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This report may be of interest to members of the public, policy officials and other stakeholders to make local and national comparisons and to monitor the quality and effectiveness of NHS ambulance services

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Version: V1.0
Date of publication: 17 June 2015
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This is a National Statistics publication

The United Kingdom 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.

Executive Summary

Ambulance Indicators

In 2014-15

- The number of emergency 999 calls presented to Ambulance switchboards in 2014-15 was 9.00 million, an increase of 515,506 (6.1%) over last year’s 8.49 million calls. This is an average of 24,661 calls per day or 17.1 calls per minute.

- Of all 999 and 111 calls 6.47 million received a face to face response from the ambulance service.

- 3.14 million or 48.5% of all calls (999 and 111) classified as category A (most urgent) resulted in a response from an emergency vehicle. Of these 5.2% (164,478) were classed as Red 1 (most serious) and 94.8% (2.98 million) were classed as Red 2 (serious but less urgent). The response rates within 8 minutes are as follows:
  - Red 1 – 71.9% nationally with 5 of the 11 ambulance trusts achieving 75% or more
  - Red 2 – 69.1% nationally with 1 of the 11 ambulance trusts achieving 75% or more

Note: National Red 2 data needs to be treated with caution, see note on a pilot scheme for London and South West within the Data Quality statement.

- The Isle of Wight Ambulance Service responded to the largest proportion of Category A Red 1 calls within eight minutes at 80.9% with the London Ambulance Service responding to the smallest proportion at 67.2%.

- The percentage of category A incidents that resulted in an ambulance vehicle capable of transporting the patient arriving at the scene within 19 minutes was 93.9%.

Note: National 19 minute response data needs to be treated with caution, see note on a pilot scheme for London and South West within the Data Quality statement.

Re-contact rate – telephone

- The proportion of patients who re-contacted following discharge of care via the telephone has fallen from 9.6% last year (2013-14) to 7.8% this year (and from 13.0% in 2012-13).

Treated without need to attend A&E

- The proportion of incidents managed without need for transport to A&E has risen slightly from 36.0% last year to 37.0% this year (two years ago this was 35.1%).

Notes:
  ii. Ambulance Quality Indicators guidance is available in Annex 1 at the end of this document and is also published on the NHS England website at: http://www.england.nhs.uk/statistics/statistical-work-areas/ambulance-quality-indicators/

1 Calls made to NHS 111 can also be classed as emergency calls, these calls are excluded from the 9.00 million.
2 The national standard for category A calls is for an emergency response to arrive at the scene within 8 minutes in 75% of cases or within 19 minutes in 95% of cases.
3 Red 2 and A19 response rates need to be treated with caution. London and South West operated a pilot scheme affecting clock start from February 2015; DoD pilot announcement in January 2015: www.parliament.uk/business/publications/written-questions-answers-statements/written-statement/Commons/2015-01-16/HCWS201
4 Patients discharged after treatment at the scene or onward referral to an alternative care pathway and those with a patient journey to a destination other than Type 1 or 2 A&E
Revisions and Issues

2014-15:

Dispatch on Disposition (DoD) pilot

In January 2015, the Secretary of State for Health announced the Dispatch on Disposition (DoD) pilot, allowing more time to triage (to identify the clinical situation and take appropriate action), based upon clinical advice that this would be likely to improve the overall outcomes for ambulance patients.


The pilot covered all calls received by London Ambulance Service (LAS) and South Western Ambulance Service (SWAS). It started on 10 February 2015 and continued throughout March 2015.

For Red 1 calls, the clock start time remains as soon as the telephone call connects.

However, to allow more time for triage, the clock start time changed for Red 2 calls:

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LAS and SWAS response data, for the 8 minute Red 2 and 19 minute Category A measures are comparable with each other for February and March 2015, although they are not comparable with the rest of England.

National level data for these two items for 2014-15 are not comparable with other years.

Up until 2012-13 the Health and Social Care Information Centre (HSCIC) collected data on Ambulance services via the KA34 form. As NHS England began collecting and publishing the majority of this data on a monthly basis via their Unify2 system and following consultation on changing the source data, it was decided to cease the HSCIC data collection and use the monthly NHS England data. This publication uses the Unify2 data which has already been published by NHS England on 30 April 2015. NHS England subsequently revised a small proportion of their figures for 2014-15, this publication includes those revisions.

The Unify2 data has only been collected since 2011-12, we are therefore only able to provide four years’ worth of data for the majority of this publication.

For the major areas of interest (Category A 8 and 19 minute responses) we have provided an eight year time series. While some of this is not comparable due to changes to definitions over the years (which have been highlighted in the relevant sections within this bulletin) it was felt since these areas raise particular interest it was worth providing this extra set of time series tables.

The HSCIC revisions policy is available on the HSCIC website at: http://www.hscic.gov.uk/media/1351/Publications-Calendar-Revisions-Procedure/pdf/Revisions-Procedure.pdf
Introduction

Ambulance service data is now collected and published on a monthly basis by NHS England via their Unify2 system. This data is available from April 2011 onwards; this publication concentrates on the Unify2 data with the majority of information presented back to 2011-12 only.

The traditional KA34 annual collection of NHS ambulance service data in England has ceased. Historic data can be found at:

http://www.hscic.gov.uk/searchcatalogue?q=title%3A%22Ambulance+Services%2C+England%22&area=&size=10&sort=Relevance

For the main points of interest (Category A 8 and 19 minute response times) tables are included showing NHS England data alongside historic KA34 data to provide a timeseries.

