported that 220 patients out of 24,912 ischaemic stroke patients received intra-arterial intervention and data on thrombectomy was submitted by 29 teams. The median number of thrombectomies per team was 5 (IQR 2-8) with one team carrying out 34 and three teams carrying out 19-29. According to the 2016 Acute Organisational Audit 107 out of 158 sites that treat patients in the first 72 hours (including two neurosurgical centres), are able to provide patients with intra-arterial thrombectomy either on site (28/158) or by referral (51/158).

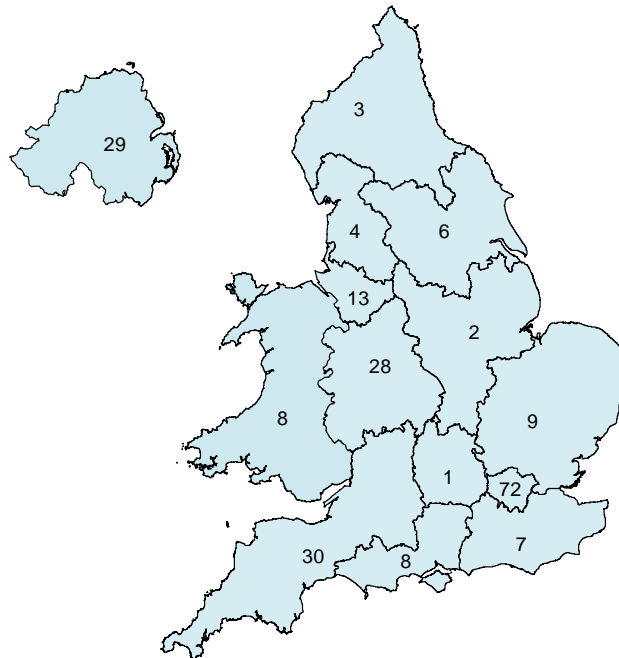
Though it is not possible to make meaningful conclusions on thrombectomy provision based on such low numbers at this early stage of data collection, median thrombectomy timings are provided in the table below to give the reader some insight into proposed future reporting. As thrombectomy

provision becomes more widely available to patients across the country, it is expected that the number of cases submitted to SSNAP will continue to increase making the data more robust. It will then be possible to provide more detailed results. Until the uptake of intra-arterial intervention increases and this is reflected in SSNAP data, national level results only will be reported on. Teams performing thrombectomies can however access their thrombectomy results through bespoke thrombectomy tools, available within the team level results section of the webtool.

Median (IQR) (in minutes)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Number of patients receiving thrombectomy	73	164	155	220	<i>G.19.1</i>
Onset to puncture	213 mins (172-290)	231 mins (175-326)	243 mins (176-312)	240 min (185-308)	<i>G19.4</i> <i>G19.5</i> <i>G19.6</i>
Onset to completion	285 mins (225-350)	314 mins (228-391)	310.5 mins (248.5-374)	298 min (241-370)	<i>G19.7</i> <i>G19.8</i> <i>G19.9</i>
Clock start to puncture	124 mins (84 – 171)	120 mins (77-183)	130 mins (90-204)	142 min (81.5-205)	<i>G19.10</i> <i>G19.11</i> <i>G19.12</i>
Puncture to deployment*	20 mins (12 – 29)	20 mins (10-34)	21.5 mins (11-34)	20 min (12-30)	<i>G19.13</i> <i>G19.14</i> <i>G19.15</i>
Puncture to end of procedure*	60 mins (40 -84)	58 mins (35-85)	53 mins (34-81.5)	54.5 min (32-75)	<i>G19.16</i> <i>G19.17</i> <i>G19.18</i>

*\*For patients where the device was not deployed these patients have been excluded from this timing*

Number of patients treated with thrombectomy and entered onto SSNAP by hospitals in each region



Source: SSNAP Dec 2016-Mar 2017

Annual thrombectomy data for 2016/17 will be published later this year.

### 3.9 Specialist assessments (Domain 4)

Following admission, there are a number of assessments that are considered mandatory elements of high quality stroke care. Some assessments (e.g. being seen by a nurse or stroke consultant) are applicable for all stroke patients. There are other instances where certain assessments do not apply for valid reasons. In these cases, teams can answer 'No but' and the record is excluded from the analysis of that particular standard. For example some patients may not need a formal swallow assessment as they had already passed their initial swallow screen. The 'compliant' percentage in the tables below indicates the proportion of *applicable* patients receiving the assessment in question.

#### 3.9.1 Swallowing screening and assessments

	Three month reporting	Four month reporting			
Swallow screening within 4h (Q2.10)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Percentage of patients applicable to have swallow screening within 4h*	89.8%	90.3%	90.7%	90.2%	H14.17
Percentage of applicable patients who had swallow screening in 4 hours	71.2%	74.4%	74.0%	73.5%	H14.20
Median (IQR) time from clock start to swallow screening within 4h (hours & minutes)	1h 23m (44m – 2h 28m)	1h 21m (42m – 2h 25m)	1h 21m (43m – 2h 25m)	1h 19m (42m – 2h 22m)	H14.12, H14.13, H14.14

\*Applicable patients are those for whom Q2.10.1 is not answered "Patient refused" or "Patient medically unwell until time of screening".

	Three month reporting	Four month reporting			
Formal swallow assessment by a Speech and Language Therapist or another professional trained in dysphagia assessment within 72 hours (Q3.8)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Percentage of patients applicable for a formal swallow assessment within 72 hours*	40.0%	39.0%	39.4%	39.5%	H15.21
Percentage of applicable patients who had formal swallow assessment within 72 hours	84.5%	87.5%	87.2%	86.9%	H15.24
Median (IQR) time from clock start to formal swallow assessment	20h 03m (6h 30m – 30h 52m)	19h 55m (6h 47m – 31h 02m)	19h 54m (7h 24m – 30h 39m)	20h 22m (7h 27m – 32h 10m)	H15.1, H15.2, H15.3

\*Applicable patients are those for whom Q 3.8.1 is answered "patient refused", "patient medically unwell" or "Patient passed swallow screening"

**Comment:** Over 70% of applicable patients are screened for the safety of their swallowing within 4 hours of arrival. While this has improved since data collection began, it is disturbing that there are

still so many cases not meeting this standard. This screening should be an essential component of the immediate evaluation of the patient. Swallow assessment within 72 hours of admission is achieved for almost 90% of applicable patients which is another area where results have improved.

### 3.9.2 Assessment by nurse

	Three month reporting	Four month reporting			
Assessed by a nurse trained in stroke management (Q3.2)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Assessed within 72h	94.7%	95.1%	95.2%	94.6%	H8.6
<i>Within 12h</i>	83.0%	84.9%	84.6%	84.0%	H8.9
12-24h	6.0%	5.0%	5.4%	5.3%	H8.11
24-72h	5.7%	5.3%	5.1%	5.3%	H8.13
Median (IQR) time from clock start to assessment by stroke nurse	1h 30m (08m – 4h 50m)	1h 15m (06m – 4h 12m)	1h 16m (06m – 4h 13m)	1h 12m (05m – 4h 28m)	H8.14, H8.15, H8.16

### 3.9.3 Assessment by stroke specialist consultant

	Three month reporting	Four month reporting			
Assessed by a stroke specialist consultant physician (Q3.3)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Assessed within 72h	93.8%	94.4%	94.6%	94.2%	H9.6
<i>Within 12h</i>	46.8%	48.1%	49.0%	49.0%	H9.9
12-24h	32.3%	32.4%	32.9%	32.1%	H9.11
24-72h	14.7%	13.8%	12.7%	13.1%	H9.13
Median (IQR) time for assessment by stroke consultant physician	12h 03m (1h 58m – 20h 43m)	11h 29m (1h 48m – 20h 10m)	11h 09m (1h 45m – 19h 45m)	11h 03m (1h 43m – 19h 54m)	H9.14 H9.15 H9.16
Assessed within 14h	-	53.0%	54.1%	53.7%	H9.19

**Comment:** Approximately a fifth of stroke admissions are not seen by a specialist stroke physician within 24 hours of admission.

### 3.10 Therapy Assessments in first 72 hours (Part of Domain 8)

For physiotherapy, occupational therapy and speech and language therapy assessments, applicable patients are those that remain after patients who refused, were medically unwell or had no relevant deficit are excluded. According to the findings of the 2016 Acute Organisational Audit 31% of sites provided at least two types of therapy 7 days a week.

The 'compliant' percentage in the tables below indicates the proportion of *applicable* patients receiving the assessment in question.

**NB** The audit did not ask about applicability in relation to therapy assessments within 24 hours. Adherence is therefore calculated out of all patients but it is not aimed at 100% optimal level/value.

Please refer to Section 4.1 ‘assessments by discharge’ and Section 5 ‘therapy intensity’ for further information about each of the therapy disciplines.

### 3.10.1 Occupational Therapy Assessments in first 72 hours

	Three month reporting	Four month reporting			
Assessed by an Occupational Therapist within 72h of Clock Start (Q3.5)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Percentage of patients applicable to be assessed by an OT within 72h*	86.6%	86.7%	87.1%	86.2%	H10.21
Percentage of applicable patients assessed by an OT within 72 hours	90.7%	91.2%	91.7%	91.2%	H10.24

\*Applicable patients are those for whom Q3.5.1 is not answered as “Patient refused”, “Patient medically unwell” or “Patient had no relevant deficit”

### 3.10.2 Physiotherapy Assessments in first 72 hours

	Three month reporting	Four month reporting			
Assessed by a Physiotherapist within 72h of Clock Start (Q3.6)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Applicable to be assessed by a PT within 72h*	89.0%	89.5%	89.4%	88.5%	H11.21
Percentage of applicable patients assessed by an PT within 72 hours	94.2%	94.5%	95.1%	94.3%	H11.24

\*Applicable patients are those for whom Q3.6.1 is not answered as “Patient refused”, “Patient medically unwell” or “Patient had no relevant deficit”

### 3.10.3 Speech and Language Therapy in first 72 hours

	Three month reporting	Four month reporting			
Communication assessed by a Speech and Language therapist within 72h of Clock Start (Q3.7)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Applicable* to be assessed by a SALT within 72h	47.1%	48.5%	49.9%	49.7%	H12.21
Percentage of applicable patients assessed by a SALT within 72 hours	86.4%	88.3%	89.0%	87.8%	H12.24

\*Applicable patients are those for whom Q3.7.1 is not answered as “Patient refused”, “Patient medically unwell” or “Patient had no relevant deficit”

**Comment:** Assessment by SALT, OT or PT within 72 hours of admission is not a particularly stringent target and should be achievable in the vast majority of cases. It is likely that services with rapid access to therapists are working more efficiently and are more likely to get their patients home more quickly, as well as initiating treatment earlier with the probability of a better outcome than when treatment is delayed.

## Section 4: Therapy provision

### 2016 NICE QS Statement 2

Patients with stroke are offered a minimum of 45 minutes per day of each active therapy that is required, for a minimum of 5 days a week, at a level that enables the patient to meet their rehabilitation goals for as long as they are continuing to benefit from the therapy and are able to tolerate it

The aim of the therapy measures reported on by SSNAP is to get an overall picture of the intensity of each therapy being provided to patients i.e. to look at national changes over time, for teams to benchmark themselves against national level results and to look at differences between teams in terms of percentage of patients being considered to require each therapy and the average time patients get across their entire length of stay as an inpatient. SSNAP allows teams to reflect when a patient no longer requires one type of therapy but still requires another. This way the intensity of each therapy provided can be compared against what was required.

*Note: SSNAP collects data on whether a patient was considered to require therapy at any point in the admission and does not reflect whether the patient required or was able to tolerate therapy on each day.*

We have calculated a proxy measure for the **NICE quality standard** by combining the percentage of patients considered to require therapy, the percentage of days on which each therapy was received, and the average number of therapy minutes received per day.

**Patients:** The benchmark for levels of patients requiring therapy is 80% for occupational therapy, 85% for physiotherapy and 50% for speech and language therapy. This has been derived using data collected in previous rounds of stroke audit and has proved to be consistent at national level.

**Minutes:** In line with the NICE quality standard, the benchmark is 45 minutes of therapy provided per day 5 days a week. If a patient receives therapy 7 days a week the benchmark is equivalent therefore to 32 minutes per day.

**Days:** In line with the NICE quality standard, an adjustment is made to the total number of days on which therapy was received to approximate the number of *working* days by multiplying by 5 out of 7 (approximately 70%).

To improve performance in the therapy domains, teams may need to improve one or more of the 3 elements. Taking annual national level results for occupational therapy as an example,

- 84.1% of patients nationally were considered to require therapy
- a median of 40minutes of therapy was provided per day (based on 7 day week)
- therapy was delivered on 63.6% of inpatient days.

These figures show that the percentage of patients considered applicable is in line with the expected level of 80% and the number of therapy minutes *across 7 days* exceeds what would be recommended across this time period (target for 7 days = 32 minutes) if the NICE quality standard was extrapolated. However, the percentage of days on which therapy is provided is below the NICE quality standard of approximately 70%.



With limited resources to achieve equilibrium between patients, days and minutes, the goal is to maximise the use of resources to benefit the highest number of patients throughout their stay. Therapy teams can chose to deliver this therapy as either one 45 minute session a day or through several shorter sessions throughout the day.

In addition to this, SSNAP produces a therapy pack, a comprehensive guide to therapy data and reporting in SSNAP. The guide is published each reporting period and contains useful information on the submission of data, FAQs and an explanation of how data are presented.

The guide is available to logged in users at:

<https://www.strokeaudit.org/Support/Resources/Therapy-Resources.aspx>

#### 4.1 Occupational Therapy (Domain 5)

	Three month reporting	Four month reporting		
Key Indicators: Occupational Therapy	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017
Percentage of patients reported as requiring occupational therapy	83.6%	83.5%	83.6%	84.4%
Median number of minutes per day on which occupational therapy is received	40.0 mins	40.0 mins	40.7 mins	40 mins
Median % of days as an inpatient on which occupational therapy is received	61.7%	62.3%	64.9%	64.1%
Proxy for 2016 NICE Quality Standard Statement 2: % of the minutes of occupational therapy required (according to 2016 NICE QS-S2) which were delivered	80.2%	80.9%	85.9%	84.2%

#### 4.2 Physiotherapy (Domain 6)

	Three month reporting	Four month reporting		
Key Indicators: Physiotherapy	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017
Percentage of patients reported as requiring physiotherapy	85.0%	85.3%	85.1%	86.3%
Median number of minutes per day on which physiotherapy is received	33.8 mins	34.5 mins	35 mins	35 mins
Median % of days as an inpatient on which physiotherapy is received	69.7%	70.7%	73.7%	71.2%
Proxy for 2016 NICE Quality Standard Statement 2: % of the minutes of physiotherapy required (according to 2016 NICE QS-S2) which were delivered	73.2%	76.3%	80.3%	78.7%

#### 4.3 Speech and Language Therapy (Domain 7)

	Three month reporting	Four month reporting		
Key Indicators: Speech and Language Therapy	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017
Percentage of patients reported as requiring speech and language therapy	48.8%	50.0%	50.7%	51.4%
Median number of minutes per day on which speech and language therapy is received	31.5 mins	32.0 mins	31.5 mins	31.7 mins
Median % of days as an inpatient on which speech and language therapy is received	45.0%	45.3%	48.1%	47.9%
Proxy for 2016 NICE Quality Standard Statement 2: % of the minutes of speech and language therapy required (according to 2016 NICE QS-S2) which were delivered	43.0%	45.1%	47.8%	48.6%

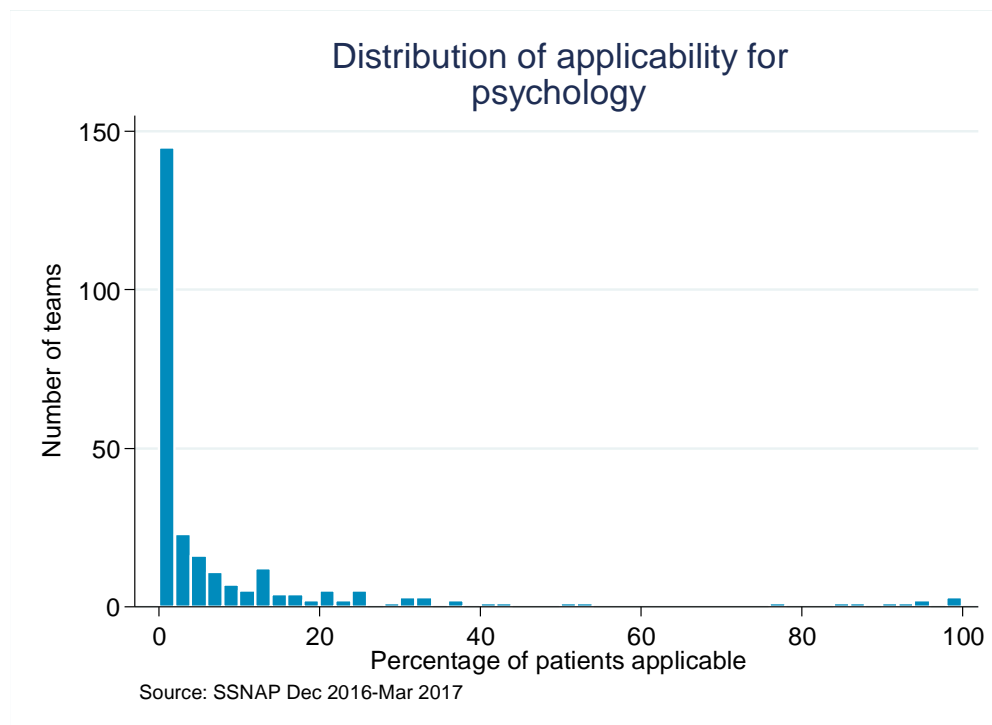
**Comment:** There has been progress made over the last couple of years in terms of the intensity of therapy provided by all of the disciplines, although there is still room for further improvement. The median number of minutes of therapy on the days that patients receive it is 40 minutes for OT, 35 minutes for PT and 32 minutes for SALT. However, there are days when patients should be undergoing therapy and yet they receive none. When these are added in to the equation then the median number of minutes will be lower.

#### 4.4 Psychology

	Three month reporting	Four month reporting			
Psychology (Q4.4 – 4.6)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Applicable for psychology	5.7%	5.6%	5.3%	5.6%	J7.3
Median % of the days in hospital on which psychology is received	9.3%	9.5%	9.9%	10.8%	J7.4
Median number (IQR) of minutes per day on which therapy is received	40.0 mins (30 – 51.7 mins)	40.0 mins (30 – 54 mins)	40.0 mins (30 – 53.8 mins)	40.0 mins (30 – 52.5 mins)	J7.5, J7.6, J7.7

**Comment:** The finding that only about 6% of patients need psychology is not consistent with published literature on the prevalence of cognitive and mood difficulties, or the self-reported, long term, unmet needs of stroke survivors. It is important to clarify that teams should answer that the patient is applicable if the patient has any psychological difficulty even if the service does not have access to a psychologist or other mental health professional.

The graph below demonstrates the high number of teams recording that none of their patient's are applicable for psychology. The finding from the acute organisational audit is that only 6% of hospitals have access to sufficient clinical psychologists and therefore it is important to reiterate that all patients requiring psychology input at any point during their stay should be recorded as requiring psychology, regardless of whether the psychology service is available at that team.



## Section 5: Care before leaving hospital

### 5.1 Multidisciplinary Working (part of Domain 8)

	Three month reporting	Four month reporting			
Rehabilitation goals agreed (Q4.7)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Percentage of patients applicable for rehab goals within 5 days*	81.6%	82.2%	82.8%	83.2%	J13.12
Percentage of applicable patients who have rehab goals set within 5 days	90.2%	90.0%	91.9%	92.3%	J13.15

\*Patients are applicable unless they have no deficits, refuse rehabilitation goals, or are on palliative care and have no rehabilitation potential

	Three month reporting	Four month reporting			
Bundle of care	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
If applicable, assessed by stroke nurse within 24h, at least one therapist within 24h, all applicable therapists within 72h and rehab goals agreed within 4 days	57.8%	58.7%	61.8%	60.4%	J14.3

### 5.2 Standards by Discharge (Domain 9)

#### 5.2.1 Nutritional screening, risk of malnutrition and dietitian

	Three month reporting	Four month reporting			
Nutritional screening (Q6.6)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Percentage of ALL patients screened	96.0%	96.4%	96.8%	96.5%	J16.3
If screened for nutrition:					
Identified as being at high risk of malnutrition	20.2%	20.3%	19.6%	20.1%	J16.6
If identified as being at high risk of malnutrition following nutritional screening:					
Seen by a dietitian	89.9%	92.2%	92.4%	92.7%	J16.9

**Comment:** Over 7% of patients identified as being at high risk of malnutrition on screening do not get to see a dietitian.

	Three month reporting	Four month reporting			
	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
<b>Combination of nutritional screening, risk of malnutrition, and seen by dietitian:</b>					
Percentage of patients applicable for nutritional screening/being seen by a dietitian *	16.6%	16.6%	15.5%	16.1%	J16.12.1
Percentage of applicable patients screened for nutrition and seen by a dietitian by discharge**	78.5%	82.1%	83.3%	82.7%	J16.15.1

\*Patients are applicable if screened for nutrition AND identified as high risk, or not screened for nutrition.

\*\* Patients who are indicated as being for palliative care (either within 72 hours or by discharge) are excluded from this measurement

### 5.5.2 Urinary continence plan

	Three month reporting	Four month reporting			
	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
<b>Urinary continence plan by discharge from inpatient care (Q6.5)</b>					
Percentage of ALL patients for whom urinary continence plan drawn up	40.3%	40.2%	40.4%	41.7%	J15.3
Median (IQR) time from clock start to continence plan drawn up (in days)	0 days (0-1)	0 days (0-1)	0 days (0-1)	0 days (0-1)	J15.12 J15.13 J15.14
Percentage of patients applicable for urinary continence plan by discharge*	43.9%	43.3%	43.2%	44.7%	J15.17
Percentage of applicable patients for whom urinary continence plan drawn up by discharge	91.7%	92.8%	93.5%	93.3%	J15.20

\*Applicable patients are those for whom Q6.5.1 has not been answered "Patient refused" or "Patient continent"

**Comment:** Over 90% of patients with incontinence are having an assessment performed while an in-patient. It is encouraging to see sustained improvements in results each reporting period but given the profound impact of incontinence on a person's life, the fact that around 6% of patients are not being adequately assessed is unacceptable. Becoming incontinent as an adult is embarrassing and demoralising. It should be treated with the utmost sensitivity and skill. To ignore it and not even bother to establish the cause and treatment is unacceptable practice.

### 5.5.3 Mood and Cognition screening

	Three month reporting	Four month reporting			
Mood screening (Q6.7)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Percentage of patients applicable for mood screening by discharge*	85.9%	85.2%	85.2%	84.7%	J17.14
Percentage of applicable patients who received mood screening by discharge	86.0%	88.4%	89.9%	88.6%	J17.17

\*Patients that are not applicable are those who refused either or both screens, patients who were medically unwell for entire admission and patients who were discharged from inpatient care within 7 days of clock start without receiving both screens are excluded from this indicator.

**Comment:** There remains a significant issue in terms of screening patients for mood disturbance. Over 50% of patients are likely to have a significant depression or anxiety state at some time after their stroke. This is frequently seen early after the stroke and it is vital that the diagnosis is made early and patients helped to deal with the problem. While there have been continued improvements in mood screening many patients who should be screened are not.

	Three month reporting	Four month reporting			
Cognition screening (Q6.7)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Percentage of patients applicable for cognition screening by discharge*	82.9%	82.5%	82.9%	82.9%	J18.14
Percentage of applicable patients who received cognition screening by discharge	91.3%	92.3%	93.5%	93.9%	J18.17

\*Applicable patients are those for whom Q6.7.1 or Q6.8.1 has not been answered "Patient refused" or "Patient medically unwell for entire admission" and whose total length of stay is 7 days or longer.

**Comment:** There are similar issues with screening for cognitive impairment where about 6% of patients are not being evaluated in the way that they should.

## 5.3 Patient Condition up to discharge

### 5.3.1 Worst Level of consciousness in first 7 days

	Three month reporting	Four month reporting			
Patient's worst level of consciousness (LOC) in the first 7 days (Q5.1)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
0: Alert keenly responsive	79.4%	79.5%	79.9%	79.1%	J24.3
1: Not alert but arousable by minor stimulation	8.6%	8.8%	8.3%	9.0%	J24.5
2: Not alert but require repeated stimulation to attend	4.7%	4.7%	4.7%	4.8%	J24.7
3: Respond only with reflex motor or autonomic effects /totally unresponsive	7.4%	6.9%	7.1%	7.0%	J24.9

### 5.3.2 Urinary tract infection in first 7 days

	Three month reporting	Four month reporting			
Did the patient develop a urinary tract infection in the first 7 days? (Q5.2)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Yes	4.8%	4.6%	4.7%	4.5%	J25.3
No	94.2%	94.6%	94.6%	94.6%	J25.5
Not known	1.0%	0.8%	0.6%	0.9%	J25.7

### 5.3.3 Pneumonia in first 7 days

	Three month reporting	Four month reporting			
Did the patient receive antibiotics for a newly acquired pneumonia in the first 7 days? (Q5.3)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Yes	8.8%	8.7%	8.7%	9.2%	J26.3
No	90.2%	90.6%	90.7%	90.0%	J26.5
Not known	1.0%	0.8%	0.6%	0.9%	J26.7

The following paper authored by Prof Craig J. Smith and Dr Benjamin D. Bray and published in the Journal of the American Heart Association, uses SSNAP data to derive a clinical risk score for predicting stroke-associated pneumonia.

<https://www.strokeaudit.org/SupportFiles/Documents/Research/J-Am-Heart-Assoc-2015-Smith.aspx>

#### 5.4.4 Modified Rankin Scale score at discharge

	Three month reporting	Four month reporting			
Modified Rankin Scale (mRS) score at discharge (Q7.4)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
0 (no symptoms)	12.1%	12.5%	12.2%	12.2%	J28.3
1 (no significant disability)	18.3%	18.6%	18.2%	17.8%	J28.5
2 (slight disability)	15.7%	15.6%	16.3%	15.3%	J28.7
3 (moderate disability)	17.4%	17.4%	17.3%	17.6%	J28.9
4 (moderately severe disability)	14.2%	14.7%	14.6%	14.7%	J28.11
5 (severe disability)	7.0%	7.1%	7.0%	7.0%	J28.13
6 (Dead)	15.2%	14.2%	14.3%	15.4%	J28.15

	Three month reporting	Four month reporting			
Modified Rankin Scale (mRS) score Median (IQR)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
mRS score before stroke	0 (0-2)	0 (0-2)	0 (0-2)	0 (0-2)	J28.16, J28.17, J28.18
mRS score at discharge	3 (1-4)	3 (1-4)	3 (1-4)	3 (1-4)	J28.19, J28.20, J28.21
Change in mRS score	1 (0-3)	1 (0-3)	1 (0-3)	1 (0-3)	J28.22, J28.23, J28.24

#### 5.5.5 Palliative care

	Three month reporting	Four month reporting			
Patients for palliative care after 72 hrs* (Q6.9)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Yes	12.0%	11.8%	12.1%	12.8%	J29.3

\*Palliative care decision between 72h and discharge from inpatient care.

**Comment:** One of the areas of care that we need to improve is care of the patients when they are unlikely to survive. The evidence suggests that patients prefer to die at home. We appear to be achieving this for only a small minority of patients.

#### 5.6.6 Intermittent Pneumatic Compression (IPC)

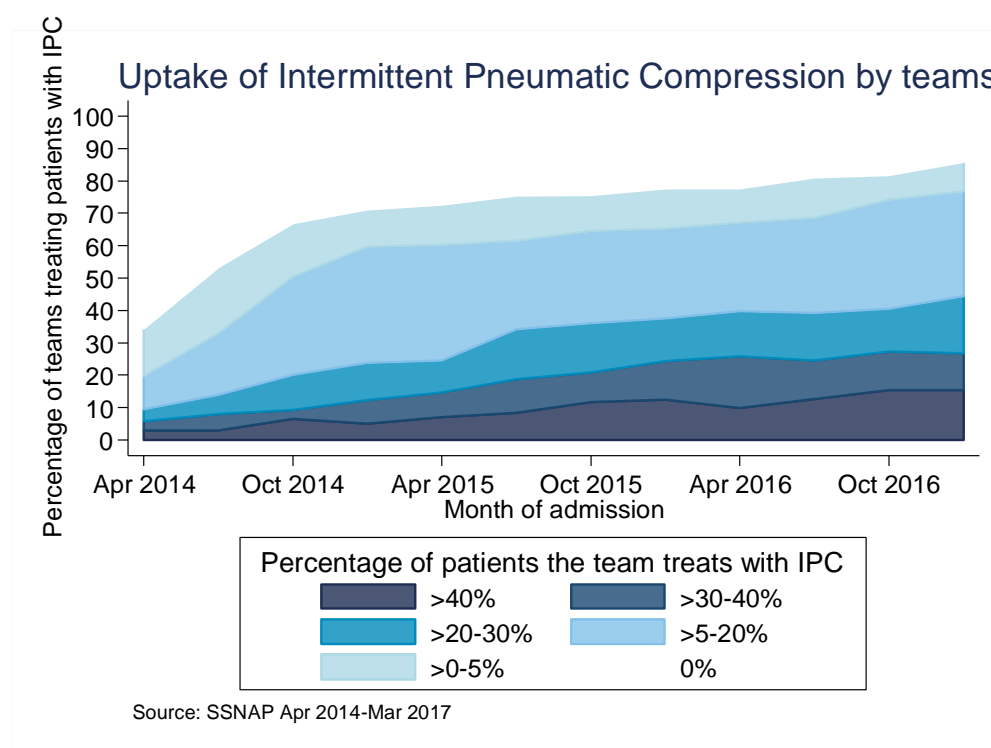
Intermittent Pneumatic Compression (IPC) reduces the risk of a person admitted to hospital with a stroke developing a deep vein thrombosis (DVT). The CLOTS 3 trial results showed a 3.6% decrease in



absolute risk reduction in the incidence of DVT and that IPC improves the six month survival rate of stroke patients.

