

Statistical Note: Ambulance Quality Indicators (AQI)

In June 2023, for all categories, the average and 90th centile ambulance response times were longer than in April and May 2023 and longer than the response time standards¹, but shorter than for 2022-23.

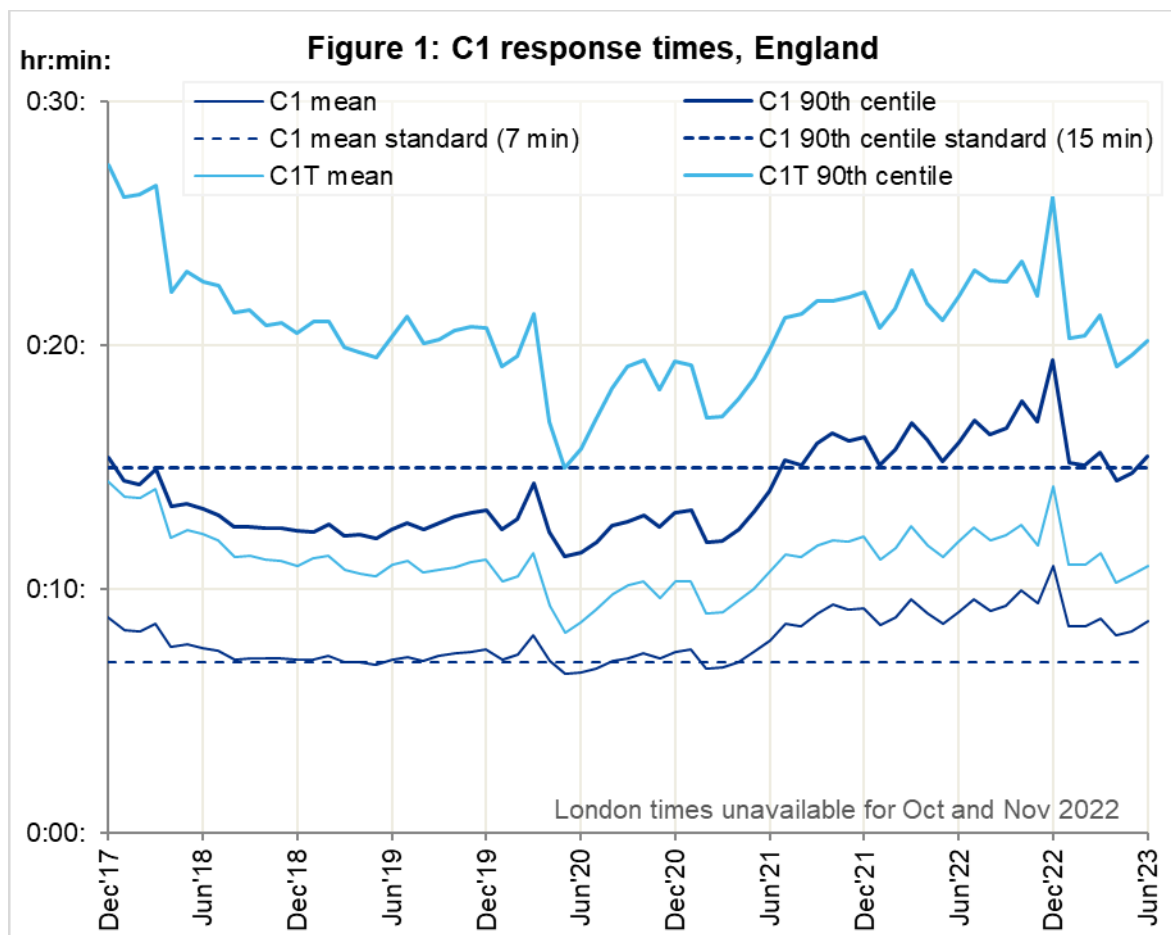
For stroke patients, the average time from hospital arrival to CT Scan in February 2023 was shorter than in all months of 2022.

