

Society for Acute Medicine Benchmarking Audit

SAMBA 2023 Report

A National Audit of Acute Medical Care in the UK



Contact SAM

Address

The Society for Acute Medicine Secretariat, Hazeltonhead Farm, Mearnskirck, Glasgow, G77 6RS

Website:

www.acutemedicine.org.uk

Email:

administrator@acutemedicine.org.uk

samba@acutemedicine.org.uk

Telephone

+44 (0) 141 639 8123

Media

communications@acutemedicine.org.uk

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Welcome to SAMBA23

The Society for Acute Medicine Benchmarking Audit (SAMBA) 2023 provides a snapshot of the care provided for acutely unwell medical patients in the UK over a 24-hour period on Thursday 22nd June 2023.

Maintaining and improving the quality of care provided to our patients within acute medicine services is vital, but presents an ongoing challenge given the continual pressures felt across the urgent and emergency care system.

This report is written for the benefit of all those involved in acute medical care, including healthcare professionals, healthcare commissioners, all UK governments and, most importantly, patients and the public.

The report has been sponsored by the Society for Acute Medicine (SAM). Everyone involved in conducting the audit provided their time voluntarily. Collecting data and running SAMBA at participating hospitals is a huge undertaking and therefore both the Society and the SAMBA team extend a massive thank you to all of those involved at each site.

Our hope is that the insights gained through SAMBA can be used to improve the care we provide for acute medical patients.

Executive Summary

SAMBA23 took place on Thursday 22nd June 2023, with follow-up data collected 7 days later. Acute medical teams from 161 hospitals within the UK collected data on operational performance, clinical quality indicators and standards for acute care set by SAM,⁽¹⁾ NICE,⁽²⁾ and the RCP and RCPE.^(3, 4)

Data was collected from 9612 patients.

Key findings

Performance against clinical quality indicators

- 73.3% of unplanned admissions had an early warning score recorded within 30 minutes of arrival to hospital
 - This target was met by 68.8% in SAMBA22, 78.6% in SAMBA21, 74.9% in WinterSAMBA20, and 81.2% in SAMBA19.
- 81.7% of unplanned admissions were seen by a tier 1 clinician within 4 hours of arrival to hospital
 - This target was met by 78.7% in SAMBA22, 87.4% in SAMBA21, 84.4% in WinterSAMBA20, and 91.0% in SAMBA19.
- 52.9% of unplanned admissions who required a medical consultant review were seen within the target time
 - This target was met by 49.8% in SAMBA22, 67.8% in SAMBA21, 61.9% in WinterSAMBA20, and 69.6% in SAMBA19.
 - This target was least likely to be achieved in unplanned admissions initially assessed in the Emergency Department who arrived between 08:00-20:00 (28.7% seen within 6 hours).

Outcomes at 7 days

- 32.9% of patients (unplanned admissions) were discharged the same day (28.9% in SAMBA22, and 31.5% in SAMBA21)
- 38.1% of patients had an inpatient hospital admission that lasted for 1-7 days (41.1% in SAMBA22, and 22.2% in SAMBA21)

Overall message

Performance against all key clinical quality indicators was higher than SAMBA22 but remained lower than that seen previously. Acute care services face ongoing pressures, and careful consideration of how clinical quality and efficient patient pathways can be maintained is needed. Emergency medicine remains the most common route of referral, with many units seeing a high proportion of their patients within the Emergency Department. However, the proportion of unplanned attendances who have their first clinical assessment in Same Day Emergency Care services has increased, reflecting increased use of these pathways, which achieve a higher performance against acute medicine clinical quality indicators.

Setting the scene

Acute medicine services across the UK continue to face substantial pressures; the increasing delays in all parts of the urgent and acute care pathway continue to be widely reported.^(5, 6) SAMBA22 demonstrated, for the first time, a decrease in performance against the key Clinical Quality Indicators for acute medicine compared to previous years, reflecting the increased pressure on our services.⁽⁷⁾

In many hospitals, the structure and delivery of the services provided by acute medicine has changed substantially over the last few years, from the changes required to deal with COVID-19 (ongoing since early 2020)^(8, 9), as well as 'winter pressures'⁽¹⁰⁾, expansion of Same Day Emergency Care (SDEC) services, and increased adoption of more specialised services such as frailty units, respiratory support units, enhanced care beds, virtual wards and hospital at home.⁽¹¹⁻¹³⁾

SAMBA23 aims to assess the same key clinical quality indicators as previously, to help us understand how performance in 2023 compares to previous years, and how patients move through our acute medicine services.

Acute medicine

Acute (internal) medicine provides immediate, specialist management of unwell adult patients, usually over the age of 16, presenting to hospital with medical conditions.⁽³⁾ Patients may be referred from multiple sources, including emergency medicine, primary and community care, paramedics (e.g. within ambulance services), and outpatient secondary care services.

Acute medicine services aim to provide rapid, high quality assessment and treatment for a wide range of patients, from those who can be managed through SDEC,⁽¹⁴⁾ to those who are physiologically unstable and require escalation to higher level care, e.g. admission to an Intensive Care Unit. Acute medical care must be timely, organised, well-led and delivered by the right staff – aiming to ensure the patient is in the right place at the right time.

The Society for Acute Medicine was founded in 2000, and over the last 23 years has expanded and developed a network of consultants, trainees and multidisciplinary members, delivering education, quality improvement, collaborative research, twice yearly conferences, and the SAMBA audit, as well as engaging with other organisations and advocating for improvements in care for our patients.

SAMBA

The Society for Acute Medicine Benchmarking Audit (SAMBA) aims to provide a comprehensive snapshot of acute medical care. The audit has taken place annually, over a pre-selected 24-hour period in June, since 2012. In the UK, SAMBA is recognised by the Healthcare Quality Improvement Partnership (HQIP).

SAMBA aims to:

- 1) compare the care delivered through acute medical units (AMUs) and same day emergency care (SDEC) services provided by acute medical teams against the Clinical Quality Indicators (CQIs) set for AMUs by the Society for Acute Medicine in 2011
- 2) enable individual AMUs to compare their performance to that of their peers.

The definitions of compliance with the CQIs used in SAMBA23 are unchanged from those used since SAMBA19 onwards, to facilitate comparison between the results.⁽¹⁵⁻¹⁷⁾

Clinical quality indicators:

Clinical Quality Indicator 1: All patients admitted to an AMU should have an early warning score (EWS) measured upon arrival.

Compliance is defined as a full set of physiological observations recorded within 30 minutes of arrival to the hospital.

Clinical Quality Indicator 2: All patients should be seen by a competent clinical decision maker within 4 hours* of arrival on AMU, who will perform a full assessment and instigate an appropriate management plan.

**In most cases, it is expected that clinical assessment and initiation of appropriate management should be undertaken in much less time, with patient assessment prioritised in accordance with clinical need.*

This time interval is measured from the time of arrival at hospital to time of first review by a competent clinical decision maker, whether in ED, SDEC, or AMU. This is the person performing the first assessment (clerking) and does not include brief assessment during a triage process. A competent clinical decision maker may be an ACP (Advanced Clinical Practitioner), PA (Physician Associate) or any grade of doctor.

Clinical Quality Indicator 3: All patients should be reviewed by the admitting consultant physician or an appropriate specialty consultant physician within 6 hours of admission to hospital (if admitted

within daytime working hours) or within 14 hours of admission to hospital (if admitted outside daytime working hours).

This time interval is measured from the time of arrival at hospital to the time of the first consultant physician contact, whether in ED, SDEC, or AMU. Daytime working hours are 08:00-20:00.

Definitions

Definitions of compliance are unchanged from previous rounds of SAMBA from SAMBA19 onwards. The background to these definitions is discussed within the SAMBA19 Report.⁽¹⁵⁾

In keeping with definitions used in the last 3 years, time intervals are measured from arrival to hospital, for all ports of entry. This provides a more accurate reflection of a patient's hospital experience. Although most patients start their journey in the ED, some patients will be admitted directly to AMU or SDEC. Many medical patients never reach the AMU, being discharged from ED, admitted directly to other wards, or redirected to SDEC. For patients referred from the ED, the total waiting time from arrival at hospital reflects the function of both the ED and acute medicine teams and its interpretation is therefore different to the interpretation of waiting times for patients who are admitted directly to AMU or SDEC. To aid interpretation, we have also presented information about time to review and location of review by a medical clinician. Individual units are encouraged to think about their local context and processes when interpreting the results.

Hospital Participation

Participation in SAMBA is voluntary for acute medicine services, but is now recognised by HQIP. The full list of hospitals who took part in SAMBA23 is available in Appendix 1. Participating units have a bespoke report of their performance provided to registered participants at each unit. Any queries regarding local reports should be directed to samba@acutemedicine.org.uk.

Organisation & Methods

SAMBA is planned and conducted by the SAMBA Committee. The current questions included in SAMBA have been developed with input from the SAMBA Academy and the SAM QI committee.

SAMBA23 was promoted to SAM members via email, on X/Twitter and via the SAM website. New units were able to register through the SAM website, with all the documents needed to participate available on the website. The same database provider was used as in SAMBA22, however units were required to re-register to ensure they had received the updated documentation for SAMBA23.

Who and When?

Recruitment to SAMBA23 was open to all hospitals in the UK receiving acutely unwell medical patients. Non-acute and community hospitals were excluded. Acute medicine teams in participating hospitals were asked to register with their local audit office and Caldicott Guardian.

The audit included all new patient referrals to acute medicine on Thursday 22nd June 2023 between 00:00 to 23:59 hours and patients returning as a planned attendance to SDEC within these hours. The data for patients returning to SDEC is not used in all the analyses below and the reader is guided through the data included in each section.

