

Statistical Note: Ambulance Quality Indicators (AQI)

December 2022 had the longest ambulance response times for all four categories of response since the categories were introduced in 2017. It also had the highest number of 999 calls answered per day.

In August 2022, the times from call to CT scan for stroke were shorter than the earlier months of 2022, but longer than they were before 2021-22.

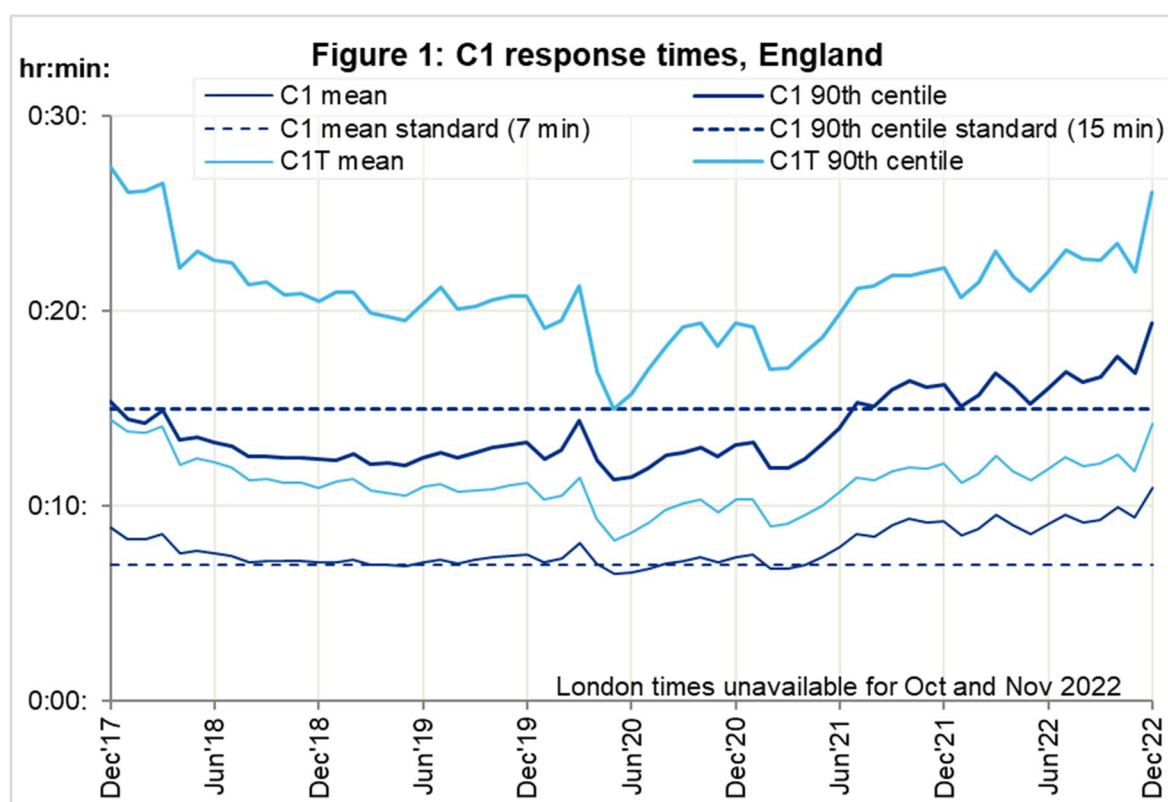
1. Ambulance Systems Indicators

1.1 Response times

In December 2022 for England, the mean average response time for the most urgent Category, C1, was 10 minutes 57 seconds, and the 90th centile was 19:25, both easily the longest since the category was introduced in 2017, and beyond the respective 7- and 15-minute standards (Figure 1).¹