1. Ambulance Systems Indicators (AmbSYS)

1.1 Response times

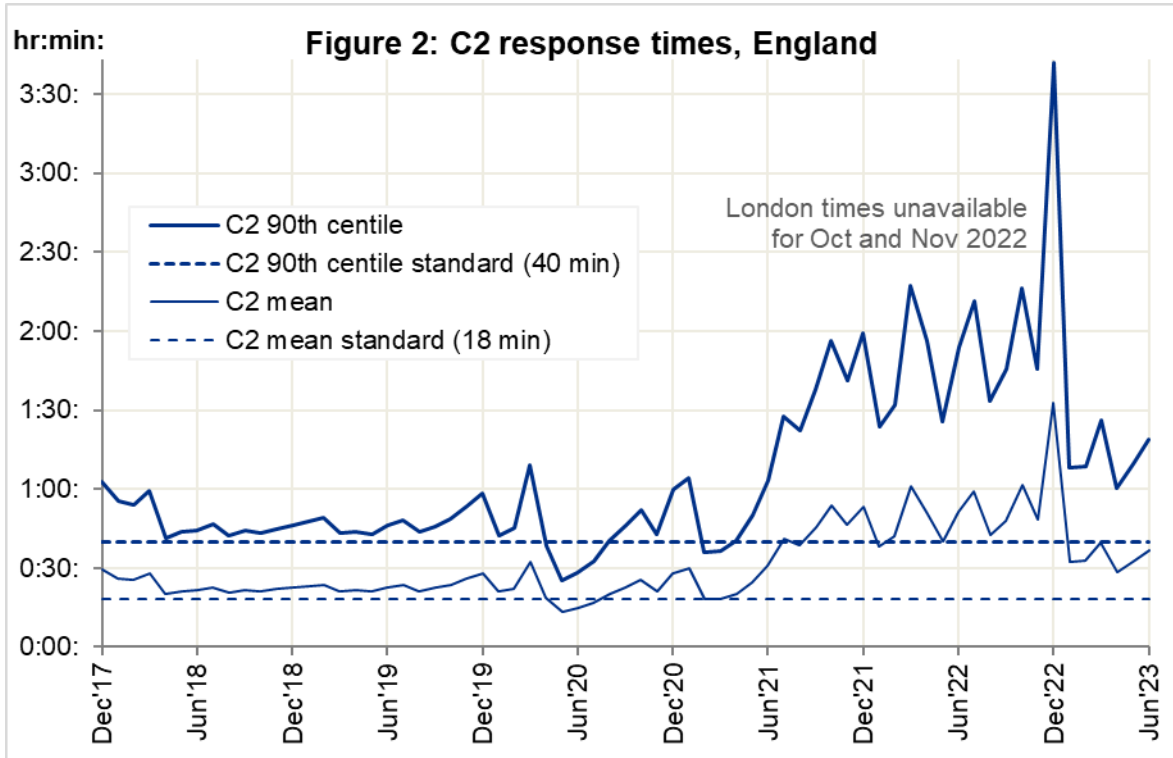
For England, the mean average response time for the most urgent Category, C1, was 8 minutes 41 seconds in June 2023, with a 90th centile time of 15:27 (Figure 1).

For C1T (time to the arrival of the transporting vehicle for C1 incidents), the average was 10:58, and the 90th centile 20:11.

