

Statistical Note: Ambulance Quality Indicators (AQI)

The latest Systems Indicators for March 2018 for Ambulance Services in England showed that one of the six standards in the Handbook¹ to the NHS constitution was met: the 90th centile response time for Category C1.

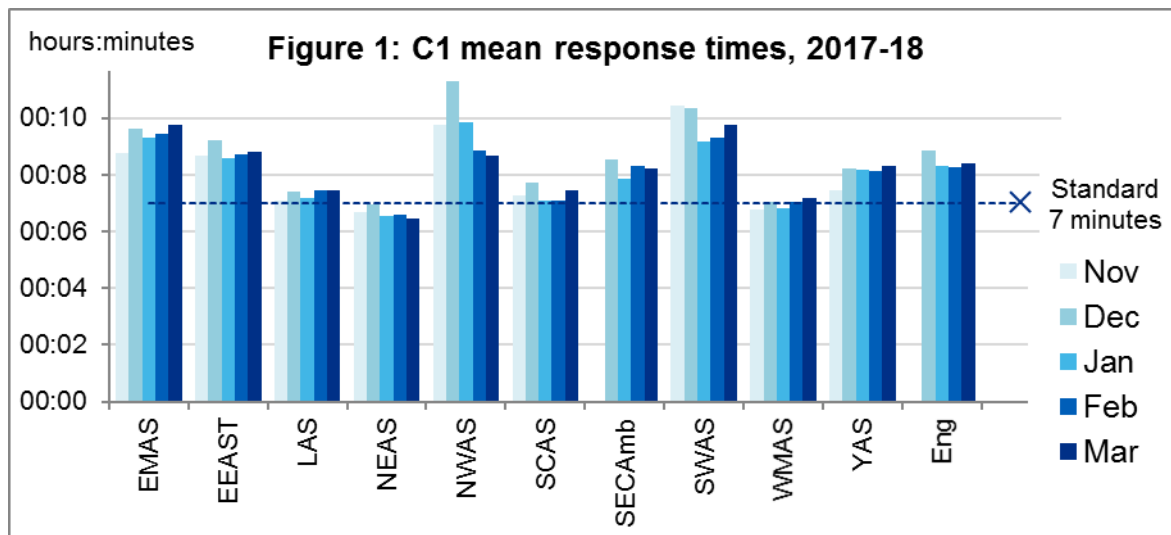
1. Systems Indicators

1.1 Response times

Figure 1 shows that March 2018 was the fourth month when all Ambulance Services in England² reported against the new standards.

Across all six standards, response times in March 2018 for England as a whole were slower than in January and February, but faster than in December 2017.

For Category³ C1, the most life-threatening incidents, the mean average response time was 8 minutes 22 seconds in March 2018, 6 seconds more than in February. Only North East (NEAS) Ambulance Services met the mean standard of 7 minutes.



The standard for the 90th centile response time for Category C1 (Figure 2) is 15 minutes.

Performance varied in March from 11:00 for NEAS to 17:42 for South Western Ambulance Service (SWAS). Six Ambulance Services met the standard in March, and each had also met it in February.

¹ Ambulance standards are in the September 2017 addendum to the Handbook to the NHS Constitution: www.gov.uk/government/publications/supplements-to-the-nhs-constitution-for-england.

² Isle of Wight continues to use Categories A and C and is excluded from all data in this document. South Western Ambulance Service response time data starts at 23 November.

³ Categories introduced nationwide in 2017: www.england.nhs.uk/urgent-emergency-care/arp