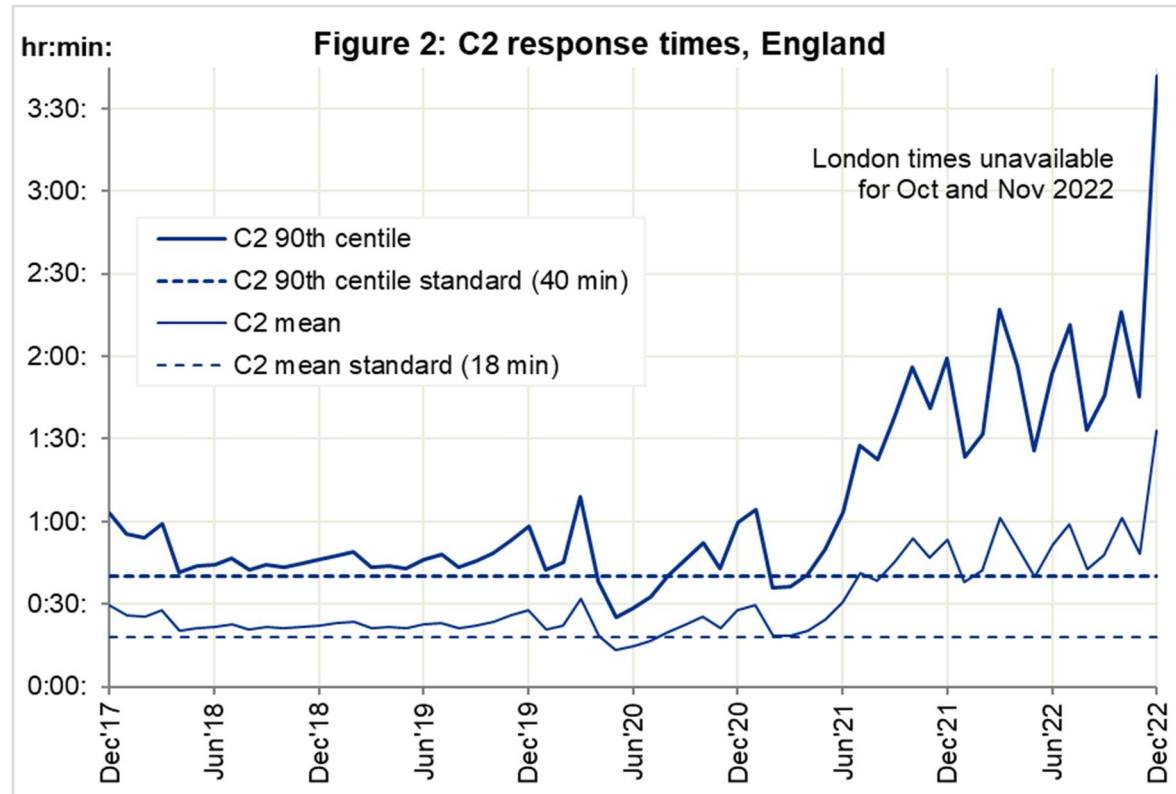
Response times are unavailable for London for the previous two months. For all four categories, a time series with London excluded from other months, for consistency, also has the longest average response times in December 2022.

The mean average for C1T (time to the arrival of the transporting vehicle for C1 incidents) was 14:14, not quite as long as it was in December 2017.



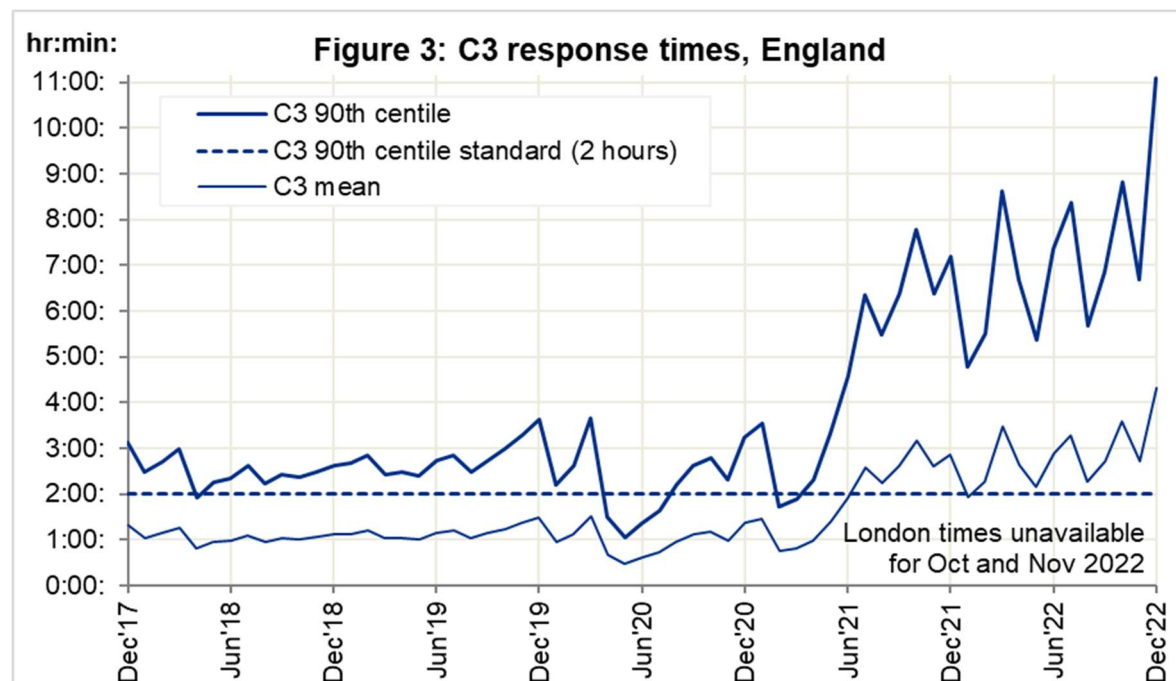
¹ Standards in the NHS Constitution Handbook: www.gov.uk/government/publications/supplements-to-the-nhs-constitution-for-england/the-handbook-to-the-nhs-constitution-for-england