Data Collection

For SAMBA23, online software was used for data entry. Study data were collected and managed using REDCap electronic data capture tools hosted at the University of Birmingham.^(18, 19) REDCap (Research Electronic Data Capture) is a secure, web-based software platform designed to support data capture for research studies, providing 1) an intuitive interface for validated data capture; 2) audit trails for tracking data manipulation and export procedures; 3) automated export procedures for seamless data downloads to common statistical packages; and 4) procedures for data integration and interoperability with external sources

No identifiable patient data is entered through the online portal. Individual sites create a Masterlist linking patient study codes to a local identifier. This is stored securely at each site, separate to any anonymised raw data.

SAMBA23 included both unit data and patient level data. Unit level data included information regarding size of AMU and hospital, and provision of SDEC services.

Acuity of illness was assessed using the National Early Warning Score 2 (NEWS2).⁽²⁰⁾

Within the results, units with missing data on an individual item are excluded from analysis and therefore the denominator may vary for each item.

Disseminating SAMBA data

Results are available to each participating unit to show their performance against the CQIs. The results available to each unit show their unit outcomes compared to anonymised results from other units, allowing them to benchmark their performance. National results are collated into a National SAMBA Report and have previously been published in peer reviewed journals^(7, 16, 17, 21) and presented at SAM conferences.

Results

Unit participation

166 units submitted patient data for SAMBA23, from 161 hospitals (Figure 1). Four hospital sites submitted data from an Acute Medical Unit and a separate frailty service. One participating hospital site has a SDEC service, but no Acute Medical Unit or inpatient services on site.

Of these participating units, 148 submitted unit data alongside patient data.

Patient data was submitted for 141 hospitals in England, 6 in Northern Ireland, 4 in Scotland, 9 in Wales and 1 in Jersey.

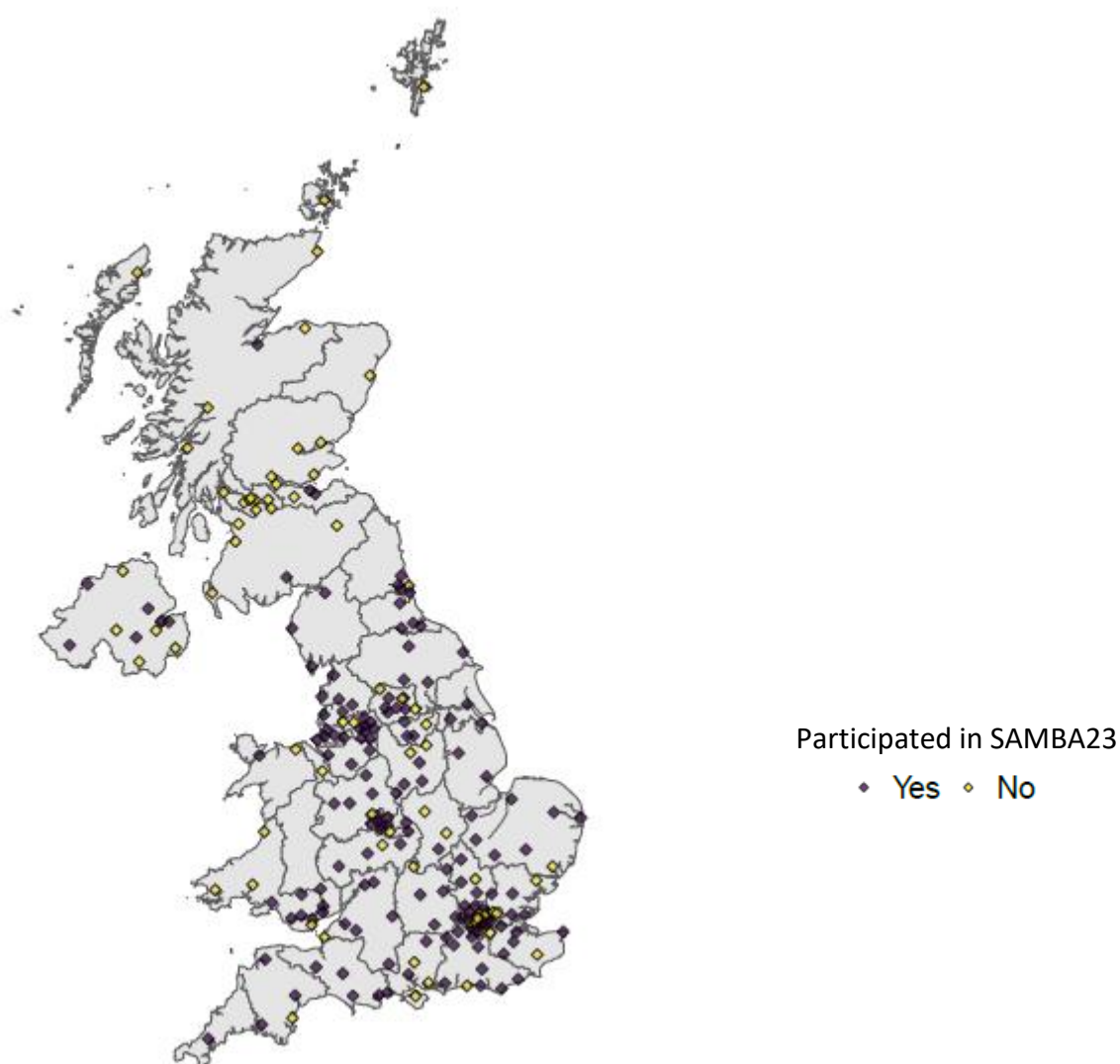


Figure 1: Participating units in SAMBA23. All hospital sites in UK with a Type 1 Emergency Department shown. London shown as inset map.

The services

Participating hospitals with inpatient services ranged in size from 72 to 1700 total inpatient beds. The median number of inpatient beds at participating hospitals was 511 (interquartile range (IQR) 372-718).

The median number of AMU beds per unit was 39 (IQR 28-51, range 10-84) (Figure 2). 55% of units reported that they did not have any additional waiting spaces (e.g. chairs, trolleys) on their AMU.

46% (65 units) reported that their AMU had a time limit for length of stay, the remainder did not.

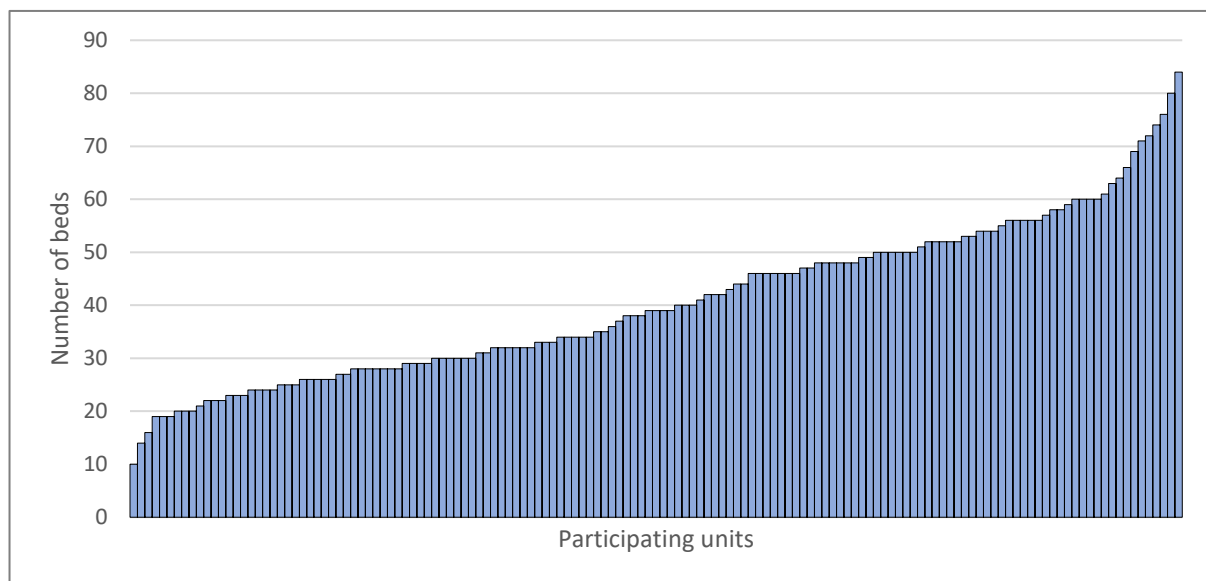


Figure 2: Number of AMU beds as each participating unit

5 participating hospitals (3.5%) did not have an on-site Emergency Department.

35 (24%) units had an enhanced care area/unit within their acute medicine service. These units had a median of 8 enhanced care beds (IQR 5-9, range 3-30).

53 units (37%) reported that their acute medicine service included a separate short stay ward, with a median 22 beds (IQR 17-30, range 8-105). This ward had a time limit regarding length of stay in 50% (26 units).

Same day emergency care

98.6% of units provide medical Same Day Emergency Care.

A private area for confidential discussions is available in 92% of services. 85% of services contact non-attenders. Patient feedback surveys for SDEC patients are conducted in 82% of services.

Most units (98, 69%) start accepting patients between 08:00-08:59; 3.5% start between 06:00-07:59 and 20.4% start between 09:00-10:00. Finish times for accepting new patients were more variable (Table 1). Nine SDEC units (6%) were open 24 hours a day.

Table 1: Finish times for accepting new patients to SDEC services.

Finish time for accepting new referrals to SDEC	
Before 16:00	4.2%
16:00-16:59	8.5%
17:00-17:59	11.3%
18:00-18:59	34.5%
19:00-19:59	15.5%
20:00-20:59	12.7%
21:00-21:59	3.5%
22:00-22:59	1.4%
23:00-23:59	2.1%

Patient level data

The patients

9612 patients were included in SAMBA23.