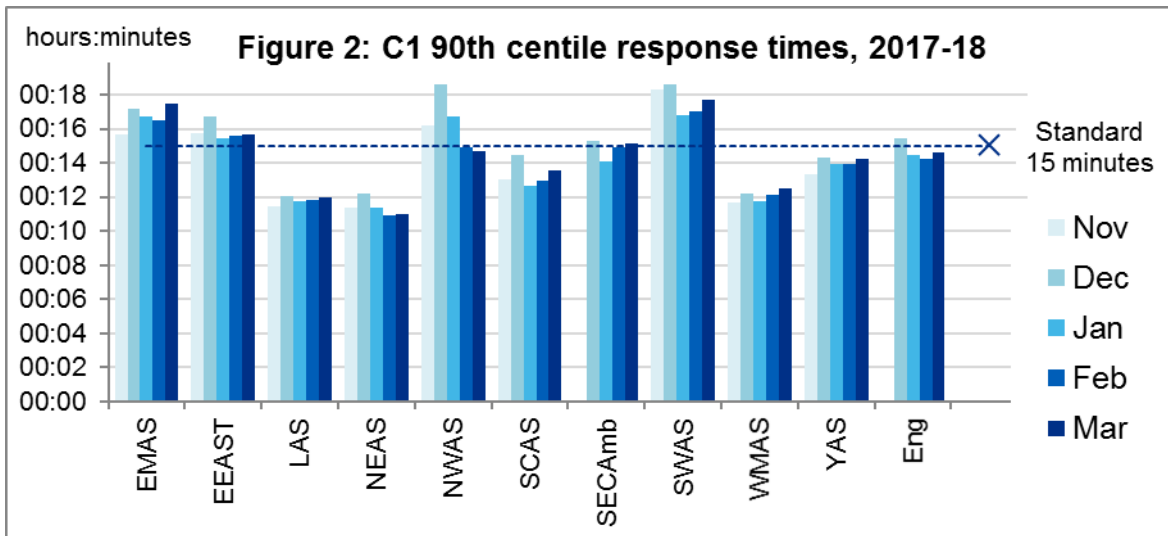
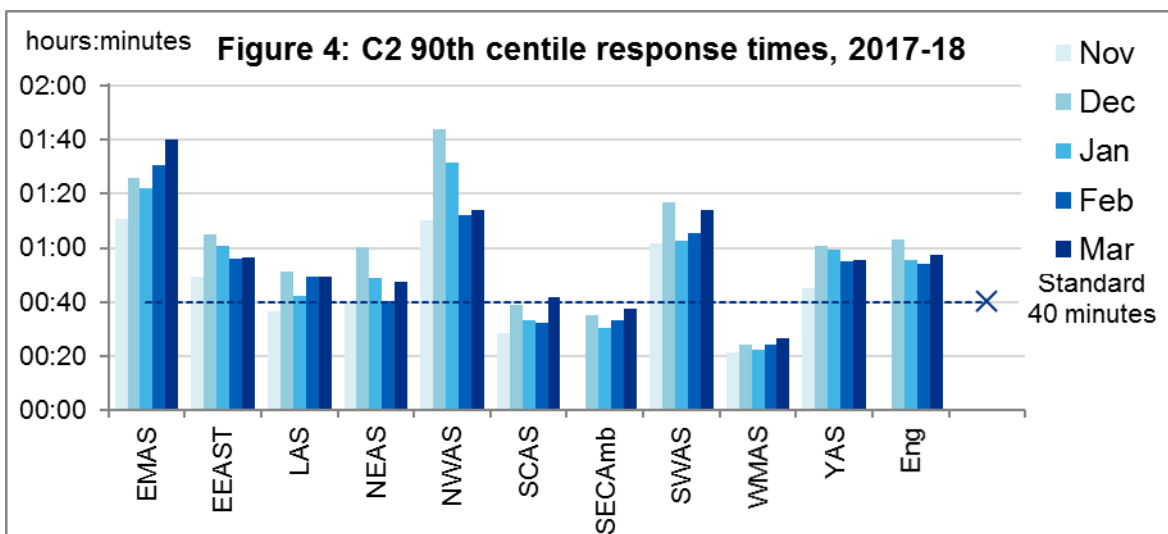
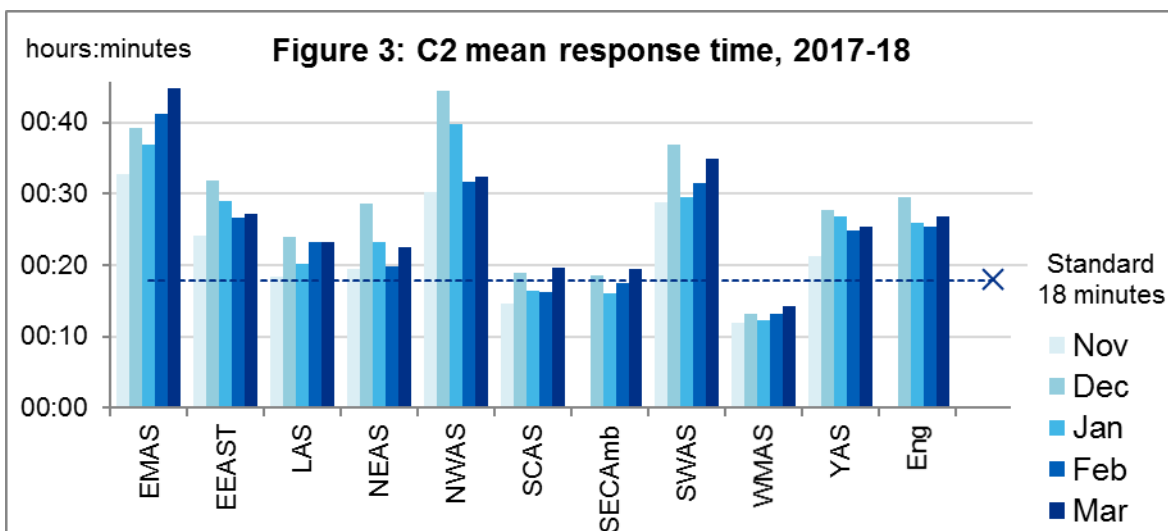
