

Statistical Note: Ambulance Quality Indicators (AQI)

The number of ambulance 999 calls per day in December 2020 was the largest since the early days of the COVID-19 pandemic in March 2020. For the standards in the NHS Constitution¹, response times in December were all the longest they had been since March 2020.

For stroke patients transported by ambulances in England in August 2020, the vast majority received the appropriate diagnosis bundle.

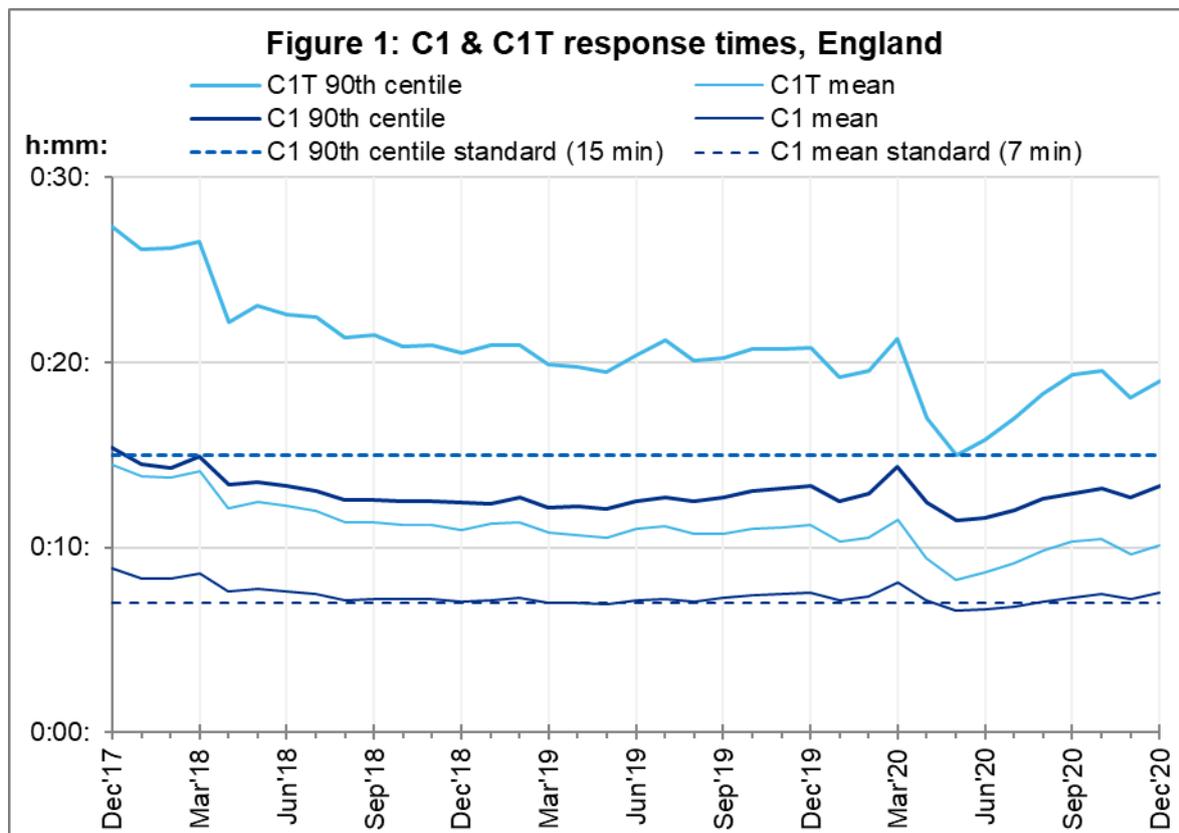
1. Systems Indicators

1.1 Response times

In December 2020, the mean average C1 response time England was 7 minutes 33 seconds, so the 7-minute standard was not met; but the C1 90th centile response times averaged 13:18 across England, so the 15-minute standard was met.