NHS England collects two sets of data:

i. System indicators (AmbSYS) - number of calls, response times, patient journeys etc.
ii. Clinical outcome indicators (AmbCO) - outcomes of cardiac arrest, stroke, survival rates etc.

These are available at:


The Health and Social Care Information Centre is using the systems indicators data (i) to produce this annual report of NHS ambulance services. This replaces the previous KA34 based report and covers many of the KA34 service areas with the addition of a few extra items.

The information is collected from individual ambulance organisations and shows volume of activity, and performance levels against required standards (e.g. responses within 8 or 19 minutes). This includes information on emergency calls, response times and patient destinations. This information is shown nationally and by each ambulance trust.

The HSCIC welcomes feedback on the methodology and tables within this publication. Please contact us with your comments and suggestions, clearly stating 'Ambulance Services, England' as the subject heading, via:

Email: enquiries@hscic.gov.uk
Telephone: 0300 303 5678
Post: 1 Trevelyan Square, Boar Lane, Leeds, LS1 6AE

This bulletin and previous editions of the publication can be found on the Health and Social Care Information Centre website patient experience section at:

http://www.hscic.gov.uk/searchcatalogue?q=title%3A%22Ambulance+Services%2C+England%22&area=&size=10&sort=Relevance
Data Quality

Accuracy:
Ambulance services use two approved call prioritisation systems (the Medical Priority Dispatch System and NHS Pathways) to map codes that comprise of categories A (immediately life threatening and other less serious incidents). The two ambulance trust systems are used to extract the information to complete NHS England’s Unify2 AmbSYS data submission.

The Unify2 AmbSYS data collection is based on 100% data i.e. not a sample and as such no estimation of the figures is needed and hence there is no sampling error.

The two ambulance trust systems are also used to extract the Unify2 AmbCO information to complete the monthly Unify2 AmbCO return to NHS England.

Relevance:
The statistics address user demand for numbers of calls, response times and patient journeys by Ambulance trust within England. The tables published in the release aim to answer the common questions previously raised. Users of the statistics are encouraged to contact us to let us know how they use the data. All correspondence received is included at the publication design and development meeting where it will be decided if the requests can be accommodated in the next publication.

We consult with key users prior to making changes, and where possible publicise changes on the internet. We also consult with relevant committees, other networks and with users more widely. We aim to respond quickly to policy changes to ensure our statistics remain relevant.

The statistics also meet NHS constitution measures as stated in NHS England’s Everyone Counts: Planning for Patients 2014/15 to 2018/19. They are used by the Department of Health, NHS England, the Care Quality Commission (for performance indicators), to answer Parliamentary Questions, press queries and are available for use by any NHS organisation or the general public.

We actively review all our outputs and welcome feedback; if you would like to make any comments, please e-mail enquiries@hscic.gov.uk

Comparability and Coherence:
Due to changes in methodology from time to time there are occasional breaks in time series. Where there are changes to the data provided, this is shown clearly in the outputs (with relevant notes).

2014-15
A change to definitions that affect Red 2 and A19 response rates, details are:

Dispatch on Disposition (DoD) pilot
In January 2015, the Secretary of State for Health announced the Dispatch on Disposition (DoD) pilot, allowing more time to triage (to identify the clinical situation and take appropriate
action), based upon clinical advice that this would be likely to improve the overall outcomes for ambulance patients.


The pilot covered all calls received by London Ambulance Service (LAS) and South Western Ambulance Service (SWAS). It started on 10 February 2015 and continued throughout March 2015.

For Red 1 calls, the clock start time remains as soon as the telephone call connects. However, to allow more time for triage, the clock start time changed for Red 2 calls:

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LAS and SWAS response data, for the 8 minute Red 2 and 19 minute Category A measures are comparable with each other for February and March 2015, although they are not comparable with the rest of England.

National level data for these two items for 2014-15 are not comparable with other years.

2012

From 1st June 2012, the category A8 (immediately live threatening) measure was split into two parts, Red 1 and Red 2. This split reflects the way that ambulance trusts already sub-divide their Category A calls for operational purposes. Red 1 calls are the most time critical and cover cardiac arrest patients who are not breathing and do not have a pulse, and other severe conditions such as airway obstruction. Red 2 calls are serious but less immediately time critical and cover conditions such as stroke and fits.

- For Red 1 calls, the existing call connect clock start will remain, ensuring that patients who require immediate emergency ambulance care will continue to receive the most rapid response.
- For Red 2 calls, a new clock start will allow call handlers to get more information about patients so that they receive the most appropriate ambulance resource based on their specific clinical needs.

Due to differing clock start times it is not possible to split previous years data into these new categories therefore no direct comparisons can be made with previous years. The difference in clock start times also means it is not possible to aggregate Red 1 and Red 2 into a single proportion for category A against the 8 minute standard. The differences in clock start times also affects category A 19 minute response times which are no longer directly comparable with earlier years.

Historically, until 2012-13 the Health and Social Care Information Centre (HSCIC) collected data on Ambulance services (via the KA34 form). From April 2011 NHS England began collecting and publishing on a monthly basis via the Unify2 system the AQI indicators which contains the majority of the KA34 data. The data for both the KA34 and Unify2 are extracted directly from the ambulance trust systems against the relevant information standards, i.e. for the same standards are directly comparable. However in some instances the KA34 and the AQIs are not fully comparable. Both did collect the main category A standard as defined in the NHS operating framework until June 2012 when Red 1 and Red 2 were introduced. The KA34 did not meet all the requirements of the operating framework for the clinical quality standards, so there are also a number of differences between the collections including:

- Frequency – KA34 is annual whereas AQI is monthly
- Data items - KA34 collected several data items split by category of call (category A and C), whereas the AQI does not.