The median number of patients seen per unit was 53 (IQR 40-76, range 9-159)(Figure 3).

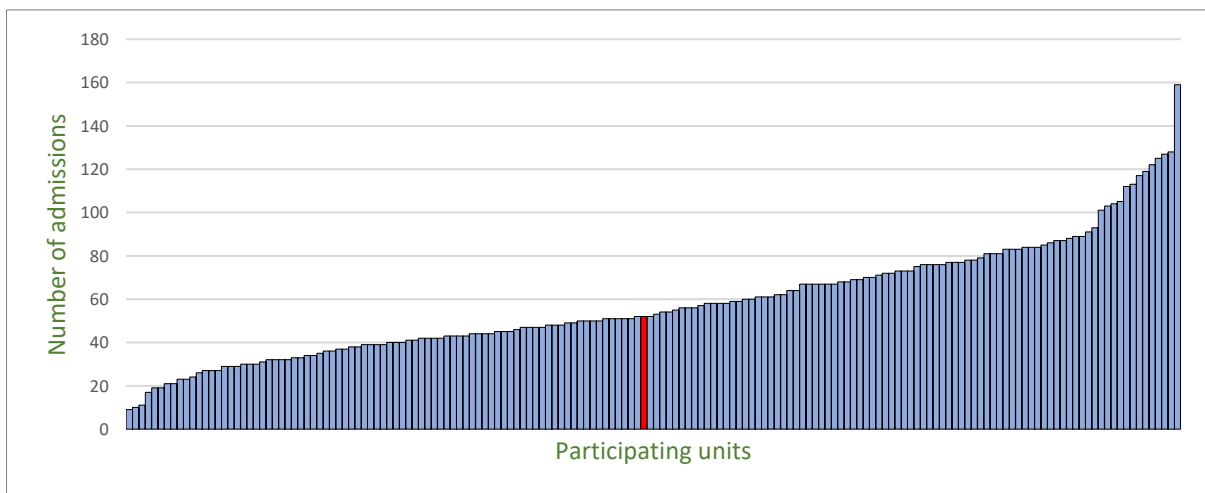


Figure 3: Number of admissions per unit participating in SAMBA23. Units ordered on x-axis by number of patients seen during the 24 hours of data collection. Planned and unplanned admissions included. Range: 9-159. Red marks median unit performance.

Demographics

- 53% of patients were female (Winter SAMBA 55%, SAMBA21 54%, SAMBA22 52%)
- 25% were aged 80 years and above (WinterSAMBA 29.6%, SAMBA21 26%, SAMBA22 27%; Figure 4)

Scheduled returns

- 14.6% of patients (1400 patients) were scheduled returns (WinterSAMBA 7.5%, SAMBA21 9.2%, SAMBA22 12.6%)
- The percentage of patients seen on the day of data collection who were scheduled returns varied between units (Figure 5)

Location before admission

- 5.1% were admitted from a care home (nursing or residential) (WinterSAMBA 6.4%, SAMBA21 5.4%, SAMBA22 5.0%)
- 0.7% of patients were homeless (WinterSAMBA, SAMBA21 & SAMBA22 0.4%)
- 1.2% were transferred from another hospital (WinterSAMBA, SAMBA21 & SAMBA22 1.1%)

Readmission

- 20% of unplanned admissions had been discharged from hospital in the last 30 days (WinterSAMBA & SAMBA21 18%, SAMBA22 20%)

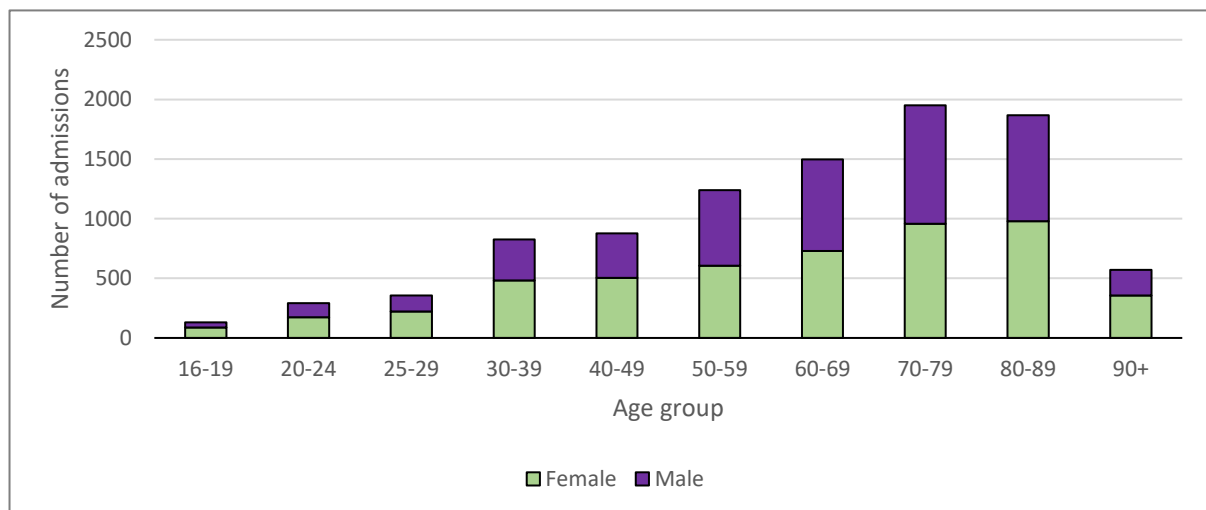


Figure 4: Age distribution of patients included in SAMBA23. Note: age categories vary in size between 16-29 years.

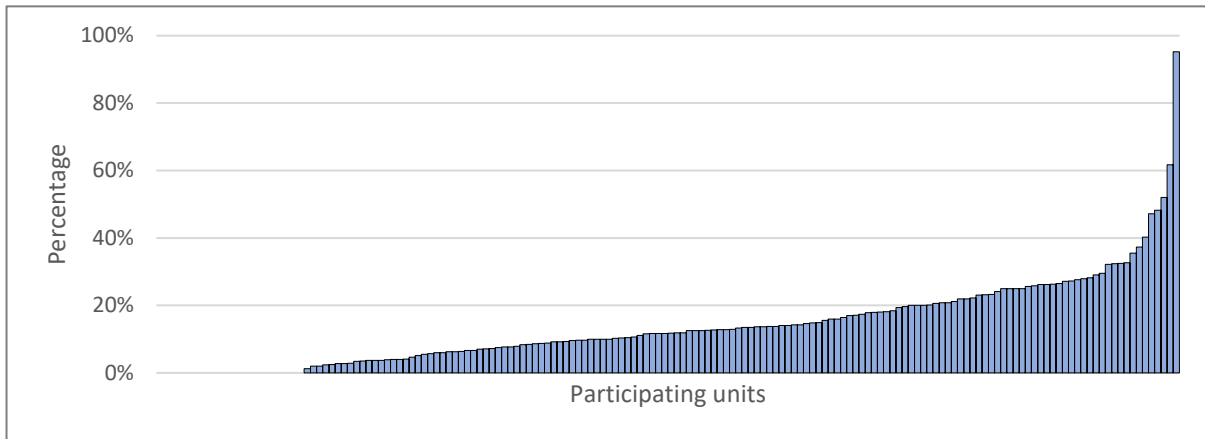


Figure 5: Percentage of admissions that were planned re-attendances. Participating units ordered by percentage that were planned reattendances. Thirty-six units reported no planned reattendances on the day of the audit.

Early warning scores

72% of unplanned admissions had a NEWS2 of 0-2 on arrival (Figure 6).

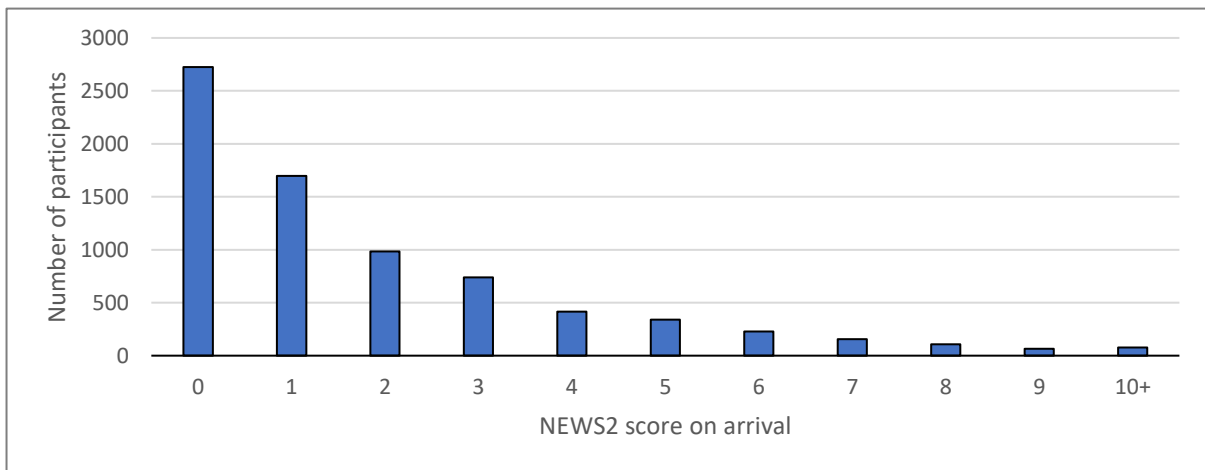


Figure 6: NEWS2 score on arrival to hospital. NEWS2: National Early Warning Score 2.

Patient pathway

Assessing unplanned admissions (8212 patients), the majority of referrals to acute medicine were patients who attended via the emergency department (61%).

Table 2: Who referred patients to acute medicine?