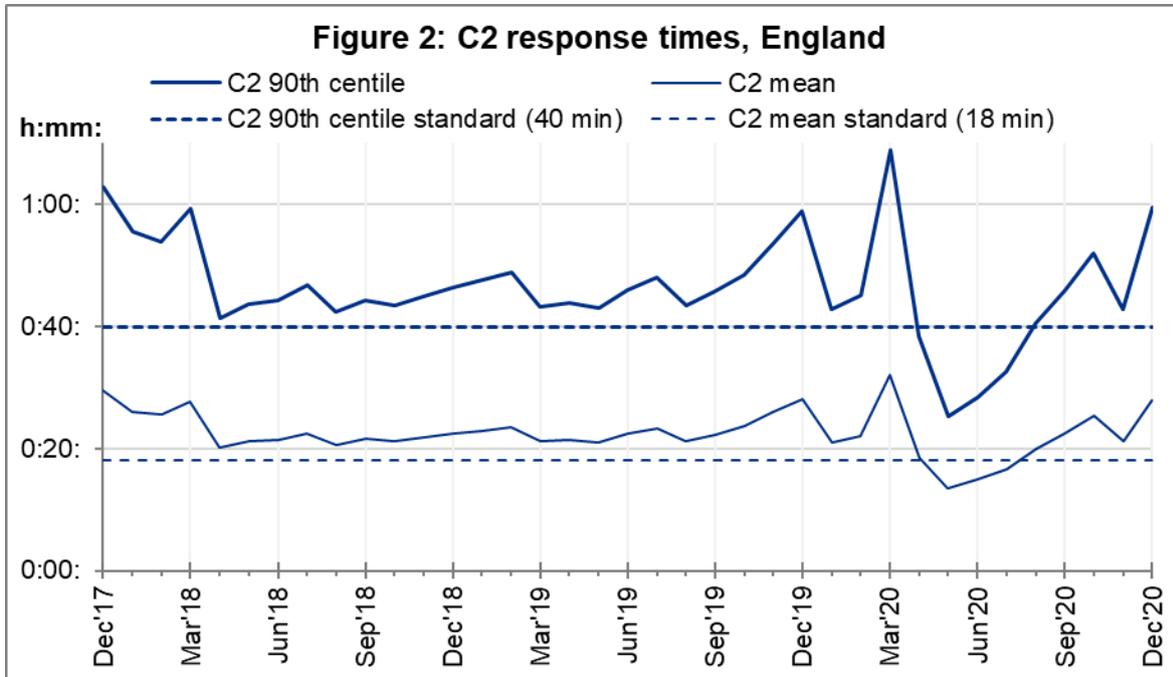
For C1T (response times for arrival of transporting vehicle, for C1 patients transported), the mean was 10:08, and the 90th centiles averaged 19:02.

In December, all four of these measures increased from November (Figure 1), but they were all within 30 seconds of their values in October 2020.



¹ Standards for Ambulance Services: www.gov.uk/government/publications/supplements-to-the-nhs-constitution-for-england/the-handbook-to-the-nhs-constitution-for-england

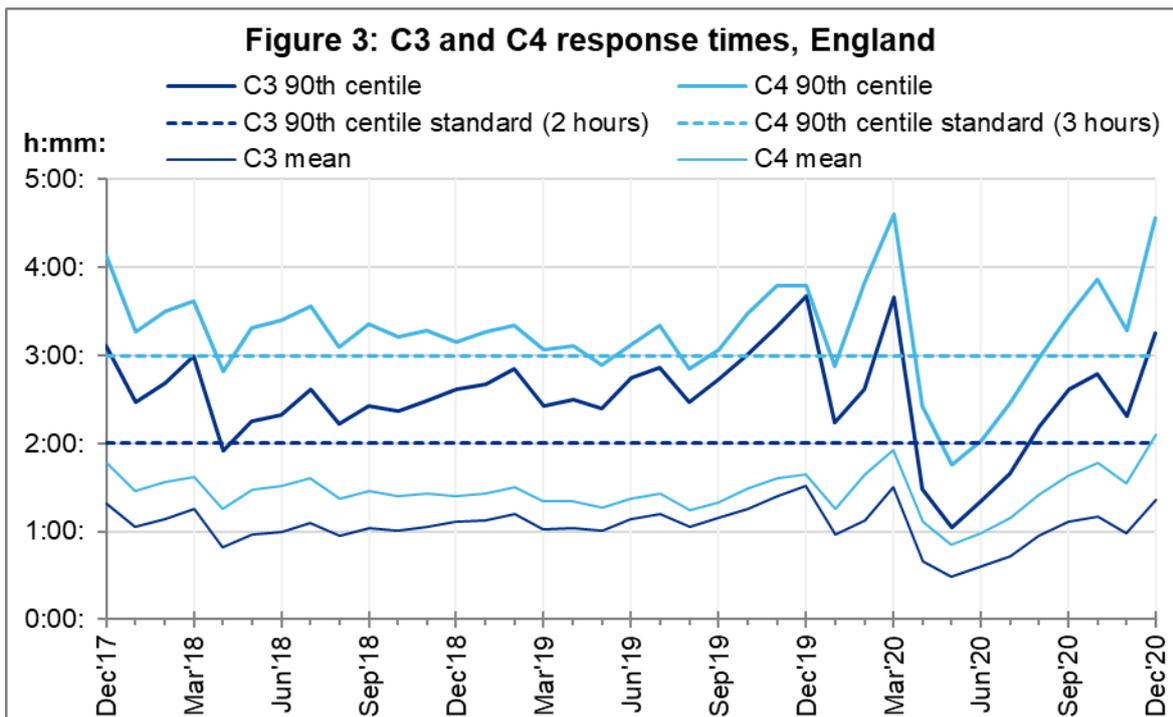
For C2 in December 2020, the mean average response time was 27:51 for England, and the 90th centiles averaged 59:37 across England (Figure 2).