In August 2013 NHS England and NHS Improving Quality (NHS IQ) put forward a bid to supply approximately six months' worth of IPC sleeves to all stroke units in an effort to realise the benefits in every day practice. To ascertain the level of implementation of IPC sleeves following the findings of the trial, the questions related to IPC were added to the revised SSNAP dataset and are mandatory for patients admitted on or after 1 April 2014.

The graph below shows that whilst the percentage of teams treating at least some patients with IPC has increased substantially over time there are still very few teams treating more than 40% of their patients with IPC.



	Three month reporting	Four month reporting			
	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Patients who have intermittent pneumatic compression applied at any point	N=20223	N=27605	N=26658	N=28072	
Yes	18.7%	19.0%	20.6%	22.7%	J35.3
No	78.2%	78.9%	77.7%	75.8%	J35.5
Not Known	3.1%	2.1%	1.7%	1.5%	J35.7
If yes:	N=3776	N=5238	N=5491	N=6364	J35.2
Median length of time IPC is applied for	6 days IQR (2-15)	6 days IQR (2-15)	6 days IQR (2-15)	6 days IQR (2-15)	J35.8 J35.9, J35.10
Mean length of time IPC is applied for	13 days	13 days	12 days	12 days	J35.11

**Comment:** Since 2012 there is new RCT evidence to support intermittent pneumatic compression device use in selected stroke patients. We will look to monitor the implementation of this at a patient level in SSNAP.

### 5.5.7 Mortality Data on SSNAP

Based on data collected on SSNAP from April 2015 - March 2016, it is reported that 13.6% of stroke patients admitted to hospitals in England and Wales died (either in hospital or after being discharged from inpatient care) within 30 days of clock start. Annual mortality results including those for 2013/14 and 2014/15 and 2015/2016 at provider level are publicly available on the SSNAP webtool. Provider level mortality results are adjusted for case mix including stroke severity and presented as a standardised mortality ratio. Data for 2016-17 will be available later in the year.

<https://www.strokeaudit.org/results/Clinical/National-Results>

## 5.6 Discharge Processes (Domain 10)

### 5.6.1 Discharge destination

	Three month reporting	Four month reporting			
Discharge destination (Q7.1)	Jan-Mar 2016 N=20223	Apr-Jul 2016 N=27606	Aug-Nov 2016 N=26659	Dec 2016-Mar 2017 N=28072	Ref
Discharged alive from inpatient care	84.8%	85.8%	85.7%	84.6%	J9.14
Discharged to a care home	10.0%	9.5%	9.3%	9.4%	J9.5
Discharged home	36.0%	36.5%	35.4%	33.7%	J9.7
Discharged somewhere else	2.2%	1.9%	2.1%	2.0%	J9.9
Transferred to an ESD/community team	30.3%	31.1%	32.3%	32.7%	J9.10.2
Transferred to a non-participating inpatient team	4.0%	4.0%	3.6%	3.8%	J9.11.2
Transferred to a non-participating ESD/community team	2.3%	2.8%	3.0%	2.9%	J9.11.4

	Three month reporting	Four month reporting			
If discharged home (Q7.6)	Jan-Mar 2016 N=7283	Apr-Jul 2016 N=10071	Aug-Nov 2016 N=9431	Dec 2016-Mar 2017 N=9450	Ref
Living Alone	25.3%	25.2%	25.2%	25.4%	J9.21
Not living alone	72.4%	72.3%	73.1%	72.3%	J9.23
Not known	2.2%	2.5%	1.7%	2.2%	J9.25

### 5.6.2 Care home discharge

	Three month reporting	Four month reporting			
If discharged to a care home (Q7.5)	Jan-Mar 2016 N=2021	Apr-Jul 2016 N=2615	Aug-Nov 2016 N=2466	Dec 2016-Mar 2017 N=2641	Ref
Previously a resident	33.3%	35.4%	34.8%	36.5%	J9.28
Not previously a resident	66.7%	64.6%	65.2%	63.5%	J9.30

	Three month reporting	Four month reporting			
If discharged alive from inpatient care:	Jan-Mar 2016 N=17140	Apr-Jul 2016 N=23697	Aug-Nov 2016 N=22834	Dec 2016-Mar 2017 N=23749	Ref
Newly institutionalised (discharged to a care home where not previously a resident)	7.9%	7.1%	7.0%	7.1%	J9.33

	Three month reporting	Four month reporting			
If newly institutionalised:	Jan-Mar 2016 N=1348	Apr-Jul 2016 N=1689	Aug-Nov 2016 N=1689	Dec 2016-Mar 2017 N=1676	Ref
Temporary	21.9%	19.7%	20.9%	20.6%	J9.36
Permanent	78.1%	80.3%	79.1%	79.4%	J9.38

**Comment:** About 85% of patients leave hospital alive after a stroke, with over a third of those returning home. Close to 10% are discharged to a care home, with approximately 65% of these being sent to a home for the first time. Approximately 80% of these were expected to become permanent residents. The new institutionalisation rate is an important measure of outcome, which at 7% is lower than we have previously seen in the Sentinel audits where there were rates of about 10-15%.

### 5.6.3 Activities of Daily Living

	Three month reporting	Four month reporting			
If discharged alive, required help with activities of daily living (ADL)? (Q7.9)	Jan-Mar 2016 N=17140	Apr-Jul 2016 N=23697	Aug-Nov 2016 N=22834	Dec 2016-Mar 2017 N=23749	Ref
Yes	40.6%	40.0%	40.4%	40.5%	J30.3
No	59.4%	60.0%	59.6%	59.5%	

	Three month reporting	Four month reporting			
If patient required help with ADL, what help did they receive (Q7.9.1)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Paid carers	68.0%	68.9%	68.2%	67.8%	J30.6
Informal carers	19.0%	17.8%	17.9%	19.2%	J30.8
Paid and informal carers	11.6%	12.1%	12.9%	11.8%	J30.10
Paid care services unavailable	0.1%	0.1%	0.1%	0.1%	J30.12
Patient refused	1.3%	1.1%	0.9%	1.1%	J30.14
Applicable for receiving help for ADL (not refused)	98.7%	98.9%	99.1%	98.9%	J30.17
Compliant (any type of paid services)	80.6%	81.9%	81.8%	80.5%	J30.20

	Three month reporting	Four month reporting			
If patient required help with ADL, number of social service visits per week (Q7.9.2)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
0 visits	32.8%	32.9%	34.4%	36.3%	J31.18
At least one visit per week	29.8%	31.6%	33.0%	32.8%	J31.20
1-6 visits	1.0%	1.1%	0.9%	0.8%	J31.5
7-13 visits	5.2%	5.3%	5.7%	5.1%	J31.7
14-20 visits	6.2%	6.0%	6.4%	6.1%	J31.9
21-27 visits	4.9%	5.0%	5.6%	6.0%	J31.11
28+ visits	12.5%	14.3%	14.4%	14.8%	J31.13
Not known	37.4%	35.5%	32.6%	30.9%	J31.15

**Comment:** Approximately 40% of patients are discharged needing help with activities of daily living. Nearly a fifth receive this solely from unpaid carers and about two thirds from only paid carers. The remainder receive help from both paid and unpaid carers. Approximately 20% of patients requiring help with ADL receive three or more visits a day from social services.

#### 5.6.4 Atrial Fibrillation at Discharge

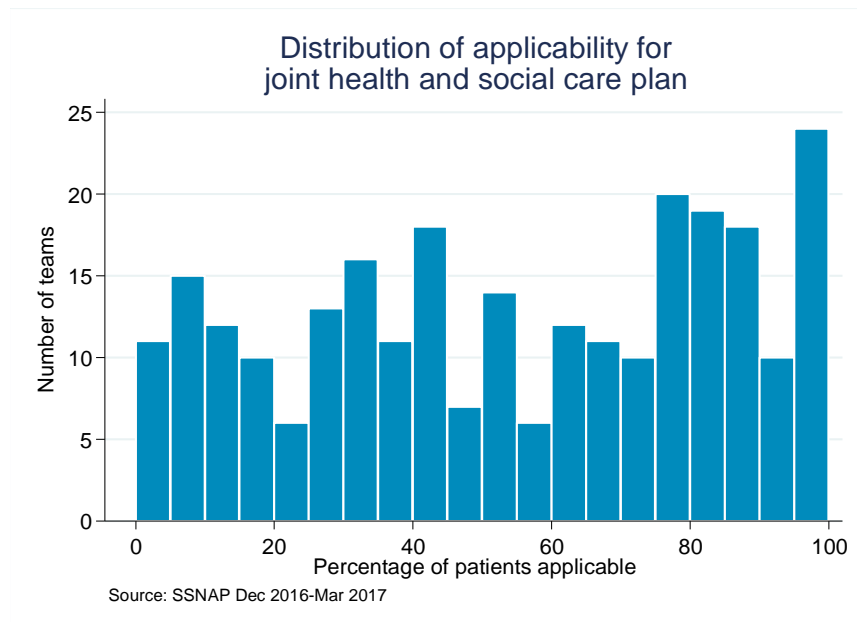
	Three month reporting	Four month reporting			
If discharged alive, is patient in Atrial Fibrillation (AF) (Q7.10)	Jan-Mar 2016 N=17140	Apr-Jul 2016 N=23697	Aug-Nov 2016 N=22834	Dec 2016-Mar 2017 N=23749	Ref
Patient in Atrial Fibrillation	21.7%	21.6%	21.3%	22.6%	J32.3

	Three month reporting	Four month reporting			
If in AF, patient given anticoagulation (Q7.10.1)	Jan-Mar 2016 N=3725	Apr-Jul 2016 N=5123	Aug-Nov 2016 N=4858	Dec 2016-Mar 2017 N=5361	Ref
Yes	83.1%	83.4%	83.3%	85.0%	J32.6
No	2.6%	2.2%	2.1%	1.8%	J32.8
No but	14.3%	14.4%	14.6%	13.2%	J32.10
Applicable for receiving anticoagulation	15.8%	15.9%	15.6%	16.6%	J32.13
Compliant	97.0%	97.4%	97.5%	98.0%	J32.16

### 5.6.5 Joint Care Planning

	Three month reporting	Four month reporting			
If discharged alive, did the patient receive a joint health and social care plan at discharge (Q7.11)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Yes	46.4%	48.0%	49.4%	49.1%	J33.3
No	5.2%	5.0%	5.2%	5.4%	J33.5
Not applicable	48.4%	47.0%	45.4%	45.5%	J33.7
Applicable for receiving a joint care plan	43.7%	45.5%	46.8%	46.1%	J33.10
Compliant	89.9%	90.5%	90.6%	90.1%	J33.13

The graph below demonstrates the wide range of reported applicability for joint health and social care plan.



### 5.6.6 Named contact at discharge

	Three month reporting	Four month reporting			
If discharged alive, was there a named person for the patient and/or carer to contact after discharge? (Q7.12)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Yes	92.4%	93.3%	96.6%	96.9%	J34.3
No	7.6%	6.7%	3.4%	3.1%	

**Comment:** Approximately 90% of the patients with ongoing health and social care needs are discharged with joint health and social care plans. This represents an increase of over 25 percentage points since data collection began in 2013. Over 95% of patients are given a named contact on discharge. This is another area which has shown consistent improvements each reporting period. However, further improvements are needed as the failure to provide joined up services after discharge is one of the principle areas of concern raised by patients. We are also doing better in terms of anticoagulating or making plans to anticoagulate patients in atrial fibrillation.

## 5.7 Length of Stay

Participation of post-acute teams has continued to increase, and therefore an increased number of records have been fully completed and locked to discharge which will more accurately reflect length of stay across the entire pathway.

(See section 3.6 for additional stroke unit key indicators).

### 5.7.1 Length of stay in an inpatient setting

	Three month reporting	Four month reporting			
Length of stay (in days)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Length of stay from Clock Start to final inpatient discharge including death (in days)	Median = 7.3 IQR (2.8-23.1) Mean = 18.6	Median = 7.3 IQR (2.8-24.1) Mean = 19.0	Median = 7.2 IQR (2.8-23.6) Mean = 19.2	Median = 7.5 IQR (2.8-23.5) Mean = 18.7	J8.1, J8.2, J8.3, J8.4

**Comment:** The median length of stay in this cohort for all patients (including deaths in hospital) is between 7-8 days which is shorter than we would have expected.

### 5.7.2 Length of stay on Stroke Unit

	Three month reporting	Four month reporting			
Length of stay on stroke unit (in days)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Length of stay on an SU across inpatient pathway - based on component parts of provider level SU length of stay (in days)	Median = 6.3 IQR (2.1-20.9) Mean = 16.9	Median = 6.4 IQR (2.1-21.9) Mean = 17.4	Median = 6.2 IQR (2.1-21.6) Mean = 17.7	Median = 6.4 IQR (2.1-21.2) Mean = 17.1	J8.5, J8.6, J8.7, J8.8

(excludes patients who go straight to ITU/CCU/HDU at any provider during their inpatient stay)

### 5.7.3 90% of stay on Stroke Unit (Part of Domain 2)

	Three month reporting	Four month reporting			
Is over 90% of a patient's stay in hospital spent on a stroke unit?	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Yes	82.4%	84.0%	84.8%	82.7%	J8.11

(excludes patients who go straight to ITU/CCU/HDU at any provider during their inpatient stay)

**Comment:** While we are managing to treat most patients at some stage on a stroke unit, approximately 15% are not spending at least 90% of their stay on the unit.

### 5.7.4 Delays in discharging patients who no longer require inpatient rehabilitation

	Three month reporting	Four month reporting			
Date patient considered by the multidisciplinary team to no longer require inpatient rehabilitation (Q7.3.1)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Number of days from patient no longer requiring inpatient rehabilitation to stroke unit discharge (Mean)	0.6 days	0.8 days	0.9 days	0.7 days	K20.7
Number of days from patient no longer requiring inpatient rehabilitation to hospital discharge (Mean)	1.0 days	1.1 days	1.1 days	1.0 days	K20.8

**Comment:** It is important that where there are delays in arranging discharge, for whatever reason, these are documented and data submitted to SSNAP.

## Section 6: Early supported discharge and community rehabilitation preliminary results

### 6.1 Introduction

Although national stroke audits have routinely collected data for acute stroke care and services since 1998, up until recently, there has been limited opportunity to audit and benchmark post-acute stroke services in the same way. With the arrival of SSNAP in early 2013, and the expansion of stroke clinical audit up to 6 months post-stroke, this changed and there are now 122 domiciliary services submitting data and receiving reports on the care they provide their stroke patients.

#### 6.1.1 Domiciliary teams and SSNAP

There is no single model of stroke care organisation or commissioning and consequently pathways of stroke care beyond the acute setting are complex. The 2015 post-acute audit reported on the availability and structure of stroke services in community settings, we can now estimate that there are 160 teams providing ESD and approximately 200 community rehabilitation services in England and Wales. More information on this pioneering audit can be found here:

<http://www.strokeaudit.org/results/PostAcute.aspx>

There are currently 320 teams working in the community registered on SSNAP, a total of 198 domiciliary teams have submitted at least one record to this report and 122 of these teams submitted enough records to receive named team results. We congratulate these teams for leading the way in SSNAP data collection. A full list of the domiciliary teams which submitted sufficient data to receive results can be found in the results portfolio.

<https://www.strokeaudit.org/results/Clinical-audit/National-Results.aspx>

It is clear that certain areas of the country are performing significantly better than others in terms of submitting domiciliary data to the audit. It is therefore important that all post-acute inpatient teams and community teams are encouraged to register for SSNAP and fully complete the information collected at this stage on all records transferred to them to give an accurate picture of the whole of the patient pathway.

#### 6.1.2 Early supported discharge and community rehabilitation

A key element of the National Stroke Strategy is the implementation of early supported discharge (ESD). ESD is a system in which rehabilitation is provided to stroke patients at home instead of at hospital by a multi-disciplinary team at the same intensity as inpatient care. ESD should be stroke specific and delivered by teams with specialist stroke skills. According to literature, approximately 34% of stroke patients are considered eligible for ESD <sup>1</sup>.

ESD can result in better outcomes for patients including reduction of long-term mortality and institutionalisation rates, increased independence six months after a stroke and increased capacity to undertake activities of daily living and greater patient satisfaction (Langhorne et al 2005). Benefits have also been identified for acute hospital providers with reduced lengths of stays for stroke patients.

---

<sup>1</sup> <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD000443.pub3/pdf/standard>



Community stroke rehabilitation services cater for those stroke survivors who are able to return home following inpatient rehabilitation or ESD. Access to a specialist stroke multi-disciplinary community rehabilitation team should be available to all those for whom it is clinically appropriate.

The needs of patients being treated by these teams will differ case by case. For example, some will need only one therapy while others will need several. Domiciliary stroke services should be designed around the needs of the stroke survivor and their family and be appropriate for all ages. For example, patients with aphasia and other communication-related impairments will have specific needs while working age adults will have different recovery goals such as returning to work or parenting.

From research literature, it is known that there is a wide variation in the availability of rehabilitation and community services. Some areas have ESD, responsive community stroke rehabilitation teams and vocational rehabilitation services which demonstrate good outcomes and value for money. Other areas have no dedicated community stroke service and are without access to even generic rehabilitation teams. This inequality of access to services results in variation in patient experience and outcomes. The Care Quality Commission (CQC, 2011) reported across a number of aspects of ESD and community rehabilitation services and concluded: 'the overall picture is one of inconsistency, waits between transfer home and commencing community rehabilitation and lack of specialist access.'

### 6.1.3 Interpreting the SSNAP results

SSNAP publicly reports results for domiciliary teams at national and provider level. SSNAP now reports domiciliary results over a four month reporting period, in the same way that results for inpatient teams are reported. In the past, SSNAP combined 2 quarters worth of domiciliary data due to the slower rate of recruitment of these teams but now SSNAP has been collecting data for years it is expected that all domiciliary teams should be participating and entering all their data to SSNAP.

National figures have been calculated based on the combined data input by ESD teams, CRT teams and a small number of teams which provide both of these functions. In the text that follows the term used will be 'domiciliary team' as there is insufficient data to report on the different types of team separately. However, it should be noted that ESD and CRT teams have distinct functions and, in the future, results for each type of team will be presented separately to better reflect this.

The mechanics of collecting information at this stage of the pathway require the inpatient team to collect data on SSNAP about the processes of care as an inpatient and to send the data electronically to the next team to continue the electronic data capture. The domiciliary team has to be registered to have permission to complete the electronic record. Between Dec 2016 - March 2017:

11,949 patients were reported in SSNAP as being discharged with a stroke specific domiciliary service (ESD or CRT team). This is approximately 50.3% of all patients discharged alive from inpatient care.

- However, only 9,186 patient records were electronically transferred to domiciliary teams for further information to be collected on SSNAP.
- In this time period, 6862 electronic records were **fully** completed by the domiciliary team for 6696 patients.

It is planned to report on case ascertainment for domiciliary teams using data from the post-acute organisational audit in the future.

Provider level results for teams submitting at least 20 records are publicly available. Please see Tab L of the 'Full Results Portfolio' on the SSNAP Reporting Portal for these results.

<http://www.strokeaudit.org/results/National-Results.aspx>

## 6.2 Results for Domiciliary Teams

	Six month reporting	Four month reporting			
Rehabilitation Goals	Oct 2015-Mar 2016 N=9655	Apr-Jul 2016 N=6684	Aug- Nov 2016 N=6564	Dec 2016-Mar 2017 N=6862	Ref
Reported on SSNAP as applicable for rehabilitation goals while being treated by a domiciliary team	89.8%	90.8%	91.5%	90.7%	L2.3
If applicable, rehabilitation goals set by domiciliary team	94.2%	94.2%	95.4%	95.3%	L2.6
Median number of days under the care of a domiciliary team until rehabilitation goals are set	0 (0-2)	0 (0-1)	0 (0-1)	0 (0-2)	L2.7, L2.8, L2.9

	Six month reporting	Four month reporting			
Modified Rankin Scale (mRS) score Median (IQR)	Oct 2015-Mar 2016	Apr-Jul 2016	Aug- Nov 2016	Dec 2016-Mar 2017	Ref
mRS score at discharge from domiciliary teams	2 (1-3)	2 (1-3)	2 (1-3)	2 (1-3)	L3.1, L3.2, L3.3

	Six month reporting	Four month reporting			
Duration of treatment (in days)	Oct 2015-Mar 2016	Apr-Jul 2016	Aug- Nov 2016	Dec 2016-Mar 2017	Ref
Duration of treatment with a domiciliary team (in days)	Median 36.0 IQR (16.9 – 54.9) Mean 47.1	Median 37.1 IQR (18.0 – 56.8) Mean 48.6	Median 36.8 IQR (16.9 – 56.3) Mean 48.5	Median 35.3 IQR (16.1 – 52.6) Mean 45.4	L4.1, L4.2, L4.3, L4.4
Number of days between discharge from inpatient care to first direct contact with domiciliary team	Median = 1 IQR (0-3)	Median = 1 IQR (0-3)	Median = 1 IQR (0-3)	Median = 1 IQR (0-3)	L4.5, L4.6, L4.7

### 6.2.1 Therapy results

This section presents results about the intensity of rehabilitation provided by domiciliary teams in the community. As described earlier in this report, intensity of therapy is collected separately for each part of the patient's pathway.

The tables in this section present results for the 6,862 patient records for which data on therapy whilst under domiciliary care is available.

The results cover 4 aspects:

- the percentage of patients reported as being **applicable** for each therapy during their domiciliary rehabilitation
- the percentage of **days** on which therapy was provided
- the median number of **daily therapy minutes** received on **each day** therapy was provided
- the median number of **daily therapy minutes** received across the **entire treatment period** under domiciliary team (i.e. regardless of whether or not therapy was provided every day).

Note: SSNAP collects data on whether a patient was considered to require therapy at any point whilst under the care of a domiciliary team and does not reflect whether the patient required or was able to tolerate therapy on each day.

	Six month reporting		Four month reporting		
<b>Occupational Therapy</b> whilst being treated by a domiciliary team	<b>Oct 2015-Mar 2016</b> N=9655	<b>Apr-Jul 2016</b> N=6684	<b>Aug-Nov 2016</b> N=6564	<b>Dec 2016-Mar 2017</b> N=6862	<i>Ref</i>
Percentage of <b>patients</b> reported as <b>applicable</b> for OT at any point during treatment	80.7%	79.5%	80.2%	80.4%	L6.3
Median percentage of <b>days</b> on which OT is received by the patient	21.5%	20.9%	21.3%	21.1%	L6.4
Number of OT <b>minutes</b> received per day (on days when OT is provided) Median (IQR)	50 mins (40.9-60 mins)	48.8 mins (40-60 mins)	50 mins (40-60 mins)	50 mins (41.7-60 mins)	L6.5, L6.6, L6.7
Number of OT <b>minutes</b> received per day (across entire treatment period) Median (IQR)	10 mins (4.8-19.2 mins)	9.8 mins (4.9-18.6 mins)	10 mins (4.8-18.9 mins)	10.1 mins (4.9-19.1 mins)	L6.12, L6.13, L6.14

	Six month reporting		Four month reporting		
<b>Physiotherapy</b> whilst being treated by a domiciliary team	<b>Oct 2015-March 2016</b> N=9655	<b>Apr-Jul 2016</b> N=6684	<b>Aug-Nov 2016</b> N=6564	<b>Dec 2016-Mar 2017</b> N=6862	<i>Ref</i>
Percentage of <b>patients</b> reported as <b>applicable</b> for PT at any point during treatment	72.4%	71.2%	72.4%	73.7%	<i>L7.3</i>
Median percentage of <b>days</b> on which PT is received by the patient	27.4%	26.4%	27.0%	26.5%	<i>L7.4</i>
Number of PT <b>minutes</b> received per day (on days when PT is provided) Median (IQR)	46.1 mins (39.4-57.5 mins)	45.7 mins (39.2-56.3 mins)	45.6 mins (38.3-57.2 mins)	47 mins (40-58.2 mins)	<i>L7.5, L7.6, L7.7</i>
Number of PT <b>minutes</b> received per day (across entire treatment period) Median (IQR)	12.1 mins (6-21.7 mins)	11.7 mins (5.7-20.6 mins)	11.7 mins (5.9-21.5mins)	11.9 mins (6.1-21 mins)	<i>L7.12, L7.13, L7.14</i>

	Six month reporting		Four month reporting		
<b>Speech and language therapy</b> whilst being treated by a domiciliary team	<b>Oct 2015-March 2016</b> N=9665	<b>Apr-Jul 2016</b> N=6684	<b>Aug-Nov 2016</b> N=6564	<b>Dec 2016-Mar 2017</b> N=6862	<i>Ref</i>
Percentage of <b>patients</b> reported as <b>applicable</b> for SALT at any point during treatment	32.1%	33.1%	33.4%	32.8%	<i>L8.3</i>
Median percentage of <b>days</b> on which SALT is received by the patient	17.2%	15.4%	16.1%	15.8%	<i>L8.4</i>
Number of SALT <b>minutes</b> received per day (on days when SALT is provided) Median (IQR)	48.3 mins (40-60 mins)	47.0 mins (40-60 mins)	47.5 mins (40-60 mins)	48.6 mins (40-60 mins)	<i>L8.5, L8.6, L8.7</i>
Number of SALT <b>minutes</b> received per day (across entire treatment period) Median (IQR)	8 mins (3.4-16.2 mins)	7.1 mins (3.0-14.3 mins)	7.2 mins (3.1-14.7 mins)	7.6mins (3.4-15.0 mins)	<i>L8.12, L8.13, L8.14</i>

	Six month reporting		Four month reporting		
	Oct 2015-March 2016 N=9665	Apr-Jul 2016 N=6684	Aug-Nov 2016 N=6564	Dec 2016-Mar 2017 N=6862	Ref
Psychology					
Percentage of <b>patients</b> reported as <b>applicable</b> for psychology at any point during treatment	8.2%	7.8%	8.0%	7.6%	L10.3
Median Percentage of <b>days</b> on which psychology is received by the patient	5.7%	5.5%	6.1%	6.5%	L10.4
Number of psychology <b>minutes</b> received per day (on days when psychology is provided) [Median (IQR)]	60 mins (45-60 mins)	60 mins (43.7-60 mins)	56 mins (45-60 mins)	55 mins (43.3-60 mins)	L10.5, L10.6, L10.7
Number of psychology <b>minutes</b> received per day (across entire treatment period) [Mean]	4.4 mins	5.2 mins	4.9 mins	6.1 mins	L10.8

**Comment:** The figure reported for patients applicable for psychology from an ESD/CRT team is unlikely to be an accurate reflection of the care needs for patients post-stroke. It is expected that at least 50% of stroke patients will suffer from depression or cognitive impairments in the weeks following their stroke and will therefore require psychological support. We urge all teams to indicate when a patient is applicable for psychology, even if the team is not in a position to provide this service to their patients.

## Section 7: Six month follow up assessments

Collection of six month outcome data is key to assessing the outcomes of stroke care. It notably forms part of the CCG Outcomes Indicator Set that was reported in December 2014 ,December 2015 and December 2016 in England.

206 teams have submitted data for at least one patient who received a six month assessment. 106 teams have provided a six month assessment for at least 20 patients and the breakdown is shown in table below. These include acute hospitals, domiciliary teams, and voluntary organisations e.g. the Stroke Association. As this is a relatively small number, the results may not be representative of six month follow-up provision nationally. A full list of six month assessment provider teams which submitted at least 20 records to SSNAP can be found in the results portfolio. Named team results for teams providing six month follow ups are publicly available. Please see the 'Full Results Portfolio' on the SSNAP Results Portal for individual team results: [www.strokeaudit.org/results/national](http://www.strokeaudit.org/results/national)

Region	Six month reporting period		Four month reporting period	
	Number of teams providing at least 20 six month assessments October 2015- March 2016	Number of teams providing at least 20 six month assessments April-July 2016	Number of teams providing at least 20 six month assessments Aug-Nov 2016	Number of teams providing at least 20 six month assessments Dec-Mar 2017
London	12	9	5	9
East of England	9	9	10	9
East Midlands	3	3	2	2
West Midlands	8	9	8	7
North West Coast (formerly Cheshire and Mersey)	11	9	12	10
Greater Manchester and Eastern Cheshire (formerly Manchester, Lancashire & South Cumbria )	10	8	7	7
North of England	13	11	12	11
Yorkshire and The Humber	14	12	14	14
South East	6	4	3	4
South West	9	9	6	9
Thames Valley	5	4	4	4
Wessex	4	3	5	6
Wales	11	10	9	7
Northern Ireland	3	4	5	6
Islands	1	0	0	1
<b>Total</b>	<b>119</b>	<b>104</b>	<b>102</b>	<b>106</b>

## 7.1 Interpreting the Results

The results which follow are based on six month assessments which were due in this reporting period. The record completion analysis below concerns whether the question about six month assessment has been answered at all, and the analyses covering the percentage of patients applicable to receive this assessment and the percentage of those who actually received it are based on all patients who were alive at the relevant time point.