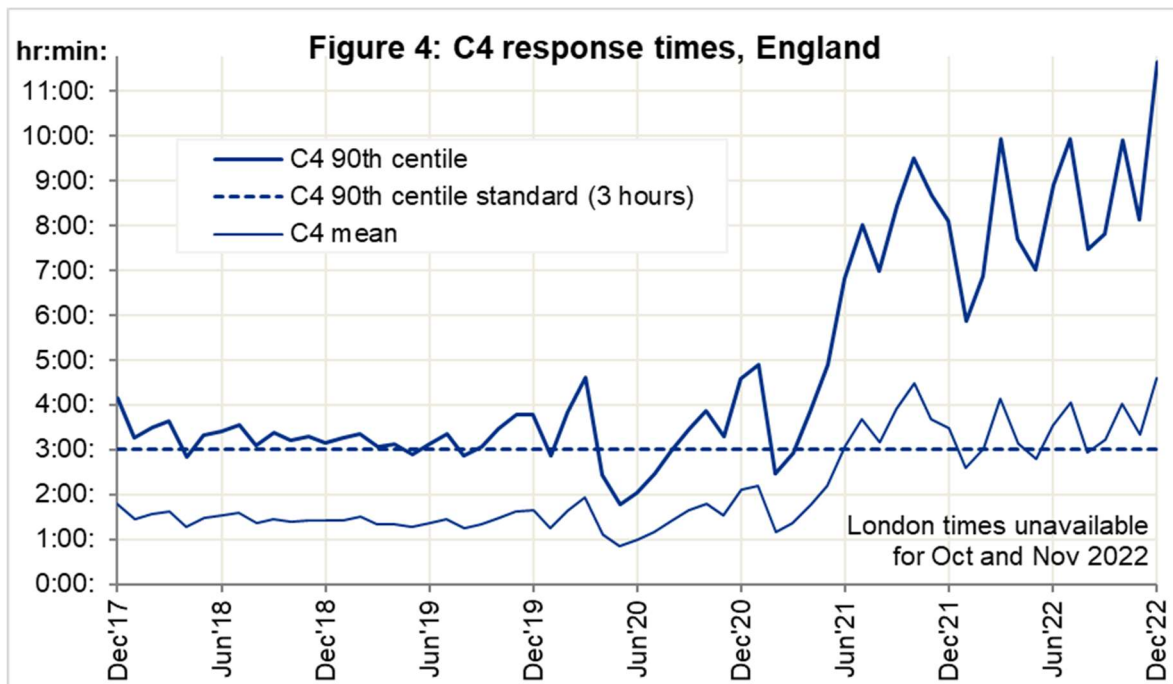
The average C2 response time in England in December 2022 was 1:32:54 and the 90th centile was 3:41:48, each more than 50% longer than the previous longest monthly values.



C3 averaged 4:19:10 with a 90th centile of 11:05:56 in December 2022, both more than 50% longer than in November (Figure 3).

