

Statistical Note: Ambulance Quality Indicators (AQI)

The average response times for all categories C1-C4 were longer in September 2022 than in the previous month but shorter than in the month before that.

For ambulance stroke patients in England, the average time from 999 call to hospital arrival peaked in March 2022, as did the time from hospital arrival to CT scan.

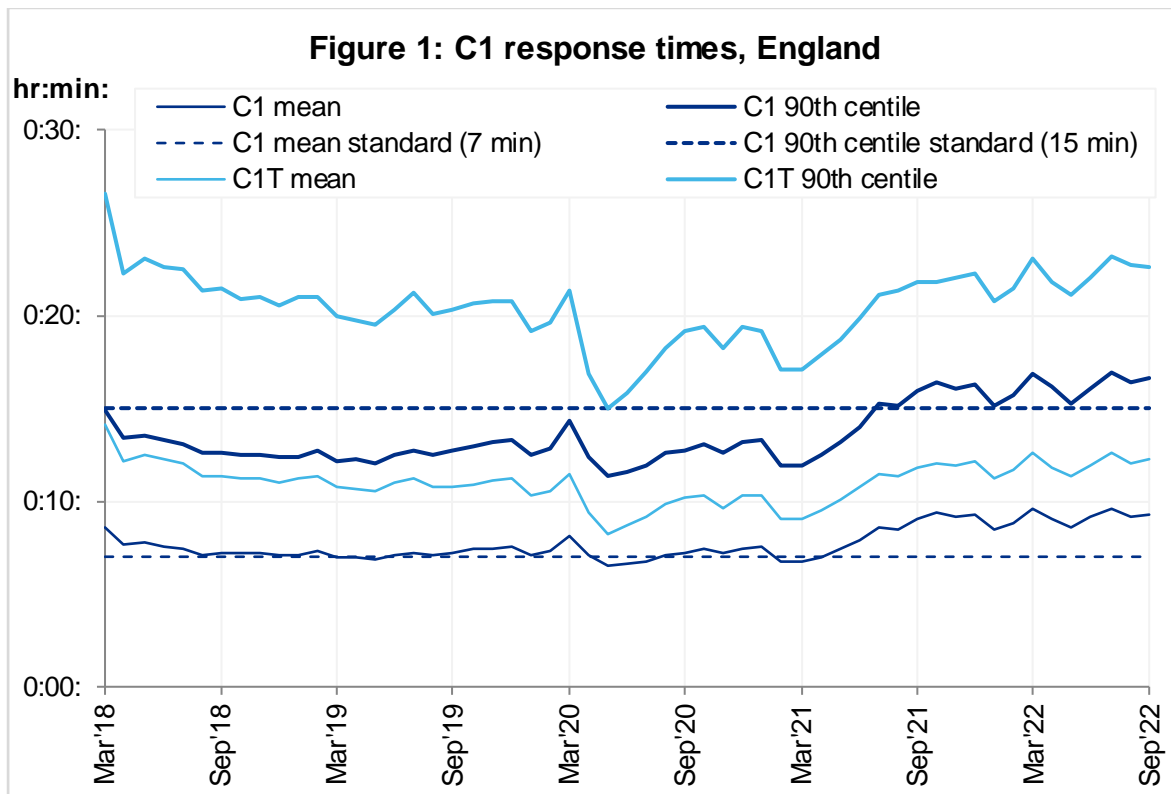
1. Ambulance Systems Indicators (AmbSYS)

1.1 Response times

In September 2022, the England mean average response time for the most urgent Category, C1, was 9 minutes 19 seconds, and the 90th centile was 16:38 (Figure 1), so neither the 7-minute mean nor the 15-minute 90th centile standard¹ were met.