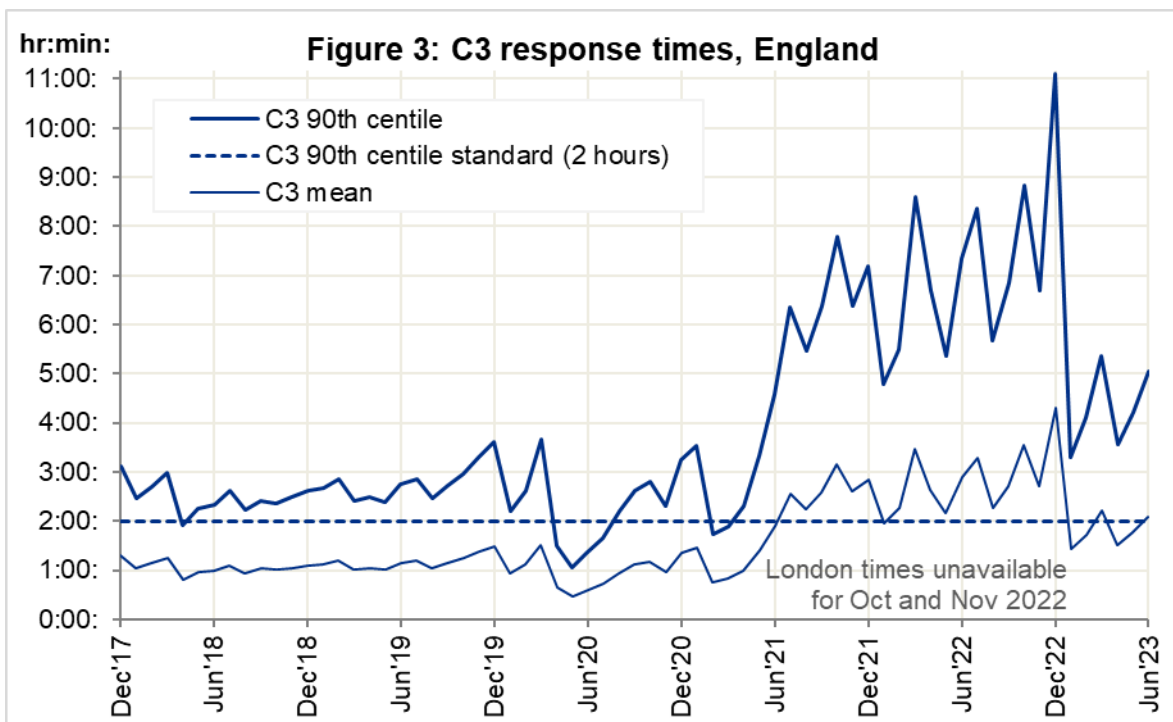


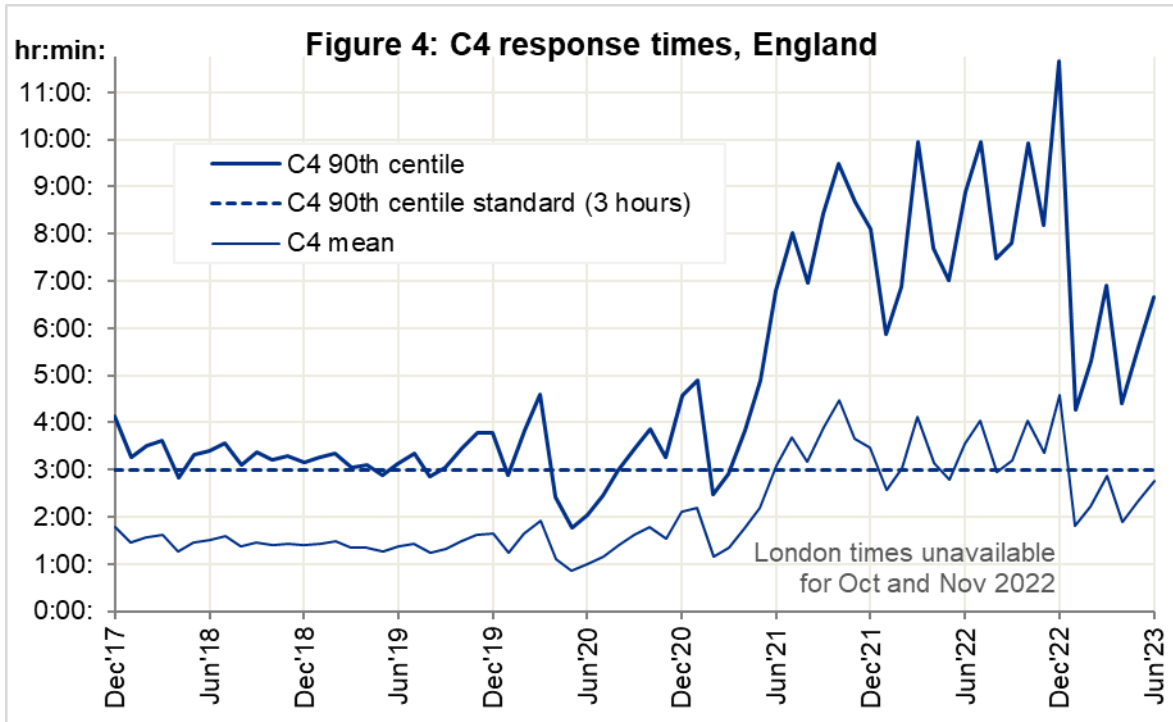
¹ Standards in the NHS Constitution Handbook: www.gov.uk/government/publications/supplements-to-the-nhs-constitution-for-england/the-handbook-to-the-nhs-constitution-for-england

The C2 average in June 2023 was 36:49. The 90th centile was 1:18:53. (Figure 2). These times are higher than April and May 2023, but lower than in all months of 2022.