### *Breakdown of six month assessment analysis*

#### **Record completion**

Information on record completion for the six month assessment question is provided to give an indication of how widely this section of the audit is being answered, rather than indicating the numbers of patients who had a six month assessment completed. If this question is not answered, it is interpreted as an assessment did not take place.

- 24,278 patient records should have had an answer recorded on the webtool
- Of these, 11,622 patient records (47.9%) did have an answer.

**Comment:** It is extremely important that data regarding a patient's six month follow up is recorded on SSNAP. This is regardless of whether or not the assessment was provided. These data have the potential to reveal variations in access to six month assessments across the country. In cases where six month assessments are being provided but are not recorded on SSNAP, valuable information about patient outcomes post stroke is being missed.

#### Applicability for six month assessment

Patients are considered to be applicable to receive a six month assessment unless they are known to have died before six months after admission, or if they have a 'no but' reason recorded for the six month assessment question. Therefore any patients alive six months after admission who do not have an answer recorded in the audit are deemed applicable.

- 21,491 patients were considered to be applicable to receive a six month assessment (excludes died in care, died within six months of admission\* and 'no but')  
\*either as recorded on SSNAP or from the national register of deaths, the Office for National Statistics

Note: SSNAP records are linked with mortality information from the Office for National Statistics (ONS). Usually, SSNAP data are securely sent for linkage following each reporting deadline, enabling SSNAP to track mortality other than as reported on SSNAP (i.e. after patients have left care). We use this in determining eligibility for receiving a six month assessment and for other purposes, such as providing casemix adjusted mortality rates for providers. (Following lengthy delays, SSNAP was able to perform linkage with ONS to obtain information for patients that died up to mid-2016. Casemix-adjusted mortality results were publicly reported earlier in the year. It has therefore been possible to exclude these patients from the denominator for 6 month assessments).

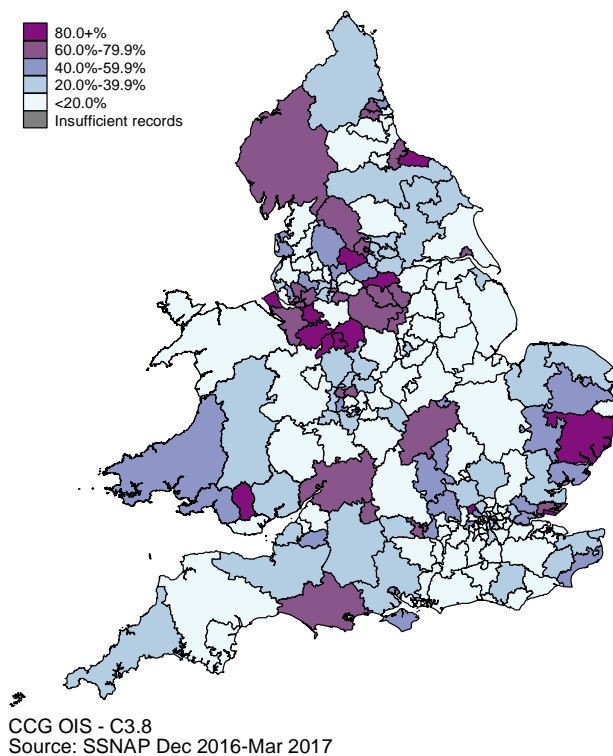
### Patients assessed at six months

Out of 21,491 patients considered to be applicable to receive a six month assessment:

- 6,182 patients (28.8%) received a six month assessment
- The inpatient teams which had the highest percentage of patients going on to receive a six month assessment are:
  - *Ipswich Hospital, Singleton Hospital, Prince Philip Hospital, Staffordshire Rehabilitation Team, Chesterfield Royal and Noble's Hospital.*
- N.B. This does not necessarily indicate that these were the teams who carried out the six month assessments, only that their patients went on to have them.

**Comment:** While the vast majority of patients alive at this time after stroke are applicable to receive a six month review this is currently happening in a minority of cases. Clinical teams and commissioners need to work closely together to see this improve to get the most value from the audit for service improvement.

Percentage of applicable patients  
who are assessed at 6 months





## 7.2 Preliminary Results

	Six month reporting period		Four month reporting period		
Six month review timings:	Oct 2015-March 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016 – Mar 2017	Ref
	Median (IQR)	Median (IQR)	Median (IQR)	Median (IQR)	
Time from admission to hospital (or stroke in hospital) to six month review assessment	6.5 (5.8-7.4) months	6.5 (5.9-7.5) months	6.5 (5.9-7.5) months	6.5 (5.9-7.5) months	M5.1, M5.2, M5.3
Time from discharge from all care (In patient and domiciliary) to six month assessment	5.6 (4.4-6.4) months	5.6 (4.4-6.4) months	5.6 (4.4-6.4) months	5.6 (4.4-6.4) months	M5.4, M5.5, M5.6

SSNAP is collecting the mode of administration of the review as it provides context.

	Six month reporting period		Four month reporting period		
Method of assessment /review (Q8.1.2) % (n)	Oct 2015-March 2016 N=8664	Apr-Jul 2016 N=6150	Aug-Nov 2016 N=6555	Dec 2016 – Mar 2017 N=6182	Ref
In person	82.6% (7155)	81.9% (5034)	83.1% (5445)	80.8% (4996)	M6.2, M6.3
By telephone	16.7% (1445)	17.6% (1085)	3% (1085)	18.7% (1158)	M6.6, M6.7
By post	0.7% (64)	0.4% (27)	0.3% (22)	0.4% (26)	M6.8, M6.9
Online	0.0% (0)	0.1% (4)	<0.1% (3)	<0.1% (2)	M6.4, M6.5

SSNAP offers six categories to identify the person who contacted the patient for a review.

Unfortunately, this question was not well recorded throughout this reporting period and “other” was recorded for over 30% of cases.

	Six month reporting period		Four month reporting period		
<b>Discipline providing the six month follow up? (Q8.1.3) %(n)</b>	<b>Oct 2015-Mar 2016 N= 8664</b>	<b>Apr-Jul 2016 N=6150</b>	<b>Aug-Nov 2016 N=6555</b>	<b>Dec 2016 – Mar 2017 N=6182</b>	<i>Ref</i>
Stroke coordinator	34.1% (2958)	32.2% (1982)	33.7% (2209)	33.1% (2049)	M6.13, M6.14
Secondary care clinician	7.3% (636)	7.6% (470)	7.4% (483)	8.0% (496)	M6.21, M6.22
Therapist	10.5% (909)	11.9% (731)	13.1% (858)	12.3% (763)	M6.15, M6.16
Voluntary services employee	6.2% (533)	6.4% (394)	6.5% (425)	6.6% (406)	M6.19, M6.20
District/community nurse	7.9% (685)	8.5% (525)	7.7% (507)	8.0% (495)	M6.17 M6.18
GP	0.1% (8)	0.1% (7)	0.1% (8)	<0.1% (2)	M6.11, M6.12
Other	33.9% (2935)	33.2% (2041)	31.5% (2065)	31.9% (1971)	M6.23 M6.24

	Six month reporting period		Four month reporting period		
<b>Was the patient screened for mood, behaviour or cognition (Q8.2) %(n)</b>	<b>Oct 2015-Mar 2016 N=8664</b>	<b>Apr-Jul 2016 N=6150</b>	<b>Aug-Nov 2016 N=6555</b>	<b>Dec 2016 – Mar 2017 N=6182</b>	<i>Ref</i>
Yes	70.9% (6140)	74.1% (4558)	74.2% (4861)	74.1% (4583)	M7.2 M7.3
No	22.0% (1902)	19.5% (1198)	19.4% (1273)	19.5% (1207)	M7.4 M7.5
‘No but’*	7.2% (622)	6.4% (394)	6.4% (421)	6.3% (392)	M7.6 M7.7

\*‘No but’ is an appropriate response if a problem has already been detected and there is an action plan in place

	Six month reporting period	Four month reporting period			
Patient identified as needing support (if screened) % (n)	Oct 2015-Mar 2016 N=6140	Apr-Jul 2016 N=4558	Aug-Nov 2016 N=4861	Dec 2016 – Mar 2017 N=4583	Ref
Yes	20.3% (1247)	20.9% (953)	19.1% (928)	18.7% (859)	M7.8 M7.10
Of those identified as needing support, support given	N=1247	N=953	N=928	N=859	M7.8
Yes	64.6% (806)	61.3% (584)	60.8% (564)	62.9% (540)	M7.12, M7.13
No	24.3% (303)	25.9% (247)	28.0% (260)	26.8% (230)	M7.14, M7.15
No but	11.1% (138)	12.8% (122)	11.2% (104)	10.4% (89)	M7.16, M7.17

	Six month reporting	Four month reporting			
Patient location at the time of the review % (n)	Oct 2015-Mar 2016 N=8664	Apr-Jul 2016 N=6150	Aug-Nov 2016 N=6555	Dec 2016 – Mar 2017 N=6182	Ref
Home	89.3% (7735)	89.3% (5489)	89.5% (5867)	90.7% (5607)	M8.2, M8.3
Care Home	9.6% (829)	9.5% (583)	9.4% (618)	8.2% (506)	M8.4, M8.5
Other	1.2% (100)	1.3% (78)	1.1% (70)	1.1% (69)	M8.6, M8.7

### Changes in Rankin Score between time periods

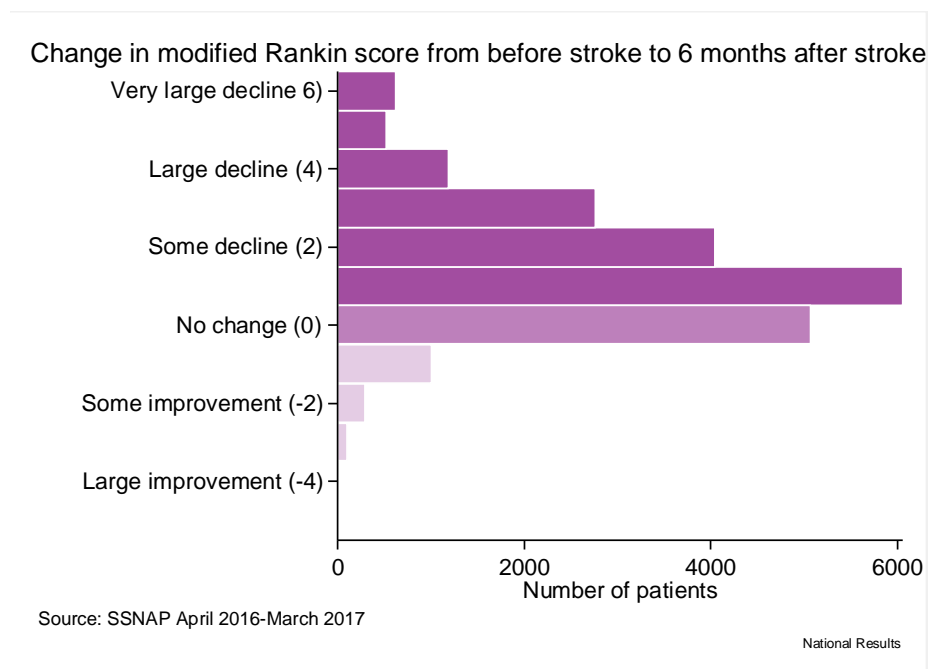
Information about the function of stroke patients six months after admission to hospital is also collected. During this period it is available for 6,041 out of 21,491 patients applicable for a review during this reporting period and cannot be interpreted as representative until the data have been collected for a longer time period. The data on this cohort shows that patients who are receiving a review include all severity levels.

**Comment:** Though the percentage of patients with follow up data recorded on SSNAP is improving each reporting period, it may not be entirely representative of the national picture. As recruitment of six month providers continues to increase, data will become more meaningful and robust. The results below reinforce how invaluable these data could be.

Modified Rankin Score at 3 time points for the 6,041 patients for whom data was available*	Pre stroke		At discharge from all care		At six months	
	N	%	N	%	n	%
0 (no symptoms)	3838	63.5	978	16.2	1111	18.4
1 (no significant disability)	937	15.5	1742	28.8	1684	27.9
2 (slight disability)	541	9.0	1336	22.1	1236	20.5
3 (moderate disability)	488	8.1	1074	17.8	1156	19.1
4 (moderately severe disability)	204	3.4	686	11.4	627	10.4
5 (severe disability)	33	0.6	225	3.7	227	3.8

Change in mRS from before stroke to six months after stroke	Number of patients	Percentage of patients
-5	1	0
-4	9	0.2
-3	35	0.6
-2	91	1.5
-1	333	5.5
0	1610	26.7
1	1854	30.7
2	1102	18.2
3	685	11.3
4	254	4.2
5	67	1.1
<b>Total</b>	<b>6041</b>	<b>100</b>

The graph below demonstrates the change in mRS from pre-stroke to 6 months post-stroke.



	Six month reporting	Four month reporting			
Since initial stroke patient suffered % (n)	Oct 2015-Mar 2016 N=8664	Apr-Jul 2016 N=6150	Aug-Nov 2016 N=6555	Dec 2016 – Mar 2017 N=6182	Ref
Another stroke	3.0% (261)	2.7% (167)	2.8% (182)	3.3% (203)	M17.2 M17.3
Myocardial infarction	0.6% (48)	0.7% (42)	0.5% (35)	0.5% (33)	M18.2 M18.3
Other hospitalisation illness	13.3% (1156)	14.4% (887)	13.7% (901)	13.4% (830)	M19.2 M19.3

## Section 8: SSNAP Performance Tables (by named team)

This section aims to provide a summary of performance for named teams based on **10 domains** of care. Both patient-centred domain scores (whereby scores are attributed to every team which treated the patient at any point in their care) and team-centred domain scores (whereby scores are attributed to the team considered to be most appropriate to assign the responsibility for the measure to) are calculated. Each domain is given a performance level (level A to E) and a **key indicator score** is calculated based on the average of the 10 domain levels for both patient-centred and team centred domains.

The **overall performance** section of the table consists of:








- A **Combined Key Indicator (KI) Score** derived from the average of the patient- and team-centred total KI score.
- **Case ascertainment** and **audit compliance** levels
- **SSNAP level** which is the combined total key indicator score adjusted for case ascertainment and audit compliance.

The results in this table should be read in combination with the SSNAP 'Summary Report' which includes named team results for the 44 key indicators which comprise the 10 domains:

[www.strokeaudit.org/results/National-Results](http://www.strokeaudit.org/results/National-Results)

To be included in the SSNAP scoring, teams had to achieve a minimum case ascertainment requirement. Teams which did not meet this requirement (i.e. with insufficient records to be included in the named team results) are shown by an **X**. Some teams did not receive results due to them treating small number of patients during the time period. These teams are shown by 'TFP' (too few patients to report on).

Across the SSNAP domain results a consistent colour code is used to represent each team's performance for specific domains and overall.

<u>Colour</u>	<u>Level</u>
	A
	B
	C
	D
	E
	Insufficient data
	Too few patients to report on

### Changes over time

Teams are being encouraged to review their results (which are provided every 4 months) and plan to implement change. In some aspects it may be possible to make change rapidly, in other areas of care this may take longer. We are providing information on how the current results compare with the previous reporting period for an indication of where changes may be starting to be made. These need to be interpreted with caution at this stage as a number of factors may be influential at this time. Changes between the December 2016 – March 2017 results and the previous reporting period

are illustrated within the table by arrows. Upward pointing arrows indicate that the team has achieved a higher level this reporting period than in the previous reporting period; downward pointing arrows that the team has achieved a lower level this reporting period than previously. The number of arrows represents the extent of the change.

For example, an *increase of 2 levels* from D to B would be shown by the symbol



## Six month follow up results

SSNAP report upon the numbers and percentage of patients going on to receive a six month assessment; these results are patient-centred (attributed to all teams who treated the patient). Therefore, the named-team results do not necessarily indicate that these were the teams who carried out the six month assessments, just that their patients went on to have them. Please refer to results in the 'Full Results Portfolio' for details about the clinical information related to these reviews reported on SSNAP, for example, whether patients are taking appropriate medication at six months.

## Interpreting the results

The colour-coded tables are structured as follows:

1. Patient-centred results
  - A. Routinely admitting teams
    - i. Geographical Region
      - Hospital (ordered alphabetically)
  - B. Non-routinely admitting teams (*as above*)
  - C. Non-acute teams (*as above*)
2. Team-centred results  
*Same structure as above*

The column headings in the performance tables have been abbreviated for reasons of space. Please use the following key as a guide when using the results.

Abbreviated heading	Full Description
SSNAP Level	SSNAP Level
CA	Case ascertainment
AC	Audit compliance
Combined KI level	Combined Total Key Indicator Level
D1 Scan	Domain 1: Scanning
D2 SU	Domain 2: Stroke unit
D3 Throm	Domain 3: Thrombolysis
D4 Spec asst	Domain 4: Specialist assessments Domain
D5 OT	5: Occupational therapy
D6 PT	Domain 6: Physiotherapy
D7 SALT	Domain 7: Speech and language therapy
D8 MDT	Domain 8: Multi-disciplinary team working
D9 Std disch	Domain 9: Standards by discharge
D10 Disch proc	Domain 10: Discharge processes
PC KI level	Patient-centred Total Key Indicator Level
TC KI level	Team-centred Total Key Indicator Level

36 teams in England have achieved the top overall performance level this reporting period.

Considering the extremely high standards SSNAP has set, an 'A' score is a fantastic achievement for these teams. Though nowhere else in the world has set such stringent standards, it does show that this top score is achievable. It is expected that the number of teams achieving top scores will increase as further improvements to stroke services are made nationally in future reporting periods.

Routinely Admitting Teams		Number of patients		Overall Performance				Patient Centred Data													Six Month Assessment			
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	TC KI Level	Number Applicable	% Applicable	Number assessed	% Assessed		
London - London SCN																								
Barking, Havering and Redbridge University Hospitals NHS Trust	Queens Hospital Romford HASU	380	351	D	A↑↑↑↑	C	C↓	A↑	E↓↓	D↓	C	A	A	A	D↓	E↓	C	C↓	208	86%	28	13%		
Barts Health NHS Trust	Royal London Hospital HASU	251	221	C↓	B↓	D↓↓	B↓	A	C	B	C↓	A	A	B	B↓	B	B	A	230	95%	14	6%		
Imperial College Healthcare NHS Trust	Charing Cross Hospital HASU	321	281	B↑	B↑	B↓	B	A	C↓	B	B	A↑	B	B↑	B↓	D	B	B	241	92%	22	9%		
King's College Hospital NHS Foundation Trust	King's College Hospital HASU	306	289	B↓	A	B	A	A	D	B	B	A	A	C↓	B	A	A	A	193	95%	30	16%		
King's College Hospital NHS Foundation Trust	Princess Royal University Hospital HASU	265	276	B↑	A↑↑	B	B	A	E↓	C↓	B↓	A	A	C	D	A	B	B	213	98%	11	5%		
London North West Healthcare NHS Trust	Northwick Park Hospital HASU	368	359	A	A	A	A	A	B	A	B↓	A	B	B	A	A	B↑	A	283	91%	64	23%		
St George's Healthcare NHS Trust	St George's Hospital HASU	415	387	A	A	B↓	A	A	C	A↑	B	A	A	A↑	A	A	A	A	357	97%	28	8%		
University College London Hospitals NHS Foundation Trust	University College Hospital HASU	384	364	B↓	A	B↓	A	A	E↓	B	B	A	A	A	B↑↑	A↑	B	A↑	364	95%	42	12%		
Midlands & East - East Midlands SCN																								
Derby Hospitals NHS Foundation Trust	Royal Derby Hospital	296	283	D↓	A	C↓	D↓↓	C	D↓	D↓↓	C↓	B	B	D↓	C↓	C↓	C	D↓↓	154	100%	0	0%		
Northampton General Hospital NHS Trust	Northampton General Hospital	317	308	A	A	A	A	A	D	C	A	A	B↓	C↓↓	B	A↑	A↑	A	144	71%	68	47%		
Nottingham University Hospitals NHS Trust	Nottingham City Hospital	362	378	C	A	B	B↑	C↑	B	B↑	C	A	B	E	C	B	A↑	B↑	363	99%	33	9%		
Shenwood Forest Hospitals NHS Foundation Trust	Kings Mill Hospital	173	171	A	A	A	A	B↑	B↑	B	B	A	A↑	B↑	B	A	A	A↑	135	100%	0	0%		
United Lincolnshire Hospitals NHS Trust	Lincoln County Hospital	203	198	D↓	A	C	C↓	B↓	D	B↓	D↓	B	B	C	D↓↓	C	C↓	A	166	100%	0	0%		
United Lincolnshire Hospitals NHS Trust	Pilgrim Hospital	161	167	B	A	A	B	A	B	A	A	B↑	B	E↓	B↑	C	A	B	163	100%	1	1%		
University Hospitals of Leicester NHS Trust	Leicester Royal Infirmary	379	355	B	A	A	B	B↑	C↑	C	B	B↑	B	E↓	C↓	A	A	B	346	100%	0	0%		
Midlands & East - East of England SCN																								
Basildon and Thurrock University Hospitals NHS Foundation Trust	Basildon University Hospital	212	214	A	A	A	A	A	C	A	B	A	A	B	A	A	A	A	81	70%	35	43%		
Cambridge University Hospitals NHS Foundation Trust	Addenbrooke's Hospital	198	220	D	A	B	D	B↑	E	E↓↓	B↑↑	C	B↓	D↑	D↑	A	C	D	182	99%	0	0%		
Colchester Hospital University NHS Foundation Trust	Colchester General Hospital	183	182	A	A	A	A	A	C	B↓	B	A	A	C	A	B	A	A	99	91%	43	43%		
East and North Hertfordshire NHS Trust	Lister Hospital	307	331	A↑	A	A	A↑	B↓	C	B↑	B	A	A	B↑	B	A↑	A↑	A↑	198	88%	43	22%		
Ipswich Hospital NHS Trust	Ipswich Hospital	241	209	B↓	A	A	B↓	B↑	C↓	C↓↓	C	A	A	E↓↓	C↓	A	A	B↓	66	38%	66	100%		
James Paget University Hospitals NHS Foundation Trust	James Paget Hospital	121	135	C	B↓	B	C	C	C	D	B	A	B	C	D	B↑	C↓	C	126	100%	0	0%		
Luton and Dunstable University Hospital NHS Foundation Trust	Luton and Dunstable Hospital	306	298	C	A	A	C	A	D	C↓	B	B↓	B	E	C↑	B	C↑	C	175	97%	3	2%		
Mid Essex Hospital Services NHS Trust	Broomfield Hospital	193	199	A	A	A	A	A	B	A↑	A	A	B	C↑	B	A	A	A	138	97%	23	17%		
Norfolk and Norwich University Hospitals NHS Foundation Trust	Norfolk and Norwich University Hospital	376	368	B	A	A	B	B	D↓	C↓	B↓	C↓	B	C	C↓	B	A	B	273	100%	81	30%		
Peterborough and Stamford Hospitals NHS Foundation Trust	Peterborough City Hospital	207	207	D	A	B↓	D	C	E	D	B↑	D↓	D	E↓↓	D	B	C	D	179	100%	1	1%		
Queen Elizabeth Hospital King's Lynn NHS Foundation Trust	Queen Elizabeth Hospital Kings Lynn	199	202	B↓	A	B	A	B↓	C↓	B↓	B↓	A	A	A	C↓	B	C	B↓	60	67%	19	32%		
Southend University Hospital NHS Foundation Trust	Southend Hospital	235	240	B	A	B	A	B↓	D	A↑	B	A	B↓	A↑	B	B	C	B	109	75%	78	72%		
West Hertfordshire Hospitals NHS Trust	Watford General Hospital	213	209	A	A	A	A	B↓	D↓	C↓	A	A	A	A↑	C	A↑	B	A	123	76%	12	10%		
West Suffolk NHS Foundation Trust	West Suffolk Hospital	166	143	A	A	A	A	A	C↓	C↓	B	B↓	A	A	B	C↓	A↑	A	109	83%	63	58%		



Routinely Admitting Teams		Number of patients		Overall Performance				Patient Centred Data												Six Month Assessment			
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	TC KI Level	Number Applicable	% Applicable	Number assessed	% Assessed	
Midlands & East - West Midlands SCN																							
Burton Hospitals NHS Foundation Trust	Queens Hospital Burton upon Trent	137	145	C↑	A↑	A↑↑	C↑	A	D	D	E	A↑↑	B	C	D	D	A↑	C↑	81	91%	5	6%	
Dudley Group of Hospitals NHS Foundation Trust	Russells Hall Hospital	211	203	C	A	B	C	B↑	D	D↓	C↓	C	B	C	B	B	B↑	C	135	91%	45	33%	
George Eliot Hospital NHS Trust	George Eliot Hospital	67	63	D↓	B↓	C↓	C	B↓	E	C	B	C↑	C	B↑	A	B	C	C	58	94%	12	21%	
Heart of England NHS Foundation Trust	Birmingham Heartlands Hospital	303	293	A	A	A↑	A	B↓	C↓	B↓	A↑	A	B↓	C	B↓	B	A	A	249	100%	0	0%	
Royal Wolverhampton NHS Trust	New Cross Hospital	177	156	C	B↓	A↑	C↓	B↓	C	C↓	C	A↑	A↑	D↑	C	D↓↓	B↓	C↓	120	94%	45	38%	
Sandwell and West Birmingham Hospitals NHS Trust	Sandwell District Hospital	204	199	B↑	A	B↑	B	A	C	B↑	B	C↑↑	B	E↓↓	B	B	A	B	152	100%	8	5%	
Shrewsbury and Telford Hospital NHS Trust	Princess Royal Hospital Telford	319	326	D	A	C	D	C↑	D	C	D	A	C↑	E	D	D↑	B↑	D	303	99%	5	2%	
South Warwickshire NHS Foundation Trust	Warwick Hospital	100	98	C	A	A	C	D	E↓	C↑	D	A	B	C↓	B	A	D↓	C	83	100%	0	0%	
University Hospitals Birmingham NHS Foundation Trust	Queen Elizabeth Hospital Edgbaston	191	161	D↓	A	A	D↓	B	D↓	B↑	D↓↓	C	B↑	C	E↓	D↓	A↑	C	127	79%	56	44%	
University Hospitals Coventry and Warwickshire NHS Trust	University Hospital Coventry	288	283	B↑	A	A	B↑	A↑	D↑	B	B↑↑	A	A↑	D	B↑	B↓	A	B	209	100%	25	12%	
University Hospitals of North Midlands NHS Trust	Royal Stoke University Hospital	421	401	B	A	A	B	A	D	C↓	B	A	A	E	B	C	A	B	277	90%	199	72%	
Walsall Healthcare NHS Trust	Manor Hospital	130	124	D↓	A	A	D↓	A↑	E	D	C↓	D↓	D↓	E↓↓↓	C↓	A	B	D↓	68	86%	32	47%	
Worcestershire Acute Hospitals NHS Trust	Worcestershire Royal Hospital	281	212	D	B	C↑	D	C↓	E	C↑↑	E	A	C↓	D	D	E↓	A	D	142	68%	17	12%	
Wye Valley NHS Trust	Hereford County Hospital	183	187	B↑	A	A	B↑	B↑	E	C	B↑↑	A↑	A↑	E	B↑	B↓	B	B↑	133	99%	1	1%	
North of England - Greater Manchester & Eastern Cheshire SCN																							
Pennine Acute Hospitals NHS Trust	Fairfield General Hospital	373	365	A	A	A	A	A	B	A↑	A	A	B↓	B	A	B	A	A	273	99%	52	19%	
Salford Royal NHS Foundation Trust	Salford Royal Hospital	707	684	A	A	A	A	A	B	B	A	A	A	C	A	A	A	A	437	94%	101	23%	
Stockport NHS Foundation Trust	Stepping Hill Hospital	365	346	A	A	A	A	A	B	A	A	A↑↑	B↑	B↑	A	B	B↑	A↑	226	83%	90	40%	
North of England - North West Coast SCN																							
Aintree University Hospitals NHS Foundation Trust	University Hospital Aintree	159	132	B↑	A	A	B↑	B	D↑	C	B	B↑	B↑↑	C↑↑	C	A	A	B↑	135	98%	28	21%	
Blackpool Teaching Hospitals NHS Foundation Trust	Blackpool Victoria Hospital	147	144	E↓	B↓	A	E↓	C	E↓	E↓	D	E	E	E	E	C	A↑	E↓	113	93%	34	30%	
Countess of Chester Hospital NHS Foundation Trust	Countess of Chester Hospital	119	119	B	A	A	B	B↓	B↑	C↓	A↑	B↓	B	D	B	B↓	A↑	B	55	86%	22	40%	
East Lancashire Hospitals NHS Trust	Royal Blackburn Hospital	247	241	C↑	A	A	C↑	C↑	D	D	D↑	C↑	C↑	C	B↑	A	C↑	C↑	168	98%	48	29%	
Lancashire Teaching Hospitals NHS Foundation Trust	Royal Preston Hospital	202	195	D	A	A	D	C	E	D	E	C↑	D	D↓	D	A	C	D	118	90%	5	4%	
Mid Cheshire Hospitals NHS Foundation Trust	Leighton Hospital	211	196	C	A	B↓	C	A	E	D↑	C	A	A	B	B↓	C↓	A	B	76	79%	60	79%	
Royal Liverpool and Broadgreen University Hospitals NHS Trust	Royal Liverpool University Hospital	243	245	C	A	B	B	B	E↓	B↑	B	A	A	E	A↑	C↑	A	B	167	96%	28	17%	
Southport and Ormskirk Hospital NHS Trust	Southport and Formby District General	134	132	C↑	A	A↑	C	A↑	E	D	C	A↑	B	E↓	B	B	D	C	87	97%	16	18%	
St Helens and Knowsley Teaching Hospitals NHS Trust	Whiston Hospital	291	260	A	A	A	A	A↑	B	B	A	B	C	C↓	A	B	A	A	176	75%	126	72%	
University Hospitals of Morecambe Bay NHS Foundation Trust	Furness General Hospital	61	60	C↑	B↓	A↑↑	C	A↑	C	E↓	B	A	D↓	E	C↓	B	B↑	C	44	94%	35	80%	
University Hospitals of Morecambe Bay NHS Foundation Trust	Royal Lancaster Infirmary	120	112	D	A	B	D	A	E	E	D	C	D	E	D	A↑	B↓	D	100	100%	0	0%	
Warrington and Halton Hospitals NHS Foundation Trust	Warrington Hospital	110	110	D↓	B↓	A	D↓	C	E↓↓	D	E↓	A	B↓	E	B	C	A	D↓	43	64%	30	70%	
Wirral University Teaching Hospital NHS Foundation Trust	Arrows Park Hospital	217	220	A	A	A	A	A	B↑	B	B	A	B	C	A	A	A	A	103	84%	94	91%	
North of England - North of England SCN																							
City Hospitals Sunderland NHS Foundation Trust	Sunderland Royal Hospital	249	247	D	A	A↑	D	B	C	D↓	B	C↑↑	D	E	C↑	C↑	A	C↑	115	100%	6	5%	
County Durham and Darlington NHS Foundation Trust	University Hospital of North Durham	250	255	E	A↑↑↑↑	C	D	C	B	C	C	E	D	E	E	D	E	D	183	100%	0	0%	
Newcastle upon Tyne Hospitals NHS Foundation Trust	Royal Victoria Infirmary	335	328	A	A	A	A	A	A↑	C↓	A↑	A	A	A	C↑	B	A	A	125	75%	92	74%	
North Cumbria University Hospitals NHS Trust	Cumberland Infirmary	132	115	C	A	B	C↓	B	D	D	D↓	A	A↑	E↓↓	C↓	C↓	A	C↓	64	55%	54	84%	
North Cumbria University Hospitals NHS Trust	West Cumberland Hospital	83	81	B	A	A	B	B	D↓	C	D↓↓	A	A	B	C	A	D	B	51	89%	38	75%	
North Tees and Hartlepool NHS Foundation Trust	University Hospitals of North Tees and Hartlepool	174	173	C	A	B	B↑	A↑↑	A↑	A↑	B	C	D	E	B	B↓	D↓	B↑	157	96%	92	59%	
Northumbria Healthcare NHS Foundation Trust	Northumbria Specialist Emergency Care Hospital HASU	295	293	A↑	A	A	A↑	B↑	B	B	B	A	A	B↑	A↑	C↓	B↓	A	258	95%	90	35%	
South Tees Hospitals NHS Foundation Trust	James Cook University Hospital	255	242	A	A	A	A	B	B	B	B	A	B	B↑	A	A↑	B	A	134	91%	91	68%	