For C3 in December, the mean average response time was 1:21:35. The C3 90th centile times averaged 3:14:55, so the two-hour standard was not met (Figure 3).

For C4 in December, the mean average response time was 2:06:11. The C4 90th centile times averaged 4:33:56, so the three-hour standard was not met (Figure 3).

All the C2, C3, and C4 (but not C1) mean and 90th centile response times for England in December increased by more than 30% on November 2020.



1.2 Other Systems Indicators

In December 2020, the 95th and 99th centile call answer times across England averaged 58 and 142 seconds respectively, with the 95th centile at the highest point since April 2020 and the 99th centile at the highest point since March 2020.

In December 2020, per day, there were (Figure 4):

- 24.5 thousand calls to 999 answered, 11.9% more than in November;
- 24.7 thousand incidents that received a response (whether on the telephone or on the scene) from an ambulance service, 2.9% more than in November;
- 12.8 thousand incidents where a patient was transported to an Emergency Department (ED), 0.2% more than in November.

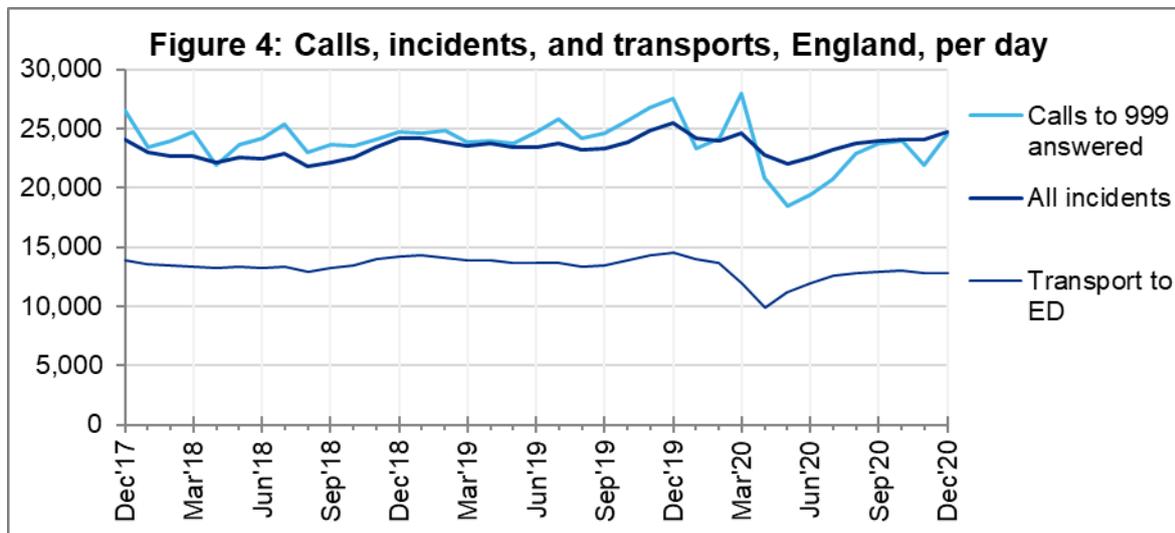
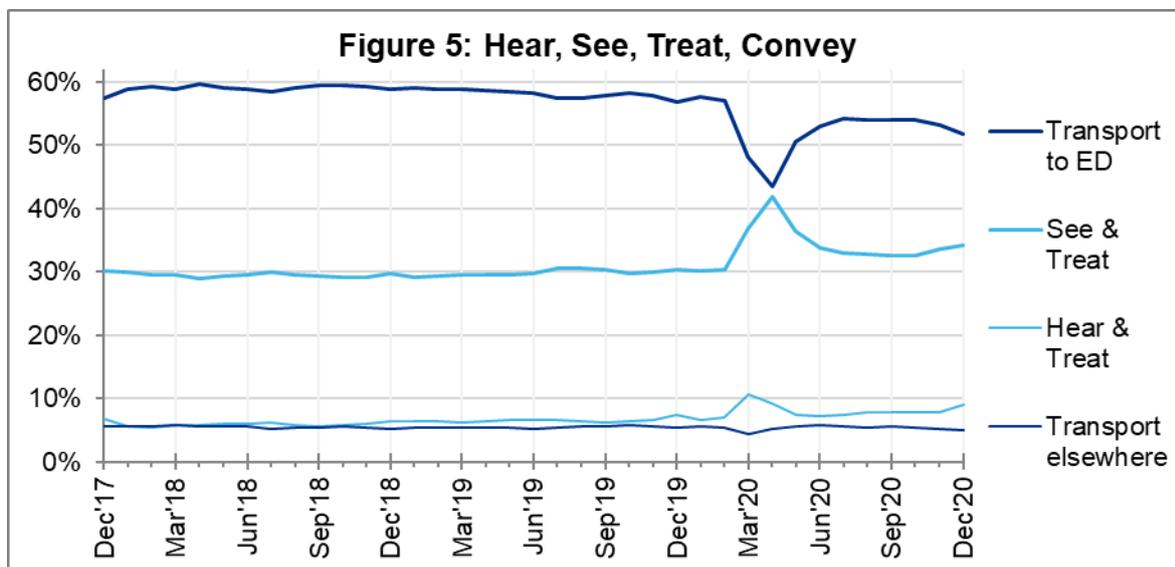