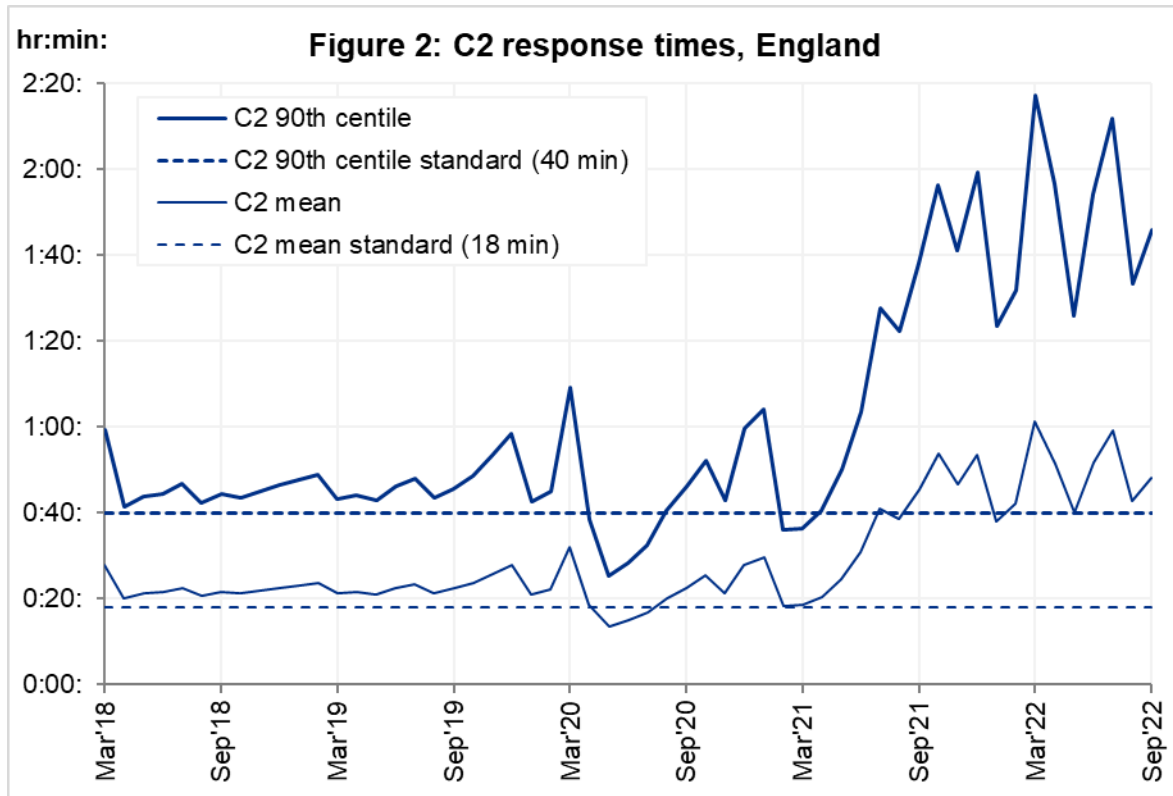
The mean average for C1T (time to the arrival of the transporting vehicle for C1 incidents) was 12:12, and the 90th centile was 22:37. Like the C1 times, these were similar to the values for 2022-23 so far, but longer than in the previous four years.

AmbSYS data are unavailable for London Ambulance Service (LAS) after 22 September 2022. LAS advised that their C1 average for September is probably longer than our published figure. However, that is not necessarily true for our published times for England as a whole.