Routinely Admitting Teams		Number of patients		Overall Performance				Patient Centred Data												Six Month Assessment			
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	TC KI Level	Number Applicable	% Applicable	Number assessed	% Assessed	
North of England - Yorkshire and The Humber SCN																							
Barnsley Hospital NHS Foundation Trust	Barnsley Hospital	157	162	C↑	A	A	C↑	D	D	D↑	D	A	A	D↓	B↑	B↓	C↑	C	81	81%	63	78%	
Bradford Teaching Hospitals NHS Foundation Trust	Bradford Royal Infirmary	203	215	D	A	B	D	C↑	D↓	E	E	C↓	B↑	E↓↓	D	A↑	D↓	D	73	68%	60	82%	
Calderdale and Huddersfield NHS Foundation Trust	Calderdale Royal Hospital	202	230	B	A	A	B	C	C	B↓	B	B↓	D↓↓	C	C↓	B	A	B	129	85%	68	53%	
Chesterfield Royal Hospital NHS Foundation Trust	Chesterfield Royal	183	190	C	A	B↓	C	B↑	C	D	D	A↑↑	B↑	E	C	B	A	C↑	122	66%	118	97%	
Doncaster and Bassetlaw Hospitals NHS Foundation Trust	Doncaster Royal Infirmary	219	215	B	A	A	B	C↓	D↓	C	D↓	A	A	A	B	B↓	D↓	B	151	79%	3	2%	
Harrogate and District NHS Foundation Trust	Harrogate District Hospital	94	87	D	A	B	D↓	D	C	C↑	D	B	C↓	D↓	C	B	C	D↓	83	97%	0	0%	
Hull and East Yorkshire Hospitals NHS Trust	Hull Royal Infirmary	276	276	C	A	B	B	B	C	C	B	A	B↓	E	D	B	A↑	B	154	89%	33	21%	
Leeds Teaching Hospitals NHS Trust	Leeds General Infirmary	240	248	C	C↓↓	A↑	B	B	D↓	B	B	C	B	B	C↑	A	C	B	233	100%	60	26%	
Mid Yorkshire Hospitals NHS Trust	Pinderfields Hospital	296	318	C	A	A	C	B	C	C↓	C	A↑↑	B	D↑	E	A	A	B↑	173	82%	47	27%	
Northern Lincolnshire and Goole Hospitals NHS Foundation Trust	Scunthorpe General Hospital	228	231	B↓	A	A	B↓	B↓	C↓	D↓	B	A	A	C↓↓	C↓	A	B↑	B↓	176	99%	18	10%	
Rotherham NHS Foundation Trust	Rotherham Hospital	154	146	C↓	A	A	C↓	A	D↓	E↓	D	A	B↓	E	D	A	B↓	C↓	49	64%	39	80%	
Sheffield Teaching Hospitals NHS Foundation Trust	Royal Hallamshire Hospital	333	317	C	A	B	B↑	B	B	C↑	C	A	B	C↑↑	C	B	B	B↑	229	91%	127	55%	
York Teaching Hospital NHS Foundation Trust	York Hospital	314	305	B	A	A	B	C↓	D↓	C	B	B↓	B↓	C	B	B	B↑	B	216	89%	53	25%	
South England - South East SCN																							
Ashford and St Peter's Hospitals NHS Foundation Trust	St Peter's Hospital	171	163	A	A↑	A	A	A	C	C↑	A	A	A	B	B↓	A	A	A	111	99%	0	0%	
Brighton and Sussex University Hospitals NHS Trust	Royal Sussex County Hospital	173	139	B	B↓	A	B	A	B	B	A	B↑	C	D↓	D	A↑	B↑	B	150	97%	10	7%	
Dartford and Gravesham NHS Trust	Darent Valley Hospital	116	92	D	A↑	B	D	A↑	E	B↑	D↑	C	B	E	E	D	B↑	D	88	100%	0	0%	
East Kent Hospitals University NHS Foundation Trust	Kent and Canterbury Hospital	89	82	E↓	A	D↓	D↓	B	E↓	D↓↓	C↓	E↓↓	D	E	E↓	B	B↓	D↓	73	87%	15	21%	
East Kent Hospitals University NHS Foundation Trust	Queen Elizabeth the Queen Mother Hospital	110	108	D↓	B↓	A	C	A	D	C↑↑	B↓	B↓	B	E↓	D↓	B	D↓	C	114	96%	26	23%	
East Kent Hospitals University NHS Foundation Trust	William Harvey Hospital	141	134	C↓	A	A	C↓	B↓	E↓↓	C↓	A	A↑↑	B↑	E↓	C	C↓↓	B	C↓	94	87%	28	30%	
East Sussex Healthcare NHS Trust	Eastbourne District General Hospital	170	206	B↑	A↑	A	B↑	A	B	B↑	A	C↑	C	E	D	A↑	C	B↑	153	99%	8	5%	
Epsom and St Helier University Hospitals NHS Trust	Epsom Hospital	93	91	D↓	A	B↓	D↓	A	E↓↓	E	C↓	A↑	C	D↓	D↓↓	A↑	C↓	C↓	54	95%	11	20%	
Frimley Health NHS Foundation Trust	Frimley Park Hospital	178	155	A	A	B↓	A	A	C	A↑↑	A	A	A	B↑	B	B	B↓	A	123	100%	1	1%	
Maidstone and Tunbridge Wells NHS Trust	Maidstone District General Hospital	103	106	A↑	A	A↑	A↑	A↑	C	C	C	A	A	A	B	C↑	B	B	112	100%	0	0%	
Maidstone and Tunbridge Wells NHS Trust	Tunbridge Wells Hospital	119	122	C↓	A	A	C↓	B	E↓	B↑	C	B↓	A	A	C	D	C↓	C↓	92	100%	1	1%	
Medway NHS Foundation Trust	Medway Maritime Hospital	101	97	D	B↓	C	D	B	E	D	D	E	D	C↑	D↓	B	A	D	100	100%	9	9%	
Royal Surrey County Hospital NHS Foundation Trust	Royal Surrey County Hospital	98	95	D↓↓	B↓	C↓↓	C↓	A	E↓	C↑	C↑	B↓	A	B	B	A	D↓↓	B	87	100%	1	1%	
Surrey and Sussex Healthcare NHS Trust	East Surrey Hospital	201	190	C↑	A↑↑	C	C	A	D	D↓	C	A↑↑	B↑	B	C↓	B	D	C	138	99%	2	1%	
Western Sussex Hospitals NHS Trust	St Richards Hospital	151	138	C↓	A	A	C↓	A↑↑	C	B↓	C	C↓↓	C↓	B↑	C↓	B	D↓	C↓	111	100%	0	0%	
Western Sussex Hospitals NHS Trust	Worthing Hospital	164	154	B	A	A	B	A↑	B↑	B	B	A↑	B	D↓	C	A	C	B	149	100%	0	0%	

Routinely Admitting Teams		Number of patients		Overall Performance				Patient Centred Data													Six Month Assessment			
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	TC KI Level	Number Applicable	% Applicable	Number assessed	% Assessed		
South England - South West SCN																								
Gloucestershire Hospitals NHS Foundation Trust	Gloucestershire Royal Hospital	311	287	E↓	A	B	D	D	E↓	D↓	D	E↓	D	E	E	B↓	B↑	D	112	67%	56	50%		
Great Western Hospitals NHS Foundation Trust	Great Western Hospital Swindon	152	123	E↓	B	B	D	A	E	D↓	E↓	E↓	D	E	E	B↑	D	D	97	82%	34	35%		
	North Bristol NHS Trust	251	247	D↓	A	A	D↓	A	D↓	B	D↓	D↓	D	D↓	D	C	B	D↓	182	98%	6	3%		
Northern Devon Healthcare NHS Trust	North Devon District Hospital	159	151	D↓	A	B	C↓	D↓	E↓	C↓	E	A	A	E↓	C	B↓	A	C↓	118	100%	2	2%		
Plymouth Hospitals NHS Trust	Derinford Hospital	314	321	B↑	A	A	B↑	A↑	D	B↑	B	C↓	A↑	C↑	E	B↓	A	B	232	100%	57	25%		
Royal Cornwall Hospitals NHS Trust	Royal Cornwall Hospital	269	266	B↑↑	A	A↑	B↑	A	C		B↑	B	C↑	B↑	C↑	C	A↑	B↑	177	99%	44	25%		
Royal Devon and Exeter NHS Foundation Trust	Royal Devon and Exeter Hospital	236	236	A↑	A	A	A↑	B↑	C	B	B	A	A↑	C	B	A	B	A↑	205	100%	1	0%		
Royal United Hospital Bath NHS Trust	Royal United Hospital Bath	201	192	C	A	A↑	C	A↑	D	B↑	B	C↓	C↓	E↓	D	C	B	C	135	92%	35	26%		
Salisbury NHS Foundation Trust	Salisbury District Hospital	117	127	D↓	A	B	D↓	B↓	E↓	D	D↓	C↓	D↓	E↓	B	B↑	B	D↓	83	90%	19	23%		
Taunton and Somerset NHS Foundation Trust	Musgrove Park Hospital	201	199	B↑↑	A↑	A↑	B↑	A	C↑	C	C↑	B↑	B	D↑	B↑	B	B↓	B↑	154	93%	13	8%		
Torbay and South Devon NHS Foundation Trust	Torbay Hospital	208	205	B	A	A	B	B	C	C	C	A	B↓	C	B	B↓	A	B	161	100%	0	0%		
University Hospitals Bristol NHS Foundation Trust	Bristol Royal Infirmary	167	165	D↓	A	A	D↓	A	E↓	C	D↓	C↓	C↓	C↑↑	E↓	B	B	D↓	146	98%	8	5%		
Weston Area Health NHS Trust	Weston General Hospital	72	78	D	A	A	D	C	E	B↑	C↓	C	D↓	E↓	D↓	A↑	C	D↓	46	85%	17	37%		
Yeovil District Hospital NHS Foundation Trust	Yeovil District Hospital	124	118	C↓	A	A	C↓	B↓	D↓	B↓	D	A	B↓	E	D	B↑	A	C↓	62	90%	22	35%		
South England - Thames Valley SCN																								
Buckinghamshire Healthcare NHS Trust	Wycombe General Hospital	248	233	A	A	A	A	A	B↑	B	B↓	A	B↓	C↓	C↓	C↓	B	B↓	90	78%	35	39%		
Frimley Health NHS Foundation Trust	Wexham Park Hospital	74	70	E↓	A	E↓	D	D	D	D	E	A	B	C	E↓	C↓	B	D↓	99	100%	0	0%		
Milton Keynes University Hospital NHS Foundation Trust	Milton Keynes General Hospital	79	75	C	A	B↑	C↓	A	C↑	D↓	C↓	B↓	A	D	C	B↓	B	B	31	86%	6	19%		
Oxford University Hospitals NHS Foundation Trust	Horton General Hospital	21	20	TFP	A	TFP	TFP	B	E↓	E	E	B↑	B	B↑	D	D	C	NA	26	100%	0	0%		
Oxford University Hospitals NHS Foundation Trust	John Radcliffe Hospital	216	195	A↑	A	A	A↑	A	C↓	B	C	A	B	A↑↑	B	C	B	B	179	99%	2	1%		
Royal Berkshire NHS Foundation Trust	Royal Berkshire Hospital	236	233	A	A↑	A	A	A	D↓	A	B	A	A	C↓	B	A↑	A↑	A	132	89%	38	29%		
South England - Wessex SCN																								
Dorset County Hospital NHS Foundation Trust	Dorset County Hospital	127	129	C	A	A	C	D	B	C	C↑	A	B	B	C	C↑	C	C	68	82%	55	81%		
Hampshire Hospitals NHS Foundation Trust	Royal Hampshire County Hospital	178	175	B	A	A	B	C	C	B↑	B	A↑	A↑	C↓	B	C	A↑	B	136	96%	6	4%		
Isle of Wight NHS Trust	St Mary's Hospital Newport	76	93	D	A	B	D	A	E	E	C	D	C↓	D↑	C	B	A	D	74	100%	42	57%		
Poole Hospital NHS Foundation Trust	Poole Hospital	179	178	D↓	A	B↓	C↓	B↑	D↓	D↓	D	A	B	D↓	B↓	D	A	C↓	73	90%	39	53%		
Portsmouth Hospitals NHS Trust	Queen Alexandra Hospital Portsmouth	363	344	C↓	A	B	C↓	C	E↓	C	C↓	A	B↓	C	C↓	B	A	C↓	273	100%	10	4%		
Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust	Royal Bournemouth General Hospital	266	265	A	A	A	A	C	C	C	B	A	B↓	A	A	B↓	A	A	128	90%	66	52%		
University Hospital Southampton NHS Foundation Trust	Southampton General Hospital	284	292	B	A	B↓	B	B	B	B	B	A↑	A↑	D	C↓	B	B	B	203	89%	92	45%		
Islands																								
Isle of Man Department of Health	Noble's Hospital	53	51	E	A	C↑	E	E	D	E	E	E↓	D↓	E	E	B	C↑	E	38	93%	37	97%		
Northern Ireland																								
Belfast Health and Social Care Trust	Royal Victoria Hospital Belfast	204	183	C	A	B↑	C	A↑	E↓	B	C↑	C↓	B↓	B↑	D	C	A	C	166	100%	2	1%		
Northern Health and Social Care Trust	Antrim Area Hospital	141	148	E	A	B↑↑	E↓	C	E	C	D	C↓	E↓	E	E↓	D↑	C	D	101	98%	8	8%		
Northern Health and Social Care Trust	Causeway Hospital	51	42	E	B↓	C↑	E	E↓	E	E	E	E↓	E↓	E↓	E	E↓	C↑	E↓	60	100%	8	13%		
South Eastern Health and Social Care Trust	Downe General Hospital	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	.	.	.	.		
South Eastern Health and Social Care Trust	Ulster Hospital	137	141	D	A	A	D	C↑	E	D↓	E	A	D↓	C	E↓	A	A↑	D↓	79	81%	66	84%		
Southern Health and Social Care Trust	Craigavon Area Hospital	149	140	D	A	A	D	C↑	E	C	D↑	C	C↑	D	E	B	A↑↑↑	D	59	80%	37	63%		
Southern Health and Social Care Trust	Daisy Hill Hospital	41	38	D	C↓	B↓	D	B↑	E	B↑	D↑	B↑	C↓	C↑↑	E	B	A↑↑	C↑	28	85%	20	71%		
Western Health and Social Care Trust	Altnagelvin Hospital	101	93	E↓	A	B	E↓	C	E	B	B	E↓	E↓	D↓	E	E	B	D↓	44	94%	16	36%		
Western Health and Social Care Trust	South West Acute Hospital	83	75	B↑	A	A	B↑	A↑	B↑	A↑	B	A↑	B	E	C↑	B	C	B↑	43	100%	31	72%		

Routinely Admitting Teams		Number of patients		Overall Performance				Patient Centred Data											Six Month Assessment			
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	TC KI Level	Number Applicable	% Applicable	Number assessed	% Assessed
<b>Wales</b>																						
Abertawe Bro Morgannwg University Health Board	Morriston Hospital	221	205	D↓	A	A	D↓	C	E	D↓	D↓	B	C↓↓	D↓	B↓	B	D	D↓	83	59%	24	29%
Abertawe Bro Morgannwg University Health Board	Princess Of Wales Hospital	99	100	D↓	A	A	D↓	B↑	E↓↓	D	C↓	C	C↑↑	E↓↓↓	B	B	D	D↓	57	80%	36	63%
Aneurin Bevan University Health Board	Royal Gwent Hospital	268	250	B	A	A	B	A	D↓	C	B↓	C	C↑	C	B↓	B↓	C	C↓	265	88%	83	31%
Betsi Cadwaladr University Health Board	Glan Clwyd District General Hospital	105	99	C	B↓	A	C	A↑↑	C	D	A	E	E	B	B↓	A	C	C	100	100%	2	2%
Betsi Cadwaladr University Health Board	Maelor Hospital	140	118	C	A	A	C	C	E	B↑↑	B	B↑↑	B↑	E↓	B↓	A	C	C	147	87%	47	32%
Betsi Cadwaladr University Health Board	Ysbyty Gwynedd	115	109	C	A	A	C	C	C↑	D↑	B↓	C↓↓	B	C↑↑	B	A	C↑	C	80	95%	7	9%
Cardiff and Vale University Health Board	University Hospital of Wales	193	191	C↓	A	A	C↓	A	E↓↓	C	C↓	C	B↓	C↑	C↓	A	A	B	179	100%	2	1%
Cwm Taf University Health Board	Prince Charles Hospital	225	211	C	A	B	C	B	E↓	D	C↑	A	C↓	A↑	B↑	B↓	C	C	92	91%	71	77%
Hywel Dda Health Board	Bronglais Hospital	40	35	D↓	A	B↓	C	B↓	C↓	A	D↓	C↑↑	C↑	C	D↓	B	E↓	C	28	78%	17	61%
Hywel Dda Health Board	Prince Philip Hospital	68	66	C	A	B↓	C	A	C	C	A↑	C↑	D	E	B	A↑	C	C	21	45%	21	100%
Hywel Dda Health Board	West Wales General	84	78	D	A	B	D	A	C↑↑	C↑	C↑	D↓	D↓↓	E	D↓	A	C	D	80	90%	18	23%
Hywel Dda Health Board	Withybush General Hospital	62	48	C↓	B↓	B	B	A	C	B	C↓	A↑↑	C↓	D↑	A	A	D↓	B	42	88%	34	81%

Non-Routinely Admitting Acute Teams		Number of patients		Overall Performance				Patient Centred Data												Six Month Assessment			
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	TC KI Level	Number Applicable	% Applicable	Number assessed	% Assessed	
London - London SCN																							
Barking, Havering and Redbridge University Hospitals NHS Trust	Queens Hospital Romford SU	191	173	D↓	A	E↓	D↓↓	A↑	D↓	D↓	D	A	B	A↑	D↓	E↓	C	C	117	87%	14	12%	
Barts Health NHS Trust	Newham General Hospital	40	44	B	A	D	A	A↑	E↓	C↑	B	A	A	A	C↓	B↓	A	B↓	18	56%	11	61%	
Barts Health NHS Trust	Royal London Hospital SU	71	77	C↓↓	A↑	D↓↓	A	A	C	C↑	C↓	A	A	B↓	A↑	A↑	B	A	74	99%	4	5%	
Barts Health NHS Trust	Whipps Cross University Hospital	74	70	B	A	A	B	A	E	D↓	D	A↑	B↑	B↓	C	A	B↑	B↑	47	94%	6	13%	
Chelsea and Westminster Hospital NHS Foundation Trust	Chelsea and Westminster Hospital	TFP	X	TFP	E	X	TFP	NA	NA	NA	NA	X	X	X	NA	X	X	TFP	24	100%	0	0%	
Croydon Health Services NHS Trust	Croydon University Hospital	67	63	C	A	D	B	B	E	B↑↑	D↓	A	C↓	B	C	A	A	B	60	78%	33	55%	
Epsom and St Helier University Hospitals NHS Trust	St Helier Hospital	60	60	B	A	B↑↑	A	B↓	E↓↓	C↓↓	D↓	A	A↑	A	C↓	B↓	A	B↓	48	94%	7	15%	
Guy's and St Thomas' NHS Foundation Trust	St Thomas Hospital	63	61	A	A	A	A	A↑	E↓	B	C	B↓	A	B↓	C	B↓	A	B↓	45	90%	13	29%	
Hillingdon Hospitals NHS Foundation Trust	Hillingdon Hospital	51	43	C↓	B↓	E↓	A	A	B↓	A	B↓	A	A	A	B↓	B↓	C	A	40	95%	7	18%	
Homerton University Hospital NHS Foundation Trust	Homerton University Hospital	37	40	B↑	A	D↑	A	A	C	A↑↑↑	B↑	A	A	A	B↑	B↑	B	A↑	35	100%	2	6%	
Imperial College Healthcare NHS Trust	Charing Cross Hospital SU - Nine South Ward	133	97	C	B↑↑↑	C	B	A	C	B	B	A	B	A	B	C	B	A	20	91%	0	0%	
King's College Hospital NHS Foundation Trust	King's College Hospital SU	53	46	A	A	C↓↓	A	A	C	C↓↓	B	A	A	B	C↓	A	A	A	35	83%	13	37%	
King's College Hospital NHS Foundation Trust	Princess Royal University Hospital SU	81	100	C↓	A	D↓↓	B↓	A	E↓↓	B	B↓	A	A	C	D↓	A	B	B↓	75	99%	3	4%	
Kingston Hospital NHS Foundation Trust	Kingston Hospital	55	46	A↑	A↑	A↑↑	A	A↑	D↓	C↑	D↓	A	A	B↓	C↓	B	A	B	53	98%	4	8%	
Lewisham and Greenwich NHS Trust	University Hospital Lewisham	113	118	B	A	D↓↓↓	A↑	A	D↓	A↑↑	B↑	A↑↑	A↑	B	C↑	A↑	A	A↑	94	94%	6	6%	
London North West Healthcare NHS Trust	Northwick Park Hospital SU	229	224	A	A	C↓	A	A	C↓	A	B↓	A	A	A↑	B↓	A	B↑	A	173	89%	52	30%	
North Middlesex University Hospital NHS Trust	North Middlesex Hospital	54	51	C	B↑	D	B↓	B↓	E↓↓	C↓	C↓	A	B↓	A	C↑	B	D↓	C↓	65	100%	7	11%	
Royal Free London NHS Foundation Trust	Barnet General Hospital	37	31	B↓	A	B↓	B↓	D↓↓↓	E↓↓	D↓↓↓	E↓↓↓	A	A	B↓	D	A	A	C↓↓	36	92%	3	8%	
Royal Free London NHS Foundation Trust	Royal Free Hospital	70	60	A↑	A↑	A↑↑	A	B↓	E↓	C↓	C	A	A	A	C↑	B	B↓	B	49	94%	12	24%	
St George's Healthcare NHS Trust	St George's Hospital SU	114	104	B	A	D	A	A	C	B↑↑	B	A	A	A	A	A	A	A	74	97%	7	9%	
University College London Hospitals NHS Foundation Trust	University College Hospital SU	68	65	B↓	A	D↓	A	A	E↓	B	B	A	A	A	C↑	A	B↓	A	42	95%	1	2%	
West Middlesex University Hospital NHS Trust	West Middlesex University Hospital	41	29	D↓↓	C↓↓	D	A	A	B	B↓	B↑	A	B↓	A↑	A↑	D↓	B↑	A	30	97%	4	13%	
Midlands & East - East Midlands SCN																							
Kettering General Hospital NHS Foundation Trust	Kettering General Hospital	58	55	D↑	A↑↑↑	C	D	B	E	D↑	C↑	E↓	D	C	C↑	B	A↑	D	39	95%	12	31%	
Midlands & East - East of England SCN																							
Bedford Hospital NHS Trust	Bedford Hospital	73	66	D↓	A	A↑	D↓	C↓	E↓	C↑	C↓	C↓↓	B↓	E↓	D↓	B	D	D↓	70	100%	0	0%	
Hinchingbrooke Health Care NHS Trust	Hinchingbrooke Hospital	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	26	100%	0	0%	
Midlands & East - West Midlands SCN																							
Heart of England NHS Foundation Trust	Good Hope General Hospital	81	89	C↓	A	B	B	B	D↓	C↓	D↓↓	B	B	C	D↓↓	A	A	C↓	74	99%	1	1%	
Heart of England NHS Foundation Trust	Solihull Hospital	73	65	B	A	A	B	B↑↑	D↓	C	C	A↑	B	C↓	B↑	A↑	A	B	68	100%	0	0%	
Shrewsbury and Telford Hospital NHS Trust	Royal Shrewsbury Hospital	TFP	TFP	TFP	NA	TFP	TFP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	TFP	18	100%	0	0%	
University Hospitals of North Midlands NHS Trust	County Hospital	40	37	D↓	A	B	C	B↑	E	B	B↑	C↓	C↓	C↓	B	D	B	C	30	94%	5	17%	
North of England - Greater Manchester & Eastern Cheshire SCN																							
Bolton NHS Foundation Trust	Royal Bolton Hospital	77	75	C↓	A	A	C↓	B	E↓↓	C	C↓	B↑	B	D	C↓	B	A	C↓	70	100%	2	3%	
Central Manchester University Hospitals NHS Foundation Trust	Manchester Royal Infirmary	71	60	B	A	A	B	C	E	C↑	C	A	B	B↑	C↓	A	A	B	24	67%	10	42%	
Central Manchester University Hospitals NHS Foundation Trust	Trafford General Hospital	45	44	B↓	A	A	B↓	A	C	D↓↓	A	B↓	B↓	C↓	B	A	A	B↓	33	100%	14	42%	
Tameside and Glossop Integrated Care NHS Foundation Trust	Tameside General Hospital	70	67	C↓	A	A	C↓	A↑	D	C	D↓↓	A	B	D↓	C↓	C↓↓	B↓	C↓	46	100%	0	0%	
University Hospital of South Manchester NHS Foundation Trust	Wythenshawe Hospital	87	89	B	A	A	B	C↓	D	B	C↓	A↑	B	B	B	B	A	B	56	95%	13	23%	
Wrightington, Wigan and Leigh NHS Foundation Trust	Royal Albert Edward Infirmary	119	125	B	A	A↑↑↑	B↓	B↓	D↓	C↓	B	A	B	D↓	B	A	A	B↓	63	93%	28	44%	