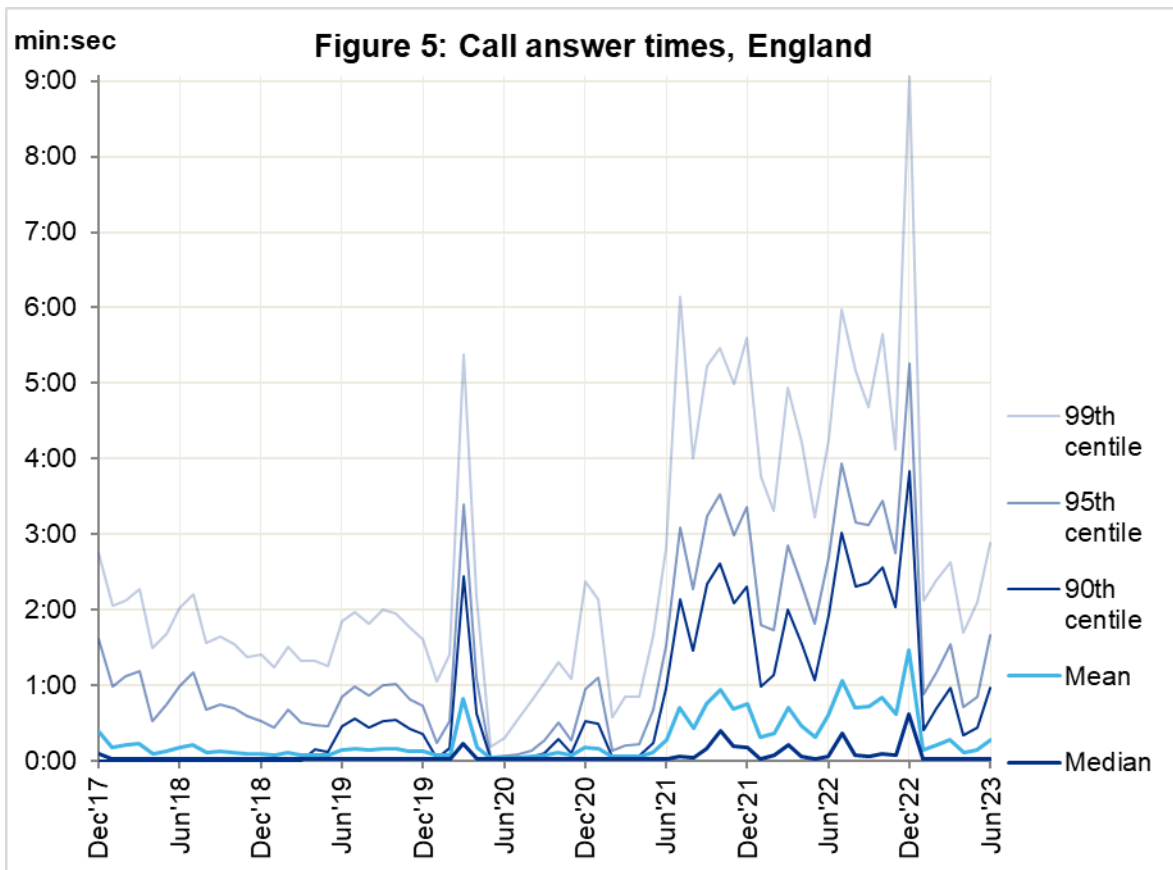
In June 2023, the C3 average was 2:05:40, with a 90th centile of 5:03:18 (Figure 3), and the C4 average was 2:45:15, with a 90th centile of 6:39:53 (Figure 4). All these were shorter than in all months of 2022 apart from January 2022.