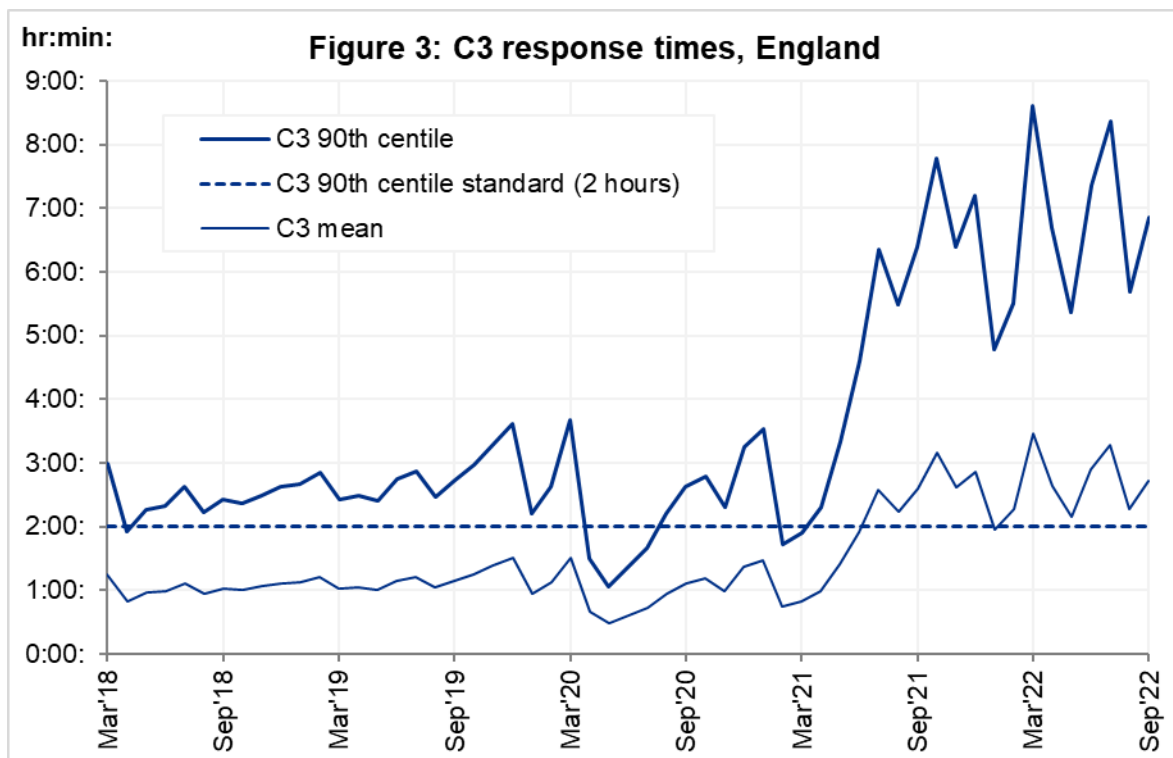


¹ Standards in the NHS Constitution Handbook: www.gov.uk/government/publications/supplements-to-the-nhs-constitution-for-england/the-handbook-to-the-nhs-constitution-for-england

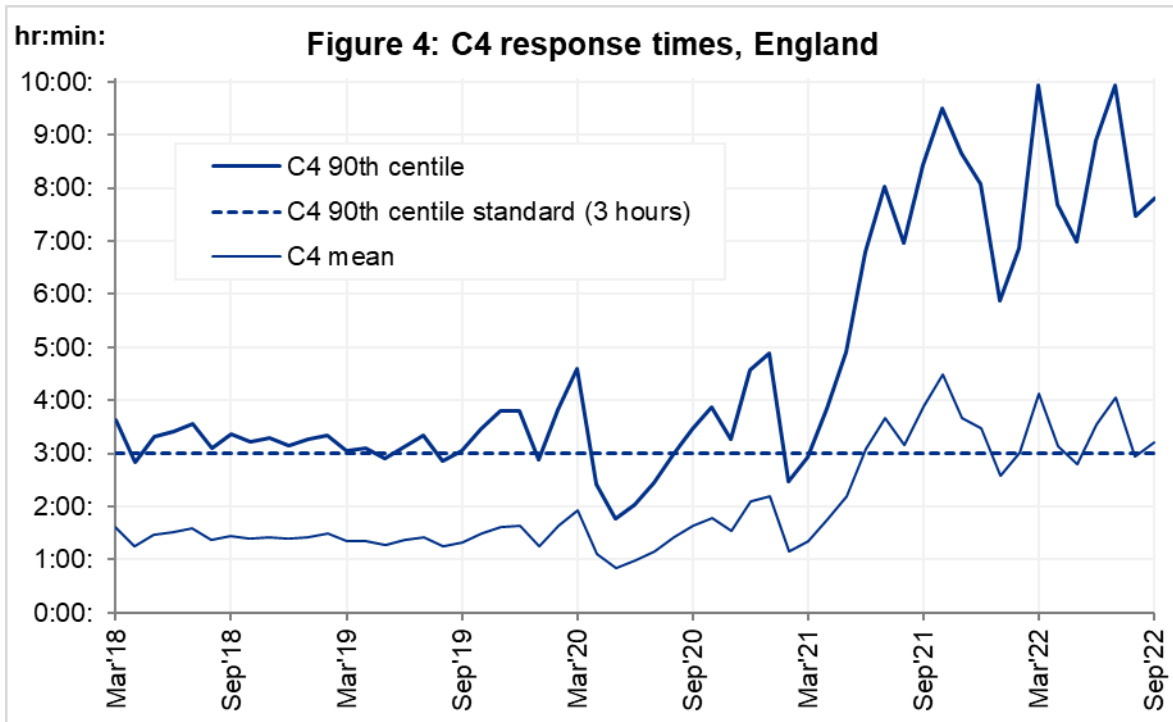
The C2 mean response time in September 2022 was 47:59, and the 90th centile was 1:45:45, so the 18 and 40-minute standards were not met. (Figure 2)