This report highlights as required where the data collected via the KA34 and Unify2 are and are not comparable.

Since August 2011 calls to the NHS 111 service have been able to request an emergency vehicle to respond to a Category A incident. These calls are not captured as part of the emergency 999 call information and do not form part of this year’s (or previous years’) 9.00 million emergency calls. This report highlights as required where NHS 111 calls are included, some instances are:

- Category A response times includes both 999 and 111 calls
- All emergency calls that receive a telephone or face-to-face response does not include 111
- All emergency (999 and 111) calls that receive a face-to-face response from the ambulance service includes both 999 and 111 calls

Note: NHS 111 was initially piloted in 4 areas within England and was fully rolled out to the whole of England by June 2014.

There is similar information available from other parts of the UK but the data is not exactly comparable due to local definitions and standards in each area – see UK Home countries section on page 23 for further details.

**Great Western Ambulance Service Trust:** As from 1st February 2013 Great Western Ambulance trust dissolved (its services were taken on by South Western Ambulance Service Foundation Trust). For comparability purposes we have merged Great Western and South Western for earlier years into a single South Western Ambulance trust. Data for this trust prior to February 2013 should be treated as an estimate.

**Timeliness and punctuality:**

All outputs adhere to the Code of Practice for Statistics by pre-announcing the date of publication through the Publications Calendar web page on the HSCIC website.

The ambulance services data is made available as soon as possible after it has been validated and compiled (Note: NHS England publish AmbSYS information monthly and also produced an annual summary of AmbSYS information published in April 2015 available on their website at: [www.england.nhs.uk/statistics/statistical-work-areas/ambulance-quality-indicators/](http://www.england.nhs.uk/statistics/statistical-work-areas/ambulance-quality-indicators/) ).
Accessibility:

All data areas are published, however further detailed analyses may be available on request, subject to resource limits and compliance with disclosure control requirements. Data is also available on the website in a csv format to enable users to download the data in a suitable format for their purposes.

The statistics are published in an accessible, orderly, pre-announced manner on the HSCIC website at 9:30am on the day of publication. Simultaneously this release is also published on the National Statistics Publication Hub.

This publication is accompanied by a press notice distributed by the press team to national and local press officers.

Performance cost and respondent burden

Unify2 is a simple data collection and asks trusts to provide data that they already collect and is produced from existing administrative systems with a minimal burden.

Confidentiality, Transparency and Security:

The standard HSCIC data security and confidentiality policies have been applied in the production of these statistics.
Analysis and Commentary

Response times (Tables 1a, 2, 3, 4, 5 & 6)

Category A: 8 minute response

From June 2012, the A8 measure was split into two parts, Red 1 and Red 2. This split reflects the way that ambulance trusts already sub-divide their Category A calls for operational purposes. Red 1 calls are the most time critical and cover cardiac arrest patients who are not breathing and do not have a pulse, and other severe conditions such as airway obstruction. Red 2 calls are serious but less immediately time critical and cover conditions such as stroke and fits. Red 1 patients should account for less than 5% of all ambulance calls.

For Category A Red 1 calls, the clock starts on Call Connection. This ensures that patients who genuinely require emergency ambulance care will continue to receive the most rapid response.

From February 2015 Category A Red 2 calls, used a new clock start in two ambulance services (see note below relating to 2014-15 changes for information on changes in February 2015). This allowed more appropriate ambulance resources to be provided to patients based on their specific clinical needs. The clock start is the earliest of:

1. The point at which the chief complaint of the call has been identified
2. A vehicle has been assigned to the call
3. A 60 second cap from the Call Connect time

Due to the changes to the way category A8 minute responses are recorded over the years, care is needed when comparing year on year data.

2014-15 changes: Dispatch on Disposition (DoD) pilot

In January 2015, the Secretary of State for Health announced the Dispatch on Disposition (DoD) pilot, allowing more time to triage (to identify the clinical situation and take appropriate action), based upon clinical advice that this would be likely to improve the overall outcomes for ambulance patients.


The pilot covered all calls received by London Ambulance Service (LAS) and South Western Ambulance Service (SWAS). It started on 10 February 2015 and continued throughout March 2015.

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LAS and SWAS response data, for the 8 minute Red 2 and 19 minute Category A measures are comparable with each other for February and March 2015, although they are not comparable with the rest of England.

National level data for these two items for 2014-15 are not comparable with other years.

For 2014-15

**Red 1** - nationally the percentage of Category A red 1 incidents that received a response within 8 minutes was 71.9%, down from 75.6% in 2013-14. This equates to 0.12 million incidents (0.10 million in 2013-14). Of the 11 ambulance services 5 met or exceeded the 75% standard for this section, this compares to 8 trusts in 2013-14.

By ambulance trust Isle of Wight had the highest percentage response rate for Red 1 calls in 2014-15 at 80.9% of all emergency incidents attended by an emergency response vehicle by the 8 minute target time.

![Figure 1: Percentage of Red 1 calls responded to within 8 minutes by Ambulance service, 2013-14 to 2014-15](image-url)
Red 2 - for 2014-15 the national figure needs to be treated with caution because of the changes to London and South Western’s clock start times. The detailed tables at the end of the publication show figures with and without these two trusts however these national figures do include the two trusts (see note on page 12 on changes to Red 2 clock start).