	Source of referral			
	Emergency department	Primary care	Paramedic	Own hospital
SAMBA23	61.0%	24.9%	5.5%	4.9%
SAMBA22	67.6%	23.4%	3.0%	3.1%
SAMBA21	70.0%	21.8%	3.0%	4.0%
Winter SAMBA	66.1%	25.9%	2.2%	4.5%
SAMBA19	60.1%	28.1%	1.8%	8.8%

Note: Percentages do not equal 100% due to referrals from other sources.

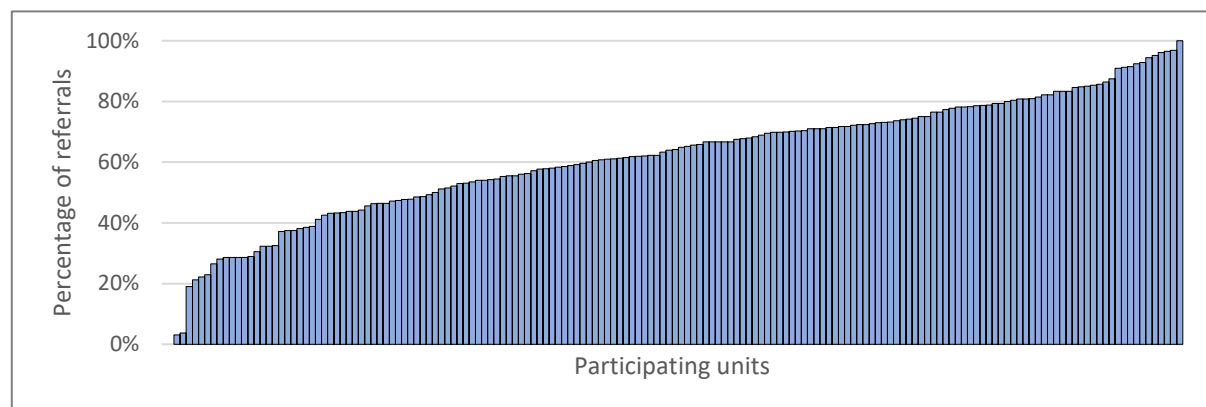


Figure 7: Percentage of patients (unplanned admissions) included in the audit who were referred from the Emergency Department. Units ordered along x-axis by percentage of patients referred from ED. Note: two units did not see any patients that had presented to an ED/were not in a site with an ED.

Time of day

Most patients (unplanned admissions) arrived during the daytime:

- 15% of patients arrived between midnight and 8am
- 75% arrived between 8am and 8pm
 - 24% between 8am and midday, 30% between midday and 4pm, 21% between 4pm and 8pm
- 10% arrived between 8pm and midnight.

Location of first clinician assessment

The first clinical assessment is performed by any competent clinical decision maker – this may be the medical team, but may be a member of the emergency medicine team or a specialty clinician.

59% of unplanned admissions (4809 patients) had their first clinical assessment performed by a member of the emergency medicine team.

The location of first clinician assessment is shown in Figure 8. 48% of patients had their first assessment by the medical team in the Emergency Department (WinterSAMBA & SAMBA21 41%, SAMBA22 52%).

Patients who had their initial assessment in the ED were more likely to have a NEWS2 of 3 or more than those who had their initial clinician assessment in AMU or SDEC (ED: 37%, AMU: 23%, SDEC: 8%, Chi square <0.001).

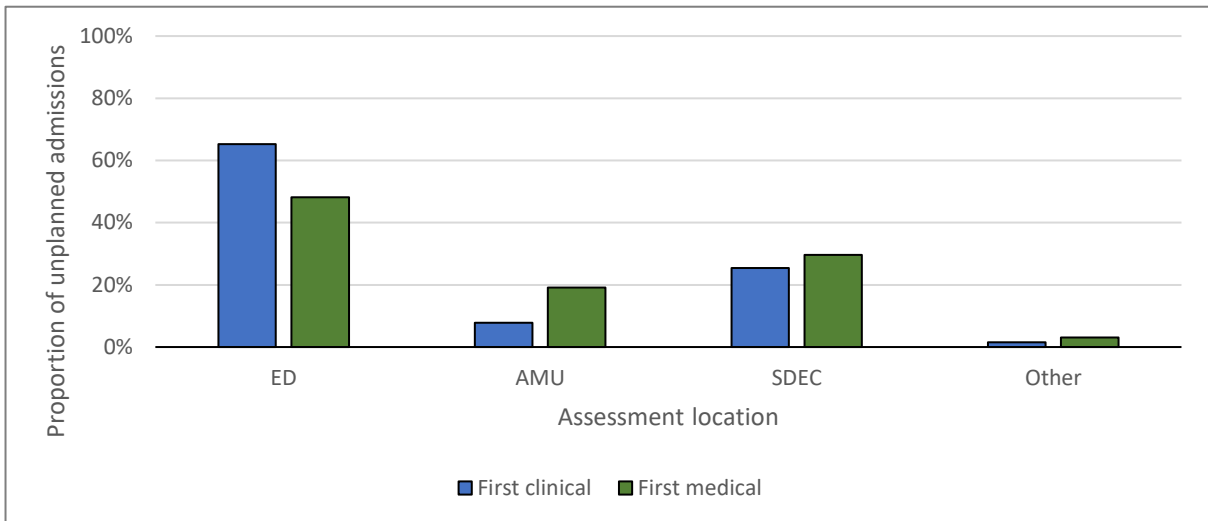


Figure 8: Assessment location for unplanned admissions. Location of first clinical assessment and first assessment by the medical team. Patients who were scheduled to return excluded. ED: Emergency Department; AMU: Acute Medical Unit; SDEC: Same Day Emergency Care.

Location of first medical team assessment

The location of the first assessment by a member of the medical team is also shown in Figure 8.

Patient journey

Patient journey for unplanned admissions is summarised in Figure 9. This is a simplified diagram – pathways taken by patients through their hospital admission are complex.

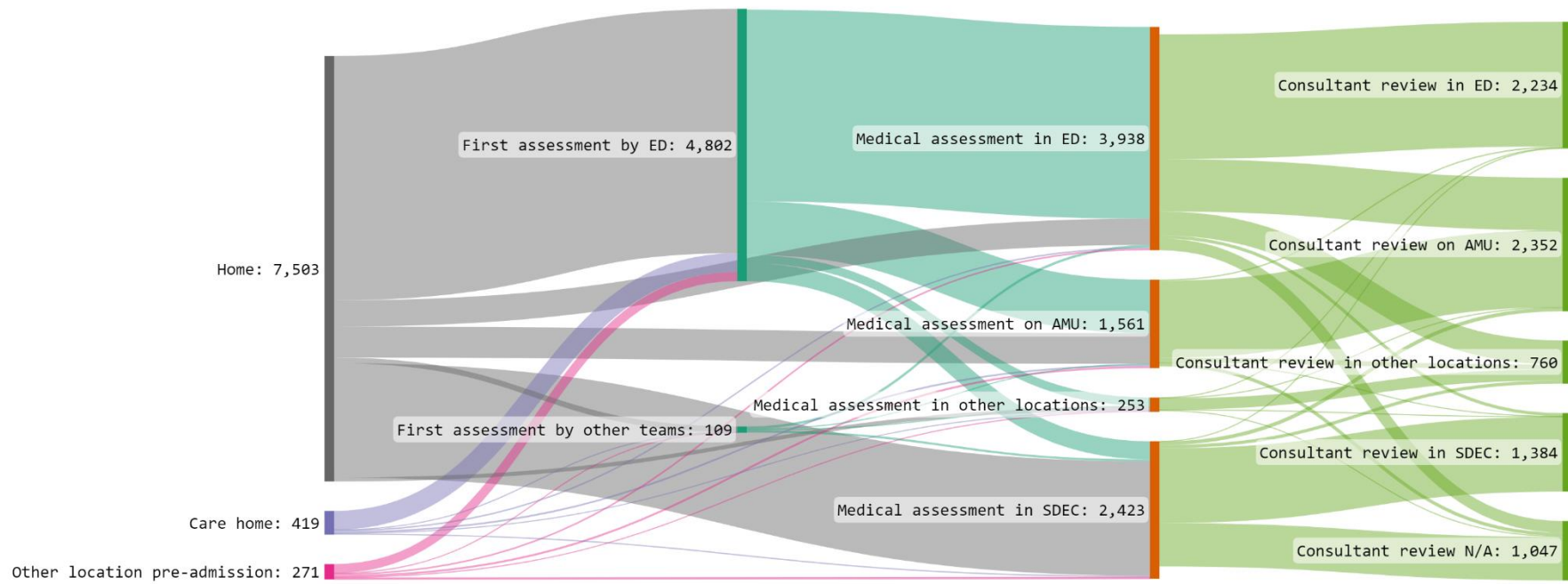


Figure 9: Sankey diagram of patients' initial journey through acute medical admission. ED: Emergency Department, AMU: Acute Medical Unit; SDEC: Same Day Emergency Care. Note: numbers may not reflect overall total due to missing data.

Same Day Emergency Care

The percentage of patients (unplanned admissions) who received their medical team assessment in SDEC varied between units. Comparison between units is shown in Figure 10. Twenty units didn't see any unplanned admissions in SDEC. A third or more of admissions were seen by the medical team in SDEC in 35.5% of units (25.4% in SAMBA22).

The age range of patients who had their assessment by the medical team in SDEC is shown in Figure 11.