Non-Routinely Admitting Acute Teams		Number of patients		Overall Performance				Patient Centred Data												Six Month Assessment			
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	TC KI Level	Number Applicable	% Applicable	Number assessed	% Assessed	
North of England - North of England SCN																							
Gateshead Health NHS Foundation Trust	Queen Elizabeth Hospital Gateshead	69	75	B↑↑	A↑	E↓↓	A↑	A↑	B↑	A↑↑	A↑↑	A↑	A	A↑↑↑	B↑↑	C↓	A	A↑	135	96%	77	57%	
Northumbria Healthcare NHS Foundation Trust	Hexham General Hospital	30	33	B	A	A↑	B	B↑	B↑↑	D↓↓	B↑	A	A	D	A↑	A	C	B	24	96%	22	92%	
Northumbria Healthcare NHS Foundation Trust	North Tyneside General Hospital	71	74	A	A	A	A	B	B↑	B	B	A	B↓	C↓	B	B	A	A	48	96%	23	48%	
Northumbria Healthcare NHS Foundation Trust	Wansbeck General Hospital	78	72	B	B↓	A	B	B↓	B	A	A↑	A↑	B↓	B↑	A↑	B	B↓	A	58	98%	13	22%	
North of England - Yorkshire and The Humber SCN																							
Airedale NHS Foundation Trust	Airedale General Hospital	66	49	D	A	A	D	D↓	D	E	E	C	D	C↓	D	A↑	C	D	43	81%	40	93%	
Northern Lincolnshire and Goole Hospitals NHS Foundation Trust	Diana Princess of Wales Hospital Grimsby	50	54	C↓	A	B	B↓	C	D↓	E	C↓	A	B↓	A	D↓	A	B↓	C↓	29	100%	2	7%	
Northern Lincolnshire and Goole Hospitals NHS Foundation Trust	Goole District Hospital	TFP	TFP	TFP	NA	TFP	TFP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	TFP	9	100%	0	0%	
York Teaching Hospital NHS Foundation Trust	Scarborough General Hospital	54	51	D	B	D	D↓	C↓	E	C	B↑	B↓	D↓↓↓	D↑	D	D	B↓	D↓	76	95%	24	32%	
South England - Wessex SCN																							
Hampshire Hospitals NHS Foundation Trust	Basingstoke and North Hampshire Hospital	20	27	C	A	C↓	B↑	D↓	C	B↑	D↓	A	A↑	C	C	B↑	B↓	B	39	100%	0	0%	
Wales																							
Abertawe Bro Morgannwg University Health Board	Singleton Hospital	34	30	D	A↑	B↑↑	D↓	D↓	E	D	E	E↓	B↓	B↓	C↓	B	D↓	D↓	14	54%	14	100%	
Aneurin Bevan University Health Board	Nevill Hall Hospital	54	49	D	A↑	D	C	B↑	E	C↓	D	C	B↑	D	C	B	B	C↑	27	60%	4	15%	
Aneurin Bevan University Health Board	Ysbyty Ystrad Fawr	36	39	C↑	A↑	C↑	B	B↓	C↓	B↓	C↓	C	C	C	B	B	A↑	B	33	97%	2	6%	
Cardiff and Vale University Health Board	Llandough Hospital	82	83	C	A↑	D	B	A	E↓↓	C↑	C↓	C	B	C	C↓	B↓	A	C↓	72	100%	0	0%	

Non-Acute Inpatient Teams		Number of patients		Overall Performance				Patient Centred Data												Six Month Assessment			
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	TC KI Level	Number Applicable	% Applicable	Number assessed	% Assessed	
London - London SCN																							
Barking, Havering and Redbridge University Hospitals NHS Trust	King George Hospital Inpatient Rehab Team	TFP	42	C↓	A	C↓↓	B	NA	A	NA	NA	A	B	B	E↓	E	B	C↓	29	74%	2	7%	
Central and North West London NHS Foundation Trust	St Pancras Hospital	TFP	26	C↑	A↑	C↑	B	NA	E	NA	NA	A	A	A	D↑	A	D	B↑	20	100%	1	5%	
North East London NHS Foundation Trust	Grays Court Community Hospital	TFP	27	D	C	E	C	NA	A	NA	NA	C	A	A	E	E	D	C	14	100%	1	7%	
Midlands & East - East Midlands SCN																							
Leicestershire Partnership NHS Trust	Coalville Community Hospital	TFP	34	D	D	D	A↑	NA	A	NA	NA	B↑	B↑	C	B↑	A	A	A↑	52	100%	0	0%	
Leicestershire Partnership NHS Trust	St Lukes Stroke Rehabilitation Team - Market Harborough Hospital	TFP	50	C	A	D	B	NA	A	NA	NA	C	B	E	C	A	A	B	40	100%	0	0%	
University Hospitals of Leicester NHS Trust	Leicester City Stroke Rehabilitation Unit	TFP	48	C	A↑	D	B↓	NA	A	NA	NA	B	C↓	D↓	C↓	A	A	B↓	57	100%	0	0%	
Midlands & East - East of England SCN																							
Anglian Community Enterprise CIC	Clacton Hospital	TFP	30	B↑	A	D	A	NA	A	NA	NA	A	A↑	C	B↑	B	A	A	19	95%	6	32%	
Hertfordshire Community NHS Trust	Danesbury Neurological Centre	TFP	31	B↑	A	D↓	A↑	NA	A	NA	NA	A	A↑	B↓	D	B	B↑↑	A↑	27	87%	9	33%	
Hertfordshire Community NHS Trust	Holywell Rehabilitation Unit	TFP	23	B↑↑	B↑↑	C	A↑	NA	A	NA	NA	A	A	A↑	A↑↑↑↑	A↑	C↑	A↑	25	96%	1	4%	
Norfolk Community Health and Care NHS Trust	Norwich Community Hospital - Beech Ward	TFP	56	D	A	D	C	NA	A	NA	NA	D	C	B↑	C↑	B	A	B↑	48	100%	23	48%	
North East London NHS Foundation Trust	Brentwood Community Hospital	TFP	23	B	A	D	A	NA	A	NA	NA	A	A	A	B	E	A	A	10	63%	9	90%	
Provide	St Peter's Community Hospital Rehab Unit	TFP	33	A	A	A↑	A	NA	A	NA	NA	A	A↑	B↑	B↑	A↑	A	A	24	96%	14	58%	
South Essex Partnership University NHS Foundation Trust	St Margaret's Hospital Essex	TFP	20	D	A	E	B	NA	A	NA	NA	C	B	B	D	D	A	B	4	33%	2	50%	
Midlands & East - West Midlands SCN																							
Birmingham Community Healthcare NHS Foundation Trust	Moseley Hall Stroke Rehabilitation Unit	TFP	47	C	A↑	C↑↑	B↓	NA	A	NA	NA	C↓	B	B↓	E↓	D↓↓	B	C↓	46	98%	15	33%	
Burton Hospitals NHS Foundation Trust	Samuel Johnson Community Hospital	TFP	22	D	A	A	D	NA	A	NA	NA	C	C	C	E	D	A	C	5	100%	0	0%	
South Warwickshire NHS Foundation Trust	Feldon Stroke Rehabilitation Unit SWFT	TFP	47	B↓	A	C↓	A	NA	C↓	NA	NA	A	A	A	C↓↓	A	C	A	45	100%	0	0%	
Staffordshire and Stoke-on-Trent Partnership NHS Trust	Staffordshire Rehabilitation Team	TFP	47	B	A	C↑	A	NA	A↑	NA	NA	A	A	D↓	B	A↑	A	A	37	93%	37	100%	
North of England - North West Coast SCN																							
East Lancashire Hospitals NHS Trust	Pendle Community Hospital - Marsden Stroke Unit	TFP	63	C↑	A↑↑	D↓↓	B↑	NA	A↑↑	NA	NA	B↑	C	B↑	D↑	A	C↑	B↑↑	53	100%	10	19%	
Lancashire Teaching Hospitals NHS Foundation Trust	Chorley and South Ribble Hospital	TFP	54	D↓	A↑	D	C↓↓	NA	B	NA	NA	C↓↓	C↓↓	C	E↓	A	C	C↓	29	100%	0	0%	
North of England - Yorkshire and The Humber SCN																							
Doncaster and Bassetlaw Hospitals NHS Foundation Trust	Bassetlaw District General Hospital	TFP	27	B↑	A	B	B↑	NA	B	NA	NA	A	B	A↑	B↑↑	B	C	A↑	36	100%	1	3%	
Doncaster and Bassetlaw Hospitals NHS Foundation Trust	Montagu Hospital	TFP	27	B↓	B↓	A	B↓	NA	A	NA	NA	B↑	B	A	B	B↓	D↓	B↓	27	64%	1	4%	
South West Yorkshire Partnership NHS Foundation Trust	Kendray Hospital	TFP	58	B↓	A	A	B↓	NA	B	NA	NA	A	B↓	B	C	B↓	C	B↓	104	85%	92	88%	
South England - South East SCN																							
East Sussex Healthcare NHS Trust	Bexhill Hospital - Irvine Unit	TFP	24	D	A	D	C	NA	A	NA	NA	C	B	C	E	A	D	C	31	100%	0	0%	
Sussex Community NHS Foundation Trust	Crawley Hospital Stroke Rehab Ward	TFP	29	D	C	E	C	NA	A	NA	NA	C	C	C	E	A	E	C	41	95%	1	2%	
South England - South West SCN																							
CORNWALL PARTNERSHIP NHS FOUNDATION TRUST	Lanyon Stroke Rehabilitation Unit	TFP	71	B	A	D	A	NA	A	NA	NA	A	B	B	C	B	A	A	60	100%	16	27%	
CORNWALL PARTNERSHIP NHS FOUNDATION TRUST	Woodfield Stroke Rehabilitation Unit	TFP	44	B	A	D	A	NA	B↓	NA	NA	B↓	B	A	D↓	B↑	A	B↓	23	96%	12	52%	
Great Western Hospitals NHS Foundation Trust	Chippenham Community Hospital - Mulberry Stroke Unit	TFP	26	E	D	E	D	NA	B	NA	NA	D	D	D	E	B	C	D	29	97%	4	14%	
Great Western Hospitals NHS Foundation Trust	Forest Ward - Swindon Intermediate Care Centre	TFP	21	E↓	C↓↓	E	D	NA	A↑	NA	NA	E↓	D↓↓	E↓↓	E	D	D↓↓	D	21	78%	13	62%	
Northern Devon Healthcare NHS Trust	Bideford Community Hospital	TFP	28	B	A	D	A	NA	A↑	NA	NA	A	A	C	C↓	A↑	A	A	23	100%	0	0%	
Plymouth Community Healthcare CIC	Mount Gould Hospital	TFP	44	A	A	A	A	NA	B	NA	NA	A	A	B	E	B	A	B	37	100%	1	3%	
Royal Devon and Exeter NHS Foundation Trust	East Devon Community Stroke Rehab Unit	TFP	42	C	A	D	B	NA	A	NA	NA	B	B	C	B	A	C	B	34	100%	0	0%	
Somerset Partnership NHS Foundation Trust	South Petherton Community Hospital	TFP	31	D↓	B↓	D	C↓	NA	A	NA	NA	C↓↓	D↓↓	D	D	B	A	C↓	26	87%	5	19%	
Torbay and South Devon NHS Foundation Trust	Newton Abbot Hospital	TFP	75	A	A	C↑	A	NA	A	NA	NA	A	A	A	C↓	A	A	A	62	100%	0	0%	

Non-Acute Inpatient Teams		Number of patients		Overall Performance				Patient Centred Data											Six Month Assessment			
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	TC KI Level	Number Applicable	% Applicable	Number assessed	% Assessed
South England - Thames Valley SCN																						
Oxford Health NHS Foundation Trust	Abingdon Community Hospital	TFP	27	C↓	A	B↓	B	NA	A	NA	NA	A	B↓	B	D	B	D	B	28	100%	0	0%
Oxford Health NHS Foundation Trust	Witney Community Hospital	TFP	23	C↓	A↑	C↓↓	B↓	NA	B↓	NA	NA	A↑	B↓	B	B↑	B	D↓↓	B↓	25	100%	0	0%
Northern Ireland																						
Southern Health and Social Care Trust	South Tyrone and Lurgan Hospitals	TFP	46	D	C↓	C↓	D↓	NA	B↓	NA	NA	E	B	E↓↓	E	C↓	A↑↑↑	D	16	89%	10	63%
Wales																						
Aneurin Bevan University Health Board	St Woolos Hospital	TFP	45	D	C↓↓	D	C	NA	A	NA	NA	B↑	B↑	C	A	B↓	D	B	48	91%	5	10%
Cwm Taf University Health Board	Ysbyty Cwm Rhondda	TFP	28	D	A↑↑	C	D↓	NA	D↓	NA	NA	A	C↓	B↑	E↓↓	B	C↑	C	17	100%	16	94%



Routinely Admitting Teams		Number of patients		Overall Performance				Team Centred Data											
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	TC KI Level	
London - London SCN																			
Barking, Havering and Redbridge University Hospitals NHS Trust	Queens Hospital Romford HASU	372	379	D	A↑↑↑	C	C↓	A↑	E↓↓	D↓	C	A	A	A	C	E↓↓	D↓	C↓	
Barts Health NHS Trust	Royal London Hospital HASU	247	225	C↓	B↓	D↓↓	B↓	A	D↓	B	C↓	A	A↑	B↑	B	D↓↓	C	B	
Imperial College Healthcare NHS Trust	Charing Cross Hospital HASU	305	327	B↑	B↑	B↓	B	A	C↓	B	B	A↑	B	B↑	B	D	B↑	B	
King's College Hospital NHS Foundation Trust	King's College Hospital HASU	299	305	B↓	A	B	A	A	D	B	B	A	A	D↓↓↓	B	A↑	A	A	
King's College Hospital NHS Foundation Trust	Princess Royal University Hospital HASU	265	275	B↑	A↑↑	B	B	A	E↓	C↓	B↓	A	A	C	D↓	A	B↑	B	
London North West Healthcare NHS Trust	Northwick Park Hospital HASU	368	365	A	A	A	A	A	C↓	A	B↓	A	B	B	B	A	C↑	A	
St George's Healthcare NHS Trust	St George's Hospital HASU	411	414	A	A	B↓	A	A	C	A↑	B	A	A	A	A↑	A	B↓	A	
University College London Hospitals NHS Foundation Trust	University College Hospital HASU	381	392	B↓	A	B↓	A	A	E↓	B	B	A	A	A	B	A	C↓	A	
Midlands & East - East Midlands SCN																			
Derby Hospitals NHS Foundation Trust	Royal Derby Hospital	291	286	D↓	A	C↓	D↓↓	C	D↓	D↓↓	C↓	C↓	B	D	B	C	C	D↓	
Northampton General Hospital NHS Trust	Northampton General Hospital	309	312	A	A	A	A	A	D↓	C	A	A	A	B↓	B	A	A↑	A	
Nottingham University Hospitals NHS Trust	Nottingham City Hospital	355	378	C	A	B	B↑	C↑	C↓	B↑	C	A	B	E	C	B	A↑	B↑	
Shenwood Forest Hospitals NHS Foundation Trust	Kings Mill Hospital	170	170	A	A	A	A	B↑	B↑	B	B	A	A	B↑	B	A	A	A	
United Lincolnshire Hospitals NHS Trust	Lincoln County Hospital	198	198	D↓	A	C	C↓	B↓	D	B↓	D↓	A↑	B	B	C	D↓↓	C	C↓	
United Lincolnshire Hospitals NHS Trust	Pilgrim Hospital	160	166	B	A	A	B	A	B	A	A	B↑	B	D↑	B↑	D↓	A	B	
University Hospitals of Leicester NHS Trust	Leicester Royal Infirmary	373	378	B	A	A	B	B↑	C↑	C	B	A↑	A↑	D	B	A	B	B	
Midlands & East - East of England SCN																			
Basildon and Thurrock University Hospitals NHS Foundation Trust	Basildon University Hospital	207	216	A	A	A	A	A	C	A	B	A	A	B	A	A	A	A	
Cambridge University Hospitals NHS Foundation Trust	Addenbrooke's Hospital	196	239	D	A	B	D	B↑	E	E↓↓	B↑↑	C	A	D↑	C↑↑	A	D↓	C↑	
Colchester Hospital University NHS Foundation Trust	Colchester General Hospital	182	183	A	A	A	A	A	C	B↓	B	A	A	C	B	B	A	A	
East and North Hertfordshire NHS Trust	Lister Hospital	301	333	A↑	A	A	A↑	B	C	C	B	A	A	B↑	B	B	A↑	A↑	
Ipswich Hospital NHS Trust	Ipswich Hospital	202	210	B↓	A	A	B↓	B↑	C↓	C↓	C	A	A	E↓↓	C↓	A	A	B↓	
James Paget University Hospitals NHS Foundation Trust	James Paget Hospital	117	135	C	B↓	B	C	C	C	D	B	A	B	C	C↑	B↑	C↓	C	
Luton and Dunstable University Hospital NHS Foundation Trust	Luton and Dunstable Hospital	302	302	C	A	A	C	A↑	D	C↓	B	A	B	E	C	B	C↑	C	
Mid Essex Hospital Services NHS Trust	Broomfield Hospital	190	199	A	A	A	A	A	B	A	A	A	B	D	B	A	A	A	
Norfolk and Norwich University Hospitals NHS Foundation Trust	Norfolk and Norwich University Hospital	374	369	B	A	A	B	B	D↓	C↓	B↓	C↓	B	C	C↓	A↑	A	B	
Peterborough and Stamford Hospitals NHS Foundation Trust	Peterborough City Hospital	207	211	D	A	B↓	D	C	E	D	B↑	D↓	D	E↓↓	C	B	C	D	
Queen Elizabeth Hospital King's Lynn NHS Foundation Trust	Queen Elizabeth Hospital Kings Lynn	199	203	B↓	A	B	A	B↓	C↓	B↓	B↓	A	A	A	B	B	C	A	
Southend University Hospital NHS Foundation Trust	Southend Hospital	232	237	B	A	B	A	B↓	D↓	A↑	B	A	B↓	A	A	B	C	A	
West Hertfordshire Hospitals NHS Trust	Watford General Hospital	208	209	A	A	A	A	B↓	D↓	C↓	A	A	A	A	C↓	A↑	A	A	
West Suffolk NHS Foundation Trust	West Suffolk Hospital	138	142	A	A	A	A	A	C↓	C	B	B↓	A	A	B	C↓	A↑	A	

Routinely Admitting Teams		Number of patients		Overall Performance				Team Centred Data											
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	TC KI Level	
Midlands & East - West Midlands SCN																			
Burton Hospitals NHS Foundation Trust	Queens Hospital Burton upon Trent	136	148	C↑	A↑	A↑↑	C↑	A	D	D	E	A↑	B	C	D	D	A↑	C↑	
Dudley Group of Hospitals NHS Foundation Trust	Russells Hall Hospital	210	210	C	A	B	C	B↑	D	D↓	B	C	B	C↑	B	B	C	C	
George Eliot Hospital NHS Trust	George Eliot Hospital	52	63	D↓	B↓	C↓	C	C↓↓	E	NA	B	D	D↓	B↑	A	B	C	C	
Heart of England NHS Foundation Trust	Birmingham Heartlands Hospital	301	300	A	A	A↑	A	A	C↓	B↓	A↑	A	B↓	B↓	B↓	C↓	A	A	
Royal Wolverhampton NHS Trust	New Cross Hospital	169	155	C	B↓	A↑	C↓	B↓	C	C↓	C	A↑	A↑	D↑	C	D↓↓	B↓	C↓	
Sandwell and West Birmingham Hospitals NHS Trust	Sandwell District Hospital	196	194	B↑	A	B↑	B	A	B↑	B↑	B	C↑↑	B	E↓↓	B	B	A	B	
Shrewsbury and Telford Hospital NHS Trust	Princess Royal Hospital Telford	308	330	D	A	C	D	D	D	C	D	A	D	E	C↑	D↑	B↑	D	
South Warwickshire NHS Foundation Trust	Warwick Hospital	86	99	C	A	A	C	D	E↓	NA	D	A↑	A	C	B	A↑	D↓	C	
University Hospitals Birmingham NHS Foundation Trust	Queen Elizabeth Hospital Edgbaston	184	167	D↓	A	A	D↓	B↑	D↓	C	D↓↓	C	C	C	E↓	D	A↑	D↓	
University Hospitals Coventry and Warwickshire NHS Trust	University Hospital Coventry	287	288	B↑	A	A	B↑	A↑	D↑	B	B↑↑	A	A↑	D↑	B↑	B↓	A	B↑	
University Hospitals of North Midlands NHS Trust	Royal Stoke University Hospital	332	419	B	A	A	B	A	C	B	B	A	A	E	C↓	C↓	A	B	
Walsall Healthcare NHS Trust	Manor Hospital	129	129	D↓	A	A	D↓	A	E	D	C↓	D	D	E↓↓	B	A	B	D↓	
Worcestershire Acute Hospitals NHS Trust	Worcestershire Royal Hospital	273	272	D	B	C↑	D	C↓	E	D↑	E	A	C↓	E↓	D	E↓	A	D	
Wye Valley NHS Trust	Hereford County Hospital	182	192	B↑	A	A	B↑	B↑	E	C	B↑↑	A↑	A↑	E	B↑	B↓	B	B↑	
North of England - Greater Manchester & Eastern Cheshire SCN																			
Pennine Acute Hospitals NHS Trust	Fairfield General Hospital	328	365	A	A	A	A	A	B	A	A	A	B↓	B	A	B	A	A	
Salford Royal NHS Foundation Trust	Salford Royal Hospital	700	699	A	A	A	A	A	B	B	A	A	A	C	A	A	A	A	
Stockport NHS Foundation Trust	Stepping Hill Hospital	347	351	A	A	A	A	A	B	A	A	A↑	A↑	A↑	B↓	B	B↑	A	
North of England - North West Coast SCN																			
Aintree University Hospitals NHS Foundation Trust	University Hospital Aintree	156	134	B↑	A	A	B↑	B	D↑	D↓	B	B↑	B↑↑	C↑	B	A	A	B↑	
Blackpool Teaching Hospitals NHS Foundation Trust	Blackpool Victoria Hospital	147	148	E↓	B↓	A	E↓	C	E↓	E↓	D	E	E	E	E	C	A↑	E↓	
Countess of Chester Hospital NHS Foundation Trust	Countess of Chester Hospital	118	119	B	A	A	B	B↓	B↑	C↓	A↑	B↓	B	D↑	B	B↓	A↑	B	
East Lancashire Hospitals NHS Trust	Royal Blackburn Hospital	246	245	C↑	A	A	C↑	C↑	D	D	D↑	B↑↑↑	C↑	B↑	B↑	A	C↑	C↑	
Lancashire Teaching Hospitals NHS Foundation Trust	Royal Preston Hospital	199	188	D	A	A	D	C	E	D	E	C	D	C	D↓	B↓	D↓	D	
Mid Cheshire Hospitals NHS Foundation Trust	Leighton Hospital	161	199	C	A	B↓	C	B	E	E	C	D	D	C	B	C↓	A	D	
Royal Liverpool and Broadgreen University Hospitals NHS Trust	Royal Liverpool University Hospital	241	246	C	A	B	B	B	E↓	C	B	A	A	E	B	C↑	A	B	
Southport and Ormskirk Hospital NHS Trust	Southport and Formby District General	133	131	C↑	A	A↑	C	A↑	E	D	C	A↑	A↑	E↓	B	B	D	C	
St Helens and Knowsley Teaching Hospitals NHS Trust	Whiston Hospital	249	260	A	A	A	A	A↑	B	B	A	B	C	C↓	A	B	A	A	
University Hospitals of Morecambe Bay NHS Foundation Trust	Furness General Hospital	61	59	C↑	B↓	A↑↑	C	A↑	C	E↓	B	A	D↓	E	C↓	B	B↑	C	
University Hospitals of Morecambe Bay NHS Foundation Trust	Royal Lancaster Infirmary	118	113	D	A	B	D	A	E	E	D	C	D	E	C	A↑	B↓	D	
Warrington and Halton Hospitals NHS Foundation Trust	Warrington Hospital	93	109	D↓	B↓	A	D↓	C	E↓	D	E↓	A	B↓	E	C	C	A	D↓	
Wirral University Teaching Hospital NHS Foundation Trust	Arrows Park Hospital	214	220	A	A	A	A	A	B↑	B	B	A	B	C	A	A	A	A	
North of England - North of England SCN																			
City Hospitals Sunderland NHS Foundation Trust	Sunderland Royal Hospital	246	246	D	A	A↑	D	B	C	D↓	C↓	C↑↑	D	E	C	C↑	A	D	
County Durham and Darlington NHS Foundation Trust	University Hospital of North Durham	247	255	E	A↑↑↑↑	C	D	D	B	C	C	E	D	E	D	D	E	D	
Newcastle upon Tyne Hospitals NHS Foundation Trust	Royal Victoria Infirmary	331	331	A	A	A	A	A	A↑	C↓	A↑	A	A	A	A↑	B	B↓	A	
North Cumbria University Hospitals NHS Trust	Cumberland Infirmary	131	119	C	A	B	C↓	B	D	D	D↓	A	A↑	E↓↓	C↓	C↓	A	C↓	
North Cumbria University Hospitals NHS Trust	West Cumberland Hospital	82	81	B	A	A	B	B	D↓	C	D↓↓	A	A	B	C	A	D	B	
North Tees and Hartlepool NHS Foundation Trust	University Hospitals of North Tees and Hartlepool	168	174	C	A	B	B↑	A↑↑	A↑	A↑	B	C	C↑	E	B	B↓	D↓	B↑	
Northumbria Healthcare NHS Foundation Trust	Northumbria Specialist Emergency Care Hospital HASU	294	299	A↑	A	A	A↑	B↑	B↑	B	B	A	A	A↑	B	D↓	B	A↑	
South Tees Hospitals NHS Foundation Trust	James Cook University Hospital	253	243	A	A	A	A	B	B	B	B	A	B	B↑	B↓	A↑	A↑	A	

Routinely Admitting Teams		Number of patients		Overall Performance				Team Centred Data										
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	TC KI Level
North of England - Yorkshire and The Humber SCN																		
Barnsley Hospital NHS Foundation Trust	Barnsley Hospital	137	158	C↑	A	A	C↑	D	E	NA	D	A	A	D↓	B↑	A	D	C↑
Bradford Teaching Hospitals NHS Foundation Trust	Bradford Royal Infirmary	199	227	D	A	B	D	C↑	D↓	E	E	B↓	B↑	E↓↓↓	C↑	A	D↓	D
Calderdale and Huddersfield NHS Foundation Trust	Calderdale Royal Hospital	200	230	B	A	A	B	C	C	B↓	B	A	D↓↓	C	B	B	A	B
Chesterfield Royal Hospital NHS Foundation Trust	Chesterfield Royal	180	189	C	A	B↓	C	B↑	C	D↓	D	A↑↑	B↑	E	C↓	B	A	C
Doncaster and Bassetlaw Hospitals NHS Foundation Trust	Doncaster Royal Infirmary	210	219	B	A	A	B	C↓	D↓	C	C	A	A	A	B	A	D↓	B
Harrogate and District NHS Foundation Trust	Harrogate District Hospital	94	87	D	A	B	D↓	D	C	C↑	D	B	C↓	D↓	C	B	C	D↓
Hull and East Yorkshire Hospitals NHS Trust	Hull Royal Infirmary	275	287	C	A	B	B	B	C	C	B	A	B↓	E	D↓	B↓	A	B
Leeds Teaching Hospitals NHS Trust	Leeds General Infirmary	239	248	C	C↓↓	A↑	B	B↑	D↓	B	B	C	B	B	B↑↑	A	D↓	B
Mid Yorkshire Hospitals NHS Trust	Pinderfields Hospital	294	320	C	A	A	C	B	C	C↓	C	B↑	B	E	E	A	A	C
Northern Lincolnshire and Goole Hospitals NHS Foundation Trust	Scunthorpe General Hospital	216	233	B↓	A	A	B↓	A	C↓	D↓	B↓	A	A	B↓	B	A	B↑	A
Rotherham NHS Foundation Trust	Rotherham Hospital	149	154	C↓	A	A	C↓	A	D↓	E↓	D	A	B↓	E	C	A	A	C↓
Sheffield Teaching Hospitals NHS Foundation Trust	Royal Hallamshire Hospital	324	314	C	A	B	B↑	B	B	C↑	C	A	B	D↑	C	B	B	B↑
York Teaching Hospital NHS Foundation Trust	York Hospital	309	308	B	A	A	B	C↓	D	C	B	B↓	B	C	B	A↑	C	B
South England - South East SCN																		
Ashford and St Peter's Hospitals NHS Foundation Trust	St Peter's Hospital	167	171	A	A↑	A	A	A	C	C↑	A	A	A	B	B↓	A	A	A
Brighton and Sussex University Hospitals NHS Trust	Royal Sussex County Hospital	172	168	B	B↓	A	B	A	B	B	A	C	B↑	C↑	D	A↑	B↑	B
Dartford and Gravesham NHS Trust	Darent Valley Hospital	116	107	D	A↑	B	D	A↑	E	B↑	D↑	C	B	E	E	D	B↑	D
East Kent Hospitals University NHS Foundation Trust	Kent and Canterbury Hospital	76	83	E↓	A	D↓	D↓	B	E↓	D↓↓	D↓↓	E↓↓	D	E	E↓	B	B↓	D↓
East Kent Hospitals University NHS Foundation Trust	Queen Elizabeth the Queen Mother Hospital	109	108	D↓	B↓	A	C	A	D	C↑↑	B↓	B↓	B	E	D↓	B	D↓↓	C
East Kent Hospitals University NHS Foundation Trust	William Harvey Hospital	139	135	C↓	A	A	C↓	B↓	E↓↓	C↓	A	A↑↑	B↑	D	B	C↓↓	C↓	C↓
East Sussex Healthcare NHS Trust	Eastbourne District General Hospital	167	194	B↑	A↑	A	B↑	A	B	B↑	A	C↑	B↑	E	D	A↑	C	B↑
Epsom and St Helier University Hospitals NHS Trust	Epsom Hospital	85	90	D↓	A	B↓	D↓	A	E↓↓	E	D↓↓	B	D↓	D↓	D↓	A↑	B	D↓
Frimley Health NHS Foundation Trust	Frimley Park Hospital	171	175	A	A	B↓	A	A	C	B↑	A	A	A	B↑	B	B	B↓	A
Maidstone and Tunbridge Wells NHS Trust	Maidstone District General Hospital	102	106	A↑	A	A↑	A↑	A↑	C	C	B↑	A	A	A	B	C↑	B	A↑
Maidstone and Tunbridge Wells NHS Trust	Tunbridge Wells Hospital	117	122	C↓	A	A	C↓	B	D	B↑	C	B↓	A	A↑	C	D	C↓	B
Medway NHS Foundation Trust	Medway Maritime Hospital	97	98	D	B↓	C	D	B	E	D	D	E	D	C↑	C	B	A	D
Royal Surrey County Hospital NHS Foundation Trust	Royal Surrey County Hospital	56	97	D↓↓	B↓	C↓↓	C↓	A	E↓	E↓	E↓	A	A	B	D↓↓	A	D↓↓↓	C↓
Surrey and Sussex Healthcare NHS Trust	East Surrey Hospital	197	199	C↑	A↑↑	C	C	B↓	D	D↓	C	A↑↑	B↑	B	B	B	D	C
Western Sussex Hospitals NHS Trust	St Richards Hospital	139	145	C↓	A	A	C↓	B↑	C	B↓	C	C↓↓	C↓	B↑	C↓	B	D↓	C↓
Western Sussex Hospitals NHS Trust	Worthing Hospital	163	161	B	A	A	B	A↑	B↑	B	B	A	B	C	C↓	A	C	B