Nationally the percentage of Category A Red 2 incidents that received a response within 8 minutes was 69.1%. This equates to 2.06 million incidents (2.05 million in 2013-14). Of the 11 ambulance services 1 met or exceeded the 75% standard for this section compared to 7 ambulance services in 2013-14.

By trust, Isle of Wight had the highest percentage response rate for Red 2 calls in 2014-15 at 75.4% of all emergency incidents attended by an emergency response vehicle by the 8 minute target time.

It was envisaged that Red 1 patients would account for less than 5.0% of all Category A ambulance calls. For England the percentage of Red 1 calls resulting in an emergency response as a total of all category A (Red1 + Red 2) calls resulting in an emergency response is 5.2%, an increase from 4.7% in 2013-14. At trust level North West and Isle of Wight had the highest percentage at 6.9% and the lowest was London with 3.1%, as shown in table 3a and figure 3.
Factors that may influence response times

There are a number of factors which may impact on ambulance response times which include:

- Demand – the demand for ambulance services is generally increasing with a national 6.1% increase in emergency 999 calls in the last year. By trust this does vary with East of England showing a decrease of 13.5%. The remaining trusts show increases, ranging from 2.9% in the East Midlands to an increase of 19.8% in Yorkshire. Historical KA34 data, which has a longer time series, shows that all trusts have had increases over a longer time period. Any increase in the number of emergency calls places considerable pressure on resources. Although Red 1 Category A calls have a greater priority than Red 2 Category A calls, both are serious, requiring immediate attention,
however not every call requesting an emergency vehicle is a genuine category A incident. Demand for ambulances can also be increased in the event of an emergency situation such as dealing with a major road traffic accident.

- Location of incident – England has diverse geographical makeups which are classified between urban and rural with population not uniformly distributed. This gives rise to various issues on number and type of vehicles required to respond. For example the factors affecting achieving the standard in a densely populated heavily congested city (e.g. London) are different to low population, very rural countryside (e.g. North Yorkshire Moors). However, both are measured against the same standards.

- Handover and turnaround time – The timely handover of patient care between the ambulance service and the hospital can help reduce delays and improve service offered to patients. Patient handover is where the professional responsibility and accountability for the care of the patient is transferred from the ambulance crew to the medical staff at the hospital. The turnaround time is the overall time taken for the ambulance crew to handover the patient, clean, restock and make the vehicle available to respond to another call. This is important as it increases the number of patients that they can respond to in a timely manner.

- Staffing – Having enough trained professionals available to cover rotas and service patients in a timely fashion

- Other dependencies such as:
  - Parking / Access – inability to gain access to streets or park close to incidents
  - Adverse weather
  - Major incidents
  - Major sporting / public events

- For 2014-15 a further factor affecting response times is the time the clock starts for two of the ambulance trusts. A Dispatch on Disposition (DoD) pilot was introduced for London and the South West in February 2015 (see first section of this section or the data quality chapter for more information). This affects Red 2 A8 and A19 response rates, it does not affect Red 1 information

All, some or none of the above factors will affect ambulance trust response times and overall ability to meet required national standards with these factors probably affecting trusts differently throughout the year. Trusts awareness of these influences facilitates effective planning to maximise the opportunity to achieve the national standards.
Category A: 19 minute response

Note: Dispatch on Disposition (DoD) pilot

In January 2015, the Secretary of State for Health announced the Dispatch on Disposition (DoD) pilot, allowing more time to triage (to identify the clinical situation and take appropriate action), based upon clinical advice that this would be likely to improve the overall outcomes for ambulance patients.

The pilot covered all calls received by London Ambulance Service (LAS) and South Western Ambulance Service (SWAS). It started on 10 February 2015 and continued throughout March 2015.

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National level data for these two items for 2014-15 are not comparable with other years.

For 2014-15 the national figure needs to be treated with caution because of the changes to London and South Western’s clock start times. The detailed tables at the end of the publication show figures with and without these two trusts however these national figures do include the two trusts.

Nationally in 2014-15 the percentage of Category A incidents that received a response within 19 minutes was 93.9%, this equates to 2.94 million incidents.

At a trust level, 5 out of the 11 services exceeded the 95.0% standard. The highest percentage response was 96.8% in the West Midlands.

Call Abandonment (Tables 1b & 7)

Ambulance calls presented to switchboard and abandoned before being answered

In 2014-15 there were 9.00 million emergency 999 calls recorded. Of these calls, 119.1 thousand (1.3%) were abandoned before they were answered. This compares with 8.49 million emergency calls in 2013-14, of which 98.5 thousand (1.2%) were abandoned before they were answered.

By trust, the proportion of calls abandoned before they were answered varies between 0.4% in London and East Midlands and 3.7% in the North West. The lowest and highest proportions last year were 0.0% in London and 3.6% in South East Coast.
A high call abandoned rate is not safe and may reflect a high level of clinical risk for patients as patients who hang up before being assessed by a clinical decision maker may have health conditions that will be exacerbated without treatment.

**Re-contact rate – Telephone advice (Tables 1b & 8)**

*Emergency calls closed with telephone advice, where re-contact occurs via 999 within 24 hours*

In 2014-15 there were 526.2 thousand emergency 999 calls closed with telephone advice, of these re-contact occurred within 24 hours by telephone in 41.2 thousand cases (7.8%).