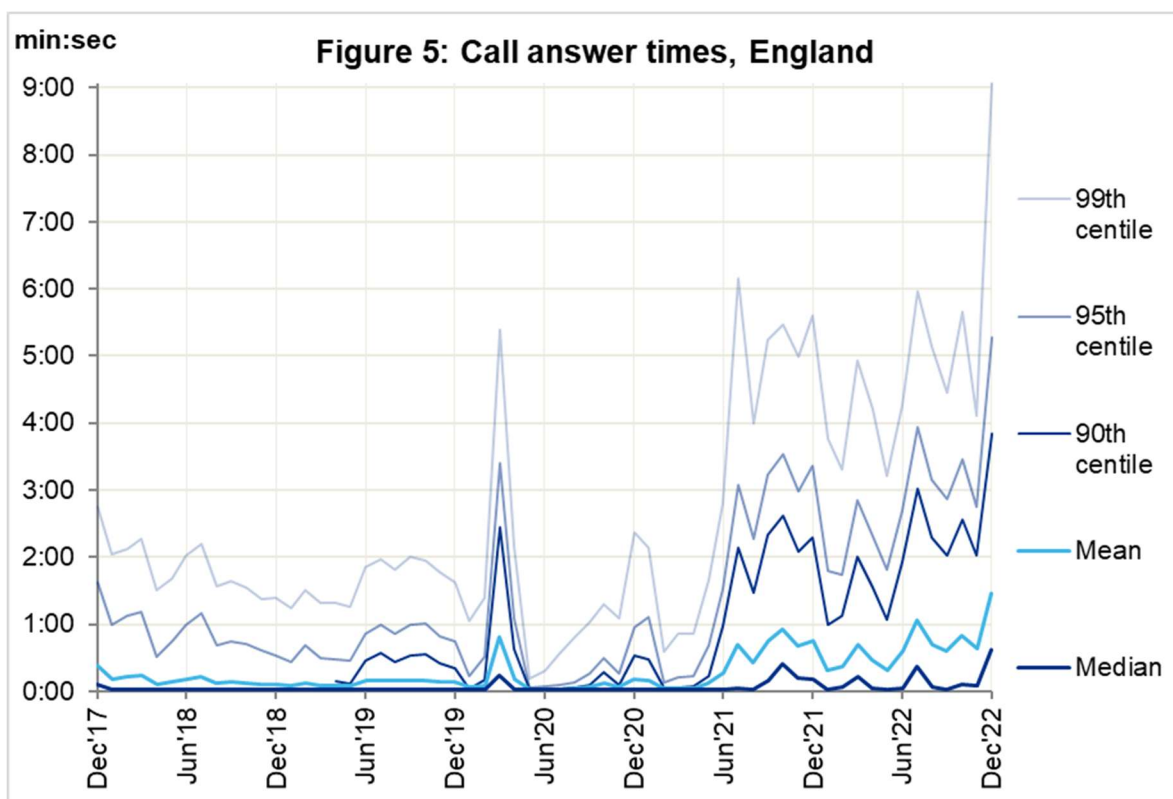
C4 averaged 4:35:09 in December 2022 with a 90th centile of 11:39:08 (Figure 4).