Routinely Admitting Teams		Number of patients		Overall Performance				Team Centred Data												
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	TC KI Level		
South England - South West SCN																				
Gloucestershire Hospitals NHS Foundation Trust	Gloucestershire Royal Hospital	300	284	E↓	A	B	D	D	E↓	D	D	E↓	D	E	E	B↓	B↑	D		
Great Western Hospitals NHS Foundation Trust	Great Western Hospital Swindon	146	149	E↓	B	B	D	A	E	D↓	E↓	E↓↓	D	E↓	E	B↑	D	D		
	North Bristol NHS Trust	243	245	D↓	A	A	D↓	A	D↓	B	D↓	D↓	D	D↓	D↓	C	B	D↓		
Northern Devon Healthcare NHS Trust	North Devon District Hospital	152	152	D↓	A	B	C↓	D↓	E↓↓	C↓	E	A	A	E↓↓	B↑	A	A↑	C↓		
Plymouth Hospitals NHS Trust	Deriford Hospital	310	322	B↑	A	A	B↑	A↑	D	B↑	B	C	A	B↓	D↑	E	B↓	A↑	C	
Royal Cornwall Hospitals NHS Trust	Royal Cornwall Hospital	263	274	B↑↑	A	A↑	B↑	A	C	C	B↑	B↑	C↑	B↑	C↑	B↑	B↑	B↑		
Royal Devon and Exeter NHS Foundation Trust	Royal Devon and Exeter Hospital	231	231	A↑	A	A	A↑	B↑	C	B	B	A	A	B	B	A	B	A		
Royal United Hospital Bath NHS Trust	Royal United Hospital Bath	197	209	C	A	A↑	C	A↑	D	B↑	B	D↓↓	C↓	D	D	C	B↑	C		
Salisbury NHS Foundation Trust	Salisbury District Hospital	117	126	D↓↓	A	B	D↓↓	B↓	E↓↓	D	D↓↓	C↓↓	D↓↓↓	E↓	B	B↑	B	D↓↓		
Taunton and Somerset NHS Foundation Trust	Musgrove Park Hospital	194	206	B↑↑	A↑	A↑	B↑	A	C↑	C	C↑	B↑	A	D↑	B↑	B	B↓	B↑		
Torbay and South Devon NHS Foundation Trust	Torbay Hospital	206	204	B	A	A	B	B	C	C	C	A	B	C	B	B	A	B		
University Hospitals Bristol NHS Foundation Trust	Bristol Royal Infirmary	161	165	D↓	A	A	D↓	A	D	C	D↓	C↓	C↓	C↑↑	E↓	B	B	C		
Weston Area Health NHS Trust	Weston General Hospital	64	78	D	A	A	D	D↓	E	B↑	C↓	C	D↓↓	E	D↓	A↑↑↑	C	D		
Yeovil District Hospital NHS Foundation Trust	Yeovil District Hospital	123	124	C↓	A	A	C↓	B↓	D↓	B↓	D	A	A	E	D	B↑	A	C↓		
South England - Thames Valley SCN																				
Buckinghamshire Healthcare NHS Trust	Wycombe General Hospital	227	245	A	A	A	A	A	B↑	A	A	A	B↓	B	B	C↓	A	A		
Frimley Health NHS Foundation Trust	Wexham Park Hospital	43	72	E↓	A	E↓	D	E	E↓	E	E	C↓↓	C↓	D↓	E↓↓	C↓	B	D		
Milton Keynes University Hospital NHS Foundation Trust	Milton Keynes General Hospital	55	75	C	A	B↑	C↓	A	D	NA	D↓↓	B↑	A	E↓	C	B	B	C↓		
Oxford University Hospitals NHS Foundation Trust	Horton General Hospital	TFP	20	TFP	A	TFP	TFP	NA	C↓↓	NA	NA	B↑	B	B↑	NA	NA	NA	NA		
Oxford University Hospitals NHS Foundation Trust	John Radcliffe Hospital	205	208	A↑	A	A	A↑	A	C↓	B	C	A	A	A↑↑	B	C	A↑↑↑	A↑		
Royal Berkshire NHS Foundation Trust	Royal Berkshire Hospital	233	232	A	A↑	A	A	A	D↓	A	B	A	A	C↓	B	A↑	A↑	A		
South England - Wessex SCN																				
Dorset County Hospital NHS Foundation Trust	Dorset County Hospital	126	132	C	A	A	C	D	B	C	C↑	A	B	B	C	C↑	C	C		
Hampshire Hospitals NHS Foundation Trust	Royal Hampshire County Hospital	172	169	B	A	A	B	C	C	C	B	A	A	C↓	B	C	A	B		
Isle of Wight NHS Trust	St Mary's Hospital Newport	75	92	D	A	B	D	A	E	E	C	D	C	D↑	C↓	B	A	D		
Poole Hospital NHS Foundation Trust	Poole Hospital	178	178	D↓↓	A	B↓	C↓	C	D↓	D↓	D	A	B	D↓	B↓	D	A	C↓		
Portsmouth Hospitals NHS Trust	Queen Alexandra Hospital Portsmouth	358	344	C↓	A	B	C↓	C	E↓	C	C↓	A	A	C	C↓	B	A	B		
Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust	Royal Bournemouth General Hospital	263	266	A	A	A	A	C	C	C	B	A	B↓	A	A	B↓	A	A		
University Hospital Southampton NHS Foundation Trust	Southampton General Hospital	282	293	B	A	B↓	B	B	C↓	B	B	A	A	C↑	C↓	B	B	B		
Islands																				
Isle of Man Department of Health	Noble's Hospital	53	51	E	A	C↑	E	E	D	E	E	E↓↓	D↓	E	E	B	C↑	E		
Northern Ireland																				
Belfast Health and Social Care Trust	Royal Victoria Hospital Belfast	202	196	C	A	B↑	C	A↑	E↓	B	C↑	C	B↓	B↑	D	C↓	A	C		
Northern Health and Social Care Trust	Antrim Area Hospital	138	149	E	A	B↑↑	E↓	C	E	D↓	D	C↓	E↓	E	E↓	D↑	C	E↓		
Northern Health and Social Care Trust	Causeway Hospital	49	44	E	B↓	C↑	E	E↓	E	E	E	E↓↓	E↓↓	E↓	E	E↓	C↑	E		
South Eastern Health and Social Care Trust	Downe General Hospital	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
South Eastern Health and Social Care Trust	Ulster Hospital	134	139	D	A	A	D	C↑	E	D↓	E	A↑	D↓↓	C	E↓	A	A↑	D		
Southern Health and Social Care Trust	Craigavon Area Hospital	145	151	D	A	A	D	D	E	C↑	D↑	C	D	E↓	E	B	A↑↑	D		
Southern Health and Social Care Trust	Daisy Hill Hospital	38	38	D	C↓	B↓	D	C	E	C	E	B↑	C↓	C↑↑	E↓	B	A↑↑	D		
Western Health and Social Care Trust	Altnagelvin Hospital	96	94	E↓	A	B	E↓	D↓	E	B	E↓	E↓↓	E↓	E	B	B	D↓	E↓		
Western Health and Social Care Trust	South West Acute Hospital	81	85	B↑	A	A	B↑	A↑	B↑	A↑	B	A↑	B	E	C↑	B	C	B↑		

Routinely Admitting Teams		Number of patients		Overall Performance				Team Centred Data										
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	TC KI Level
<b>Wales</b>																		
Abertawe Bro Morgannwg University Health Board	Morriston Hospital	220	218	D↓	A	A	D↓	C	E	D↓	D↓	C↓	B↓	D↓	B↓	A↑	C↑	D↓
Abertawe Bro Morgannwg University Health Board	Princess Of Wales Hospital	97	103	D↓	A	A	D↓	B↑	D↓	D	C↓	D↓	D	E↓↓↓	B↓	B	D	D↓
Aneurin Bevan University Health Board	Royal Gwent Hospital	263	267	B	A	A	B	A	D↓	C	B↓	B	B	B↓	B	B↓	B	B↓
Betsi Cadwaladr University Health Board	Glan Clwyd District General Hospital	105	98	C	B↓	A	C	A↑↑	C	D	A↑	E	E	B	B↓	A	C	C
Betsi Cadwaladr University Health Board	Maelor Hospital	129	127	C	A	A	C	C	E	B↑↑	B	B↑	B↑	E↓	B	A	C	C
Betsi Cadwaladr University Health Board	Ysbyty Gwynedd	115	116	C	A	A	C	C	C↑	D↑	B↓	C↓↓	B↓	C	C↓	A	C↑	C↓
Cardiff and Vale University Health Board	University Hospital of Wales	189	196	C↓	A	A	C↓	A	E↓	C	C↓	D↓↓	B↓	C	C↓	A	B↓	C↓
Cwm Taf University Health Board	Prince Charles Hospital	224	217	C	A	B	C	B	D	D	C↑	A	C↓	A↑	B↑	B↓	D↓	C
Hywel Dda Health Board	Bronglais Hospital	40	38	D↓	A	B↓	C	B↓	C↓	A	D↓	C↑↑	C↑	C	C↓	B↓	E↓↓	C↓
Hywel Dda Health Board	Prince Philip Hospital	63	67	C	A	B↓	C	A	C	B	A	C↑	D	E	B	A	C	B↑
Hywel Dda Health Board	West Wales General	83	81	D	A	B	D	A	C↑↑	C↑↑	C↑	D↓	D↓↓	E	C↓	A	C	C↑
Hywel Dda Health Board	Withybush General Hospital	60	54	C↓	B↓	B	B	A	C↓	B↓	C↓	A↑↑	C↓	D↑	B↓	A	D↓	B

Non-Routinely Admitting Acute Teams		Number of patients		Overall Performance				Team Centred Data											
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	TC KI Level	
London - London SCN																			
Barking, Havering and Redbridge University Hospitals NHS Trust	Queens Hospital Romford SU	TFP	192	D↓	A	E↓	D↓↓	NA	A	NA	NA	D↓↓↓	C↓	C↓	NA	E↓	C	D↓↓	
Barts Health NHS Trust	Newham General Hospital	TFP	45	B	A	D	A	NA	A	NA	NA	A	A	B	NA	B↓	A	A	
Barts Health NHS Trust	Royal London Hospital SU	TFP	70	C↓↓	A↑	D↓↓↓	A	NA	A	NA	NA	B↓	C↓↓	E↓↓↓	NA	A	B	B↓	
Barts Health NHS Trust	Whipps Cross University Hospital	TFP	70	B	A	A	B	NA	B	NA	NA	B	B↑	C↓	NA	A	B↑	B	
Chelsea and Westminster Hospital NHS Foundation Trust	Chelsea and Westminster Hospital	TFP	X	TFP	E	X	TFP	NA	X	NA	NA	X	X	X	NA	X	X	TFP	
Croydon Health Services NHS Trust	Croydon University Hospital	TFP	63	C	A	D	B	NA	C↓	NA	NA	B	D	C	NA	A	A	B	
Epsom and St Helier University Hospitals NHS Trust	St Helier Hospital	TFP	60	B	A	B↑↑	A	NA	A	NA	NA	A↑	B	B	NA	B↓	A	A	
Guy's and St Thomas' NHS Foundation Trust	St Thomas Hospital	TFP	64	A	A	A	A	NA	B↓	NA	NA	A	A	C↓↓	NA	B↓	A	A	
Hillingdon Hospitals NHS Foundation Trust	Hillingdon Hospital	TFP	44	C↓	B↓	E↓	A	NA	A	NA	NA	A	A	B	NA	B↓	C	A	
Homerton University Hospital NHS Foundation Trust	Homerton University Hospital	TFP	37	B↑	A	D↑	A	NA	A	NA	NA	A	A	A	NA	B↑	B	A	
Imperial College Healthcare NHS Trust	Charing Cross Hospital SU - Nine South Ward	TFP	122	C	B↑↑↑	C	B	NA	A	NA	NA	B	B	B	NA	D	B	B	
King's College Hospital NHS Foundation Trust	King's College Hospital SU	TFP	52	A	A	C↓↓	A	NA	A	NA	NA	A	A	B↑	NA	A	A	A	
King's College Hospital NHS Foundation Trust	Princess Royal University Hospital SU	TFP	96	C↓	A	D↓↓	B↓	NA	A	NA	NA	A	B	D	NA	A	B	A	
Kingston Hospital NHS Foundation Trust	Kingston Hospital	TFP	52	A↑	A↑	A↑↑	A	NA	B↓	NA	NA	A	A	A↑	NA	B	A	A	
Lewisham and Greenwich NHS Trust	University Hospital Lewisham	TFP	118	B	A	D↓↓↓	A↑	NA	A	NA	NA	A↑↑	A↑	C	NA	A↑	A	A↑	
London North West Healthcare NHS Trust	Northwick Park Hospital SU	TFP	240	A	A	C↓	A	NA	A	NA	NA	A	A	A↑	NA	A	B↑	A	
North Middlesex University Hospital NHS Trust	North Middlesex Hospital	TFP	50	C	B↑	D	B↓	NA	A	NA	NA	A	B↓	B	NA	A↑	D↓	A	
Royal Free London NHS Foundation Trust	Barnet General Hospital	TFP	38	B↓	A	B↓	B↓	NA	C↓	NA	NA	A	A	C↓	NA	B↓	A	A	
Royal Free London NHS Foundation Trust	Royal Free Hospital	TFP	72	A↑	A↑	A↑↑	A	NA	A	NA	NA	A	A	B↓	NA	B	A	A	
St George's Healthcare NHS Trust	St George's Hospital SU	TFP	103	B	A	D	A	NA	A	NA	NA	A	A	D↓↓	NA	A	A	A	
University College London Hospitals NHS Foundation Trust	University College Hospital SU	TFP	66	B↓	A	D↓	A	NA	A	NA	NA	A	A	A	NA	A	A	A	
West Middlesex University Hospital NHS Trust	West Middlesex University Hospital	TFP	31	D↓↓	C↓↓	D	A	NA	A	NA	NA	A	B↓	B	NA	D↓	B↑	B↓	
Midlands & East - East Midlands SCN																			
Kettering General Hospital NHS Foundation Trust	Kettering General Hospital	TFP	56	D↑	A↑↑↑	C	D	NA	C↑	NA	NA	E	D↑	E↓	NA	B	A↑	D	
Midlands & East - East of England SCN																			
Bedford Hospital NHS Trust	Bedford Hospital	TFP	66	D↓	A	A↑	D↓	NA	B↓	NA	NA	D↓↓↓	B	E	NA	B	D	D↓↓	
Hinchingbrooke Health Care NHS Trust	Hinchingbrooke Hospital	TFP	X	X	X	X	X	NA	X	NA	NA	X	X	X	NA	X	X	X	
Midlands & East - West Midlands SCN																			
Heart of England NHS Foundation Trust	Good Hope General Hospital	TFP	88	C↓	A	B	B	NA	C↓	NA	NA	B	B	D↑	NA	A	A	B	
Heart of England NHS Foundation Trust	Solihull Hospital	TFP	65	B	A	A	B	NA	C↓↓	NA	NA	A↑↑	C↓	C	NA	A↑	A	B	
Shrewsbury and Telford Hospital NHS Trust	Royal Shrewsbury Hospital	TFP	TFP	TFP	NA	TFP	TFP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	TFP	
University Hospitals of North Midlands NHS Trust	County Hospital	TFP	37	D↓	A	B	C	NA	B↑	NA	NA	C↓	D↓↓	C	NA	E↓	B	D↓	
North of England - Greater Manchester & Eastern Cheshire SCN																			
Bolton NHS Foundation Trust	Royal Bolton Hospital	TFP	76	C↓	A	A	C↓	NA	C↓	NA	NA	B	B	E	NA	B	A	B	
Central Manchester University Hospitals NHS Foundation Trust	Manchester Royal Infirmary	TFP	65	B	A	A	B	NA	E↓	NA	NA	B↓	B	C	NA	A	A	B	
Central Manchester University Hospitals NHS Foundation Trust	Trafford General Hospital	TFP	44	B↓	A	A	B↓	NA	A	NA	NA	D↓↓↓	B↓	C	NA	A	A	B↓	
Tameside and Glossop Integrated Care NHS Foundation Trust	Tameside General Hospital	TFP	67	C↓	A	A	C↓	NA	C	NA	NA	A	B	E↓	NA	C↓↓	B↓	C↓	
University Hospital of South Manchester NHS Foundation Trust	Wythenshawe Hospital	TFP	89	B	A	A	B	NA	C	NA	NA	A↑	B	C	NA	B	A	B	
Wrightington, Wigan and Leigh NHS Foundation Trust	Royal Albert Edward Infirmary	TFP	130	B	A	A↑↑↑	B↓	NA	C↓	NA	NA	A	B↓	D↑	NA	A	A	B↓	

Non-Routinely Admitting Acute Teams		Number of patients		Overall Performance				Team Centred Data											
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	TC KI Level	
North of England - North of England SCN																			
Gateshead Health NHS Foundation Trust	Queen Elizabeth Hospital Gateshead	TFP	75	B↑↑	A↑	E↓↓	A↑	NA	B↑	NA	NA	A↑	A	C↑	NA	C↓	A	A↑	
Northumbria Healthcare NHS Foundation Trust	Hexham General Hospital	TFP	32	B	A	A↑	B	NA	A	NA	NA	B↓	B↓	E↓	NA	A	C	B↓	
Northumbria Healthcare NHS Foundation Trust	North Tyneside General Hospital	TFP	74	A	A	A	A	NA	A	NA	NA	B	B	C	NA	B	A	A	
Northumbria Healthcare NHS Foundation Trust	Wansbeck General Hospital	TFP	71	B	B↓	A	B	NA	A	NA	NA	C	C	D	NA	B	B↓	B	
North of England - Yorkshire and The Humber SCN																			
Airedale NHS Foundation Trust	Airedale General Hospital	TFP	49	D	A	A	D	NA	C↓	NA	NA	B↑	D	D↓↓	NA	A↑	C	C	
Northern Lincolnshire and Goole Hospitals NHS Foundation Trust	Diana Princess of Wales Hospital Grimsby	TFP	55	C↓	A	B	B↓	NA	C	NA	NA	B↓	C↓	C	NA	A	B↓	B↓	
Northern Lincolnshire and Goole Hospitals NHS Foundation Trust	Goole District Hospital	TFP	TFP	TFP	NA	TFP	TFP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	TFP	
York Teaching Hospital NHS Foundation Trust	Scarborough General Hospital	TFP	51	D	B	D	D↓	NA	B	NA	NA	C↓	D↓↓↓	E	NA	D	B↓	D↓↓	
South England - Wessex SCN																			
Hampshire Hospitals NHS Foundation Trust	Basingstoke and North Hampshire Hospital	TFP	29	C	A	C↓	B↑	NA	A↑	NA	NA	C	A↑	E	NA	C	B	B↑	
Wales																			
Abertawe Bro Morgannwg University Health Board	Singleton Hospital	TFP	32	D	A↑	B↑↑	D↓	NA	B	NA	NA	E↓↓	C↓	D	NA	A	D↓	D↓↓	
Aneurin Bevan University Health Board	Nevill Hall Hospital	TFP	50	D	A↑	D	C	NA	B	NA	NA	C	B↑	E	NA	B	B	C	
Aneurin Bevan University Health Board	Ysbyty Ystrad Fawr	TFP	37	C↑	A↑	C↑	B	NA	A	NA	NA	D↓	D	C↑↑	NA	B	A↑	B↑	
Cardiff and Vale University Health Board	Llandough Hospital	TFP	80	C	A↑	D	B	NA	A	NA	NA	D↓	B	D	NA	B	A	B	

Non-Acute Inpatient Teams		Number of patients		Overall Performance				Team Centred Data											
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	TC KI Level	
London - London SCN																			
Barking, Havering and Redbridge University Hospitals NHS Trust	King George Hospital Inpatient Rehab Team	TFP	47	C↓	A	C↓↓	B	NA	A	NA	NA	A	B↓	B	NA	D↓	B	B↓	
Central and North West London NHS Foundation Trust	St Pancras Hospital	TFP	26	C↑	A↑	C↑	B	NA	E	NA	NA	A	A	C↓↓	NA	A	D	B	
North East London NHS Foundation Trust	Grays Court Community Hospital	TFP	27	D	C	E	C	NA	A	NA	NA	C	A	B	NA	D	D	B	
Midlands & East - East Midlands SCN																			
Leicestershire Partnership NHS Trust	Coalville Community Hospital	TFP	34	D	D	D	A↑	NA	A	NA	NA	B↑	B↑	C	NA	A	A	A↑	
Leicestershire Partnership NHS Trust	St Lukes Stroke Rehabilitation Team - Market Harborough Hospital	TFP	51	C	A	D	B	NA	A	NA	NA	D	C	E	NA	A	A	B	
University Hospitals of Leicester NHS Trust	Leicester City Stroke Rehabilitation Unit	TFP	48	C	A↑	D	B↓	NA	A	NA	NA	B↓	D↓	D↑	NA	A	A	B	
Midlands & East - East of England SCN																			
Anglian Community Enterprise CIC	Clacton Hospital	TFP	30	B↑	A	D	A	NA	A	NA	NA	A	B	E	NA	A↑	A	A↑	
Hertfordshire Community NHS Trust	Danesbury Neurological Centre	TFP	32	B↑	A	D↓	A↑	NA	A	NA	NA	A	A↑	C↓	NA	A↑↑	B↑↑	A↑	
Hertfordshire Community NHS Trust	Holywell Rehabilitation Unit	TFP	22	B↑↑	B↑↑	C	A↑	NA	A	NA	NA	A	B	E	NA	A↑	C↑	B	
Norfolk Community Health and Care NHS Trust	Norwich Community Hospital - Beech Ward	TFP	55	D	A	D	C	NA	A	NA	NA	E↓	C↑	E↓	NA	B	A	C	
North East London NHS Foundation Trust	Brentwood Community Hospital	TFP	23	B	A	D	A	NA	A	NA	NA	A	A	B	NA	E	A	A	
Provide	St Peter's Community Hospital Rehab Unit	TFP	33	A	A	A↑	A	NA	A	NA	NA	A	B↓	C	NA	A	A	A	
South Essex Partnership University NHS Foundation Trust	St Margaret's Hospital Essex	TFP	21	D	A	E	B	NA	A	NA	NA	C	B	C	NA	D	A	B	
Midlands & East - West Midlands SCN																			
Birmingham Community Healthcare NHS Foundation Trust	Moseley Hall Stroke Rehabilitation Unit	TFP	44	C	A↑	C↑↑	B↓	NA	A	NA	NA	C↓	B	A	NA	D↓↓	B	B↓	
Burton Hospitals NHS Foundation Trust	Samuel Johnson Community Hospital	TFP	22	D	A	A	D	NA	A	NA	NA	C	D	E	NA	E	A	D	
South Warwickshire NHS Foundation Trust	Feldon Stroke Rehabilitation Unit SWFT	TFP	48	B↓	A	C↓	A	NA	A	NA	NA	A	A	B↓	NA	A	C	A	
Staffordshire and Stoke-on-Trent Partnership NHS Trust	Staffordshire Rehabilitation Team	TFP	47	B	A	C↑	A	NA	A	NA	NA	A	A↑	E	NA	A↑	A	A↑	
North of England - North West Coast SCN																			
East Lancashire Hospitals NHS Trust	Pendle Community Hospital - Marsden Stroke Unit	TFP	63	C↑	A↑↑	D↓↓	B↑	NA	A	NA	NA	C↓	C↓	B↑	NA	A	C↑	B	
Lancashire Teaching Hospitals NHS Foundation Trust	Chorley and South Ribble Hospital	TFP	55	D↓	A↑	D	C↓↓	NA	A	NA	NA	C↓↓	C↓↓	C	NA	A	C	B↓	
North of England - Yorkshire and The Humber SCN																			
Doncaster and Bassetlaw Hospitals NHS Foundation Trust	Bassetlaw District General Hospital	TFP	26	B↑	A	B	B↑	NA	B	NA	NA	A↑	B↑↑	C↑↑	NA	C↓	C	B↑	
Doncaster and Bassetlaw Hospitals NHS Foundation Trust	Montagu Hospital	TFP	28	B↓	B↓	A	B↓	NA	A	NA	NA	C	C↓	A↑	NA	B↓	D↓	B	
South West Yorkshire Partnership NHS Foundation Trust	Kendray Hospital	TFP	58	B↓	A	A	B↓	NA	A	NA	NA	B↓	B	C↓	NA	B↓	C	B↓	
South England - South East SCN																			
East Sussex Healthcare NHS Trust	Bexhill Hospital - Irvine Unit	TFP	23	D	A	D	C	NA	A	NA	NA	C	B	E	NA	A	D	C	
Sussex Community NHS Foundation Trust	Crawley Hospital Stroke Rehab Ward	TFP	29	D	C	E	C	NA	A	NA	NA	C	D	D	NA	A	E	C	
South England - South West SCN																			
CORNWALL PARTNERSHIP NHS FOUNDATION TRUST	Lanyon Stroke Rehabilitation Unit	TFP	73	B	A	D	A	NA	A	NA	NA	A	A	B	NA	C	A	A	
CORNWALL PARTNERSHIP NHS FOUNDATION TRUST	Woodfield Stroke Rehabilitation Unit	TFP	46	B	A	D	A	NA	A	NA	NA	A	C↑	A	NA	B↑↑	A	A↑	
Great Western Hospitals NHS Foundation Trust	Chippenham Community Hospital - Mulberry Stroke Unit	TFP	29	E	D	E	D	NA	A	NA	NA	D	D	E	NA	B	C	D	
Great Western Hospitals NHS Foundation Trust	Forest Ward - Swindon Intermediate Care Centre	TFP	24	E↓	C↓↓	E	D	NA	A	NA	NA	E	D↓	D↑	NA	B↓	D↓	D↓	
Northern Devon Healthcare NHS Trust	Bideford Community Hospital	TFP	29	B	A	D	A	NA	A	NA	NA	A	A	D↓↓	NA	B	A	A	
Plymouth Community Healthcare CIC	Mount Gould Hospital	TFP	44	A	A	A	A	NA	A	NA	NA	A	A	B	NA	B	A	A	
Royal Devon and Exeter NHS Foundation Trust	East Devon Community Stroke Rehab Unit	TFP	41	C	A	D	B	NA	A	NA	NA	B↑	B↑	E	NA	A	C	B↑	
Somerset Partnership NHS Foundation Trust	South Petherton Community Hospital	TFP	30	D↓	B↓	D	C↓	NA	A	NA	NA	C↓	D↓	E	NA	B↓	A	C↓	
Torbay and South Devon NHS Foundation Trust	Newton Abbot Hospital	TFP	71	A	A	C↑	A	NA	A	NA	NA	A	A	A	NA	A	A	A	



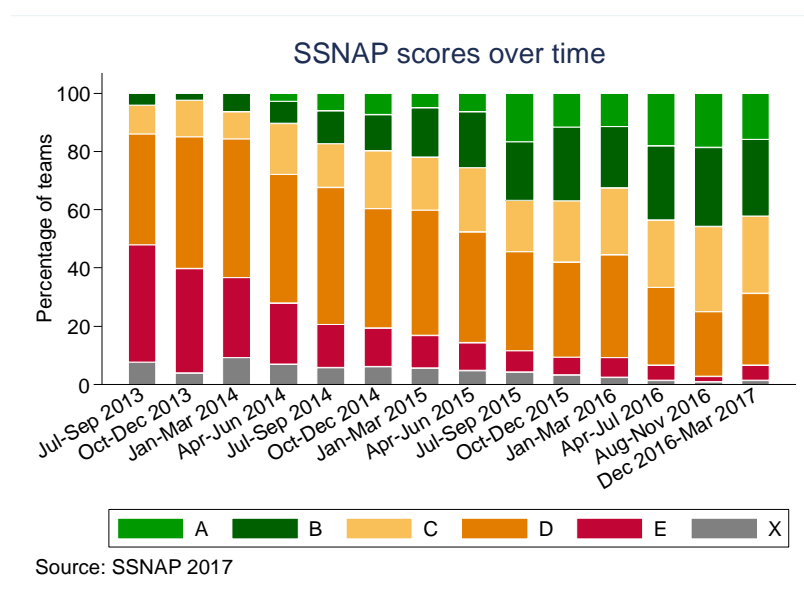
Non-Acute Inpatient Teams		Number of patients		Overall Performance				Team Centred Data											
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	TC KI Level	
South England - Thames Valley SCN																			
Oxford Health NHS Foundation Trust	Abingdon Community Hospital	TFP	27	C↓	A	B↓	B	NA	A	NA	NA	B↓	C↓	C	NA	B	D	B	
Oxford Health NHS Foundation Trust	Witley Community Hospital	TFP	24	C↓	A↑	C↓↓	B↓	NA	A	NA	NA	A↑	B	D↓	NA	B	D↓↓	B	
Northern Ireland																			
Southern Health and Social Care Trust	South Tyrone and Lurgan Hospitals	TFP	44	D	C↓	C↓	D↓	NA	A	NA	NA	E	B	E↓↓	NA	C↓	A↑↑↑	C	
Wales																			
Aneurin Bevan University Health Board	St Woolos Hospital	TFP	35	D	C↓↓	D	C	NA	A	NA	NA	C	C↑	E	NA	C↓	D	D	
Cwm Taf University Health Board	Ysbyty Cwm Rhondda	TFP	30	D	A↑↑	C	D↓	NA	C	NA	NA	C↓	E↓↓↓	E	NA	A↑	C↑	D↓	

## Conclusion

It is unprecedented to have collected such a high volume of cases with good data quality and a representative sample within three years of initiating a new national audit. Participation in the audit continues to be an unparalleled success. In the latest reporting period 28,575 patient records were submitted to SSNAP for analysis, demonstrating the efforts of all the teams and registered audit users.