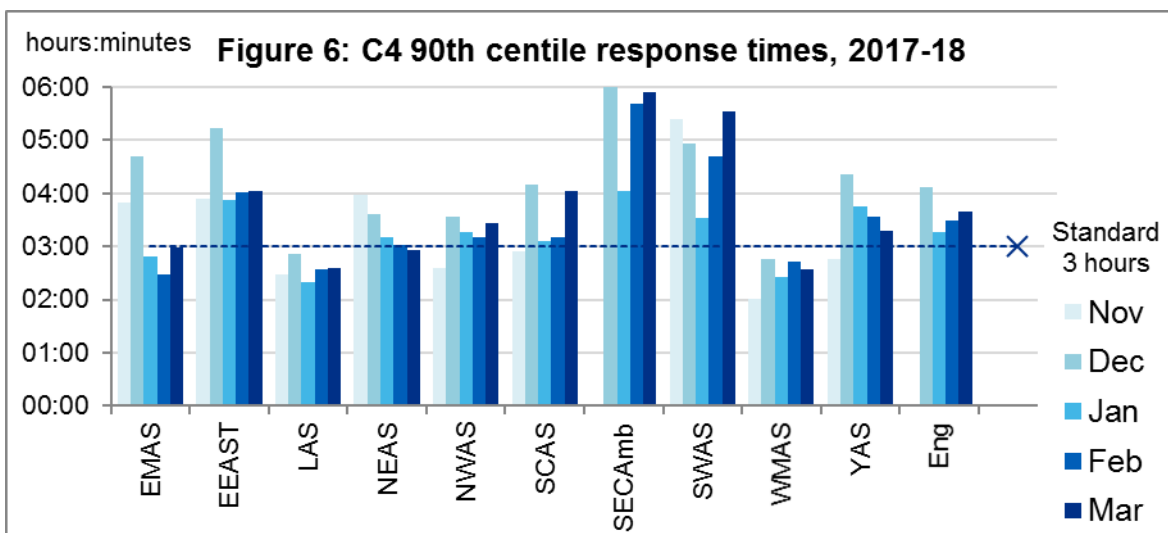
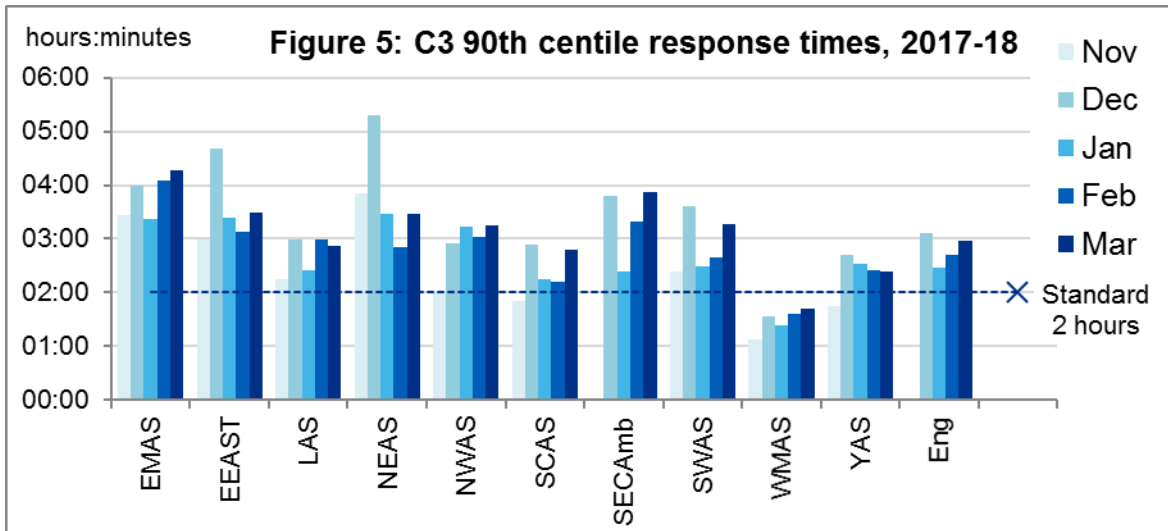