The C3 mean response time was 2:42:28, and the 90th centile was 6:51:31 so the 2-hour 90th centile standard was not met. (Figure 3)



The C4 mean average response time in September 2022 was 3:12:34, and the 90th centile was 7:48:12, so the 3-hour 90th centile standard was not met. (Figure 4)



1.2 Other Systems Indicators

The average answer time for ambulance 999 calls in England in September 2022 was 36 seconds, more than the average for 2021-22, and much more than the averages for the previous three years. (Figure 5)

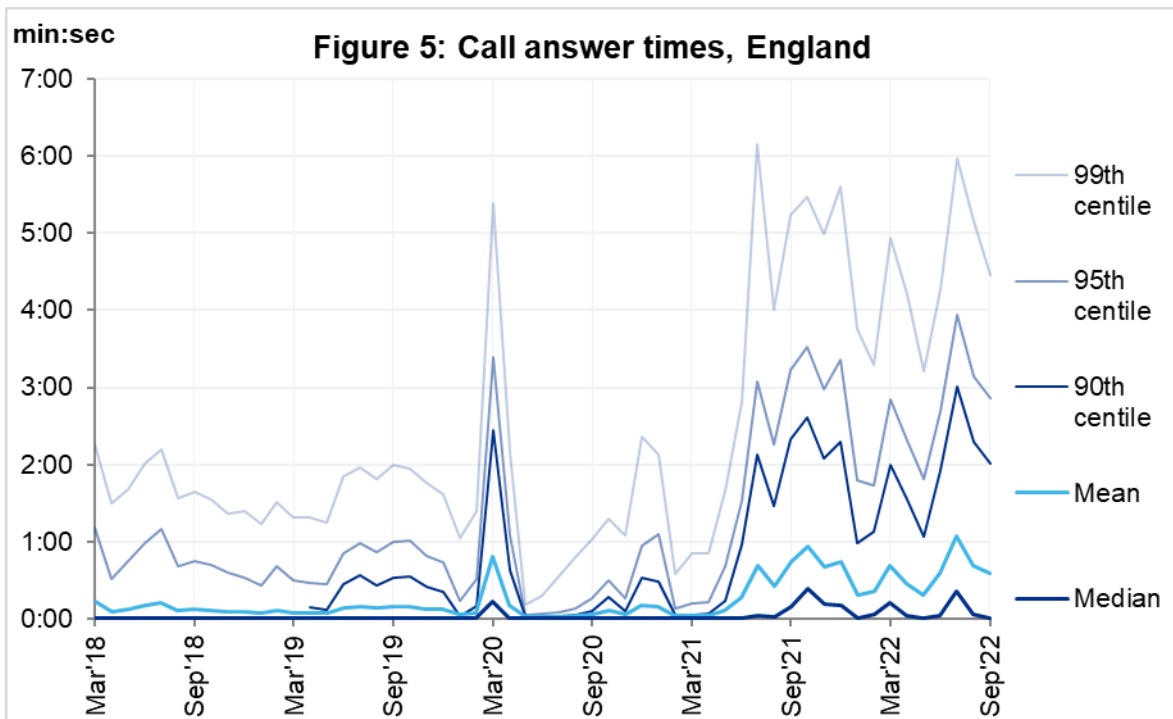