This compares with the previous year’s (2013-14) figures of 379.6 thousand calls resolved by telephone advice and of these re-contact occurred within 24 hours by telephone in 36.6 thousand cases (9.6%).

By trust, the proportion of calls closed by telephone advice which subsequently re-contacted by telephone within 24 hours varies between 2.1% in London and 14.0% in the North East. This compares with last year’s (2013-14) figures of 2.4% in London and 19.2% in South Central.

Some of the national increase for 2014-15 may be explained by the longer clock start time for London and the South West (see details in the data quality statement) though several other regions also show increases.
Re-contact rate - Treated at scene (Tables 1b & 9)

Patients treated and discharged on scene, proportion where re-contact via 999 occurs within 24 hours

In 2014-15 there were 1.96 million patients treated and discharged at the scene of an incident. Re-contact occurred within 24 hours for 107.3 thousand (5.5%) of these patients. This compares with the previous year’s (2013-14) figures of 1.91 million treated and discharged at scene, where re-contact occurred within 24 hours for 106.8 thousand (5.6%) of these patients.

By trust, the proportion of patients who re-contacted following treatment at scene, within 24 hours varies between 3.5% in Isle of Wight and 7.7% in London. These are the same regions as in 2013-14 with figures of 2.2% for Isle of Wight and 6.8% in London.

Frequent caller (Table 1b & 10)

Ambulance calls presented to switchboard and frequent caller procedure

In 2014-15 there were 9.00 million emergency 999 calls recorded. Of these calls, 78.5 thousand (0.9%) were calls from patients for whom a locally agreed frequent caller procedure is in place. This compares with 8.49 million calls last year (2013-14), of which 67.6 thousand (0.8%) were from patients for whom a locally agreed frequent caller procedure was in place.

Some trusts do not operate the frequent caller procedure. Of the 8 trusts that do operate the frequent caller procedure, Yorkshire had the largest percentage of all calls at 2.5%.
Given that not all ambulance trusts operated a locally agreed frequent caller procedure during 2014-15 and that each of the trusts has its own local locally agreed definitions and policies for frequent callers, i.e. no consistency across the trusts, the information must be treated with caution and direct comparisons between trusts is not advisable.

**Telephone advice (Table 1b & 11)**

**All emergency calls that receive a telephone or face-to-face response and those that are resolved by telephone advice.**

In 2014-15 there were 6.47 million 999 calls that received a telephone or face to face response from the ambulance service, of these 526.2 thousand (8.1%) were resolved by telephone advice. This compares with last year’s (2013-14) 6.40 million calls of which 379.6 thousand (5.9%) were resolved through telephone advice.

By trust, the proportion of calls resolved through telephone advice varied from 3.5% in North West to 13.4% in London.

Some of the national increase for 2014-15 may be explained by the longer clock start time for London and the South West (see details in the data quality statement) though several other regions also show increases.
Treated at scene (Tables 1b & 12)

All emergency calls that receive a face-to-face response from the ambulance service

And

Patients discharged after treatment at the scene or onward referral to an alternative care pathway and those with a patient journey to a destination other than Type 1 or 2 A&E

In 2014-15 there were 6.47 million calls (999 and 111) that received a face to face response from the ambulance service. Of these the number of patients discharged after treatment at scene or onward referral to an alternative care pathway or a patient journey to a destination other than a type 1 or 2 A&E was 2.39 million (37.0%). This compares to last year’s 6.33 million calls of which 2.28 million or 36.0% were treated at scene or treated in formats other than a type 1 & 2 A&E.

By trust, the proportion of calls treated at scene or treated in formats other than a type 1 & 2 A&E varied from 26.7% in North West to 52.3% in South Western.
Emergency Journeys (Tables 1b & 13)

In 2014-15 there were 4.72 million emergency patient journeys. This is a slight reduction of 24.4 thousand (0.5%) since last year. Four trusts saw a reduction in patient journeys, the largest reduction was in London 71.4 thousand (a reduction of 8.5%), the rest saw increases, the largest of which was East of England at 40.6 thousand (an increase of 9.6%).
Other UK home countries

Other UK countries also measure ambulance response times. However the outputs differ in different countries because they are designed to help monitor policies that have been developed separately by each government. Further investigation would be needed to establish whether the definitional differences have a significant impact on data comparability. For example, in England the clock starts for category A red 1 when the call is answered, whereas in Wales the clock starts when the location of the incident is established. In Northern Ireland the clock starts when the following details of a call have been ascertained: caller’s telephone number, exact location of incident, and the nature of the chief complaint.

Wales

In Wales, statistics on ambulance services are issued on a monthly basis by the Knowledge and Analytical services, Welsh Government – www.wales.gov.uk/statistics-and-research/ambulance-services/?lang=en

The monthly release contains information on the emergency ambulance service in Wales: emergency responses to Category A (immediately life-threatening) calls by Unitary Authority, Local Health Board and ambulance region, and numbers of emergency calls.

Scotland

Data for Scotland are published directly by the Scottish Ambulance Service. They include monthly Systems Indicators for areas of Scotland, and also Clinical Outcomes including strokes and Return of Spontaneous Circulation. They are available in extensive Quality Improvement Indicators (QII) documents - www.scottishambulance.com/TheService/BoardPapers.aspx

Northern Ireland

In Northern Ireland, statistics on ambulance services are published annually by the Department of Health, Social Services and Public Safety in their ‘Hospital Statistics: Emergency Care’ bulletin - http://www.dhsspsni.gov.uk/index/statistics/hospital/emergency-care/ambulance-statistics.htm

Information is published on emergency and urgent calls, response times and patient journeys.