Figure 5 shows that in December 2020, 9.0% of incidents were resolved on the telephone (Hear & Treat); in the last three years, only March and April 2020 had more. In December, 34.3% of incidents (the most since May 2020) were closed at the scene (See & Treat), and 51.9% (the least since May 2020) featured transport to ED, with the other 4.9% featuring transport to destinations other than ED.



2. Ambulance Clinical Outcomes (AmbCO)

As announced at www.england.nhs.uk/statistics/covid-19-and-the-production-of-statistics and in our previous Statistical Notes, we did not collect AmbCO data for our May, June, or July 2020 publications. Our August, September, and October publications contained the delayed data for December 2019, January, and February 2020 respectively. We then returned to the original schedule with June 2020 data in our November publication, and July data last month. Today, alongside the planned August 2020 data, we complete the time series with data for March to May 2020.

For bundle data, we continue to publish according to the following timetable:

Month of latest AmbCO data	Bundle data in this publication
Jan / Apr / Jul / Oct	Care bundle for (i) return of spontaneous circulation (ROSC) after cardiac arrest and for (ii) ST-elevation myocardial infarction (STEMI, a type of heart attack)
Feb / May / Aug / Nov	Diagnostic bundle for stroke incidents
Mar / Jun / Sep / Dec	Care bundle for sepsis incidents