Figure 6, and our published spreadsheets, show 26,011 calls to 999 were answered in England in September 2022, fewer than in August 2022 (27,215 per day). However, we estimate that if we had the missing LAS data for 23-30 September, there would have been around 27,500 calls per day across England, 1% more than in August 2022. Similar estimations show that the number of incidents per day where a patient was conveyed to an Emergency Department (ED) also increased by 1%, while the total number of incidents per day had a smaller increase.

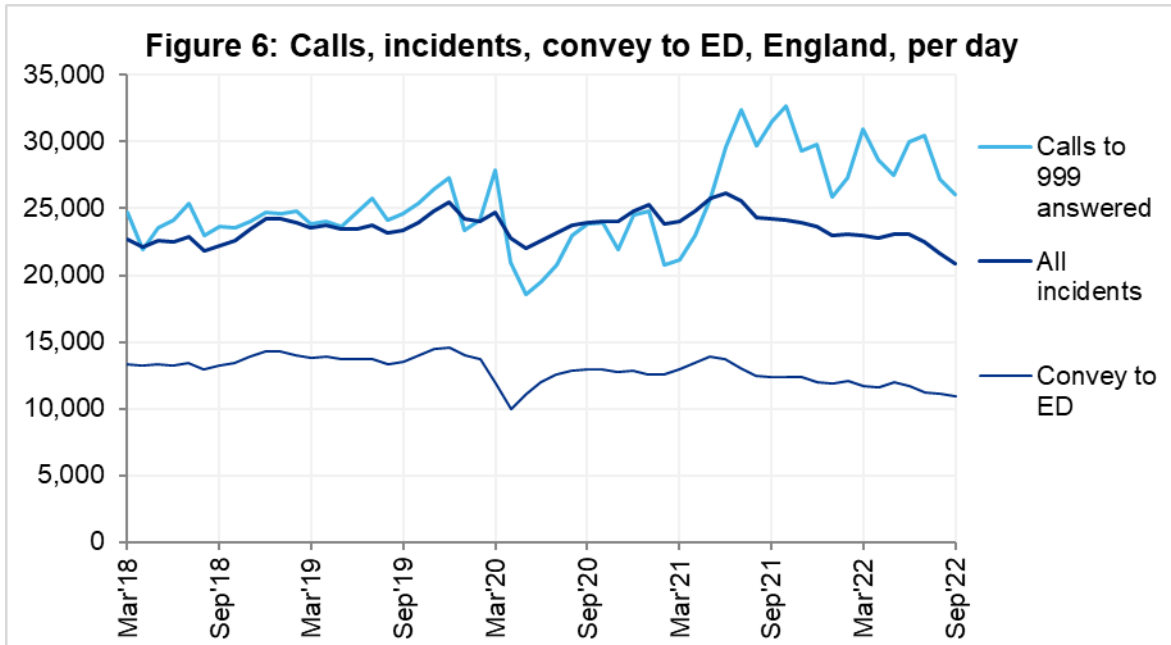
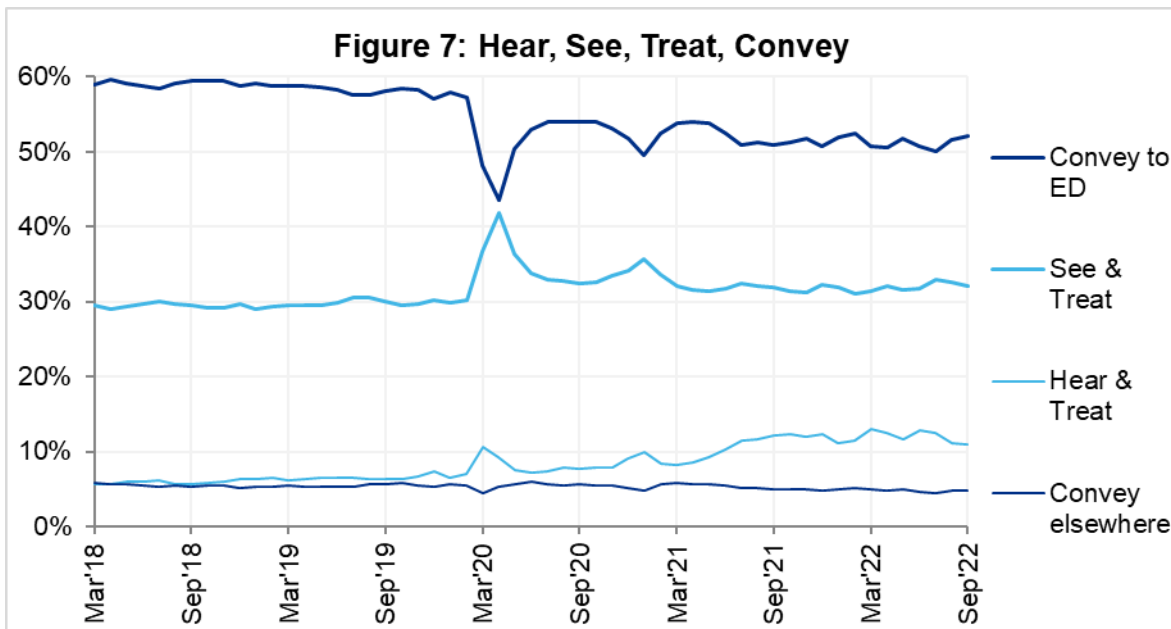