England monthly


The monthly release contains information on –

- Ambulance System Indicators; Category A 8 minute response time, category A 19 minute response time, call abandonment rate, re-contact rate following discharge of care, time to answer call, time to treatment, ambulance calls closed with telephone advice or managed without transport to A&E, ambulance emergency journeys.

- Ambulance Clinical Outcomes; Outcome from cardiac arrest – return of spontaneous circulation, outcome from acute ST-elevation myocardial infarction (STEMI), outcome from stroke for ambulance patients, outcome from cardiac arrest – survival to discharge.
Aid to Interpretation

Methods used to compile the statistics

Background

National response times standards for emergency and urgent ambulance services have been set since 1974. The NHS Executive Review of Ambulance Performance Standards introduced revised standards following publication in July 1996. The following revised targets were issued to ambulance services in Executive Letter EL(96)87, as amended by the Department of Health’s letters to all Chief Executives dated 10 September 2004, 28 September 2004 and 2 March 2006, via the NHS Operating Framework 2011-12 and most recently by the Department of Health’s letter to all Chief Executives dated 16 May 2012.

NHS England requires summary details from NHS Health Care Providers on ambulance activity. The UNIFY2 AMBSYS provide performance management measures of response times; these are also required by NHS Trusts for Ambulance Service internal monitoring and for defining service agreements.

The information originally monitored ‘Your guide to the NHS’ targets and the standards introduced following a review of ambulance performance standards in 1996-97. The standards required that all Ambulance Services would be expected to reach 75% of immediately life-threatening calls within 8 minutes irrespective of location and that all incidents that require a fully equipped ambulance vehicle, able to transport the patient in a clinically safe manner (emergency ambulance), arrive within 19 minutes of the transport request being made in 95% of cases.

Ambulance services use two approved call prioritisation systems (the Medical Priority Dispatch System and NHS Pathways) to map codes that comprise of categories A (immediately life threatening) and C (emergency calls which are not immediately life threatening).

The call categorisation codes that comprise Categories A and C are reviewed annually by the Emergency Call Prioritisation Advisory Group (ECPAG) and, if appropriate, revised lists will be issued.

NHS ambulance trusts use different types of technical solutions to quickly identify the location of a caller, to dispatch an emergency response and to record electronically the various stages of the call management cycle, including starting and stopping of the clock.

It is expected that ambulance services will have robust governance arrangements, including data management protocols, in place to assure their Board and independent auditors that all performance data submitted as part of this return is measured and recorded in accordance with this guidance.

The ambulance information collected by the Health and Social Care Information Centre (HSCIC) via the KA34 was provided by individual ambulance service providers to show volume of service against required standards. The information obtained from Unify2 AmbSYS is analysed by the HSCIC, DH and NHS England at England and individual ambulance service providers to show volume of service and performance against required standards; including clinical quality indicators, and time series analysis.
**Publication cycle**

**Overview**

All HSCIC publications including this one should follow this Process.

The boxes outline each stage of the process from project initiation, preparation, analysis, publication and review and have accompanying guidance to help production teams to comply with the requirements of the UK Statistics Authority.

All production teams use the cycle to have a clear understanding of what is expected for a publication, the processes and content, and how to learn from each cycle to incorporate improvements and user feedback into future publications.

**Collection**

Ambulance trusts are required to collect, monitor and make available details of performance against target. Ambulance services use two approved call prioritisation systems (the Medical Priority Dispatch System and NHS Pathways) to map codes that comprise of categories A and C. The system holds information on all emergency calls received with details of response times and patient destinations. These categorisation codes are reviewed annually and, if appropriate, revised lists will be issued each year in advance of 1st April.

The data within the publication (unless otherwise indicated) has been collected using the AQI Unify2 collection tool and collected by NHS England on a monthly basis.

NHS England have validated and previously published this information. The HSCIC has used the annual version of the monthly reports to produce this publication.

**Aggregation**

The information sourced by NHS England is returned at an aggregated level. Each organisation provides totals by each category requested. From this, overall totals, percentages and rates for England and ambulance trusts are calculated by NHS England.
(and by the HSCIC where there are separate analysis performed on the data). These are generated for most of the items collected to show proportions for each of the areas.

Example of calculations performed:

**Red 1 - Response within 8 minutes (percentage of total incidents with response)**

This information enables comparison between ambulance trusts and overall England figures.

It is calculated as follows:

- **Numerator:**
  Number of Red 1 calls responded to within 8 minutes

- **Denominator:**
  Number of Red 1 calls resulting in an emergency response

Multiply the result by 100 will give the proportion of Red 1 calls responded to within 8 minutes

**Sources of Error**

NHS England collects from all ambulance trusts the total number of emergency calls received and the number of patient journeys undertaken during the reported year. This gives 100% coverage of all ambulance information for England. As this collection is not a sample no estimation of the figures is needed and hence there is no sampling error.

However it should be noted:

- The telephone operators who answer the calls ask a series of questions to ascertain the nature of the emergency and follow a prescriptive path (the computer system selects the path depending on input) which classifies the category of the emergency. Processing (non-sampling) errors could occur where operators in the ambulance control centres incorrectly input data into their administrative system or measurement errors could occur from operators who mis-interpret a response to a question or have different interpretations to the same question, thus leading to a mis-categorisation. To ensure this is reduced to a minimum the ambulance trusts have their own internal training and monitoring of actual calls and act upon any mis-classification.