Without information and data about stroke services in England, Wales and Northern Ireland it would not be possible to persuade clinicians, commissioners or NHS England that there is still work to be done to ensure that high quality care is provided to patients regardless of where they live or when they have their stroke.

Recent audit results have shown that improvements to stroke services are being made. In January to March 2016 only 25 services achieved an “A” score compared to 36 teams in this reporting period. The consistent decrease in the number of hospitals achieving the lowest scoring band is similarly reassuring. This is demonstrated in the graph below that highlights changes over time in SSNAP scores.



The latest audit results reinforce our belief that whilst the audit sets the bar high to attain the top grade, world class stroke care is achievable. That clinicians are reviewing their results every reporting period and investigating where changes need to be made to improve the care they provide to patients should be celebrated. It is important that we allow teams the time to conduct a full diagnosis and time to draw up action plans to address issues. We are privileged to have honest self-reporting from providers. We are now increasingly in a position to report what happens to patients after the early part of their recovery and we urge all stroke care providers working in a community setting to participate in SSNAP to make the post-acute data similar in quality to the years spent reporting acute data with resultant improvements to the quality of care and outcomes. This will remain one of our biggest challenges in the year ahead.

## Availability of SSNAP reports in the public domain

SSNAP results are made public each reporting period by named team. This model provides clinicians, commissioners, patients and carers, and the general public with up to date information on the processes of stroke care across the entire pathway and is in line with the Department of Health in England's data transparency policy.

## December 2016 - March 2017 report

This report includes complete data for 28,174 stroke patients admitted to and 28,072 stroke patients discharged from inpatient care between 1 December 2016– 30 March 2017. The volume of records collected allows robust conclusions to be drawn at national level. Similar levels of case ascertainment were achieved in previous reporting periods.

### Definitions

- **'Normal Hours'** refers to patients who arrived at hospital on a weekday between 8am and 6pm (excluding Bank Holidays).
- **'Out of Hours'** refers to patients who arrived at hospital on a weekday before 8am or after 6pm or at any time on a weekend or Bank Holiday.
- **'Inpatient Onset'** refers to patients who were already in hospital at the time of stroke.
- **'Clock Start'** is used to signify the time at which the 'clock starts' for measuring key timings. This is arrival in most instances (patients newly arriving in hospital) but will be the onset of symptoms time for patients already in hospital at time of stroke.
- **'Team'**: SSNAP collects self-reported details of care at the level of individual clinical teams across the stroke pathway e.g. acute teams, inpatient rehabilitation teams.
- **'Routinely Admitting Teams'** are defined as teams who typically directly admit the majority of their stroke patients.
- **'Non-Routinely Admitting Acute Teams'** are teams who provide acute care but who are typically transferred the majority of their stroke patients from other teams.
- **'Non-Acute Inpatient Teams'**: teams who provide only rehabilitation care in an inpatient setting.
- **'Early Supported Discharge Teams'**: multi-disciplinary teams providing rehabilitation and support to stroke patients in a community setting with the aim of reducing the duration of hospital care for stroke patients.
- **Community Rehabilitation Teams'**: teams working in the community delivering rehabilitation services.
- **'Six Month Assessment Providers'**: teams who undertake six month reviews of stroke patients. They may be acute teams, domiciliary teams or third sector providers.
- **'Team-Centred Results'**: results are attributed to the team considered to be most appropriate to assign the responsibility for the measure to.
- **'Patient-Centred Results'**: results are attributed to every team which treated the patient at any point in their care.
- **'Audit Compliance'**: measure of completeness of non-mandatory SSNAP data items.

- **‘Case Ascertainment’**: percentage of all stroke cases entered onto SSNAP. High levels of case ascertainment are essential to ensure representativeness.
- **‘Key Indicator’**: an important measure of stroke care, e.g. in SSNAP there are 44 Key Indicators which are considered representative of high quality care.
- **‘Domain’**: an important area of care comprising several key indicators related to that topic i.e. in SSNAP there are 10 domains e.g. scanning.
- **‘Total Key Indicator Score’**: the average of the 10 domain levels (separately for patient-centred and team-centred results).
- **‘Combined Total Key Indicator Score’**: the average of the patient-centred and team-centred Total Key Indicator Score.
- **‘SSNAP Score’**: combined Total Key Indicator Score adjusted for Case Ascertainment and Audit Compliance.

### Denominators

This report does not contain numerators and denominators for each standard. Please refer to the accompanying ‘Full results portfolio’ ([www.strokeaudit.org/results/national](http://www.strokeaudit.org/results/national)) for this level of detail. The table below outlines the key denominators in the report. These vary throughout the report depending on the number of patients included in the analyses for each standard.

	Three month reporting	Four month reporting		
Key denominators	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016 – Mar 2017
Cases Locked to 72 hours	20,991	28,003	27,327	28,174
Cases with known onset time	14,238	19,214	18,695	19,607
Cases with infarct	18,218	24,487	23,798	24,912
Cases with intracerebral haemorrhage	2,683	3,379	3,419	3,529
Cases with unknown type of stroke	90	137	100	134
Inpatient strokes	1,170	1,560	1,530	1,636
Arrive within ‘normal hours’	9,480	12,635	12,920	12,909
Arrive ‘out of hours’	10,341	13,808	12,877	14,030
Patients who went to a stroke unit	20,156	26,903	26,202	27,306
Patient who had a brain scan	20,901	27,866	27,217	28,441
Patients who had thrombolysis	2,389	3,331	3,137	3,309

Technical information on how the results were calculated can be found on the final tab of the ‘Full Results Portfolio’ [www.strokeaudit.org/results](http://www.strokeaudit.org/results)

Wherever possible, the audit question numbers have been included in the tables of results to facilitate reference to the actual question wording.

## Glossary

<b>Activities of daily living</b>	Refers to activities that people normally undertake (e.g. bathing, dressing, self-feeding).
<b>Acute ischaemic stroke</b>	A type of stroke that happens when a clot blocks an artery that carries blood to the brain, causing brain cells to die.
<b>Acute stroke unit</b>	An acute stroke unit is one which treats patients usually in an intensive model of care with continuous monitoring and nurse staffing levels.
<b>Anticoagulation</b>	Treatment to reduce the likelihood of blood clotting.
<b>Antihypertensive</b>	A drug that reduces high blood pressure.
<b>Antiplatelet</b>	A drug that helps prevent the formation of blood clots by affecting the function of certain blood cells; examples are aspirin and clopidogrel.
<b>Aphasia</b>	A condition that affects the brain and leads to problems using language correctly.
<b>Audit</b>	An audit compares clinical process for individual patients and national guidelines.
<b>Atrial fibrillation (AF)</b>	This is an abnormal heart beat which can result in the formation of blood clots. Warfarin is prescribed for people with AF to thin the blood and prevent clots forming.
<b>Cardiovascular Disease Outcomes Strategy</b>	Provides advice to local authority and NHS commissioners and providers about actions to improve cardiovascular disease outcomes. <a href="https://www.gov.uk/government/publications/improving-cardiovascular-disease-outcomes-strategy">https://www.gov.uk/government/publications/improving-cardiovascular-disease-outcomes-strategy</a>
<b>Care home</b>	A residential setting where a number of older people live, usually in single rooms, and have access to on-site care services.
<b>Carer</b>	Someone (commonly the patient's spouse, a close relative or a friend) who provides on going, unpaid support and personal care at home.
<b>Casemix</b>	A measure of the characteristics of people included in a study such as age, gender, ethnicity and co-existing illnesses.

<b>CCG Outcome Indicator Set (CCG OIS)</b>	A set of measures by which commissioners of health services (Clinical Commissioning Groups) are held to account for the quality of services and the health outcomes achieved through commissioning. <a href="http://www.england.nhs.uk/ccg-ois">http://www.england.nhs.uk/ccg-ois</a>
<b>CCU</b>	Coronary Care Unit.
<b>Cohort</b>	Group of patients included in analysis for report. It comprises patients admitted and/or discharged to hospital during a defined date range.
<b>Co-morbidity</b>	The coexistence of two or more diseases.
<b>Community rehabilitation team</b>	Teams working in the community delivering rehabilitation services.
<b>Continence plan</b>	A plan to help a patient increase their control over urinary and faecal discharge.
<b>Congestive heart failure</b>	Poor heart function resulting in accumulation of fluid in the lungs and legs.
<b>Domiciliary Care</b>	The delivery of a range of personal care and support services to individuals in their own homes.
<b>Dysphagia</b>	Difficulty in swallowing.
<b>Early Supported Discharge</b>	A service providing rehabilitation and support to stroke patients in a community setting by a multi-disciplinary team with the aim of reducing the duration of hospital care for stroke patients.
<b>HDU</b>	High Dependency Unit.
<b>Haemorrhage/ haemorrhagic stroke</b>	Bleeding caused by blood escaping into the tissues.
<b>Hyperacute stroke unit</b>	Some stroke services designate the most intensive treatment as hyperacute. This would be where patients are initially treated and usually for a short period of time (i.e. up to three days).
<b>Hypertension</b>	High blood pressure.
<b>Incontinence</b>	Inability to control passing of urine and/or faeces.
<b>Infarct</b>	An area of cell death due to the result of a deprived blood supply.
<b>Interquartile range (IQR)</b>	The IQR is the range between 25th and 75th centile which is equivalent to the middle half of all values.

<b>Intermittent Pneumatic Compression (IPC)</b>	A mechanical method of preventing deep vein thrombosis in the legs.
<b>ITU</b>	Intensive Treatment/Therapy Unit.
<b>Joint care planning</b>	A process in which a person and their healthcare professional work together to create a personalised package of care.
<b>Level of Consciousness</b>	A medical term used to describe a patient's awareness of his or her surroundings and arousal potential.
<b>Lipid Lowering</b>	Reducing the concentration of lipid, such as cholesterol, in the blood.
<b>MAU</b>	Medical Assessment Unit.
<b>Median</b>	The median is the middle point of a data set; half of the values are below this point, and half are above this point.
<b>Mood screening</b>	Identifying mood disturbance and cognitive impairment using a validated tool.
<b>Motor deficits</b>	These include phenomena such as lack of coordination in movement, lack of selected movement, and lack of motor control.
<b>Multidisciplinary Team</b>	Refers to several types of health professionals working together, physiotherapists, occupational therapists, speech and language therapists, nurses and doctors.
<b>Myocardial Infarction</b>	A heart attack.
<b>National Clinical Guidelines For Stroke (2016)</b>	National evidence based guidelines for stroke care published by the Intercollegiate Working Party for Stroke fifth edition 2016. <a href="http://www.strokeaudit.org/guideline">www.strokeaudit.org/guideline</a>
<b>National Institutes of Health Stroke Scale (NIHSS)</b>	A validated international tool used by healthcare professionals to objectively quantify the impairment caused by a stroke.
<b>National Sentinel Stroke Audit (NSSA)</b>	A national audit conducted by The Royal College of Physicians monitors the rate of progress in stroke care services in England, Wales and Northern Ireland in a two year cycle <a href="http://www.rcplondon.ac.uk/sentinel">www.rcplondon.ac.uk/sentinel</a> . The NSSA has been replaced by the Sentinel Stroke National Audit Programme (SSNAP).
<b>National Stroke Strategy</b>	Provides a quality framework to secure improvements to stroke services, offers guidance and support to commissioners and strategic health authorities. <a href="http://clahrc-gm.nihr.ac.uk/cms/wp-content/uploads/DoH-National-Stroke-Strategy-2007.pdf">http://clahrc-gm.nihr.ac.uk/cms/wp-content/uploads/DoH-National-Stroke-Strategy-2007.pdf</a>

<b>NICE Acute stroke guidelines</b>	The NICE Clinical Guideline CG68 Stroke Diagnosis and initial management of acute stroke (NICE 2008). <a href="http://guidance.nice.org.uk/CG68">http://guidance.nice.org.uk/CG68</a>
<b>NICE Rehabilitation stroke guidelines</b>	Stroke rehabilitation: Long-term rehabilitation after stroke (NICE 2013): <a href="http://www.nice.org.uk/CG162">www.nice.org.uk/CG162</a>
<b>NICE Quality Standard for Stroke</b>	NICE quality standards define high standards of care within stroke. It provides specific, concise quality statements, measures and audience descriptors to provide definitions of high-quality care. <a href="http://pathways.nice.org.uk/pathways/stroke">http://pathways.nice.org.uk/pathways/stroke</a>
<b>Nutritional screening</b>	A first-line process of identifying patients who are already malnourished or at risk of becoming so.
<b>Palliative care</b>	Treating symptoms for end of life care.
<b>Rankin score</b>	A scale used to measure the degree of disability or dependence in the daily activities of living.
<b>Rehabilitation stroke unit</b>	Stroke units generally accepting patients after 7 days or more and focussing on rehabilitation.
<b>Sentinel Stroke National Audit Programme (SSNAP)</b>	SSNAP is a new continuous audit that collects data for every stroke patient along the entire stroke care pathway up to six months: <a href="http://www.strokeaudit.org">www.strokeaudit.org</a>
<b>SINAP</b>	Stroke Improvement National Audit Programme. A continuous acute stroke audit which measured the process of stroke care in the first 72 hours between May 2010 and December 2012 <a href="http://www.rcplondon.ac.uk/sinap">www.rcplondon.ac.uk/sinap</a> . The Sentinel Stroke National Audit Programme (SSNAP) has replaced SINAP.
<b>Specialist</b>	A clinician whose practice is limited to a particular branch of medicine or surgery, especially one who is certified by a higher educational organisation.
<b>Thrombolysis</b>	The use of drugs to break up a blood clot.
<b>Thrombectomy</b>	The surgical removal of a thrombus from a blood vessel.
<b>TIA</b>	Transient ischaemic attack – a stroke which completely recovers within 24 hours of onset of symptoms.
<b>Urinary tract infection</b>	An infection of the kidney, ureter, bladder, or urethra.



## **Intercollegiate Stroke Working Party – List of Members**

### **Chair**

Professor Anthony Rudd, Professor of Stroke Medicine, King's College London; Consultant Stroke Physician, Guy's and St Thomas' NHS Foundation Trust

### **Associate directors from the Stroke Programme at the Royal College of Physicians**

Professor Pippa Tyrrell, Professor of Stroke Medicine, University of Manchester; Consultant Stroke Physician, Salford Royal NHS Foundation Trust

Dr Geoffrey Cloud, Consultant Stroke Physician, Honorary Senior Lecturer Clinical Neuroscience, St George's University Hospitals NHS Foundation Trust, London

Dr Martin James, Consultant Stroke Physician, Royal Devon and Exeter NHS Foundation Trust; Honorary Associate Professor, University of Exeter Medical School

### **List of Members**

#### *Association of Chartered Physiotherapists in Neurology*

Dr Nicola Hancock, Lecturer in Physiotherapy, School of Health Sciences, University of East Anglia

#### *AGILE – Professional Network of the Chartered Society of Physiotherapy*

Mrs Louise McGregor, Allied Health Professional Therapy Consultant – Acute Rehabilitation, St George's University Hospitals NHS Trust, London

#### *Association of British Neurologists*

Dr Gavin Young, Consultant Neurologist, The James Cook University Hospital, South Tees Hospitals NHS Foundation Trust

#### *British Association of Stroke Physicians*

Dr Neil Baldwin, Consultant Stroke Physician

Dr Damian Jenkinson, Consultant in Stroke Medicine, Dorset County Hospital Foundation Trust

#### *British Society of Rehabilitation Medicine/Society for Research in Rehabilitation*

Professor Derick Wade, Consultant in Rehabilitation Medicine, The Oxford Centre for Enablement

#### *British Geriatrics Society*

Professor Helen Rodgers, Professor of Stroke Care, Newcastle University

#### *British Dietetic Association*

Mr Alex Lang, Guy's and St Thomas' NHS Foundation Trust

#### *British and Irish Orthoptic Society*

Dr Fiona Rowe, Reader in Orthoptics and Health Services Research, University of Liverpool

*British Psychological Society*

Dr Audrey Bowen, The Stroke Association John Marshall Memorial Reader in Psychology, University of Manchester

Dr Jason Price, Consultant Clinical Neuropsychologist, The James Cook University Hospital

Dr Shirley Thomas, Lecturer in Rehabilitation Physiotherapy, Queens Medical Centre

*British Society of Neuroradiologists*

Dr Andrew Clifton, Interventional Neuroradiologist, St George's University Hospitals NHS Foundation Trust, London

*Chartered Society of Physiotherapy*

Dr Cherry Kilbride, Senior Lecturer in Physiotherapy, Institute of Health, Environment and Societies, Brunel University, London

*The Cochrane Stroke Group*

Professor Peter Langhorne, Professor of Stroke Care Medicine, University of Glasgow

*College of Occupational Therapists and Special Section Neurological Practice*

Professor Avril Drummond, Professor of Healthcare Research, University of Nottingham  
Mrs Karen Clements, Clinical Specialist Occupational Therapist – Stroke, London Road Community Hospital

*College of Paramedics*

Mr Joseph Dent, Advanced Paramedic, College of Paramedics

*Faculty of Prehospital Care of the Royal College of Surgeons of Edinburgh and the National Ambulance Service Medical Directors Group*

Dr Neil Thomson, Interim Deputy Medical Director, London Ambulance Service NHS Trust

*Health Economics Advice*

Professor Anita Patel, Chair in Health Economics, Queen Mary University of London

*NIMAST (Northern Ireland)*

Dr Michael Power, Consultant Physician Ulster Hospital Belfast, Founder and Committee Member NIMAST

*Patient representative*

Mr Robert Norbury

*Patient representative*

Mr Stephen Simpson

*Patient representative*

Ms Marney Williams

*Public Health England*

Dr Patrick Gompertz, Consultant Physician, The Royal London Hospital

*Public Health England/Royal College of Physicians*

Dr Benjamin Bray, Clinical Research Fellow, Kings College London

*Royal College of Nursing*

Mrs Diana Day, Stroke Consultant Nurse, Addenbrooke's Hospital, Cambridge University Hospitals NHS Foundation Trust

Dr Amanda Jones, Stroke Nurse Consultant, Sheffield Teaching Hospitals NHS Foundation Trust

*Royal College of Radiologists*

Prof Philip White, Hon Consultant Neuroradiologist, Newcastle Upon Tyne Hospitals NHS Foundation Trust

*Royal College of Speech & Language Therapists*

Ms Rosemary Cunningham, Speech and Language Therapy Team Manager, Royal Derby Hospital (Derbyshire Community Health Services Foundation Trust)

*Royal College of Speech & Language Therapists*

Professor Pam Enderby, Professor of Rehabilitation, University of Sheffield

Dr Sue Pownall, Head of speech and Language Therapy, Sheffield Teaching Hospitals NHS Foundation Trust

*Southern Health and Social Care Trust*

Dr Michael McCormick, Consultant Geriatrician/Stroke Physician, Craivagon Area Hospital

*Stroke Association*

Mr Jon Barrick, Chief Executive, Stroke Association

Mr Dominic Brand, Director of Marketing and External Affairs, Stroke Association

*Welsh Government Stroke Implementation Group*

Dr Phil Jones, Clinical Lead for Wales, Hywel Dda University Health Board



## SSNAP Core Dataset 3.1.1

For queries, please contact [ssnap@rcplondon.ac.uk](mailto:ssnap@rcplondon.ac.uk)

Webtool for data entry: [www.strokeaudit.org](http://www.strokeaudit.org)

NB. There is a stand-alone intra-arterial proforma available in the support section of the dataset which lists only those additional questions related to this intervention. The changes in the SSNAP Core Dataset 3.1.1 are all related to these new dataset questions.

Version	Date	Changes
1.1.1	12 Dec 2012	– Official core dataset following pilot versions (most recent 3.6.16)
1.1.2	18 Feb 2013	– 1.12.2 – word ‘incident’ added to question and allowed values changed to 10 characters – 2.8 – sub questions renumbered – 6.10 – word ‘First’ added
2.1.1	02 Apr 2014	– 1.14 Which was the first ward the patient was admitted to at the first hospital? (wording change from ‘Which was the first ward the patient was admitted to?’) – 3.1 Has it been decided in the first 72 hours that the patient is for palliative care? (wording change from ‘If yes, does the patient have a plan for their end of life care?’) – 3.1.2 – If yes, does the patient have a plan for their end of life care? (wording change from ‘Is the patient on an end of life pathway?’) – 4.4.1 – New question: ‘If yes, at what date was the patient no longer considered to require this therapy?’ – 4.5.1 Question removed – 4.6.1 Question removed – 6.9.2 – If yes, does the patient have a plan for their end of life care? (wording change from ‘Is the patient on an end of life pathway?’) – 6.11 - New question: ‘Was intermittent pneumatic compression applied?’ – 6.11.1 - New question: ‘If yes, what date was intermittent pneumatic compression first applied?’ <i>Validations: Cannot be before clock start and cannot be after 7.3</i> – 6.11.2 - New question: ‘If yes, what date was intermittent pneumatic compression finally removed?’ <i>Cannot be before clock start or 6.11.1 and cannot be after 7.3</i> – 7.1 – Additional answer options: ‘Was transferred to another inpatient care team, not participating in SSNAP’; ‘Was transferred to an ESD/community team, not participating in SSNAP’. <i>Validations: Selecting either of these has same effect as selecting ‘discharged somewhere else’</i> – 7.3.1 – ‘Date patient considered by the multidisciplinary team to no longer require inpatient care?’ (wording change from ‘Date patient considered by the multidisciplinary team to no longer require inpatient rehabilitation?’) – 8.4 – Additional answer option: ‘Not Known’. (‘What is the patient’s modified Rankin Scale score?’) – 8.5 – Additional answer option: ‘Not Known’. (‘Is the patient in persistent, permanent or paroxysmal atrial fibrillation?’) – 8.6.1 – Additional answer option: ‘Not Known’. (‘Is the patient taking: Antiplatelet?’) – 8.6.2 – Additional answer option: ‘Not Known’. (‘Is the patient taking: Anticoagulant?’) – 8.6.3 – Additional answer option: ‘Not Known’. (‘Is the patient taking: Lipid Lowering?’) – 8.6.4 – Additional answer option: ‘Not Known’. (‘Is the patient taking: Antihypertensive?’) – 8.7.1 – Additional answer option: ‘Not Known’. (‘Since their initial stroke, has the patient had any of the following: Stroke’) – 8.7.2 – Additional answer option: ‘Not Known’. (‘Since their initial stroke, has the patient had any of the following: Myocardial infarction’) – 8.7.3 – Additional answer option: ‘Not Known’. (‘Since their initial stroke, has the patient had any of the following: Other illness requiring hospitalisation’)
3.1.1	01 Oct 2015	– 2.11 – New question – ‘Did the patient receive an intra-arterial intervention for acute stroke?’ – 2.11.1 – New question – ‘Was the patient enrolled into a clinical trial of intra-arterial

		<p>intervention?’</p> <ul style="list-style-type: none"> <li>– 2.11.2 – New question – ‘What brain imaging technique was carried out prior to the intra-arterial intervention?’</li> <li>– 2.11.3 – New question – ‘How was anaesthesia managed during the intra-arterial intervention?’</li> <li>– 2.11.4 – New question – ‘What was the speciality of the lead operator?’</li> <li>– 2.11.5 – New question – ‘Were any of the following used?’</li> <li>– 2.11.6 – New question – ‘Date and time of:’</li> <li>– 2.11.7 – New question – ‘Did any of the following complications occur?’</li> <li>– 2.11.8 – New question – ‘Angiographic appearance of culprit vessel and result assessed by operator (modified TCI score):’</li> <li>– 2.11.9 – New question – ‘Where was the patient transferred after the completion of the procedure?’</li> </ul>
--	--	--

Hospital / Team	<input type="text" value="Auto-completed on web tool"/>
Patient Audit Number	<input type="text" value="Auto-completed on web tool"/>

**Demographics/ Onset/ Arrival** (must be completed by the first hospital)

1.1.	Hospital Number	<input type="text" value="Free text (30 character limit)"/>	
1.2.	NHS Number	<input type="text" value="10 character numeric"/>	or <input type="radio"/> No NHS Number
1.3.	Surname	<input type="text" value="Free text (30 character limit)"/>	
1.4.	Forename	<input type="text" value="Free text (30 character limit)"/>	
1.5.	Date of birth	<input type="text" value="dd"/> <input type="text" value="mm"/> <input type="text" value="yyyy"/>	
1.6.	Gender	<input type="radio"/> Male	<input type="radio"/> Female
1.7.	Postcode of usual address	<input type="text" value="2-4 alphanumerics"/> <input type="text" value="3 alphanumerics"/>	
1.8.	Ethnicity	<input type="text" value="A – Z (select radio button)"/>	or <input type="radio"/> Not Known
1.9.	What was the diagnosis?	<input type="radio"/> Stroke <input type="radio"/> TIA <input type="radio"/> Other <input type="radio"/> (If TIA or Other please go to relevant section)	
1.10.	Was the patient already an inpatient at the time of stroke?	<input type="radio"/> Yes <input type="radio"/> No	
1.11.	Date/time of onset/awareness of symptoms	<input type="text" value="dd"/> <input type="text" value="mm"/> <input type="text" value="yyyy"/> <input type="text" value="hh"/> <input type="text" value="mm"/>	
1.11.1.	The date given is:	<input type="radio"/> Precise <input type="radio"/> Best estimate <input type="radio"/> Stroke during sleep	
1.11.2.	The time given is:	<input type="radio"/> Precise <input type="radio"/> Best estimate <input type="radio"/> Not known	
1.12.	Did the patient arrive by ambulance?	<input type="radio"/> Yes <input type="radio"/> No	
1.12.1.	Ambulance trust	<input type="text" value="Default"/>	<input type="text" value="Drop-down of all trusts"/>
1.12.2.	Computer Aided Despatch (CAD) / Incident Number	<input type="text" value="10 characters"/>	or <input type="radio"/> Not known
1.13.	Date/ time patient arrived at first hospital	<input type="text" value="dd"/> <input type="text" value="mm"/> <input type="text" value="yyyy"/> <input type="text" value="hh"/> <input type="text" value="mm"/>	
1.14.	Which was the first ward the patient was admitted to at the first hospital?	MAU/ AAU/ CDU <input type="radio"/> Stroke Unit <input type="radio"/> ITU/CCU/HDU <input type="radio"/> Other <input type="radio"/>	
1.15.	Date/time patient first arrived on a stroke unit or Did not stay on stroke unit	<input type="text" value="dd"/> <input type="text" value="mm"/> <input type="text" value="yyyy"/> <input type="text" value="hh"/> <input type="text" value="mm"/>	

**Casemix/ First 24 hours** (if patient is transferred to another setting after 24 hours, this section must be complete)

2.1.	Did the patient have any of the following co-morbidities prior to this admission?
2.1.1	Congestive Heart Failure: <input type="radio"/> Yes <input type="radio"/> No
2.1.2	Hypertension: <input type="radio"/> Yes <input type="radio"/> No
2.1.3	Atrial fibrillation: <input type="radio"/> Yes <input type="radio"/> No
2.1.4	Diabetes: <input type="radio"/> Yes <input type="radio"/> No
2.1.5	Stroke/TIA: <input type="radio"/> Yes <input type="radio"/> No

- 2.1.6 If 2.1.3 is yes, was the patient on antiplatelet medication prior to admission? Yes ☐ No ☐ No but ☐
- 2.1.7 If 2.1.3 is yes was the patient on anticoagulant medication prior to admission? Yes ☐ No ☐ No but ☐
- 2.2. What was the patient's modified Rankin Scale score before this stroke?
- 2.3. What was the patient's NIHSS score on arrival?
- |        |                              | 0                     | 1                     | 2                     | 3                     | 4                     | Not known             |
|--------|------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 2.3.1  | Level of Consciousness (LOC) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |                       |                       |
| 2.3.2  | LOC Questions                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |                       |                       | <input type="radio"/> |
| 2.3.3  | LOC Commands                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |                       |                       | <input type="radio"/> |
| 2.3.4  | Best Gaze                    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |                       |                       | <input type="radio"/> |
| 2.3.5  | Visual                       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |                       | <input type="radio"/> |
| 2.3.6  | Facial Palsy                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |                       | <input type="radio"/> |
| 2.3.7  | Motor Arm (left)             | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2.3.8  | Motor Arm (right)            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2.3.9  | Motor Leg (left)             | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2.3.10 | Motor Leg (right)            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2.3.11 | Limb Ataxia                  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |                       |                       | <input type="radio"/> |
| 2.3.12 | Sensory                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |                       |                       | <input type="radio"/> |
| 2.3.13 | Best Language                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |                       | <input type="radio"/> |
| 2.3.14 | Dysarthria                   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |                       |                       | <input type="radio"/> |
| 2.3.15 | Extinction and Inattention   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |                       |                       | <input type="radio"/> |
- 2.4. Date and time of first brain imaging after stroke       
or Not imaged ☐
- 2.5. What was the type of stroke? Infarction ☐ Primary Intracerebral Haemorrhage ☐
- 2.6. Was the patient given thrombolysis? Yes ☐ No ☐ No but ☐ (auto-selected if 2.5=PIH)
- 2.6.1 If no, what was the reason:  
Thrombolysis not available at hospital at all ☐ Outside thrombolysis service hours ☐  
Unable to scan quickly enough ☐ None ☐
- 2.6.2 If no but, please select the reasons:  
Haemorrhagic stroke (auto-selected if 2.5=PIH) ☐ Age ☐  
Arrived outside thrombolysis time window ☐ Symptoms improving ☐  
Co-morbidity ☐ Stroke too mild or too severe ☐  
Contraindicated medication ☐ Symptom onset time unknown/wake-up stroke ☐  
Patient or relative refusal ☐ Other medical reason ☐
- 2.7. Date and time patient was thrombolysed
- 2.8. Did the patient have any complications from the thrombolysis? Yes ☐ No ☐
- 2.8.1 If yes, which of the following complications:  
Symptomatic intracranial haemorrhage ☐ Angio oedema ☐ Extracranial bleed ☐ Other ☐
- 2.8.2 If other, please specify
- 2.9. What was the patient's NIHSS score at 24 hours after thrombolysis?  or Not known ☐
- 2.10. Date and time of first swallow screen       
or Patient not screened in first 4 hours ☐
- 2.10.1 If screening was not performed within 4 hours, what was the reason?