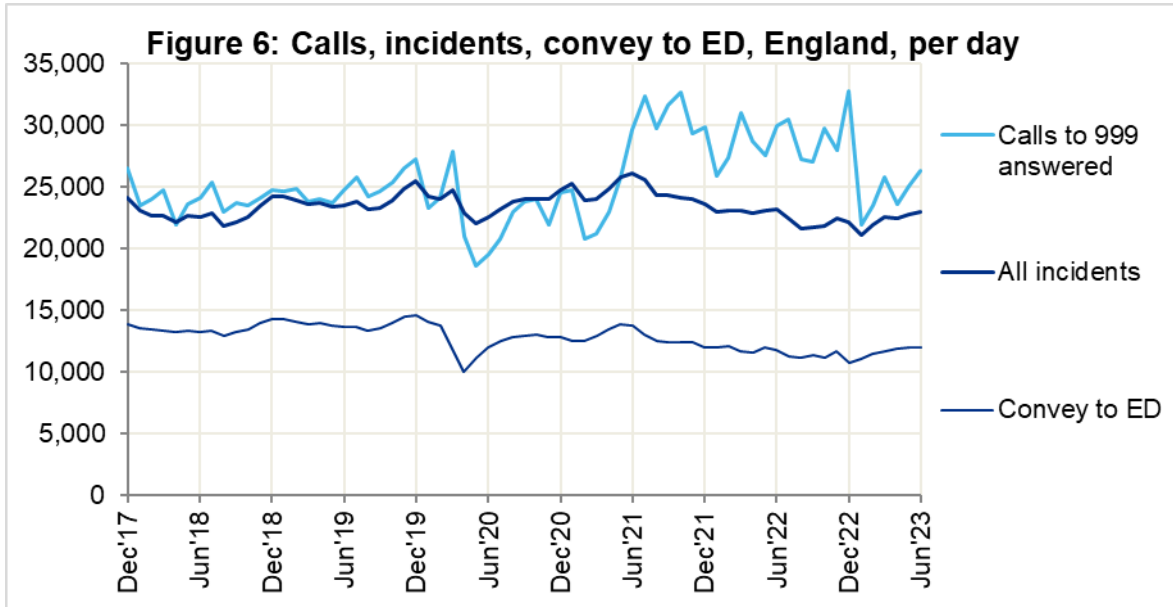
1.2 Other Systems Indicators

The average 999 call answer time in June 2023 was 17 seconds (Figure 5), the joint highest in 2023 so far, but lower than all months from July 2021 to December 2022.

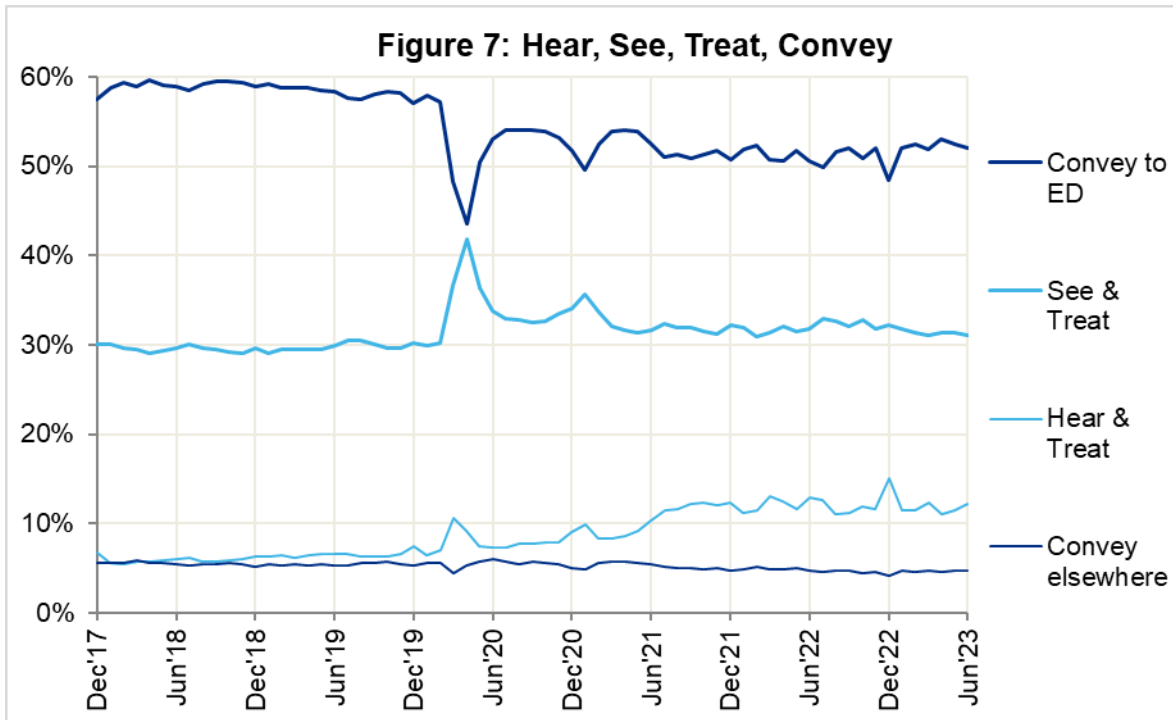


The count of 999 calls answered increased to 787,675 in June 2023, or 26,256 per day (Figure 6), which are both the highest since the peak in December 2022.