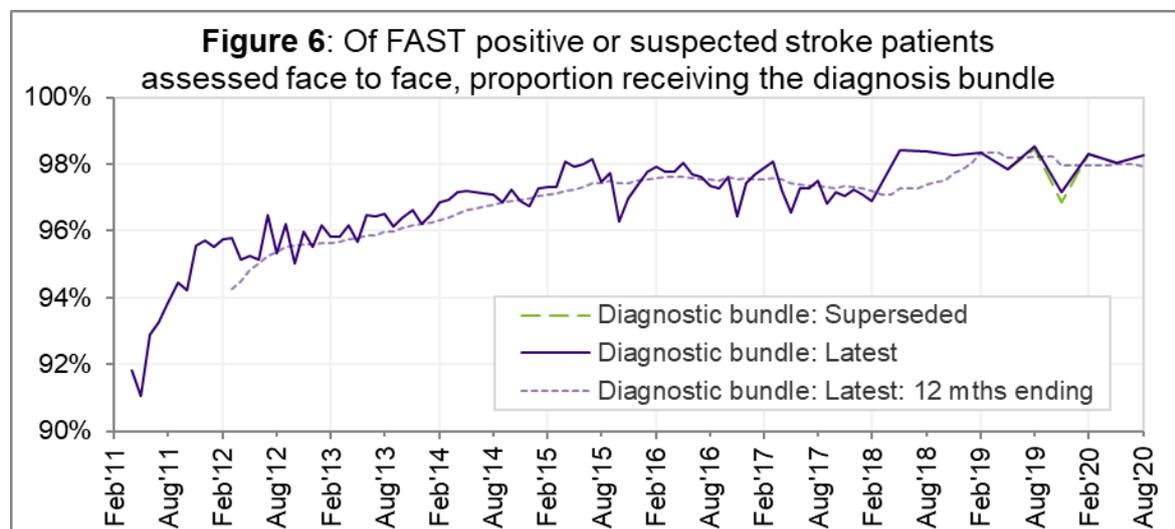
As the latest AmbCO data in today's publication is for August 2020, today we describe the data for stroke (including the revisions that we published last month for data from July 2019 to February 2020 inclusive).

2.1 Stroke

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

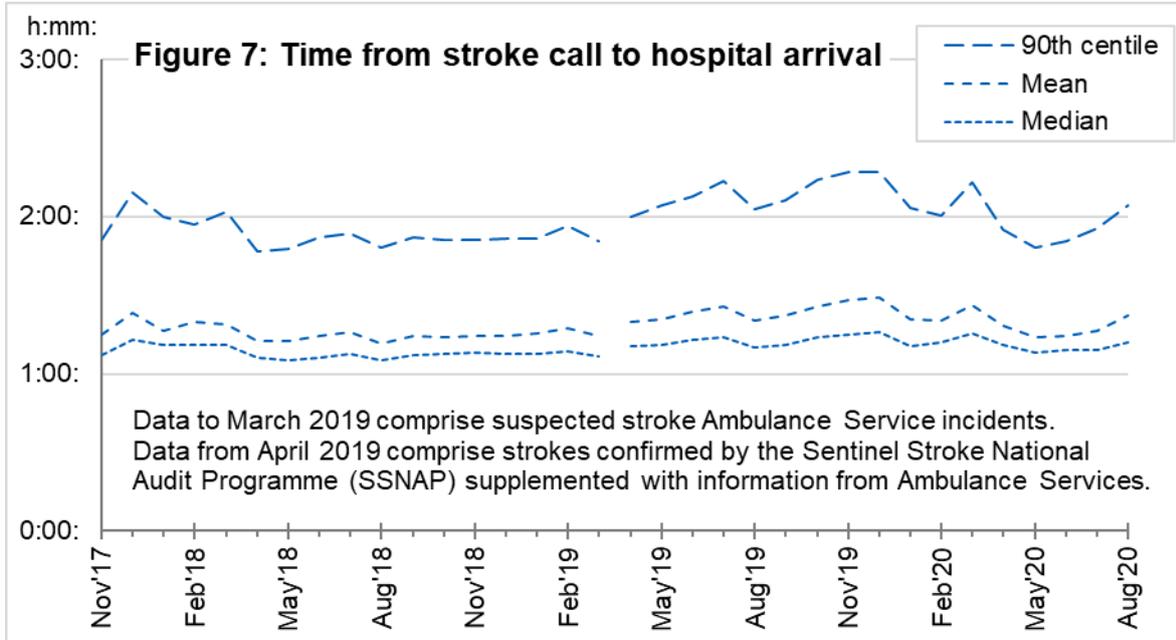
- Facial weakness: can the person smile? Has their mouth or eye drooped?
- Arm weakness: can the person raise both arms?
- Speech problems: can the person speak clearly and understand what you say?
- Time to call 999 for an ambulance if you spot any one of these signs.