Figure 3 shows that only West Midlands (WMAS, 14:17) met the C2 mean response time standard of 18 minutes. Figure 4 shows that only WMAS and South East Coast (SECamb) met the C2 90th centile standard of 40 minutes.



In each month December 2017 to March 2018, only WMAS met the C3 90th centile standard of 2 hours (Figure 5). For the C4 90th centile, four Services met the standard of 3 hours, with response times ranging from 2:33:35 to 5:54:23 (Figure 6).



1.2 Other Systems Indicators

The mean average call answer time increased from 13 seconds to 15 seconds between February and March.

In March 2018 there were 24.7 thousand calls to 999 answered per day, an increase of 3% on February.

In March 2018 there were 22.3 thousand incidents per day receiving a response from an Ambulance Service, a decrease of 1% on February.

In March 2018 there were 13.2 thousand incidents per day where a patient was transported to an Emergency Department (ED), also a decrease of 1% on February.

The proportion of incidents where a patient was transported to ED was 59% in March. Other incidents comprised 6% where a patient was transported elsewhere, 30% where patients were attended but not transported, and 6% resolved on the telephone. None of these changed more than 0.5 percentage points from February.

2. Clinical Outcomes

We continue to publish new Clinical Outcomes data in spreadsheets each month, but now only describe them in this Statistical Note once a quarter, as we did on 9 November 2017 and 8 February 2018.

However, as part of the Ambulance Response Programme review of Clinical Outcomes, this month we have introduced new timelines measures for STEMI and stroke, superseding the previous measures. Full definitions are in the “20180412 STEMI and stroke timeliness specification” document at www.england.nhs.uk/statistics/statistical-work-areas/ambulance-quality-indicators.

The cardiac arrest measures are unchanged.

2.1 ST-segment elevation myocardial infarction (STEMI)

The Myocardial Ischaemia National Audit Project (MINAP) have supplied:

- the count of patients transported by Ambulance Services in England with an initial diagnosis of “definite Myocardial Infarction”;
- of those, how patient many had primary percutaneous coronary intervention (PPCI): inflation of a balloon inside a blood vessel to restore blood flow to the heart;
- for those, the time (mean average, and 90th centile) from the call for an ambulance, until the insertion of a catheter into the blood vessels, to examine whether PPCI is clinically appropriate.

We continue to collect and publish delivery of the existing STEMI care bundle.

2.2 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.

The Ambulance Services of England have supplied the numbers of patients they transported in March 2018 that were either FAST positive, or had a provisional diagnosis of stroke; and of those, the time from the call for an ambulance, until arrival at hospital.

Complementing that, the Stroke Sentinel National Audit Programme (SSNAP) have supplied:

- the numbers of stroke patients who had a CT scan, and for those, the time from the hospital-recorded arrival to the CT scan;
- the numbers who had thrombolysis (injection of drugs to dissolve a blood clot), and for those, the time from the hospital-recorded arrival time to thrombolysis.

All times supplied for stroke indicators are mean average, median, and 90th centile.

We are now using the more appropriate name “stroke diagnostic bundle” instead of “stroke care bundle” but its definition and component data items are unchanged.

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 document 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 3.6 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.

3.2 Revisions

For Systems Indicators, we published revisions according to a six-monthly cycle until the Ambulance Response Programme (ARP) review of indicators in 2017, when we delayed revisions while Ambulance Services amended their systems to produce the new Indicators. The new indicator set allows Ambulance Services to report data more quickly, but only by reducing the validation checks before data supply. We will work with Ambulance Services to assess the quality of the subsequent data, and publish revisions to 2017 data on 10 May 2018.

A full history of AQI revisions was in the 14 December 2017 Statistical Note.

3.3 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, calls made to NHS 111 are included in all Systems Indicators except data on contacts and calls, items A0 to A6.

3.4 Related statistics in England

The AQI were used in the "Ambulance Services" publications⁴ by NHS Digital, which included additional annual analysis and commentary, up to and including 2014-15 data. The Quality Statement described in section 3.1 has more information on this publication. The Quality Statement also contains details of weekly ambulance situation reports that NHS England collected for six months from November 2010.

⁴ NHS Digital *Ambulance Services*: <https://digital.nhs.uk/search?q=ka34&s=r>



A dashboard on the AQI landing page presents an alternative layout for the AQI data. Because of the lack of comparability due to the Ambulance Response Programme (see the 14 December 2017 AQI Statistical Note), NHS England last updated the dashboard in April 2016.

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

3.5 Rest of United Kingdom

Ambulance statistics for other countries of the UK can be found at the following websites. The Quality Statement described in section 3.1 contains more information about the comparability of these statistics.

Wales: <http://wales.gov.uk/statistics-and-research/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

3.6 Contact information

Press: NHS England press office, nhsengland.media@nhs.net, 0113 825 0958.

The person responsible for producing this publication is:

Ian Kay, Operational Information for Commissioning (Central), NHS England Room 5E24, Quarry House, Leeds, LS2 7UE; 0113 825 4606; i.kay@nhs.net

3.7 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.