- 2.11 Did the patient receive an intra-arterial intervention for acute stroke? Yes ☐ No ☐
- 2.11.1 Was the patient enrolled into a clinical trial of intra-arterial intervention? Yes ☐ No ☐
- 2.11.2 What brain imaging technique(s) was carried out prior to the intra-arterial intervention?
- a. CTA or MRA Yes ☐ No ☐
  - b. Measurement of ASPECTS score Yes ☐ No ☐
  - c. Assessment of ischaemic penumbra by perfusion imaging Yes ☐ No ☐
- 2.11.3 How was anaesthesia managed during the intra-arterial intervention?
- Local anaesthetic only (anaesthetist NOT present) ☐
  - Local anaesthetic only (anaesthetist present) ☐
  - Local anaesthetic and conscious sedation (anaesthetist NOT present) ☐
  - Local anaesthetic and conscious sedation (anaesthetist present) ☐
  - General anaesthetic ☐
  - Other ☐
- 2.11.4 What was the specialty of the lead operator?
- Interventional neuroradiologist ☐
  - Cardiologist ☐
  - Interventional radiologist ☐
  - Other ☐
- 2.11.5 Were any of the following used?
- a. Thrombo-aspiration system Yes ☐ No ☐
  - b. Stent retriever Yes ☐ No ☐
  - c. Proximal balloon/flow arrest guide catheter Yes ☐ No ☐
  - d. Distal access catheter Yes ☐ No ☐
- 2.11.6 Date and time of:
- a. Arterial puncture:
 

dd	mm	yyyy	hh	mm
----	----	------	----	----
  - b. First deployment of device for thrombectomy or aspiration
 

dd	mm	yyyy	hh	mm
----	----	------	----	----

☐ Not performed
  - c. End of procedure (time of last angiographic run on treated vessel):
 

dd	mm	yyyy	hh	mm
----	----	------	----	----
- 2.11.7 Did any of the following complications occur?
- a. Symptomatic intra-cranial haemorrhage Yes ☐ No ☐
  - b. Extra-cranial haemorrhage Yes ☐ No ☐
  - c. Other procedural complication resulting in harm to the patient Yes ☐ No ☐
- 2.11.8 Angiographic appearance of culprit vessel and result assessed by operator (modified TIC1 score)
- a. Pre intervention 0 ☐ 1 ☐ 2a ☐ 2b ☐ 3 ☐
  - b. Post intervention 0 ☐ 1 ☐ 2a ☐ 2b ☐ 3 ☐
- 2.11.9 Where was the patient transferred after the completion of the procedure?
- Intensive care unit or high dependency unit ☐
  - Stroke unit ☐
  - Other ☐

**Assessments – First 72 hours** *(if patient is transferred after 72 hours, this section must be complete and locked)*

- 3.1. Has it been decided in the first 72 hours that the patient is for palliative care? Yes ☐ No ☐  
If yes:
- 3.1.1. Date of palliative care decision
- 3.1.2. If yes, does the patient have a plan for their end of life care? Yes ☐ No ☐
- 3.2. Date/time first assessed by nurse trained in stroke management       
or No assessment in first 72 hours ☐
- 3.3. Date/time first assessed by stroke specialist consultant physician       
or No assessment in first 72 hours ☐
- 3.4. Date/time of first swallow screen      (If date/time already entered for screening within 4 hours (2.10), 3.4 does not need to be answered)  
or Patient not screened in first 72 hours ☐
- 3.4.1. If screening was not performed within 72 hours, what was the reason?
- 3.5. Date/time first assessed by an Occupational Therapist       
or No assessment in first 72 hours ☐
- 3.5.1. If assessment was not performed within 72 hours, what was the reason?
- 3.6. Date/time first assessed by a Physiotherapist       
or No assessment in first 72 hours ☐
- 3.6.1. If assessment was not performed within 72 hours, what was the reason?
- 3.7. Date/time communication first assessed by Speech and Language Therapist       
or No assessment in first 72 hours ☐
- 3.7.1. If assessment was not performed within 72 hours, what was the reason?
- 3.8. Date/time of formal swallow assessment by a Speech and Language Therapist or another professional trained in dysphagia assessment       
or No assessment in first 72 hours ☐
- 3.8.1. If assessment was not performed within 72 hours, what was the reason?

**This admission** (this section must be completed by every team/ hospital/ care setting)

4.1. Date/ time patient arrived at this hospital/team

4.2. Which was the first ward the patient was admitted to at this hospital?  
MAU/ AAU/ CDU ☐ Stroke Unit ☐ ITU/CCU/HDU ☐ Other ☐

4.3. Date/time patient arrived on stroke unit at this hospital       
or Did not stay on stroke unit ☐

	1. Physiotherapy	2. Occupational Therapy	3. Speech and language therapy	4. Psychology
4.4. Was the patient considered to require this therapy at any point in this admission?	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>
4.4.1 If yes, at what date was the patient no longer considered to require this therapy?				
4.5. On how many days did the patient receive this therapy across their total stay in this hospital/team?				
4.6. How many minutes of this therapy in total did the patient receive during their stay in this hospital/team?				

4.7. Date rehabilitation goals agreed:    or No goals ☐

4.7.1. If no goals agreed, what was the reason?	
Not known <input type="radio"/>	Patient medically unwell for entire admission <input type="radio"/>
Patient refused <input type="radio"/>	Patient has no impairments <input type="radio"/>
Organisational reasons <input type="radio"/>	Patient considered to have no rehabilitation potential <input type="radio"/>

**Patient Condition in first 7 days** (if patient is transferred after 7 days, this section must be complete)

5.1. What was the patient's worst level of consciousness in the first 7 days following initial admission for stroke? (Based on patient's NIHSS Level of Consciousness (LOC) score): 0 ☐ 1 ☐ 2 ☐ 3 ☐

5.2. Did the patient develop a urinary tract infection in the first 7 days following initial admission for stroke as defined by having a positive culture or clinically treated? Yes ☐ No ☐ Not known ☐

5.3. Did the patient receive antibiotics for a newly acquired pneumonia in the first 7 days following initial admission for stroke? Yes ☐ No ☐ Not known ☐

**Assessments – By discharge** (some questions are repeated from the “Assessments – First 72 hours” section but should only be answered if assessments not carried out in the first 72 hours)

- 6.1. Date/time first assessed by an Occupational Therapist       
or No assessment by discharge ☐
- 6.1.1 If no assessment, what was the reason?
- 6.2. Date/time first assessed by a Physiotherapist       
or No assessment by discharge ☐
- 6.2.1 If no assessment, what was the reason?
- 6.3. Date/time communication first assessed by Speech and Language Therapist       
or No assessment by discharge ☐
- 6.3.1 If no assessment, what was the reason?
- 6.4. Date/time of formal swallow assessment by a Speech and Language Therapist or another professional trained in dysphagia assessment       
or No assessment by discharge ☐
- 6.4.1 If no assessment, what was the reason?
- 6.5. Date urinary continence plan drawn up    or No plan ☐
- 6.5.1 If no plan, what was the reason?
- 6.6. Was the patient identified as being at high risk of malnutrition following nutritional screening? Yes ☐ No ☐ Not screened ☐
- 6.6.1 If yes, date patient saw a dietitian    or Not seen by a dietitian ☐
- 6.7. Date patient screened for mood using a validated tool    or Not screened ☐
- 6.7.1 If not screened, what was the reason?
- 6.8. Date patient screened for cognition using a simple standardised measure?     
or Not screened ☐
- 6.8.1 If not screened, what was the reason?
- 6.9. Has it been decided by discharge that the patient is for palliative care? Yes ☐ No ☐  
If yes:
- 6.9.1 Date of palliative care decision
- 6.9.2 If yes, does the patient have a plan for their end of life care? Yes ☐ No ☐
- 6.10. First date rehabilitation goals agreed:    or No goals ☐
- This question is auto-completed. It will be based on the first date that is entered for 4.7. If no hospitals / care settings in the pathway enter a date (i.e. all select ‘no goals’), then ‘no goals’ will be selected here
- 6.11. Was intermittent pneumatic compression applied? Yes ☐ No ☐ Not Known ☐
- 6.11.1 If yes, what date was intermittent pneumatic compression first applied?
- 6.11.2 If yes, what date was intermittent pneumatic compression finally removed?

## Discharge / Transfer

- 7.1. The patient:  
Died ☐  
Was discharged to a care home ☐  
Was discharged home ☐  
Was discharged to somewhere else ☐  
Was transferred to another inpatient care team ☐  
Was transferred to an ESD / community team ☐  
Was transferred to another inpatient care team, not participating in SSNAP ☐  
Was transferred to an ESD/community team, not participating in SSNAP ☐
- 7.1.1 If patient died, what was the date of death?
- 7.1.2 Did the patient die in a stroke unit? Yes ☐ No ☐
- 7.1.3 What hospital/team was the patient transferred to?
- 7.2. Date/time of discharge from stroke unit
- 7.3. Date/time of discharge/transfer from team
- 7.3.1 Date patient considered by the multidisciplinary team to no longer require inpatient care?
- 7.4. Modified Rankin Scale score at discharge/transfer  (defaults to 6 if 7.1 is died in hospital)
- 7.5. If discharged to a care home, was the patient: Previously a resident ☐ Not previously a resident ☐
- 7.5.1 If not previously a resident, is the new arrangement: Temporary ☐ Permanent ☐
- 7.6. If discharged home, is the patient: Living alone ☐ Not living alone ☐ Not known ☐
- 7.7. Was the patient discharged with an Early Supported Discharge multidisciplinary team?  
Yes, stroke/neurology specific ☐ Yes, non-specialist ☐ No ☐
- 7.8. Was the patient discharged with a multidisciplinary community rehabilitation team?  
Yes, stroke/neurology specific ☐ Yes, non-specialist ☐ No ☐
- 7.9. Did the patient require help with activities of daily living (ADL)? Yes ☐ No ☐  
If yes:
- 7.9.1 What support did they receive?  
Paid carers ☐ Paid care services unavailable ☐  
Informal carers ☐ Patient refused ☐  
Paid and informal carers ☐
- 7.9.2 At point of discharge, how many visits per week were social services going to provide?  
or Not known ☐
- 7.10. Is there documented evidence that the patient is in atrial fibrillation on discharge? Yes ☐ No ☐
- 7.10.1 If yes, was the patient taking anticoagulation (not anti-platelet agent) on discharge or discharged with a plan to start anticoagulation within the next month? Yes ☐ No ☐ No but ☐
- 7.11. Is there documented evidence of joint care planning between health and social care for post discharge management? Yes ☐ No ☐ Not applicable ☐
- 7.12. Is there documentation of a named person for the patient and/or carer to contact after discharge? Yes ☐ No ☐

### Six month (post admission) follow-up assessment

- 8.1. Did this patient have a follow-up assessment at 6 months post admission (plus or minus two months)?  
Yes ☐ No ☐ No but ☐ No, patient died within 6 months of admission ☐  
N.B. 'No but' should only be answered for DNAs, patients who are not registered with a GP, or patients who have had another stroke and a new SSNAP record started

8.1.1 What was the date of follow-up?

8.1.2 How was the follow-up carried out: In person ☐ By telephone ☐ Online ☐ By post ☐

8.1.3 Which of the following professionals carried out the follow-up assessment:

GP	<input type="radio"/>	District/community nurse	<input type="radio"/>
Stroke coordinator	<input type="radio"/>	Voluntary Services employee	<input type="radio"/>
Therapist	<input type="radio"/>	Secondary care clinician	<input type="radio"/>
Other	<input type="radio"/>		

8.1.4 If other, please specify

8.1.5 Did the patient give consent for their identifiable information to be included in SSNAP?\*

Yes, patient gave consent ☐ No, patient refused consent ☐ Patient was not asked ☐

8.2 Was the patient screened for mood, behaviour or cognition since discharge using a validated tool?

Yes ☐ No ☐ No but ☐

8.2.1 If yes, was the patient identified as needing support? Yes ☐ No ☐

8.2.2 If yes, has this patient received psychological support for mood, behaviour or cognition since discharge?

Yes ☐ No ☐ No but ☐

8.3. Where is this patient living? Home ☐ Care home ☐ Other ☐

8.3.1 If other, please specify

8.4. What is the patient's modified Rankin Scale score?  Not known ☐

8.5. Is the patient in persistent, permanent or paroxysmal atrial fibrillation? Yes ☐ No ☐ Not known ☐

8.6. Is the patient taking:

8.6.1 Antiplatelet: Yes ☐ No ☐ Not known ☐

8.6.2 Anticoagulant: Yes ☐ No ☐ Not known ☐

8.6.3 Lipid Lowering: Yes ☐ No ☐ Not known ☐

8.6.4 Antihypertensive: Yes ☐ No ☐ Not known ☐

8.7. Since their initial stroke, has the patient had any of the following:

8.7.1 Stroke Yes ☐ No ☐ Not known ☐

8.7.2 Myocardial infarction Yes ☐ No ☐ Not known ☐

8.7.3 Other illness requiring hospitalisation Yes ☐ No ☐ Not known ☐

\*8.1.5. This question is mandatory to be collected at the 6 month review and is a requirement for collecting patient identifiable information as part of our section 251 (NHS Act 2006) approval from the Ethics and Confidentiality Committee of the National Information Governance Board.

### Appendix 3: Changes over time tables

	Three month reporting	Four month reporting		
Domain 1: Brain Scanning – Key indicators	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016 – Mar 2017
Percentage of patients scanned within 1 hour of clock start*	48.4%	50.8%	50.7%	52.5%
Percentage of patients scanned within 12 hours of clock start	92.6%	93.2%	93.5%	94.0%
Median time between clock start and scan	1h 04m	59m	59m	55m

	Three month reporting	Four month reporting		
Key indicators: Stroke unit	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016 – Mar 2017
Percentage of patients directly admitted to a stroke unit within 4 hours of clock start (CCG OIS)	54.0%	59.3%	58.5%	54.8%
Median time between clock start and arrival on stroke unit	3h 51m	3h 35m	3h 38m	3h 47m
Percentage of patients who spent at least 90% of their stay on stroke unit	82.4%	84.0%	84.8%	83.8%

	Three month reporting	Four month reporting		
Key indicators: Thrombolysis	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016 – Mar 2017
Percentage of all stroke patients given thrombolysis (all stroke types) (CCG OIS C3.6)	11.4%	11.9%	11.5%	11.6%
Percentage of eligible patients given thrombolysis (according to the Royal College of Physicians (RCP) guideline minimum threshold)	85.7%	87.7%	88.1%	85.5%
Percentage of patients who were thrombolysed within 1 hour of clock start, if thrombolysed	58.6%	61.4%	63.0%	62.3%
Percentage of applicable patients directly admitted to a stroke unit within 4 hours of clock start AND who either receive thrombolysis or have a pre-specified justifiable reason ('no but') for why it could not be given	53.7%	58.9%	58.1%	54.3%
Median time between clock start and thrombolysis (minutes)	54m	52m	51m	52m

	Three month reporting	Four month reporting		
Key Indicators: Specialist Assessments	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016 – Mar 2017
Percentage of patients who were assessed by a stroke specialist consultant physician within 24h of clock start	79.1%	80.5%	81.9%	81.1%
Median time between clock start and being assessed by stroke consultant	12h 03m	11h 29m	11h 09m	11h 03m
Percentage of patients who were assessed by a nurse trained in stroke management within 24h of clock start	89.0%	89.8%	90.1%	89.4%
Median time between clock start and being assessed by stroke	1h 30m	1h 15m	1h 16m	1h 12m



nurse				
Percentage of applicable patients who were given a swallow screen within 4h of clock start	71.2%	74.4%	74.0%	73.5%
Percentage of applicable patients who were given a formal swallow assessment within 72h of clock start	84.5%	87.5%	87.2%	86.9%

	Three month reporting	Four month reporting		
Key Indicators: Occupational Therapy	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017
Percentage of patients reported as requiring occupational therapy	83.6%	83.5%	83.6%	84.4%
Median number of minutes per day on which occupational therapy is received	40.0 mins	40.0 mins	40.7 mins	40 mins
Median % of days as an inpatient on which occupational therapy is received	61.7%	62.3%	64.9%	64.1%
Proxy for 2016 NICE Quality Standard Statement 2: % of the minutes of occupational therapy required (according to 2016 NICE QS-S2) which were delivered	80.2%	80.9%	85.9%	84.2%

	Three month reporting	Four month reporting		
Key Indicators: Physiotherapy	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017
Percentage of patients reported as requiring physiotherapy	85.0%	85.3%	85.1%	86.3%
Median number of minutes per day on which physiotherapy is received	33.8 mins	34.5 mins	35 mins	35 mins
Median % of days as an inpatient on which physiotherapy is received	69.7%	70.7%	73.7%	71.2%
Proxy for 2016 NICE Quality Standard Statement 2: % of the minutes of physiotherapy required (according to 2016 NICE QS-S2) which were delivered	73.2%	76.3%	80.3%	78.7%

	Three month reporting	Four month reporting		
Key Indicators: Speech and Language Therapy	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017
Percentage of patients reported as requiring speech and language therapy	48.8%	50.0%	50.7%	51.4%
Median number of minutes per day on which speech and language therapy is received	31.5 mins	32.0 mins	31.5 mins	31.7 mins
Median % of days as an inpatient on which speech and language therapy is received	45.0%	45.3%	48.1%	47.9%
Proxy for 2016 NICE Quality Standard Statement 2: % of the minutes of speech and language therapy required (according to 2016 NICE QS-S2) which were delivered	43.0%	45.1%	47.8%	48.6%

	Three month reporting	Four month reporting		
Key indicators: Multidisciplinary team working	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017
Percentage of applicable patients who were assessed by an occupational therapist within 72h of clock start	90.7%	91.2%	91.7%	91.2%
Median time between clock start and being assessed by occupational therapist	22h 00m	21h 58m	21h 44m	21h 48m
Percentage of applicable patients who were assessed by a physiotherapist within 72h of clock start	94.2%	94.5%	95.1%	94.3%
Median time between clock start and being assessed by physiotherapist	21h 25m	21h 07m	20 52m	21h 15m
Percentage of applicable patients who were assessed by a speech and language therapist within 72h of clock start	86.4%	88.3%	89.0%	87.8%
Median time between clock start and being assessed by speech and language therapist	23h 39m	23h 12m	23h 00m	23 25m
Percentage of applicable patients who have rehabilitation goals agreed within 5 days of clock start	90.2%	90.0%	91.9%	92/3%
Percentage of applicable patients who are assessed by a nurse within 24h AND at least one therapist within 24h AND all relevant therapists within 72h AND have rehab goals agreed within 5 days	57.8%	58.7%	61.8%	60.4%

	Three month reporting	Four month reporting		
Key Indicators: Standards by Discharge	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016 – Mar 2017
Percentage of applicable patients screened for nutrition and seen by a dietitian by discharge*	78.5%	82.1%	83.3%	82.7%
Percentage of applicable patients who have a continence plan drawn up within 3 weeks of clock start	89.7%	90.7%	92.0%	91.6%
Percentage of applicable patients who have mood and cognition screening by discharge	89.2%	90.7%	91.9%	91.6%

	Three month reporting	Four month reporting		
Key Indicators: Discharge Processes	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016 – Mar 2017
Percentage of applicable patients receiving a joint health and social care plan on discharge	89.9%	90.5%	90.6%	90.1%
Percentage of patients treated by a stroke skilled Early Supported Discharge team*	34.3%	33.7%	34.5%	35.7%
Percentage of applicable patients in atrial fibrillation on discharge who are discharged on anticoagulants or with a plan to start anticoagulation	97.0%	97.4%	97.5%	98.0%
Percentage of those patients who are discharged alive who are given a named person to contact after discharge	92.4%	93.3%	96.6%	96.9%

	Three month reporting	Four month reporting			
Number of stroke patients (Q1.9) included in report	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Number of stroke patients	20,991	28,003	27,327	28,575	F1.1
Patients already in hospital at time of stroke (Q1.10)	5.6%	5.6%	5.6%	5.7%	F11.3

	Three month reporting	Four month reporting			
Gender (Q1.6)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Male patients	50.6%	51.6%	51.0%	50.9%	F3.5
Female patients	49.4%	48.4%	49.0%	49.1%	F3.3

	Three month reporting	Four month reporting			
Median age on clock start (Q1.5)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Age (years)	77	77	77	77	F4.1
Male Patients	74	73	73	67	F4.10
Female Patients	80	80	80	85	F4.7

	Three month reporting	Four month reporting			
% of patients aged >80 years on clock start (Q1.5)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Patients aged over 80 years	39.7%	38.5%	38.6%	39.6%	F4.6
Males aged over 80 years	30.3%	29.3%	28.6%	29.5%	F4.18
Females aged over 80 years	49.3%	48.4%	49.1%	50.0%	F4.15

	Three month reporting	Four month reporting			
Number of co-morbidities (Q2.1)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
0	26.6%	26.5%	26.6%	26.2%	F5.3
1	35.5%	35.6%	35.7%	36.1%	F5.5
2	26.2%	26.2%	26.0%	26.0%	F5.7
3	9.7%	9.6%	9.8%	9.8%	F5.9
4	1.8%	1.8%	1.7%	1.8%	F5.11
5	0.2%	0.2%	0.2%	0.2%	F5.13

	Three month reporting	Four month reporting			
Type of co-morbidity (Q2.1)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Congestive Heart Failure	5.4%	5.5%	5.5%	5.1%	F5.16
Hypertension	53.7%	53.1%	53.1	53.6%	F5.19
Diabetes	20.4%	20.8%	20.8	20.9%	F5.22
Stroke/TIA	26.0%	26.5%	26.3%	25.7%	F5.25
Atrial Fibrillation	19.5%	19.3%	19.4%	20.1%	F6.3

	Three month reporting	Four month reporting			
Stroke Type (Q2.5)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Infarction	86.8%	87.4%	87.1%	87.3%	F7.3
Intracerebral Haemorrhage	12.8%	12.1%	12.5%	12.3%	F7.5
Unknown (not scanned)	0.4%	0.5%	0.4%	0.5%	F7.7

	Three month reporting		Four month reporting		
Patient arrived by ambulance (Q1.12)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Yes	82.2%	81.8%	81.6%	82.1%	H4.3

	Three month reporting	Four month reporting			
Arrival during (Q1.13)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Patient arrived in 'Normal hours' (Monday to Friday 8am – 6pm, excluding bank holidays)	45.2%	45.1%	47.3%	45.2%	H5.3
Patient arrived 'Out of hours'	49.3%	49.3%	47.1%	49.1%	H5.5
The onset of stroke was when the patient was already in hospital	5.6%	5.6%	5.6%	5.7%	H5.7

	Three month reporting	Four month reporting			
Brain Imaging (Q2.4)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Scanned	99.6%	99.5%	99.6%	99.5%	H6.3

	Three month reporting	Four month reporting			
Brain scan timings	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
	Median (IQR)	Median (IQR)	Median (IQR)	Median (IQR)	
Time from clock start to scan	1h 04m (26m – 2h 50)	0h 59m (24m – 2h 34)	0h 59m (23m – 2h 33m)	0h 55m (23m – 2h 26m)	H6.4, H6.5, H6.6
Time from onset to scan*	4h 01m (2h 00m – 12h 05m)	3h 56m (1h 57m – 11h 57m)	4h 02m (2h 00m – 11h 56m)	3h 55m (1h 57m – 11h 23m)	H3.7, H3.8, H3.9

	Three month reporting	Four month reporting			
Went to stroke unit (at first admitting team) (Q1.15)	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
Yes	96.0%	96.1%	95.9%	95.6%	H7.3

	Three month reporting	Four month reporting			
Stroke unit timings	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016-Mar 2017	Ref
	Median (IQR)	Median (IQR)	Median (IQR)	Median (IQR)	
Time from clock start to first arrival on a stroke unit	3h 51m (2h 14m – 8h 00m)	3h 35m (2h 03m – 6h 43m)	3h 38m (2h 07m – 6h 48m)	3h 47m (2h 11m – 7h 57m)	H7.4, H7.5, H7.6

Time from symptom onset to arrival at stroke unit	7h 53m (4h 23m - 20h 33m)	7h 20m (4h 09m - 20h 13m)	7h 33m (4h 18m – 20h 04m)	7h 56m (4h 20m – 21h 01m)	H3.4, H3.5, H3.6
---	------------------------------	------------------------------	------------------------------	------------------------------	------------------------

	Three month reporting		Four month reporting		
'No but' reasons for not thrombolysing	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016 – Mar 2017	Ref
Patient arrived outside the time window for thrombolysis	32.9%	33.2%	32.5%	31.6%	H16.25
Wake up time unknown	37.5%	37.1%	36.8%	37.6%	H16.39
Stroke too mild/severe	13.9%	13.8%	13.8%	13.7%	H16.37
Haemorrhagic stroke	15.2%	14.3%	14.7%	14.6%	H16.23

	Three month reporting		Four month reporting		
Thrombolysis timings	Jan-Mar 2016	Apr-Jul 2016	Aug-Nov 2016	Dec 2016 – Mar 2017	Ref
	Median (IQR)	Median (IQR)	Median (IQR)	Median (IQR)	
Time from clock start to thrombolysis	54m (37m – 1h 19m)	52m (36m – 1h 16m)	51m (36m-1h 15m)	52m (36m-1h 15m)	H16.42, H16.43, H16.44
Time from onset to thrombolysis	2h 25m (1h 53m – 3h 07m)	2h 23m (1h 48m – 3h 06m)	2h 25m (1h 50m – 3h 09m)	2h 25m (1h 51m – 3h 09m)	H3.10, H3.11, H3.12
If thrombolysed, time from onset to clock start	1h 21m	1h 21m	1h 23m	1h 23m	H16.45
If thrombolysed, time from clock start to scan	21m	20m	20m	19m	H16.46
If thrombolysed, time from scan to thrombolysis	30m	30m	29m	30m	H16.47