There were 687,896 incidents in June 2023, or 22,930 per day; 358,027, or 11,934 per day, had conveyance to ED, which was the most per day since May 2022.



Conveyance to an emergency department (ED) decreased a little as a proportion of all incidents, comprising 52% in June 2023, while incidents resolved on the telephone (Hear & Treat) increased a little and comprised 12%. Conveyance to non-ED (5%) and incidents resolved on the scene (See & Treat, 31%) saw little change.



1.3 Annual comparisons

Our published incident counts (indicator A7) for 2019-20, 2020-21, 2021-22, and 2022-23 respectively, are 8,783,204 (23,998 per day), 8,650,028 (23,699 per day), 8,873,579 (24,311 per day), and 8,119,201 (22,244 per day). For comparisons, we should use per day figures, because 2019-20 is a leap year. In 2022-23, the number of incidents per day was 9% fewer than in 2021-22, 6% fewer than in 2020-21, and 7% fewer than in 2019-20.

Response Times

The average C1 response times for England (indicator A25) in 2020-21, 2021-22, and 2022-23 were 7:03, 8:39, and 9:13 respectively, so the 7-minute standard was not met in any year. The average C1 response time in 2022-23 was 7% longer than in 2021-22, when it was 23% longer than in 2020-21.

The C2 mean response times for England (A31) in 2020-21, 2021-22, and 2022-23 were 20:57, 41:18, and 50:01 respectively, so the 18-minute standard was also not met in any year although, like the 7-minute standard, it was met in some individual months in 2020-21. The average C2 response time in 2022-23 was 21% longer than in 2021-22, when it was 97% longer than in 2020-21.

Annual comparisons should consider data quality, which we describe in footnotes in our time series spreadsheet. London response times are missing for October and November 2022, and London September 2022 data are only 1-22 September. To assess the impact, we can remove September, October, and November data for London from all years. This gives annual C1 times of 7:06 (2020-21), 8:42 (2021-22), and 9:19 (2022-23), and C2 times of 21:11 (2020-21), 41:04 (2021-22), and 50:06 (2022-23), which are all within 15 seconds of the times including all London data in the paragraph above.

999 Calls answered

The numbers of 999 calls answered (indicator A1) that we received for Yorkshire undercounted calls from 13 November 2019 to 7 September 2021 inclusive. To take this into account, we subtract Yorkshire data from all years when comparing call counts involving that period. This leaves 8,485,464 in 2019-20 (23,184 per day), 7,467,171 in 2020-21 (20,458 per day), 9,759,147 in 2021-22 (26,737 per day), and 9,302,868 in 2022-23 (25,487 per day). Comparing these shows that 2022-23 had 5% fewer calls answered than 2021-22, but 25% more than 2020-21, and 10% more than 2019-20.

Conveyance to ED

In 2022-23, 11,383 incidents per day ended in conveyance to ED (indicator A53), 9.7% fewer than in 2021-22 (12,607) and 7.6% fewer than in 2020-21 (12,324). As also noted in our footnotes, South East Coast Ambulance Service (SECamb) introduced an improved methodology for A53 in May 2020. To make comparisons between years, we can remove SECamb data for April 2020, April 2021, and April 2022. Conveyance to ED in 2022-23 remains 9.7% fewer than in 2021-22, but becomes 7.8% fewer than in 2020-21.

2. Ambulance Clinical Outcomes (AmbCO)

We continue to describe stroke data when we publish AmbCO data for February, May, August, or November, and data for STEMI (a type of heart attack) and cardiac arrest in each month before that.