- If the system coding classification is set up incorrectly then calls will be miscategorised. This occurred immediately prior to publication of the historic KA34 data in 2010-11 when the HSCIC was alerted to an issue with the data from the Pathways system that North East Ambulance Service (NEAS) use. This issue was raised after two other trusts started using this system. Communication between the trusts highlighted that category A calls had been incorrectly coded as category C. NEAS data was subsequently resubmitted and data was revised.
Users and Uses

How are the statistics used?

Users and uses of the Report

i) Known Users of the Statistics

This section contains comments based on responses from the users listed. All these users have found the information in the report useful for the purposes set out.

Department of Health

“Information from the Ambulance Quality Indicators (AQI) collection is used by the Department of Health to brief Ministers, answer Parliamentary Questions and provide responses to correspondence on the Category A response times, the number of emergency calls, the number of emergency responses and the number of emergency patient journeys, and how these have changed since the last year.”

Press & Journal Articles

Press – the data have been used to underpin articles in newspapers, journals and other media on matters of public interest. While the national press occasionally take an interest in the ambulance statistics it is usually the local press that picks up on the regional variations. Some examples are below;

31 July 2014 – Northwich Guardian (Web)
31 July 2014 – Plymouth Herald (Web)
31 July 2014 – Droitwich Spa Advertiser (Web)
31 July 2014 – BBC (Web)
1 August 2014 – Grimsby Telegraph
1 August 2014 – Worcester News
1 August 2014 – Yorkshire Evening Post (Leeds Edition)

Further details are available on request.

Web hits 2014-15:

Page views: 3,802
Unique page views: 3,356
Direct entrances: 1,181
Downloads (number of files): 1,884
Direct entrances to files: 69
ii) Unknown Users of the Statistics

We believe other key users of the statistics are:

- Ministers and their advisors
- Ambulance trusts
- Various government departments
- Students, academics and universities
- Individual citizens

The survey report is free to access via the HSCIC and HM Government (data.gov.uk) websites and therefore the majority of users will access the report without being known to the HSCIC.

It is therefore important to have in place mechanisms to understand how these additional users are using the statistics and to gain valuable feedback on how the HSCIC can make the data more useful to them.

On the webpage where the report is published there is a link to a feedback web form which the HSCIC uses for all its reports. The specific questions asked on the form are:

- How useful did you find the content in this publication?
- How did you find out about this publication?
- What type of organisation do you work for?
- What did you use the report for? What information was the most useful? Were you happy with the data quality?
- To help us improve our publications, what changes would you like to see (for instance content or timing)?
- Would you like to take part in future consultations on our publications?

Any responses via this web form are passed to the team responsible for the report to consider. The HSCIC has not received any feedback on the last three publications, 2013-14, 2012-13 and the 2011-12 reports.

The webpage where the ambulance publication information is situated generate page views with the report and tables being downloaded by users. It is difficult to gather information about the use that is being made of the report/tables published on the HSCIC website once downloaded.

Uses of these statistics

The statistics are used in a variety of ways. Some examples of these include:

- Advice to Ministers
- To assess National and ambulance trust performance against targets and standards
- For benchmarking trusts against other ambulance trusts
- For national and local press articles

Future Engagement

Further uses of the data in the report will be added to this document as we become aware of them.
Definitions

The majority of definitions are available in the guidance in Annex 1 however there are some below that are not covered by the guidance and may prove useful:

Category A: (Applies to data prior to June 2012) presenting conditions, which may be immediately life threatening and should receive an emergency response within 8 minutes irrespective of location in 75% of cases. Presenting conditions, which require a fully equipped ambulance vehicle to attend the incident, must have an ambulance vehicle arrive within 19 minutes of the request for transport being made in 95% of cases, unless the control room decides that an ambulance is not required.

Category A Red 1: Red 1 calls are the most time critical and cover cardiac arrest patients who are not breathing and do not have a pulse, and other severe conditions. For Red 1 calls, the start time is when the call connects, ensuring that patients who require immediate emergency ambulance care will continue to receive the most rapid response.

Category A Red 2: Red 2 calls, which are serious but less immediately time critical and cover conditions such as stroke and fits, a new clock start will allow call handlers to get more information about patients so that they receive the most appropriate ambulance resource based on their specific clinical needs.

Type 1 and 2 A&E: A type 1 A&E department is generally a consultant led 24 hour service with full resuscitation facilities, whereas a type 2 A&E department is generally a consultant led department offering a single specialty e.g. dentistry

Aborted calls: performance figures are calculated on the number of emergency calls resulting in an emergency response arriving at the scene of the incident. This excludes calls aborted for any reason e.g. hoax calls and also duplicate calls relating to the same incident.