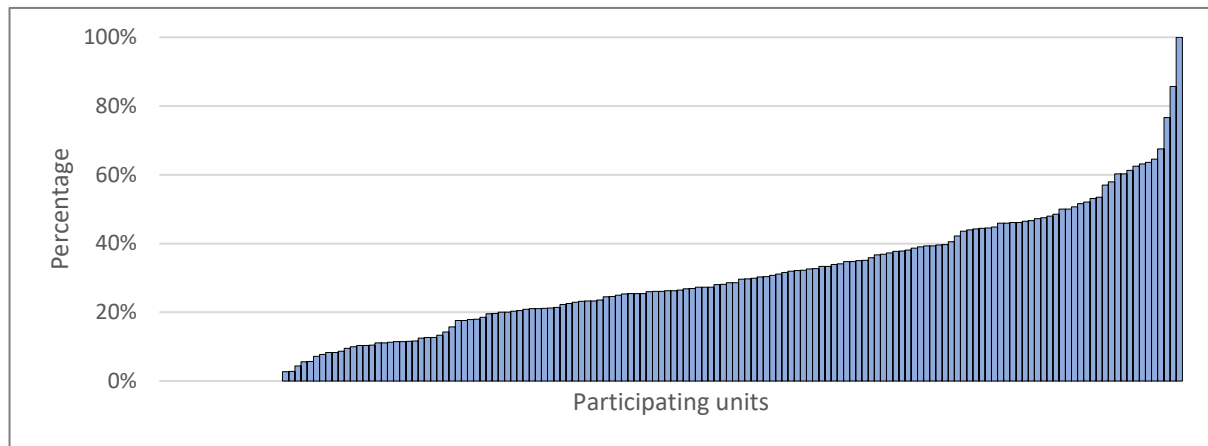


Figure 10: Percentage of patients who received their first medical assessment in Same Day Emergency Care (SDEC). Units ranked along x-axis by percentage seen in SDEC. Target line at 33.3% based on recommendations for provision of Same Day Emergency Care (SDEC) from NHS Long Term Plan⁽²²⁾

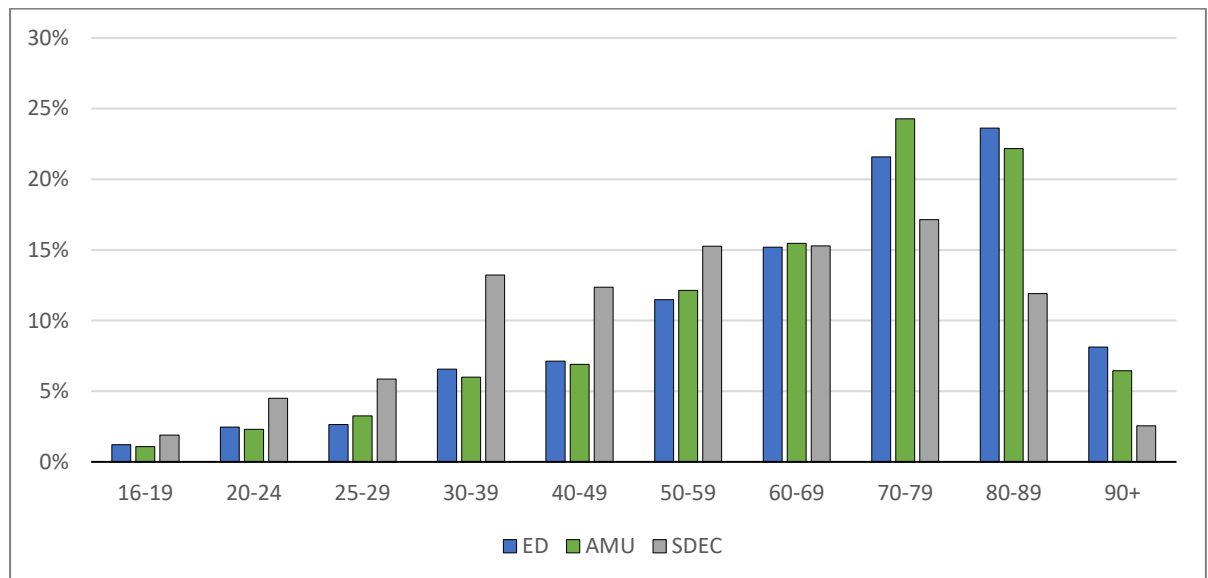


Figure 11: Age distribution of the patients within each area (Emergency Department (ED), Acute Medical Unit (AMU) and Same Day Emergency Care (SDEC)). Age distribution based on location of first assessment by the medical team within each area: Unplanned admissions only.

Clinical Quality Indicator Outcomes SAMBA23

Clinical Quality Indicator 1: Early warning score within 30 minutes

73.3% of unplanned admissions had an early warning score recorded within 30 minutes of arrival to hospital (95% CI 72.3-74.2%)

Table 3: Percentage of unplanned admissions meeting target of Early Warning Score measurement within 30 minutes of arrival to hospital, by initial assessment location

CQI 1	Location of initial clinical assessment			
	ED	AMU	SDEC	Other locations
<i>Percentage achieving target</i>				
SAMBA23	74.0%	73.4%	72.2%	61.3%
SAMBA22	67.9%	67.2%	73.3%	63.4%
SAMBA2021	78.4%	75.3%	82.3%	67.9%
Winter SAMBA	75.7%	70.3%	76.9%	61.4%
SAMBA19	81.6%	80.0%	81.2%	78.3%

Individual unit performance is shown in Figure 12.

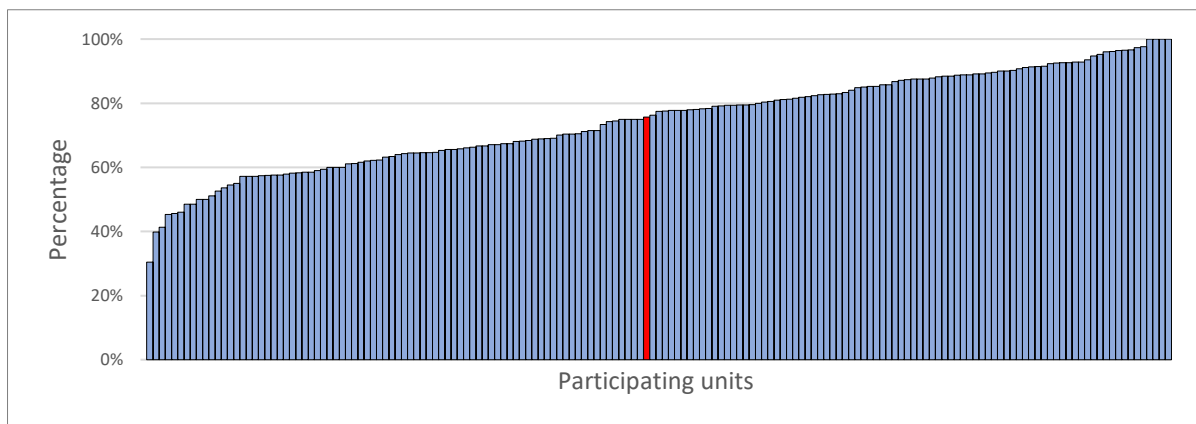


Figure 12: Percentage of unplanned admissions where target for Early Warning Score measurement within 30 minutes of arrival achieved, for participating units. Units ranked along x-axis.

Clinical Quality Indicator 2: Assessment by clinical decision maker within 4 hours

81.7% of unplanned admissions were seen by a tier 1 clinician within 4 hours of arrival to hospital (95% CI 80.8-82.5%). This target was met by 91.0% in SAMBA19, 84.4% in WinterSAMBA, 87.4% in SAMBA21, and 78.7% in SAMBA22.

Comparison of individual unit performance is shown in Figure 13.

Table 4: Percentage of unplanned admissions meeting target of assessment by clinical decision maker within 4 hours of arrival, by initial assessment location

CQI 2 Percentage achieving target	Location of initial clinical assessment			
	ED	AMU	SDEC	Other locations
SAMBA23	79.8%	76.6%	87.8%	86.7%
SAMBA22	76.1%	77.9%	88.6%	80.3%
SAMBA2021	86.4%	83.5%	93.9%	82.4%
Winter SAMBA	83.7%	78.6%	91.8%	76.2%
SAMBA19	86.7%	81.9%	94.7%	n/a

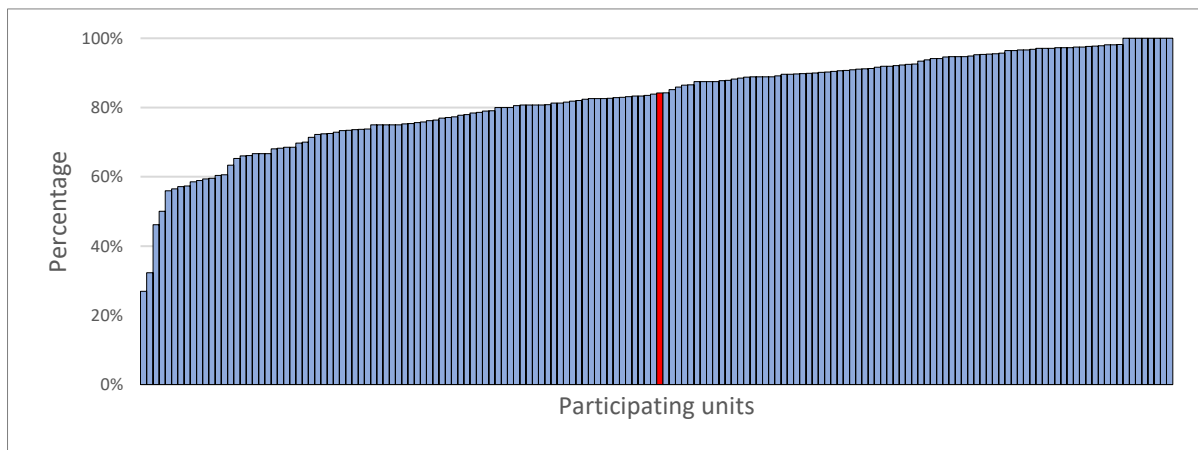


Figure 13: Percentage of unplanned admissions where target for clinical decision maker review within 4 hours of arrival achieved, for participating units. Units ranked along x-axis; median unit performance highlighted in red.