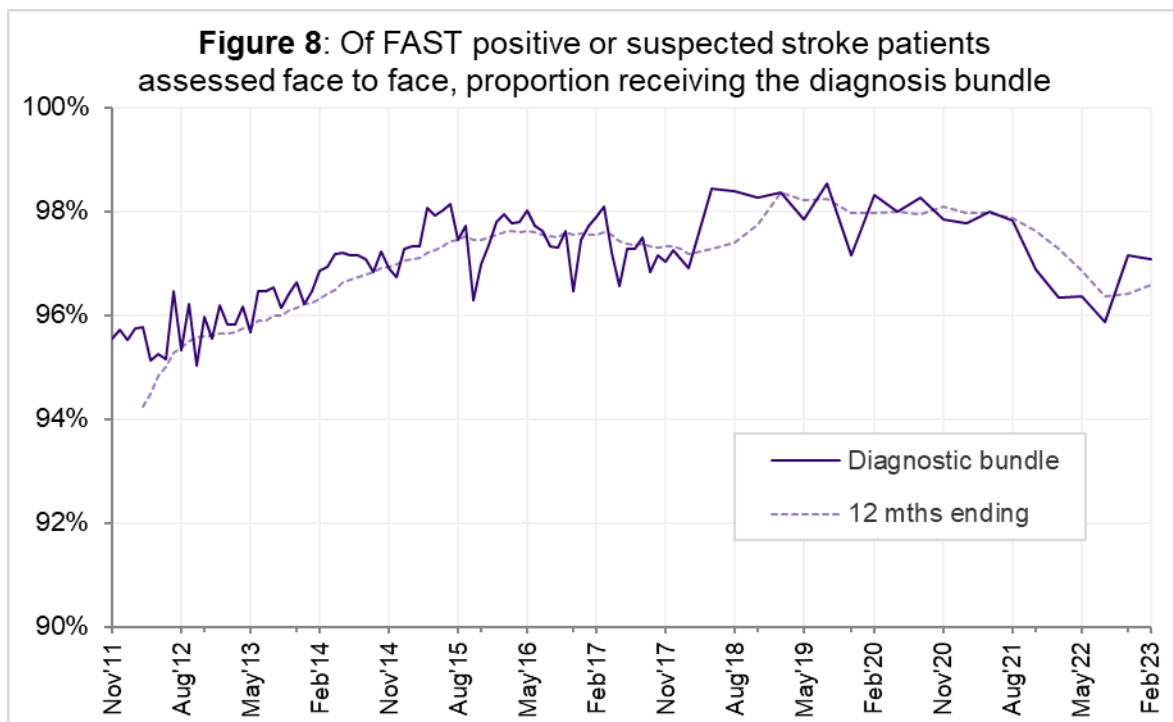
2.1 Stroke data

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.

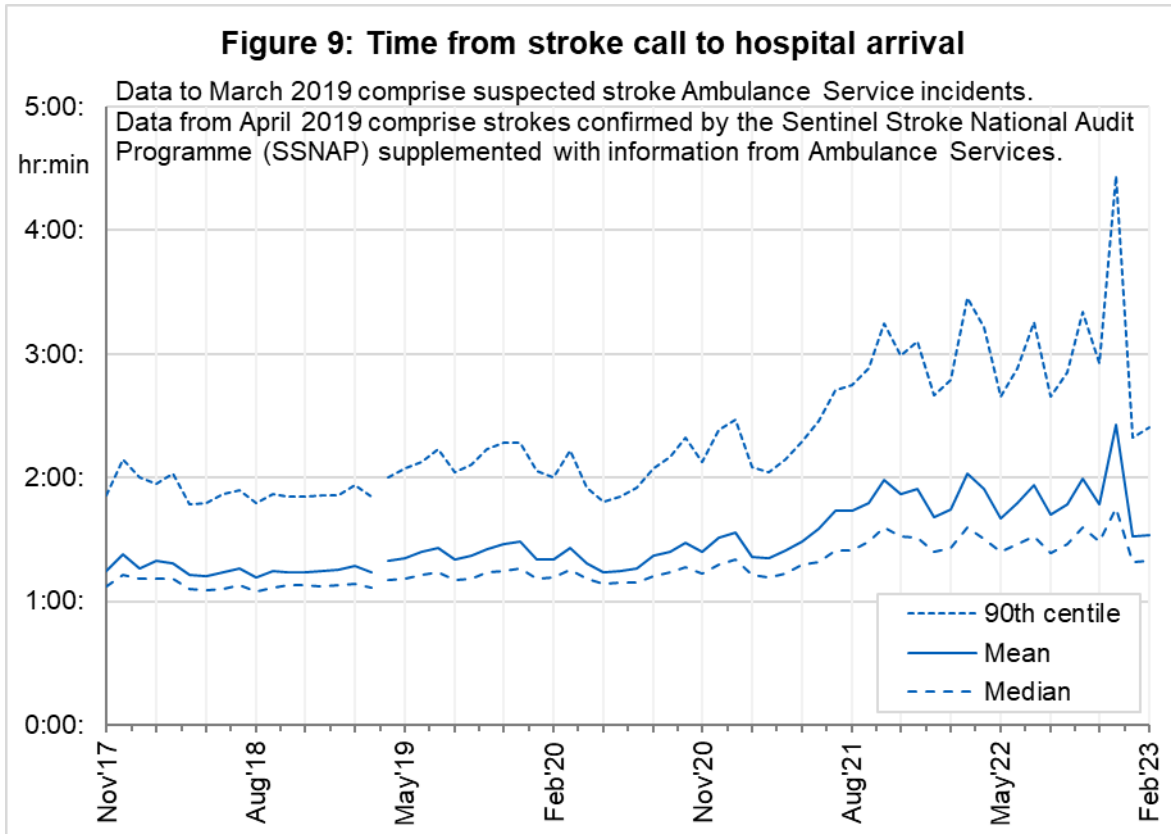
Stroke patients in England receiving an ambulance should receive a diagnosis bundle; a FAST assessment, blood glucose, and two blood pressures should all be recorded.

