

## Statistical Note: Ambulance Quality Indicators (AQI)

The latest Systems Indicators for March 2019 for Ambulance Services in England showed that two of the six response standards in the Handbook<sup>1</sup> to the NHS constitution was met.

Of suspected stroke patients assessed face-to-face in November 2018, the proportion that received an appropriate diagnostic bundle was the highest ever.

### 1. Systems Indicators

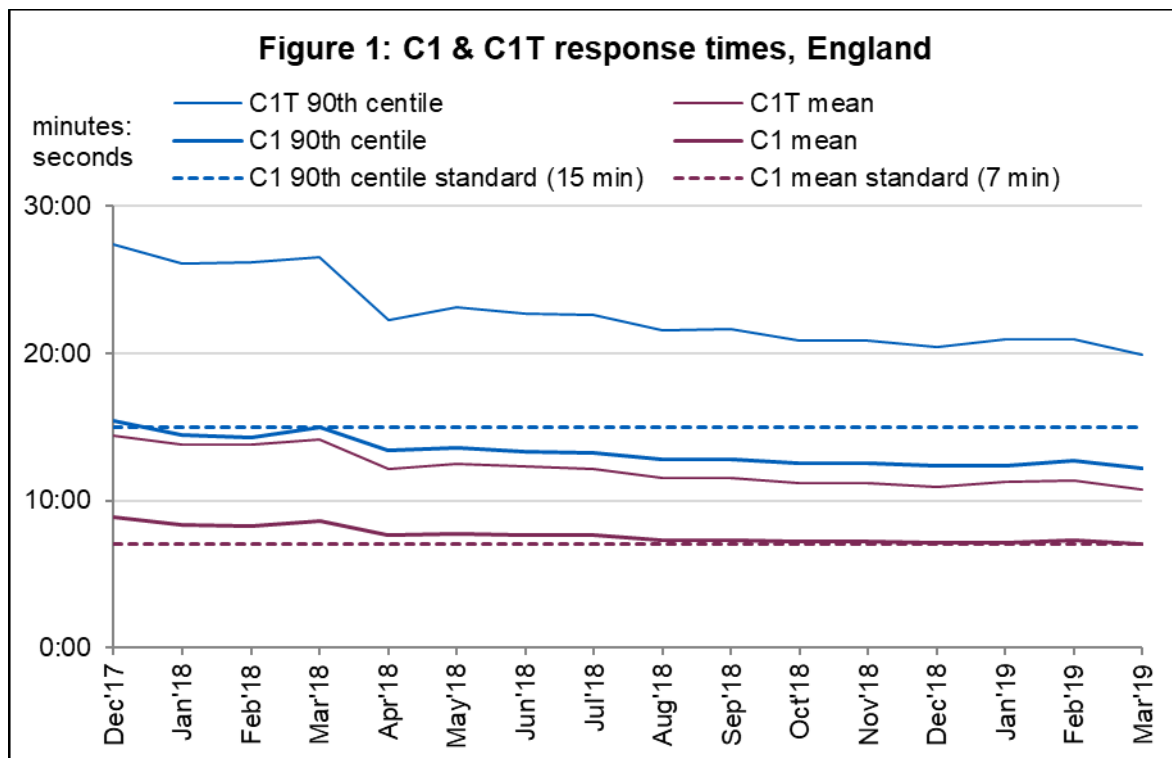
#### 1.1 Response times

In March 2019, for England as a whole, the mean average response times for all four categories improved on both February 2019 and March 2018, and both the C1 response time standards were met.

The mean average C1 response time across England was 7 minutes 0 seconds in March 2019, meeting the standard of 7 minutes.