Figure 7 shows that the proportion of incidents conveyed to ED increased from 51.5% to 52.1%, and this was mirrored by a reduction in incidents resolved on the scene (See & Treat) from 32.7% to 32.1%. Other incidents comprised 11% resolved on the telephone (Hear & Treat), and 5% with conveyance not to ED, both little changed from August 2022.



2. Ambulance Clinical Outcomes (AmbCO)

Alongside AmbCO data for May 2022, we have published revisions today to one indicator (cardiac arrest count R0n) for August 2018 and to many data items for 2021-22 and 2022-23 so far.

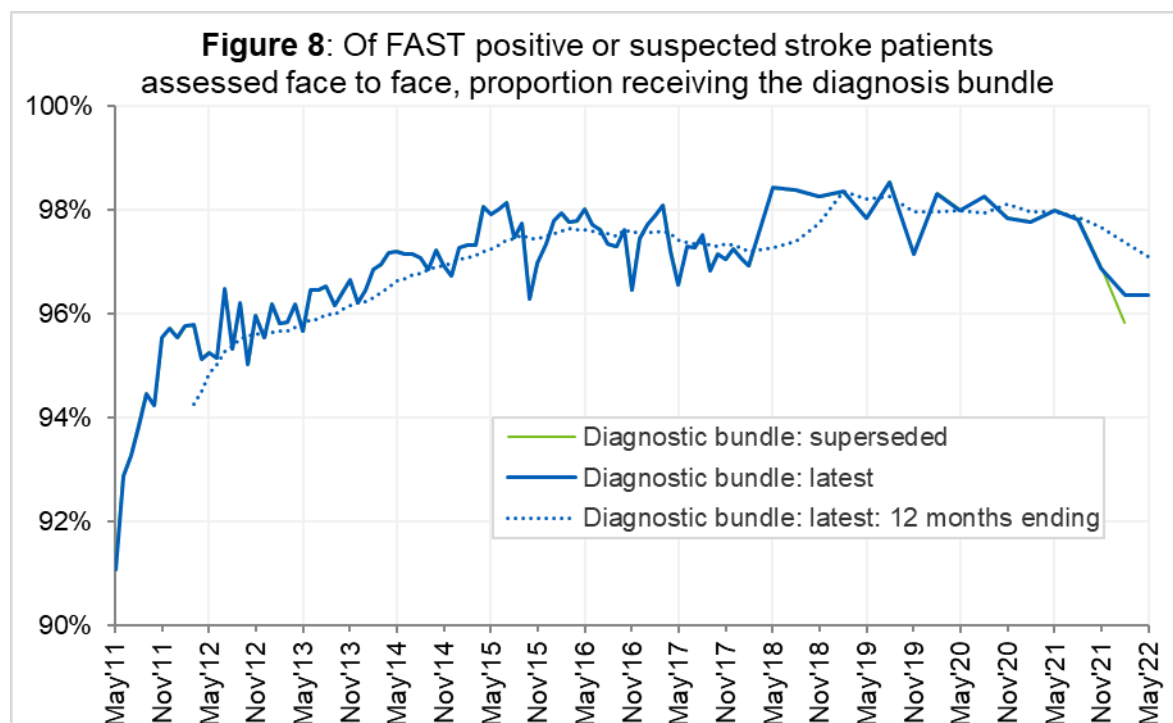
In this Statistical Note, we continue to summarise stroke data when we publish May, August, November, or February AmbCO data; sepsis data in the following month; and data for STEMI (a type of heart attack) and cardiac arrest in the month after that.