In February 2023, of 8,416 such patients in England, 8,170 (97.1%) received that diagnosis bundle (Figure 8), a small but significant² increase on the average of 96.4% for the year ending September 2022.



The average time from 999 call until arrival at hospital for ambulance patients in England who had a stroke was 1 hour 32 minutes in February 2022 (Figure 9, middle line). This was lower than the average for 2022-23 so far (1:49) and the lowest since May 2021 except for January 2023 where it was 1:31.

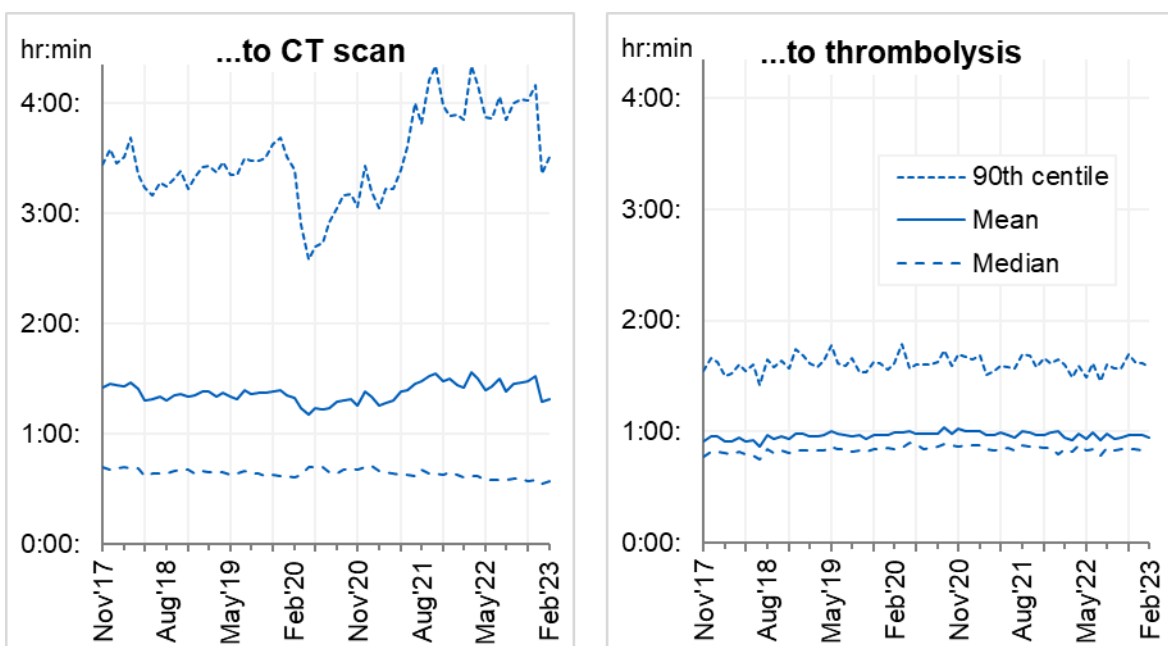
² Calculated using Student's t-test with 95% significance.



The average time from hospital arrival to CT scan in February 2023 was 1:18, lower than the average for 2022-23 so far (1:25) and 2021-22 (1:27). (Figure 10)

For time from hospital arrival to thrombolysis, the average is almost always between 55 to 60 minutes, and the February 90th centile was 1:35, shorter than in November 2022 (1:42), which was the longest for over two years.

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 (A2 to A6 and A114).

3.3 Related statistics

NHS England publishes ambulance handover delays at hospital during winter 2012-13 to 2014-15 and winter 2017-18 to 2022-23 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.