Clinical Quality Indicator 3: Assessment by consultant within target time

Overall, 52.9% of unplanned admissions who required a medical consultant review were seen within the target time (95% CI 51.7-54.1%). This target was met by 69.6% in SAMBA19, 61.9% in WinterSAMBA, 67.8% in SAMBA21, and 49.8% in SAMBA22. Comparison of individual unit performance is shown in Figure 14. Two units achieved this target for all of their patients who required consultant review.

17% of unplanned admissions did not require a consultant review (WinterSAMBA and SAMBA21 12.3%, SAMBA22 15.3%). A breakdown is shown in Table 6.

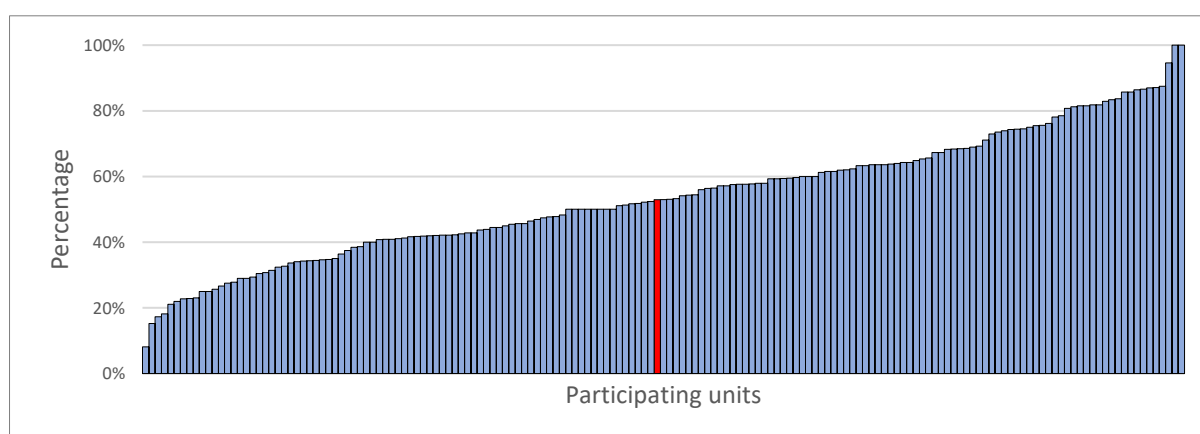


Figure 14: Per unit, percentage of patients where consultant review was achieved in the target time. Target time 6 hours for arrivals from 08:00-20:00; 14 hours for arrivals from 20:00-08:00. Units ranked along x-axis – note that units will not be in same order in the three graphs. Median unit performance highlighted in red.

Table 5: Percentage of unplanned admissions achieving consultant review within the target time, by location of initial clinical assessment.

CQI 3	Location of initial clinical assessment			
	ED	AMU	SDEC	Other locations
<i>Percentage achieving target</i>				
SAMBA23	43.5%	60.8%	86.5%	63.2%
SAMBA22	41.9%	60.2%	87.8%	68.2%
SAMBA2021	62.9%	76.4%	88.5%	73.2%
Winter SAMBA	57.0%	68.0%	82.1%	65.3%
SAMBA19	62.1%	74.3%	88.0%	n/a

Table 6: Patients who were seen by the medical team where consultant review within time target was not needed.

Reason consultant review was not needed	Number of patients
Discharged by another team member	1170
<i>Registrar</i>	646
<i>Other junior doctor</i>	213
<i>ANP/ACP</i>	163
<i>Specialist nurse</i>	15
<i>GP</i>	15
<i>PA</i>	3
Other/unknown	115
Solely required investigations/intervention	49
Self-discharged before consultant review	96
Transferred to another specialty after assessment by the medical team	55
Transferred to ICU before consultant review	8
Patient died before consultant review	7
Total	1385

ANP: Advanced Nurse Practitioner; ACP: Advanced Clinical Practitioner; GP: General Practitioner; PA: Physicians Associate; ICU: Intensive Care Unit

Time of day & Initial assessment location

Completion of clinical quality indicators depending on time of day are shown in Table 7.

Table 7: Percentage of unplanned admissions where CQI achieved depending on arrival time and initial assessment location.

	Location of initial assessment			
	ED	AMU	SDEC	Other
CQI 1				
00:00-08:00	76.1%	80.7%	72.9%	78.6%
08:00-20:00	73.6%	72.1%	72.3%	57.6%
20:00-00:00	73.3%	76.3%	58.3%	72.3%
CQI 2				
00:00-08:00	72.3%	69.4%	64.3%	69.2%
08:00-20:00	83.1%	79.0%	88.9%	87.5%
20:00-00:00	74.1%	67.1%	83.3%	100%
CQI3				
00:00-08:00	75.0%	81.8%	100%	78.6%
08:00-20:00	28.7%	53.3%	86.0%	57.3%
20:00-00:00	71%	94%	79%	81.8%

Note: Only 108 patients were seen in SDEC who arrived outside of daytime hours, and only 24 patients were seen in 'Other' locations who arrived outside daytime hours.

Completion of all indicators

All three CQIs were achieved within the target times for 35.9% of patients who required a consultant review (44.1% in WinterSAMBA, 50.6% in SAMBA21, 32.9% in SAMBA22). Comparison of individual unit performance is shown in Figure 15.

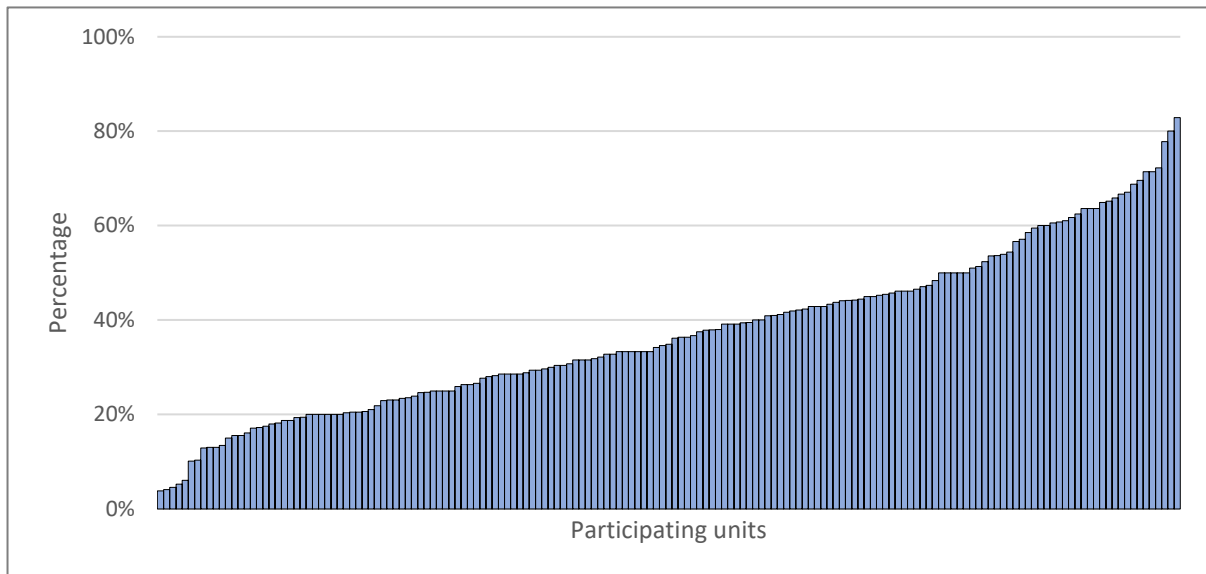


Figure 15: Percentage of patients where all three CQIs were achieved, by unit. Units ranked along x-axis.

Outcomes at seven days

Figure 16 shows patient outcomes at 7 days for all unplanned admissions.

32.8% of unplanned admissions were discharged on the day of arrival (31.5% in SAMBA21, 28.9% in SAMBA22). Of those that were discharged on the day of arrival, 64% had their initial clinician review in SDEC and 29% in the ED; 74% had their first medical team assessment in SDEC, 17% in the ED and 7.5% on AMU.