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.

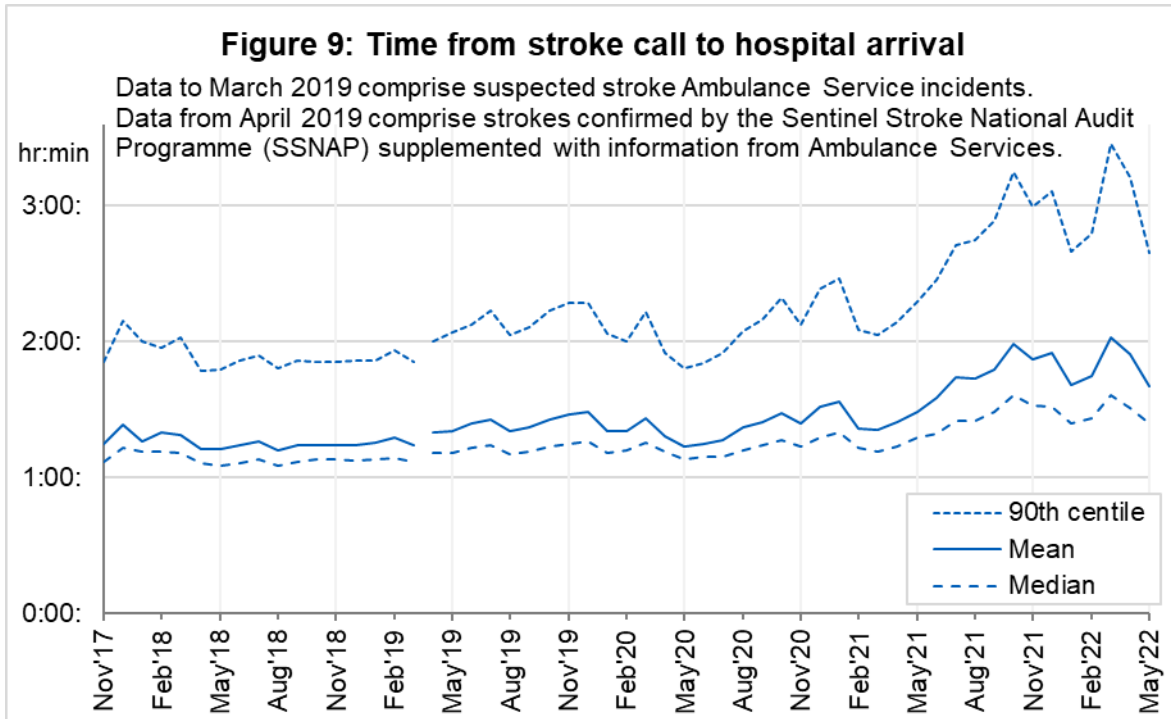
Stroke patients in England receiving an ambulance should receive a diagnosis bundle; a FAST assessment, blood glucose, and two blood pressures should all be recorded.