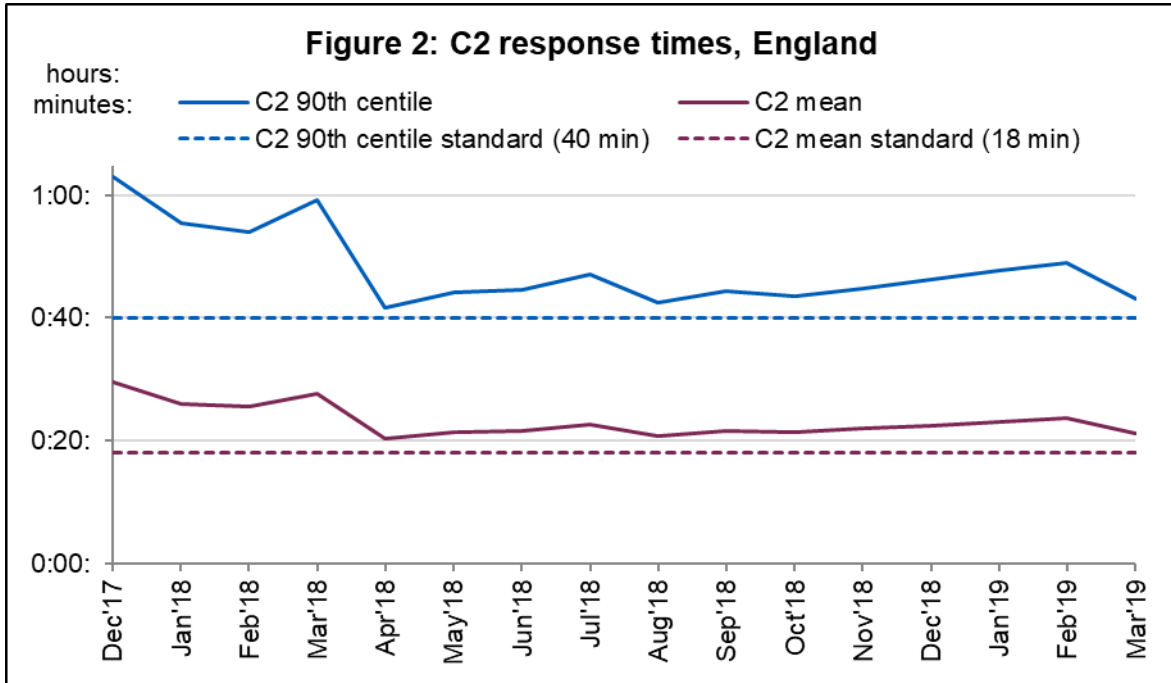
The C1 90th centile response times averaged 12:11 across England in March 2019, shorter than the standard of 15 minutes.

The mean and 90th centile for C1T (arrival of transporting vehicle, for C1 patients transported) were 10:46 and 19:54 respectively in March.



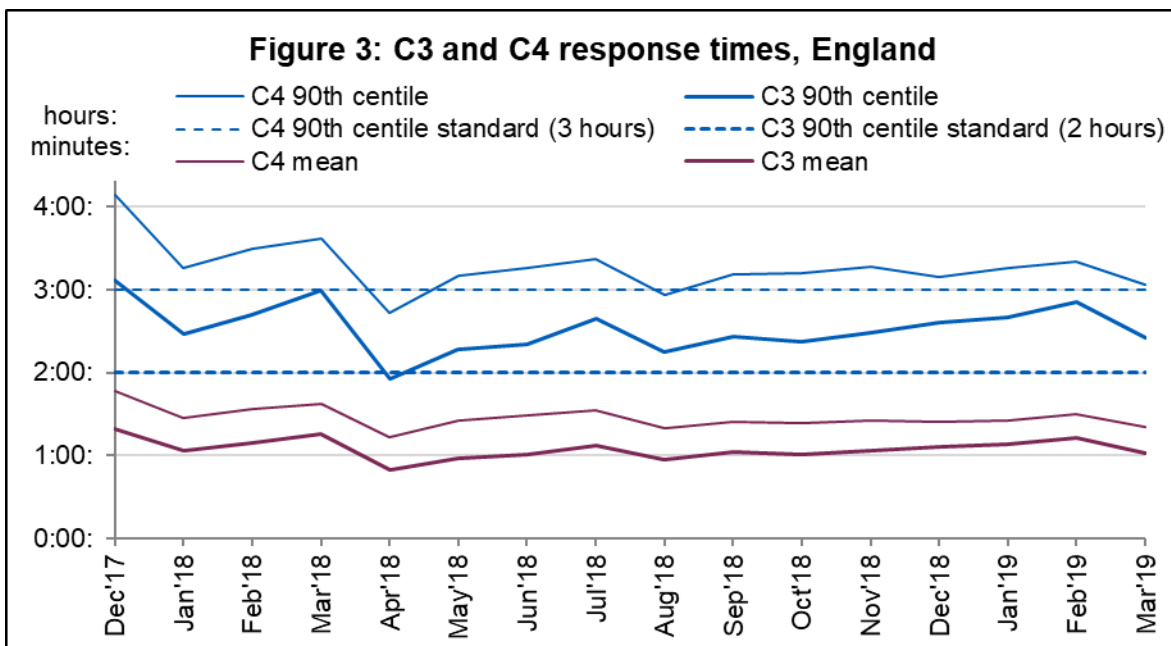
<sup>1</sup> Ambulance standards are in the Handbook to the NHS Constitution: [www.gov.uk/government/publications/supplements-to-the-nhs-constitution-for-england](http://www.gov.uk/government/publications/supplements-to-the-nhs-constitution-for-england)