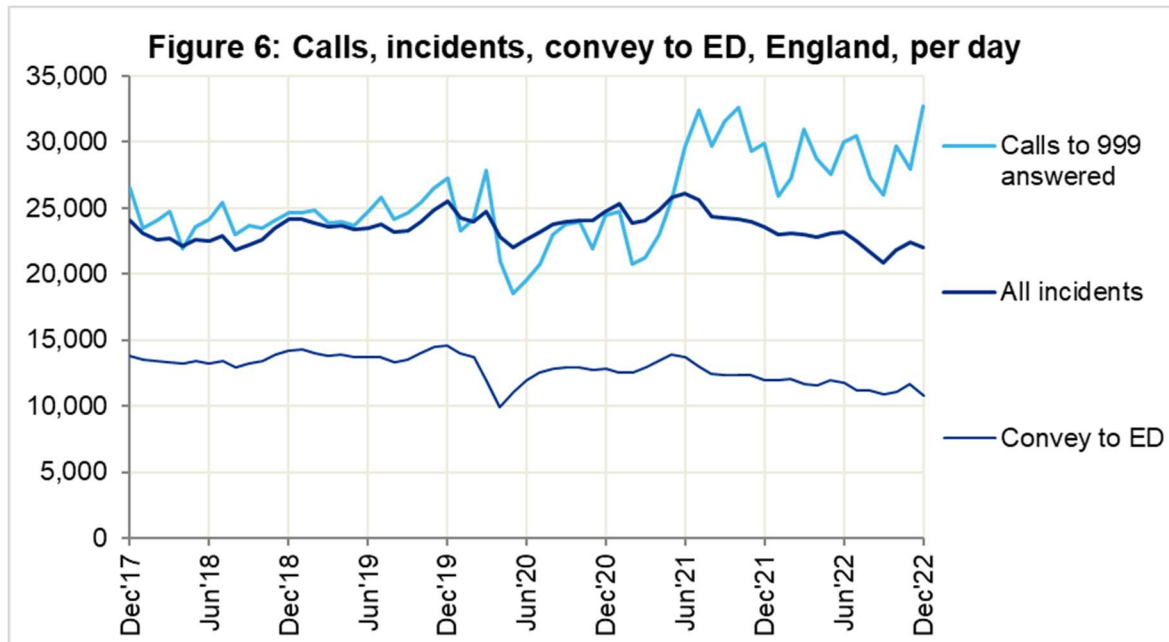


1.2 Other Systems Indicators

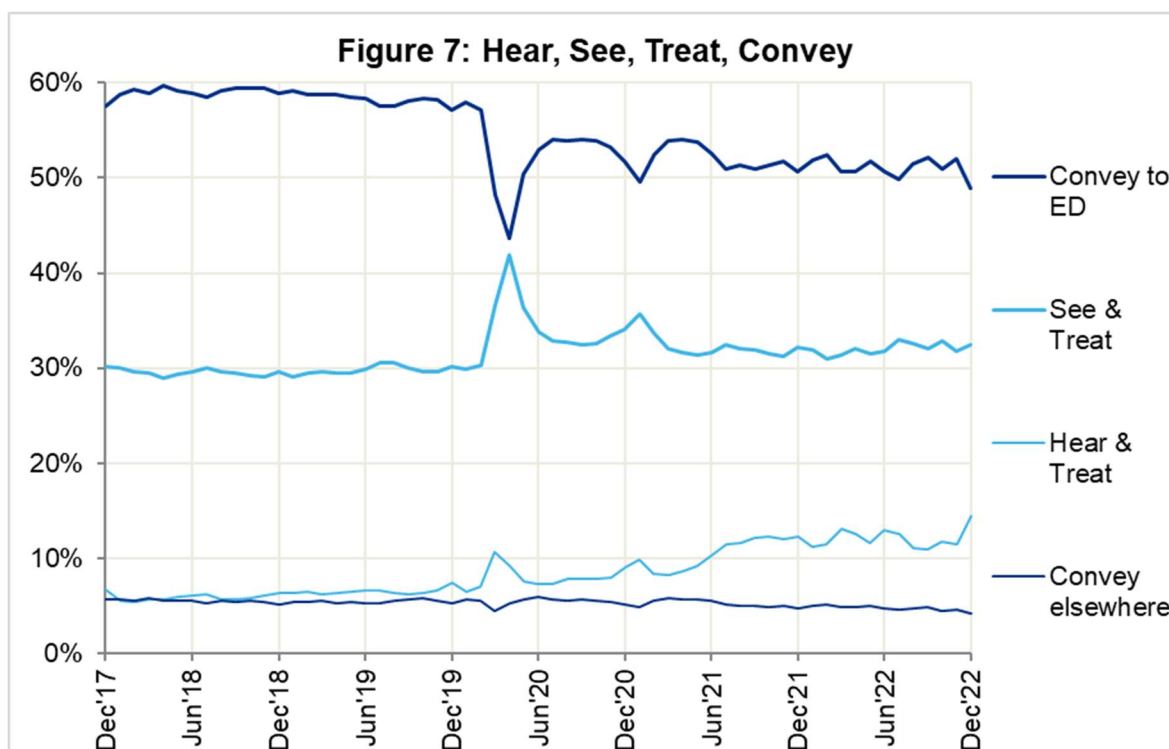
Ambulance Services answered 1,014,489 calls in December 2022, or 32,725 per day, each the highest on record. The call answer times in Figure 5 were also all the highest on record, with an average of 1 minute 28 seconds, in comparison with the previous largest monthly average of 1:04 in July 2022.