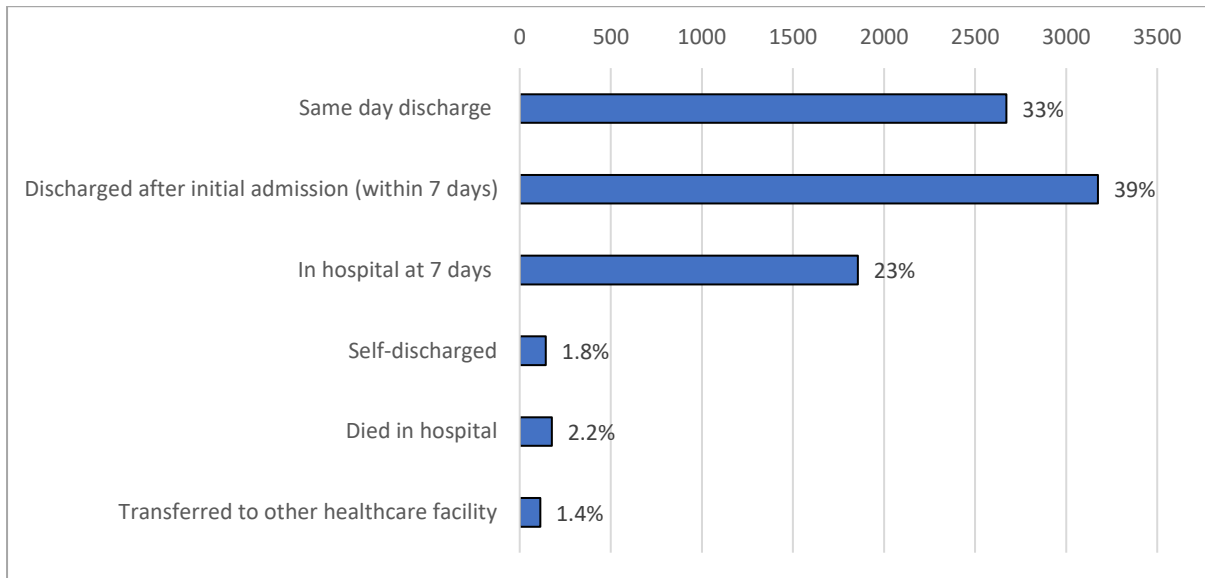


Figure 16: Patient outcomes at 7 days for unplanned admissions

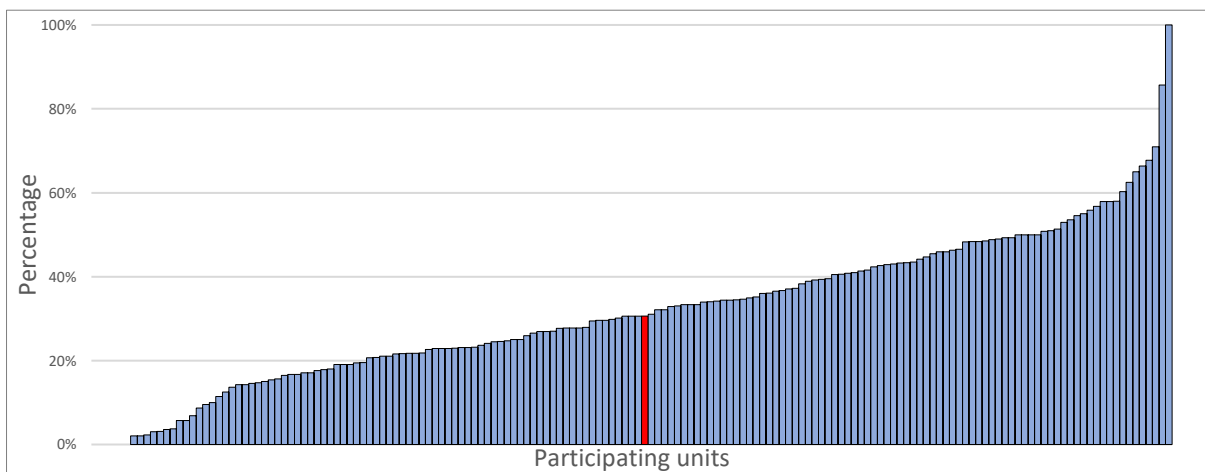


Figure 17: Percentage of patients discharged without overnight admission. Units ordered along x axis. Median unit performance marked in red.

Summary & Discussion

What has SAMBA23 shown?

SAMBA23 provides a comparison against the key clinical quality indicators for acute medicine, focussing on three areas of the patient journey through acute care services (time to measurement of an early warning score, assessment by a clinician, and review by a consultant physician). Although overall measured performance in SAMBA23 has improved in comparison to SAMBA22, performance remains lower than in previous years, including in Winter SAMBA in January 2020.⁷

In comparison to SAMBA22, the proportion of unplanned attendances to the medical team who were receiving their first clinical assessment in SDEC services has increased. This must be considered when interpreting the change in performance against the clinical quality indicators; performance against the targets for time to initial clinician assessment and time to consultant review has been consistently higher in all rounds of SAMBA since 2019 for those patients reviewed in SDEC when compared to those who undergo their initial assessment in the Emergency Department or AMU. The increasing number of patients seen through SDEC has likely improved overall measured performance. SDEC provides an appropriate assessment route for a selected cohort of medical admissions, where inpatient care would have been required if SDEC services were not available, but the patient groups at highest risk, for example due to clinical instability, complexity or frailty, require assessment through ED and AMU pathways, where performance remains a concern.^(22, 23)

Daytime arrivals who have their initial assessment in the Emergency Department remain the largest patient group. This continues to be the group with the poorest performance in patients receiving consultant physician review within the target time, and this performance is unchanged from SAMBA22. This is also the patient group that has the highest risk of deterioration, demonstrated by the higher proportion of patients with a raised NEWS2 in this group. This highlights an ongoing need to understand and improve pathways for those presenting to acute and emergency medicine services, with close work is needed between acute and emergency medicine to improve care for our patients. Medical teams continue to work physically within the Emergency Department, with half of patients receiving their medical assessment in the ED, and a third of all patients who required consultant review receiving this while still within the ED. In the context of the current system pressures, it is vital that we work together to improve pathways for acute medical patients, ensuring that they can, wherever possible, receive their treatment in the locations that are most likely to be able to deliver the investigations and treatment that they need – a core principle underpinning the use of Acute Medical Units.

Limitations

As with previous rounds of SAMBA, there remains variation in performance between units as well as variation in how each centre structures its acute services. Further evaluations using an appropriate methodology are needed to understand the reasons for this variation, and how service structure may impact performance.

SAMBA provides a snapshot of performance over 24 hours, but there is likely to be variation in performance across time. Some units may vary considerably in achievement of the quality indicators on a day-to-day or week-to-week basis. Further work is needed to understand how this snapshot reflects performance over longer periods of time, for example by collecting data over longer periods, utilising electronic health record data.

Although SAMBA can identify areas for improvement and aims to provide an overview of the performance of acute medical services, SAMBA is not designed to identify which components of acute medical care provide the best outcomes, and does not contain the detail needed to fully explore and explain the variation described here.

Next steps

Although SAMBA23 has shown an overall improvement in performance against the clinical quality indicators for acute medicine, the performance within each pathway is similar to SAMBA22, and the overall performance remains lower than 2019-2021. Improved performance may be due to changes in the proportion of patients seen within each pathway within acute care services; further data will help to show whether this change will continue. How and why this change is occurring, and its impact on patients and quality of care, likely requires deeper evaluation.

We plan to continue to improve SAMBA, to try to ensure it will continue to provide useful information that can be used to support changes to improve clinical care for those centres that take part. This includes consideration of allowing participating units to be identifiable, data collection in other time periods to assess variation in performance and building on the increasing digital capabilities of many hospitals. We will continue to adapt questions based on current priorities from SAM and those working in acute medicine.

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Appendix 1: Participating units

We would once again like to emphasise that SAMBA cannot take place without the involvement of the enthusiastic volunteers at each hospital site, involved in registering the audit, collecting data, and uploading information to the database.

If we have missed any participating units from this report, we would be happy to amend the online version. If we can help, please contact us at samba@acutemedicine.org.uk

England

Addenbrooke's Hospital	Cambridge University Hospitals
Aintree University Hospital	Liverpool University Hospitals NHS Foundation Trust
Arrowe Park Hospital	Wirral University Teaching Hospital NHS Foundation Trust
Barnet Hospital	Royal Free London NHS Foundation Trust
Barnsley Hospital	Barnsley Hospital NHS Foundation Trust
Basildon University Hospital	Mid and South Essex NHS Foundation Trust
Basingstoke and North Hampshire Hospital	Hampshire Hospitals NHS Foundation Trust
Bedford Hospital	Bedfordshire Hospitals NHS Trust
Birmingham City Hospital	Sandwell and West Birmingham NHS Trust
Birmingham Heartlands Hospital	University Hospitals Birmingham NHS Foundation Trust
Blackpool Victoria Hospital	Blackpool Teaching Hospitals NHS Foundation Trust
Bradford Royal Infirmary	Bradford Teaching Hospitals NHS Foundation Trust
Bristol Royal Infirmary	University Hospitals Bristol NHS Foundation Trust
Broomfield Hospital	Mid and South Essex NHS Foundation Trust
Calderdale Royal Hospital	Calderdale and Huddersfield NHS Foundation Trust
Chelsea and Westminster Hospital	Chelsea and Westminster Hospital NHS Foundation Trust
Cheltenham General Hospital	Gloucestershire Hospitals NHS Foundation Trust
Chorley and South Ribble Hospital	Lancashire Teaching Hospitals NHS Foundation Trust
Conquest Hospital	East Sussex Healthcare NHS Trust
Countess of Chester Hospital	Countess of Chester Hospital NHS Foundation Trust
County Hospital	University Hospitals of North Midlands NHS Trust
Country Hospital Hereford	Wye Valley NHS Trust
Cumberland Infirmary	North Cumbria Integrated Care NHS Foundation Trust
Darent Valley Hospital	Dartford and Gravesham NHS Trust
Darlington Memorial Hospital	County Durham and Darlington NHS Foundation Trust
Derriford Hospital	University Hospitals Plymouth NHS Trust
Diana, Princess of Wales Hospital	Northern Lincolnshire and Goole NHS Foundation Trust
Dorset County Hospital	Dorset County Hospital NHS Foundation Trust
Ealing Hospital	London North West University Healthcare NHS Trust
East Surrey Hospital	Surrey and Sussex Healthcare NHS Trust
Eastbourne District General Hospital	East Sussex Healthcare NHS Trust