Figure 2 shows the C2 mean average response time for England was 21:15 in March 2019, longer than the standard of 18 minutes. The C2 90th centiles averaged 43:12 across England, also longer than the standard of 40 minutes. However, both C2 response time measures were the shortest since August 2018.



For England in March 2019, the C3 mean average response time was 1:01:24. The C3 90th centile times averaged 2:25:11, longer than the standard of 2 hours. Both C3 times were the shortest since October 2018.

The C4 mean average response time was 1:20:29 for England in March 2019. The C4 90th centile times averaged 3:03:45, just longer than the standard of 3 hours. Similar to C2, both C4 times were the shortest since August 2018.

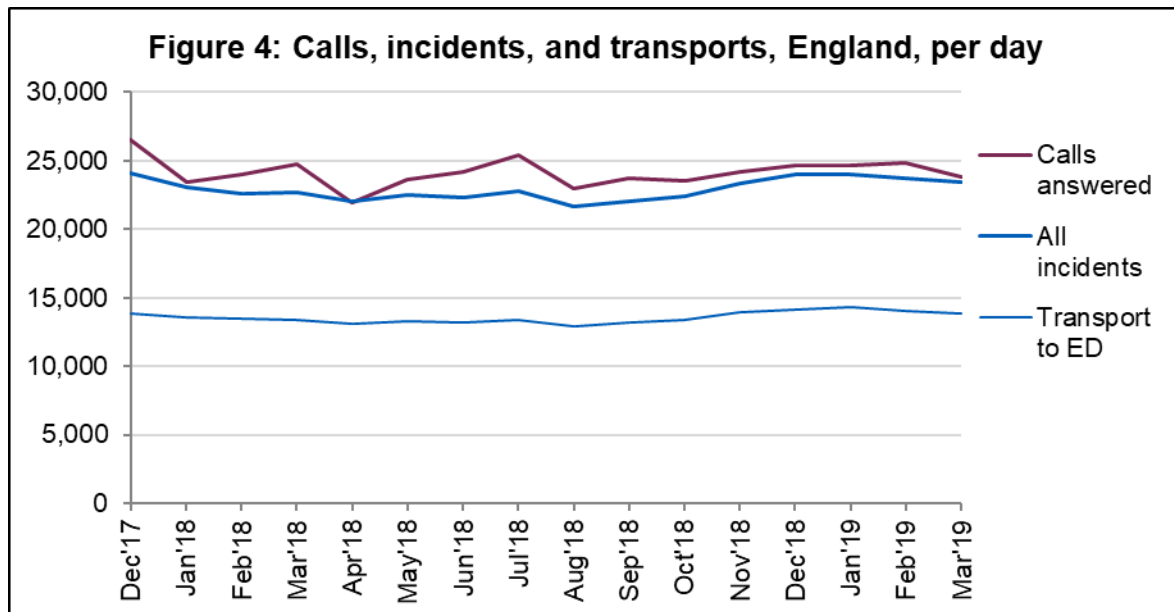


## 1.2 Other Systems Indicators

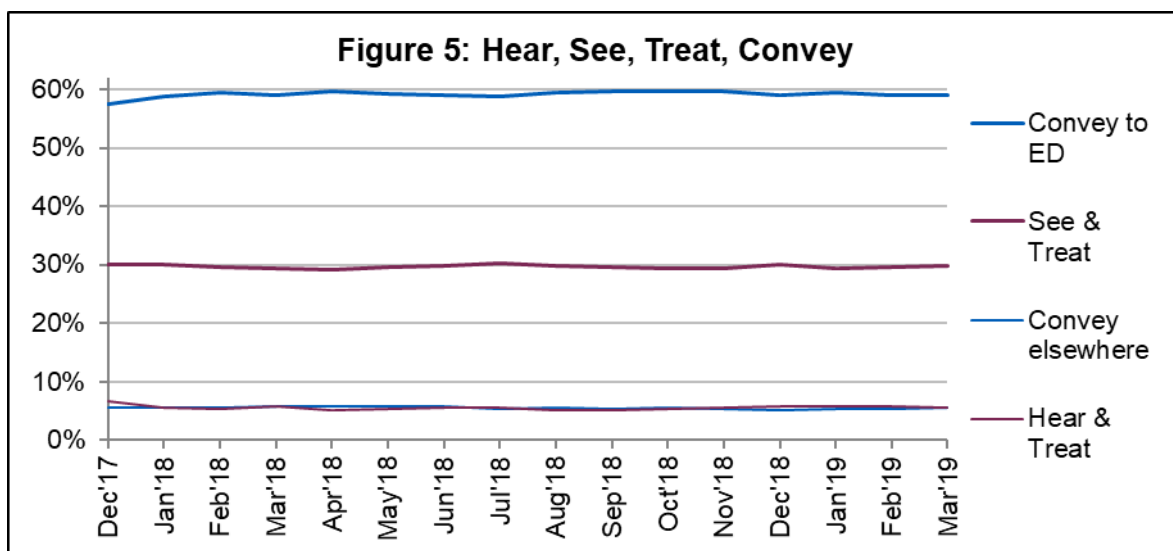
The mean average call answer time in March 2019 was 5 seconds, the joint shortest time in the series (with January 2019).

In March 2019, per day, there were (Figure 4):

- 23.8 thousand calls to 999 answered, a 4.1% decrease on February;
- 23.4 thousand incidents that received a response from an Ambulance Service, a decrease of 1.4% on February;
- 13.8 thousand incidents where a patient was transported to an Emergency Department (ED), a 1.5% decrease on February.



The proportion of incidents where a patient was transported to ED was 59.0% in March. Other incidents (Figure 5) comprised 5.5% with a patient transported elsewhere, 29.8% where patients were attended but not transported (see and treat), and 5.6% resolved on the telephone (hear and treat). These proportions all changed by less than 0.2 percentage points from February.



## 2. Clinical Outcomes

We continue to publish Clinical Outcomes data in spreadsheets each month, and as commenced in last month's publication, we now discuss each area in the month when we publish new bundle data for that topic. Today we will describe the stroke data for November 2018.