Although 17% more calls were answered per day in December 2022 than in November 2022, the number of incidents per day decreased by 2% to 22,009. The number of incidents with conveyance to ED per day decreased by 8% to 10,749, the lowest ever apart from April 2020 (Figure 6).



That reduced the proportion of incidents with conveyance to ED in December 2022 to 49%, the lowest proportion apart from March and April 2020. Incidents conveyed to non-ED also reduced, to 4.2%. Incidents resolved on the scene (See & Treat) was about average for 2022-23 at 32.5%, while incidents resolved on the telephone (Hear & Treat) was the highest ever, 14.5% (Figure 7).



The number of incidents in each category has changed over time. Of incidents receiving a response on scene, the proportion in C1 was lowest in May 2020 at 7.2% and had been highest in October 2022 at 14.1%, until a further increase to 17.3% in December 2022.

2. Ambulance Clinical Outcomes

In these Statistical Notes, we continue to summarise data for STEMI (a type of heart attack) and cardiac arrest when we publish January, April, July, or October data, and stroke data in the following month.

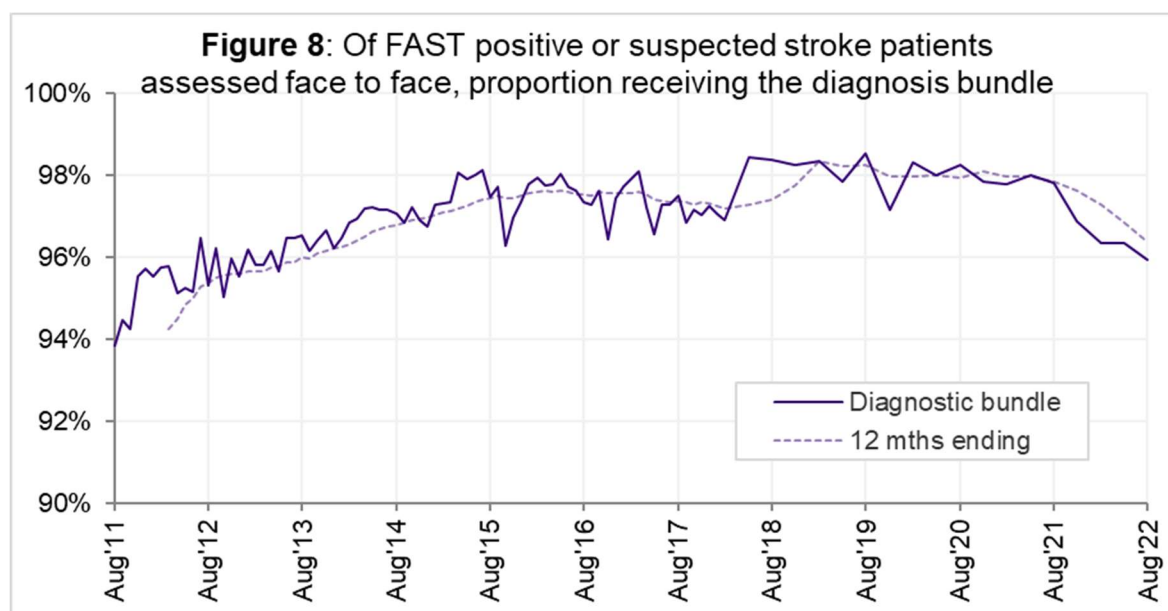
2.1 Stroke data

The FAST procedure helps assess whether someone has suffered a stroke:

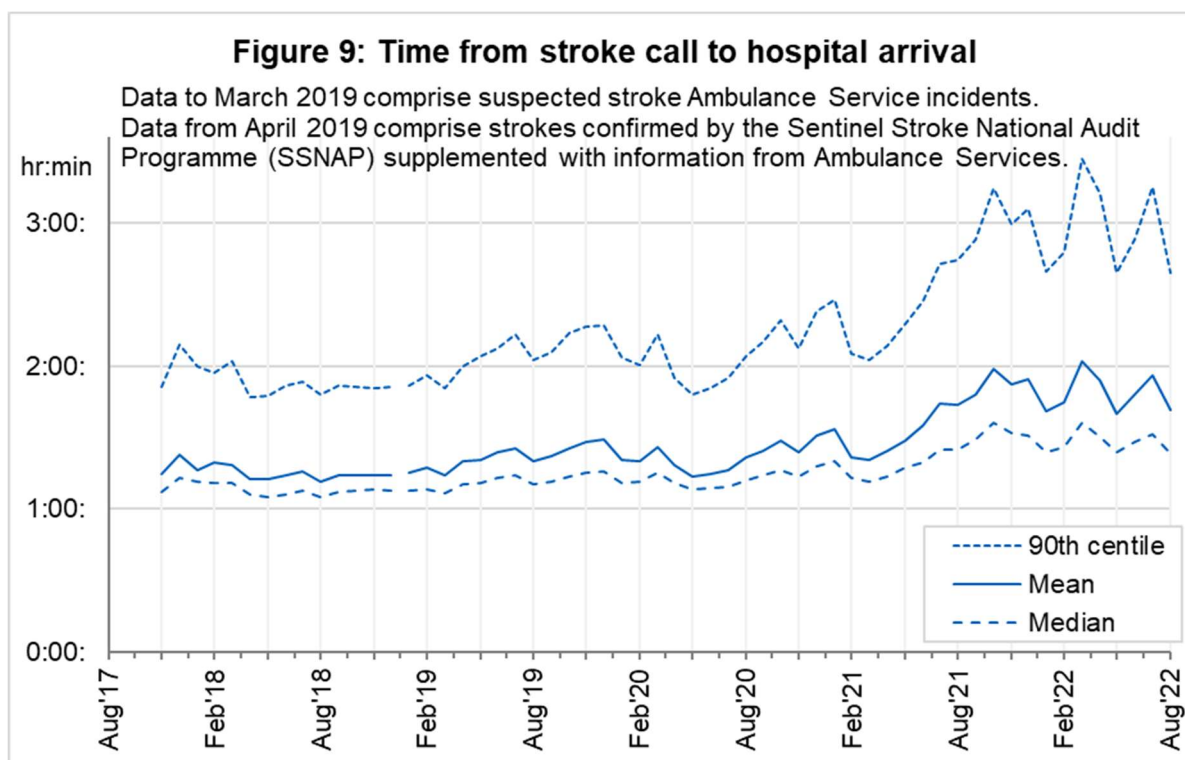
- Facial weakness: can the person smile? Has their mouth or eye drooped?
- Arm weakness: can the person raise both arms?
- Speech problems: can the person speak clearly and understand what you say?
- Time to call 999 for an ambulance if you spot any one of these signs.

Stroke patients in England receiving an ambulance should receive a diagnosis bundle; a FAST assessment, blood glucose, and two blood pressures should all be recorded.

In August 2022, of 9,278 such patients in England, 8,901 (96%) received that diagnosis bundle (Figure 8), a significant² decrease on the average of 97% for 2021-22.



² Calculated using Student's t-test with 95% significance.