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 2020, this happened for 98.3% of such incidents. Other than in November 2019, when it was 97.2% (revised from 96.9%), this proportion has been 97.8% or more since March 2018 (Figure 6).



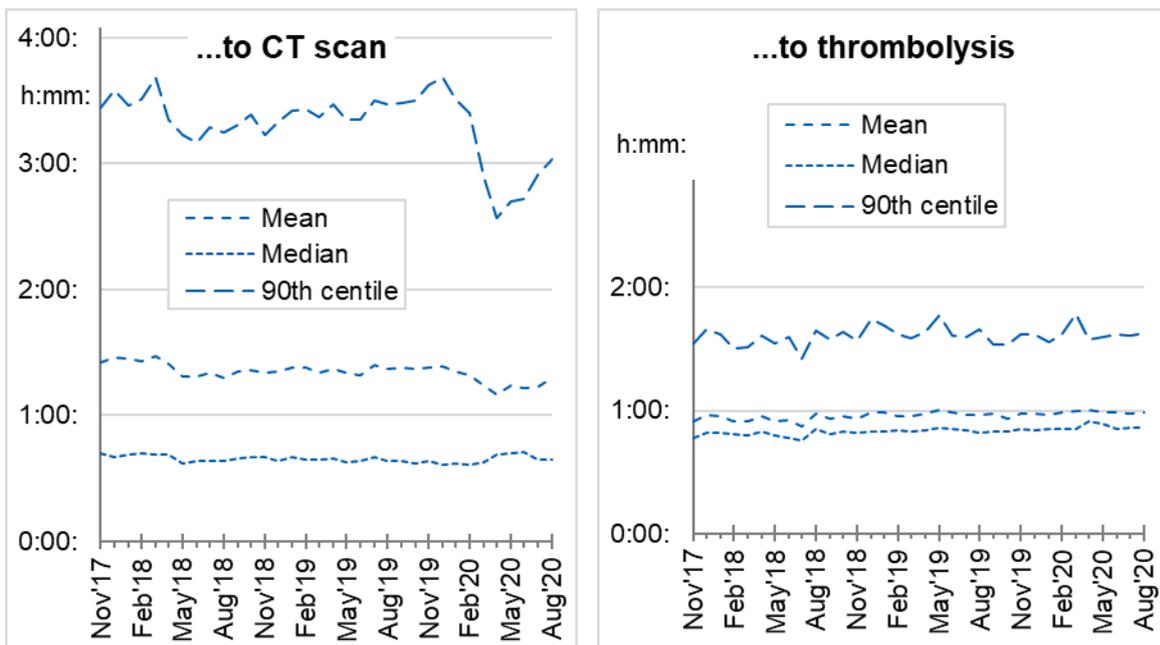
For stroke patients transported by ambulance services in England, none of the times in this publication were revised by more than two minutes.

The mean average time from call until arrival at hospital was 1 hour 22 minutes in August 2020. Like the median and 90th centile times, this was an increase on the earlier months of 2020-21, but similar to the average for 2019-20 (Figure 7).



From March to July 2020 inclusive, the 90th centile time from hospital arrival to CT scan was less than 3 hours, and the mean average time was less than 1:15. The times from hospital arrival to thrombolysis remained similar to the times in 2019/20 (Figure 8).

Figure 8: Time for stroke incidents from hospital arrival...



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 3.4 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 call data items, A1 to A6 and A114.

3.3 Related statistics

Ambulance handover delays of over 30 minutes at each Emergency Department are published by NHSEI during winter 2012-13, 2013-14, 2014-15, 2017-18, 2018-19, and 2019-20, 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://statswales.gov.wales/Catalogue/Health-and-Social-Care/NHS-Performance/Ambulance-Services>

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 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; england.nhsdata@nhs.net; 0113 825 4606.

3.5 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.