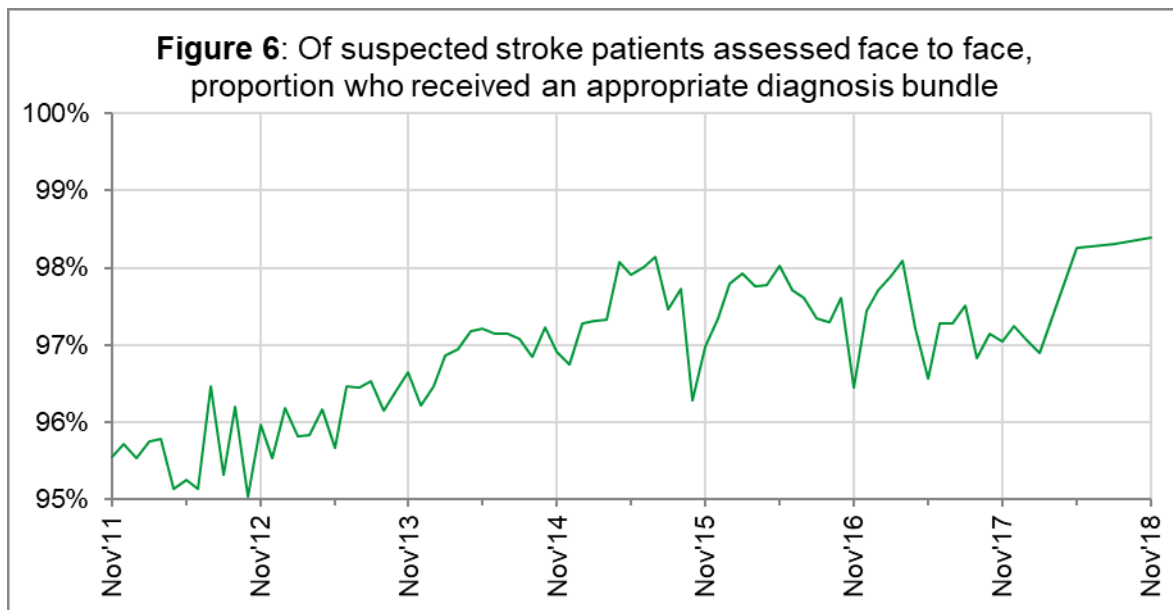
### 2.1 Stroke

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.

Of stroke patients in England assessed face-to-face in November 2018, the proportion that received an appropriate diagnostic bundle was 98.4%. This was the highest proportion recorded in the time series and significantly<sup>2</sup> higher than the average for year ending September 2018 (97.4%).

Figure 6 shows that this since we started collecting this data for only one month every three months, this proportion has exceeded 98%.



For stroke patients across England, the median Trust-level times from call until arrival at hospital was 1 hour 8 minutes in November 2018, similar to the 2018-19 year-to-date average of 1 hour 6 minutes.

The median times from arrival at hospital until CT scan averaged 42 minutes, similar to the 2018-19 year-to-date average of 41 minutes. And the median times from arrival at hospital until thrombolysis averaged 48 minutes, the same as the 2018-19 year-to-date average.

<sup>2</sup> Calculated using Student's t-test with 95% significance.

### 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](http://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 3.4 below).

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.

Publication dates are also at

[www.gov.uk/government/statistics/announcements?keywords=ambulance](http://www.gov.uk/government/statistics/announcements?keywords=ambulance).

#### 3.2 Related statistics

Ambulance handover delays of over 30 minutes at each Emergency Department were published by NHS England for winter 2012-13, 2013-14, 2014-15, 2017-18, and 2018-19, at [www.england.nhs.uk/statistics/statistical-work-areas/winter-daily-sitreps](http://www.england.nhs.uk/statistics/statistical-work-areas/winter-daily-sitreps).

The Quality Statement described in section 3.1 includes information on: a dashboard with an alternative layout for AQI data up to April 2016; the "Ambulance Services" publications<sup>3</sup> by NHS Digital, with data from before 2000, to 2014-15; and 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](http://www.scottishambulance.com/TheService/BoardPapers.aspx)

Northern Ireland: [www.health-ni.gov.uk/articles/emergency-care-and-ambulance-statistics](http://www.health-ni.gov.uk/articles/emergency-care-and-ambulance-statistics)

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<sup>3</sup> <https://digital.nhs.uk/data-and-information/publications/statistical/ambulance-services>



### 3.4 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 guidance mentioned in section 3.1, incidents resulting from a call to NHS 111 are included in all Systems Indicators except call data items A1 to A6.

### 3.5 Contact information

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### 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.