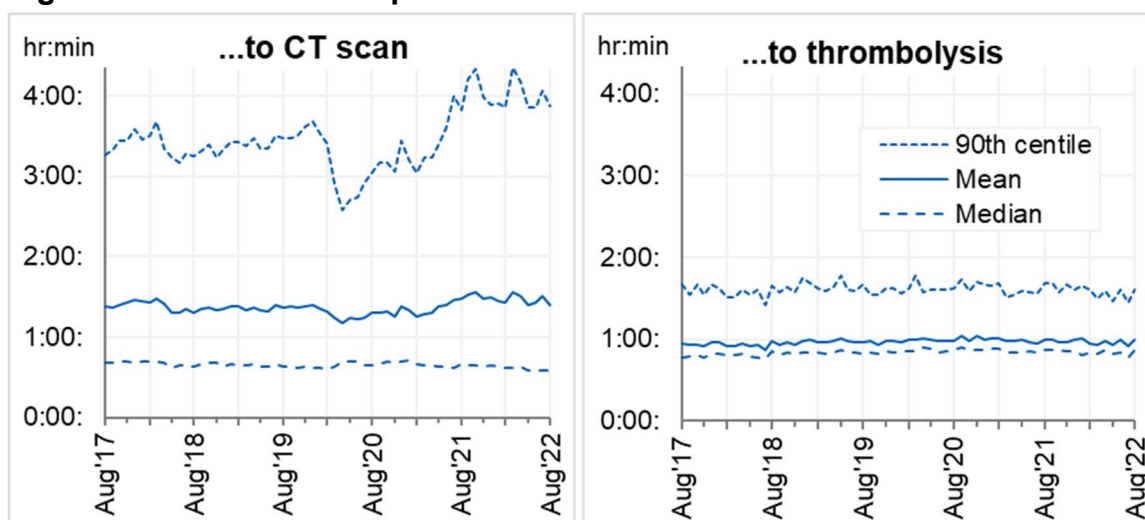


The median time from 999 call until arrival at hospital for ambulance patients in England who had a stroke was 1 hour 23 minutes in August 2022 (Figure 9, lowest line). This was shorter than all months from July 2021 onwards; but longer than in all months before that.

For time from hospital arrival to CT scan in August 2022, it is the mean average of 1:23 (rather than the median of 35 minutes) for that is the shortest for some time, shorter than all months from June 2021 onwards; but longer than in the 22 months before that. (Figure 10)

The latest average time to thrombolysis was within a minute of the 2021-22 average.

Figure 10: Time from hospital arrival for stroke...



3. Further information on AQI

3.1 The AQI landing page and Quality Statement

www.england.nhs.uk/statistics/statistical-work-areas/ambulance-quality-indicators, or <http://bit.ly/NHSAQI>, is the AQI landing page, and it holds:

- a Quality Statement for these statistics, which includes information on relevance, accuracy, timeliness, coherence, and user engagement;
- the specification guidance documents for those who supply the data;
- timetables for data collection and publication;
- time series spreadsheets and csv files from April 2011 up to the latest month;
- links to individual web pages for each financial year;
- contact details for the responsible statistician (also in section 3.5 below).

Publication dates are also at

www.gov.uk/government/statistics/announcements?keywords=ambulance.

The web pages for each financial year hold:

- separate spreadsheets of each month's data;
- this Statistical Note, and equivalent versions from previous months;
- the list of people with pre-release access to the data.

3.2 AQI Scope

The AQI include calls made by dialling either the usual UK-wide number 999 or its international equivalent 112. As described in the specification guidance in section 3.1, incidents resulting from a call to NHS 111 are included in all the AQI, except the counts of 999 calls (indicators A1, A124, and A125) and answer times (A1 to A6 and A114).

3.3 Related statistics

NHSEI publishes ambulance handover delays at Emergency Departments of over 30 minutes during winter 2012-13 to 2014-15 and winter 2017-18 to 2021-22 at

www.england.nhs.uk/statistics/statistical-work-areas/winter-daily-sitreps.

The Quality Statement described in section 3.1 includes information on:

- the “Ambulance Services” publications by NHS Digital <https://digital.nhs.uk/data-and-information/publications/statistical/ambulance-services>, with data from before 2000, to 2014-15;
- a dashboard with an alternative layout for AQI data up to April 2016;
- the comparability of data for other countries of the UK:

Wales: <https://easc.nhs.wales/asi>

Scotland: See Quality Improvement Indicators (QII) documents at www.scottishambulance.com/TheService/BoardPapers.aspx

Northern Ireland: www.health-ni.gov.uk/articles/emergency-care-and-ambulance-statistics

3.4 Centiles

The centile data for England in this document, also published in spreadsheets alongside this document, are not precise centiles calculated from national record-level data. Instead, they are the centiles calculated from each individual trust's record-level data, weighted by their incident count, and averaged across England. So, if England only had two trusts, with centiles of 7:10 and 7:40, and the former had twice as many incidents as the latter, the England centile would be 7:20.

3.5 Contact information

Media: NHS England Media team, nhsengland.media@nhs.net, 0113 825 0958.

The person responsible for producing this publication is Ian Kay, Performance Analysis Team, Transformation Directorate, NHS England, 0113 825 4606, england.nhsdata@nhs.net.

3.6 National Statistics

The UK Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- are produced according to sound methods; and
- are managed impartially and objectively in the public interest.

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.