Epsom Hospital	Epsom and St Helier University Hospitals NHS Trust
Fairfield General Hospital	Pennine Acute Hospitals NHS Trust
Friarage Hospital	South Tees Hospitals NHS Foundation Trust
Frimley Park Hospital	Frimley Health NHS Foundation Trust
Furness General Hospital	University Hospitals of Morecombe Bay NHS Foundation Trust
George Eliot Hospital	George Eliot Hospital NHS Trust
Gloucestershire Royal Hospital	Gloucestershire Hospitals NHS Foundation Trust
Good Hope Hospitals	University Hospitals Birmingham NHS Foundation Trust
Great Western Hospital	Great Western Hospitals NHS Foundation Trust
Harrogate District Hospital	Harrogate and District NHS Foundation Trust
Hillingdon Hospital	Hillingdon Hospitals NHS Foundation Trust
Hinchingbrooke Hospital	North West Anglia NHS Foundation Trust
Huddersfield Royal Infirmary	Calderdale and Huddersfield NHS Foundation Trust
Hull Royal Infirmary	Hull University Teaching Hospitals NHS Trust
James Paget	James Paget University Hospitals NHS Foundation Trust
John Radcliffe Hospital	Oxford University Hospitals NHS Foundation Trust
King's College Hospital	King's College Hospital NHS Foundation Trust
King's Mill Hospital	Sherwood Forest Hospitals NHS Foundation Trust
Kingston Hospital	Kingston Hospital NHS Foundation Trust
Leighton Hospital	Mid Cheshire Hospitals NHS Foundation Trust
Lincoln County Hospital	United Lincolnshire Hospitals NHS Trust
Lister Hospital	East and North Hertfordshire NHS Trust
Luton & Dunstable University Hospital	Bedfordshire Hospitals NHS Foundation Trust
Macclesfield District General Hospital	East Cheshire NHS Trust
Maidstone Hospital	Maidstone and Tunbridge Wells NHS Trust
Manchester Royal Infirmary	Manchester Hospitals NHS Foundation Trust
Medway Maritime Hospital	Medway NHS Foundation Trust
Milton Keynes University Hospital	Milton Keynes University Hospital NHS Foundation Trust
Musgrove Park Hospital	Somerset NHS Foundation Trust
New Queen Elizabeth II Hospital	East and North Hertfordshire NHS Trust
Newham University Hospital	Barts Health NHS Trust
Norfolk & Norwich University Hospital	Norfolk & Norwich University Hospitals NHS Foundation Trust
North Devon District Hospital	Northern Devon Healthcare NHS Trust
North Manchester General Hospital	Manchester University Hospitals NHS Trust
North Middlesex University Hospital	North Middlesex University Hospital NHS Trust
North Tees University Hospital	North Tees and Hartlepool NHS Foundation Trust
Northampton General Hospital	Northampton General Hospital NHS Trust
Northern General Hospital	Sheffield Teaching Hospitals NHS Foundation Trust

Northumbria Specialist Emergency Care Hospital	Northumbria Healthcare NHS Foundation Trust
Northwick Park Hospital	London North West University Healthcare NHS Trust
Peterborough City Hospital	North West Anglia NHS Foundation Trust
Pilgrim Hospital Boston	United Lincolnshire Hospitals NHS Trust
Pinderfields General Hospital	Mid Yorkshire Hospitals NHS Trust
Pinderfields General Hospital - frailty	Mid Yorkshire Hospitals NHS Trust
Poole Hospital – AMU	University Hospitals Dorset NHS Foundation Trust
Poole Hospital - RACE Unit	University Hospitals Dorset NHS Foundation Trust
Princess Alexandra Hospital	The Princess Alexandra Hospital NHS Trust
Princess Royal Hospital	Brighton & Sussex University Hospitals
Queen Elizabeth Hospital	Lewisham and Greenwich NHS Trust
Queen Elizabeth Hospital	The Queen Elizabeth Hospital King's Lynn NHS Foundation Trust
Queen Elizabeth Hospital, Gateshead	Gateshead Health NHS Foundation Trust
Queen Elizabeth Hospital	University Hospitals Birmingham NHS Foundation Trust
Queen Elizabeth Queen Mother Hospital	East Kent Hospitals University NHS Foundation Trust
Queen's Medical Centre	Nottingham University Hospitals NHS Trust
Queens Hospital Burton	University Hospitals of Derby and Burton NHS Foundation Trust
Rotherham Hospital	The Rotherham NHS Foundation Trust
Royal Berkshire Hospital	Royal Berkshire Hospital NHS Foundation Trust
Royal Blackburn Teaching Hospital	East Lancashire Hospitals NHS Trust
Royal Bournemouth Hospital - AMU	University Hospitals Dorset NHS Foundation Trust
Royal Bournemouth Hospital - OPAU	University Hospitals Dorset NHS Foundation Trust
Royal Cornwall Hospital	Royal Cornwall Hospitals NHS Trust
Royal Derby Hospital	University Hospitals of Derby and Burton NHS Foundation Trust
Royal Devon and Exeter Hospital	Royal Devon and Exeter NHS Foundation Trust
Royal Free Hospital	Royal Free London NHS Foundation Trust
Royal Lancaster Infirmary	University Hospitals of Morecombe Bay NHS Foundation Trust
Royal Liverpool Hospital	Liverpool University Hospitals NHS Foundation Trust
Royal Oldham Hospital	Northern Care Alliance NHS Group
Royal Preston Hospital	Lancashire Teaching Hospitals NHS Foundation Trust
Royal Shrewsbury Hospital	The Shrewsbury and Telford Hospital NHS Trust
Royal Stoke University Hospital	University Hospitals of North Midlands NHS Trust
Royal Surrey County Hospital	Royal Surrey NHS Foundation Trust
Royal Sussex County Hospital	University Hospitals Sussex
Royal United Hospital Bath	Royal United Hospitals Bath NHS Foundation Trust
Royal Victoria Infirmary	Newcastle Upon Tyne NHS Foundation Trust
Russells Hall Hospital	The Dudley Group NHS Foundation Trust
Salford Royal Hospital	Salford Royal NHS Foundation Trust

Salisbury District Hospital	Salisbury NHS Foundation Trust
Sandwell General Hospital	Sandwell and West Birmingham NHS Trust
Scarborough General Hospital	York and Scarborough Teaching Hospitals NHS Foundation Trust
Scunthorpe General Hospital	Northern Lincolnshire and Goole NHS Foundation Trust
Southampton General Hospital	University Hospital Southampton NHS Foundation Trust
Southend University Hospital	Mid and South Essex NHS Foundation Trust
Southmead Hospital	North Bristol NHS Trust
Southport District General	Southport and Ormskirk Hospital NHS Trust
ST George's Hospital	St George's University Hospitals NHS Foundation Trust
St Helier Hospital	Epsom and St Helier University Hospitals NHS Trust
St James's University Hospital	Leeds Teaching Hospitals NHS Trust
St Peter's Hospital	Ashford and St Peter's Hospitals NHS Foundation Trust
St Richard's Hospital	University Hospitals Sussex NHS Foundation Trust
Stepping Hill Hospital	Stockport NHS Foundation Trust
Stoke Mandeville Hospital	Buckinghamshire Healthcare NHS Trust
Sunderland Royal Hospital	South Tyneside and Sunderland NHS Foundation Trust
Tameside and Glossop Integrated NHS Foundation Trust	
The James Cook University Hospital	South Tees Hospitals NHS Foundation Trust
The Princess Royal Hospital	The Shrewsbury and Telford Hospital NHS Trust
The Royal London Hospital	Barts Health NHS Trust
Tunbridge Wells Hospital	Maidstone and Tunbridge Wells NHS Trust
University College Hospital	University College London Hospitals NHS Foundation Trust
University Hospital Coventry & Warwickshire, University Hospital Coventry & Warwickshire	University Hospital Coventry & Warwickshire NHS Trust
University Hospital Lewisham	Lewisham and Greenwich NHS Trust
University Hospital of North Durham	County Durham & Darlington NHS Foundation Trust
Walsall Manor Hospital	Walsall Healthcare NHS Trust
Warrington Hospital	Warrington and Halton Hospital NHS Trust
Warwick Hospital	South Warwickshire NHS Foundation Trust
Warwick Hospital – Frailty Assessment	South Warwickshire NHS Foundation Trust
Watford General Hospital	West Hertfordshire Hospitals NHS Trust
West Cumberland Hospital	North Cumbria Integrated Care NHS Foundation Trust
West Suffolk Hospital	West Suffolk NHS Foundation Trust
Wexham Park Hospital	Frimley Health NHS Foundation Trust
Whipps Cross University Hospital	Barts Health NHS Trust
Whiston Hospital	St Helens and Knowsley Teaching Hospitals NHS Trust
Worcestershire Royal Hospital	Worcestershire Acute Hospitals NHS Trust
Wythenshawe Hospital	Manchester University NHS Foundation Trust
Yeovil Hospital	Somerset NHS Foundation Trust

York Hospital

York and Scarborough Teaching Hospitals NHS Foundation Trust

Northern Ireland

Altnagelvin Area Hospital

Western Health and Social Care Trust

Antrim Area hospital

Northern Health and Social Care Trust

Craigavon Area Hospital

Southern Health and Social Care Trust

Royal Victoria Hospital, Belfast

Belfast Health and Social Care Trust

South West Acute Hospital

Western Health and Social Care Trust

Ulster Hospital

South Eastern Health and Social Care Trust

Scotland

Dumfries and Galloway Royal Infirmary

NHS Dumfries and Galloway

Raigmore Hospital

NHS Highland

Royal Infirmary of Edinburgh

NHS Lothian

Western General Hospital

NHS Lothian

Wales

Grange University Hospital

Aneurin Bevan University Health Board

Morrison Hospital

Swansea Bay University Health Board

Nevill Hall Hospital

Aneurin Bevan University Health Board

Prince Charles Hospital

Cwm Taf Morgannwg University Health Board

Princess of Wales Hospital

Cwm Taf Morgannwg University Health Board

Royal Glamorgan Hospital

Cwm Taf Morgannwg University Health Board

Royal Gwent Hospital

Aneurin Bevan University Health Board

University Hospital of Wales

Cardiff and Vale University Health Board

Ysbyty Gwynedd

Betsi Cadwaladr University Health Board

Other

Jersey General Hospital