In May 2022, of 9,612 such patients in England, 9,262 (96%) received that diagnosis bundle (Figure 8). However, West Midlands Ambulance Services advised us of a reporting problem where their 2022 data does not capture all patients where the bundle was delivered. Excluding them from all months, the May 2022 proportion for England is 97%, as it was in November 2021 and February 2022.

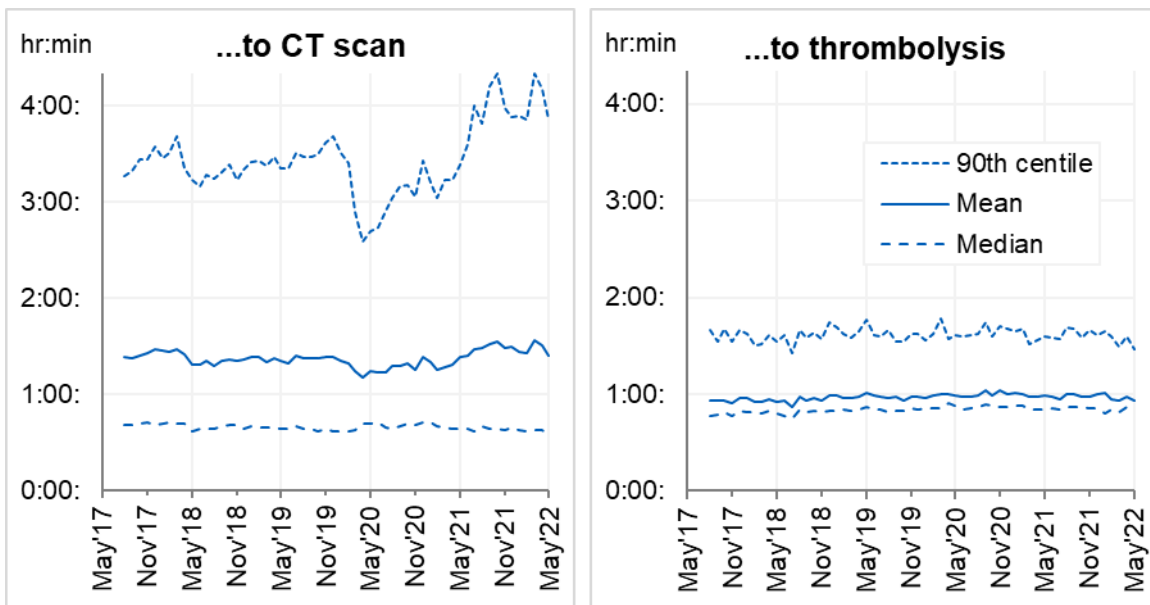
A revision by North West Ambulance Service has increased the proportion for England in February 2022 by half a percentage point.

The mean average time from 999 call until arrival at hospital for ambulance patients in England who had a stroke was 1 hour 40 minutes in May 2022 (Figure 9, solid line). This was less than the average for each of the previous ten months, including the peak of 2:01:51 in March 2022, but more than the average for each of all the earlier months (from November 2017 to June 2021).



The average time from hospital arrival to CT scan in May 2022 was 1:24, longer than in all months from May 2018 to June 2021, but shorter than the peak of 1:33 in March 2022. Conversely, the time to thrombolysis in March 2022 of 55 minutes 48 seconds was shorter than in each of the previous 43 months. (Figure 10)

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 mentioned in section 3.1, incidents resulting from a call to NHS 111 are included in all Systems Indicators the except the call indicators, 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: NHSEI Media team, nhsengland.media@nhs.net, 0113 825 0958.

The person responsible for producing this publication is Ian Kay; Performance Analysis Team; Finance, Performance and Planning Directorate; NHS England and NHS Improvement (NHSEI); england.nhsdata@nhs.net; 0113 825 4606.

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.