Geographical coverage: the performance figures shown in this Bulletin relate to all calls to which each ambulance service responds; in some areas this may include calls from outside a service's usual geographical area of coverage.
Annex 1

Ambulance regions
# Annex 2

## Ambulance Quality Indicators

### Part 1 – Systems Indicators

### Part 2 – Clinical Indicators

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<th>Line Number</th>
<th>Line Descriptor</th>
<th>Page Number</th>
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<td><strong>Part 1 – Systems Indicator</strong></td>
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<td></td>
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<tr>
<td>HQU03_1_1_3</td>
<td>The number of Category A (Red 1) calls resulting in an emergency response arriving at the scene of the incident within 8 minutes.</td>
<td>52</td>
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<tr>
<td>HQU03_1_1_4</td>
<td>The number of Category A (Red 1) calls resulting in an emergency response arriving at the scene of the incident.</td>
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<td>The 95th centile of time from Call Connect of a Category A (Red 1) call to an emergency response arriving at the scene of the incident.</td>
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<td>HQU03_1_1_6</td>
<td>The number of Category A (Red 2) calls resulting in an emergency response arriving at the scene of the incident within 8 minutes.</td>
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<tr>
<td>HQU03_1_1_7</td>
<td>The number of Category A (Red 2) calls resulting in an emergency response arriving at the scene of the incident.</td>
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<tr>
<td>HQU03_1_2_1</td>
<td>The number of Category A calls resulting in an ambulance arriving at the scene of the incident within 19 minutes.</td>
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<td>HQU03_1_2_2</td>
<td>The number of Category A calls resulting in an ambulance able to transport the patient arriving at the scene of the incident.</td>
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<tr>
<td>SQU03_1_1_1</td>
<td>Number of emergency and urgent calls abandoned before being answered.</td>
<td>57</td>
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<tr>
<td>SQU03_1_1_2</td>
<td>Total number of emergency and urgent calls presented to switchboard</td>
<td>57</td>
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<tr>
<td>SQU03_2_1_1</td>
<td>Emergency calls closed with telephone advice where recontact occurs within 24 hours.</td>
<td>58</td>
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<tr>
<td>SQU03_2_1_2</td>
<td>Emergency calls closed with telephone advice.</td>
<td>58</td>
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<tr>
<td>SQU03_2_2_1</td>
<td>Patients treated and discharged on scene where recontact occurs within 24 hours.</td>
<td>59</td>
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<tr>
<td>SQU03_2_2_2</td>
<td>Patients treated and discharged on scene.</td>
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<td>SQU03_2_3_1</td>
<td>Emergency calls from patients for whom a locally agreed frequent caller procedure is in place.</td>
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<td>SQU03_8_1_1</td>
<td>Time to answer calls (emergency and urgent), measured by median, 95th percentile and 99th percentile.</td>
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<td>SQU03_9_1_1</td>
<td>Time to arrival of an ambulance-dispatched health</td>
<td>61</td>
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<tr>
<td>SQU03_10_1_1</td>
<td>Number of emergency calls that have been resolved by providing telephone advice.</td>
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<tr>
<td>SQU03_10_1_2</td>
<td>All emergency calls that receive a telephone or face-to-face response from the ambulance service</td>
<td>63</td>
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<tr>
<td>SQU03_10_2_1</td>
<td>Patient journeys to a destination other than Type 1 and 2 A&amp;E + number of patients discharged after treatment at the scene or onward referral to an alternative care pathway</td>
<td>64</td>
</tr>
<tr>
<td>SQU03_10_2_2</td>
<td>All emergency calls that receive a face-to-face response from the ambulance service</td>
<td>64</td>
</tr>
<tr>
<td>SRS17_1_1_1</td>
<td>Number of emergency journeys</td>
<td>65</td>
</tr>
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</table>

**Part 2 - Clinical Indicators**

<table>
<thead>
<tr>
<th>SQU03_3_1_1</th>
<th>Of the patients included in the denominator, the number of patients who had return of spontaneous circulation on arrival at hospital.</th>
<th>25</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQU03_3_1_2</td>
<td>All patients who had resuscitation (Advanced or Basic Life Support) commenced/continued by ambulance service following an out-of-hospital cardiac arrest.</td>
<td>25</td>
</tr>
<tr>
<td>SQU03_3_2_1</td>
<td>Of the patients included in the denominator, the number of patients who had return of spontaneous circulation on arrival at hospital.</td>
<td>25</td>
</tr>
<tr>
<td>SQU03_3_2_2</td>
<td>All patients who had resuscitation (Advanced or Basic Life Support) commenced/continued by ambulance service following an out-of-hospital cardiac arrest of presumed cardiac origin, where the arrest was bystander witnessed and the initial rhythm was VF or VT.</td>
<td>25</td>
</tr>
<tr>
<td>SQU03_5_2_1</td>
<td>Patients with initial diagnosis of ‘definite myocardial infarction’ for whom primary angioplasty balloon inflation occurred within 150 minutes of emergency call connected to ambulance service, where first diagnostic Electrocardiogram (ECG) performed is by ambulance personnel and patient was directly transferred to a designated PPCI centre as locally agreed</td>
<td>26</td>
</tr>
<tr>
<td>SQU03_5_2_2</td>
<td>Patients with initial diagnosis of ‘definite myocardial infarction’ who received primary angioplasty, where first diagnostic ECG performed is by ambulance personnel and patient was directly transferred to a designated PPCI centre as locally agreed</td>
<td>26</td>
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<tr>
<td>SQU03_5_3_1</td>
<td>Patients with a pre-hospital diagnosis of suspected ST elevation myocardial infarction confirmed on ECG who received an appropriate care bundle</td>
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<tr>
<td>SQU03_5_3_2</td>
<td>Patients with a pre-hospital diagnosis of suspected ST elevation myocardial infarction confirmed on ECG</td>
<td>28</td>
</tr>
<tr>
<td>SQU03_6_1_1</td>
<td>FAST positive patients (assessed face to face) potentially eligible for stroke thrombolysis within agreed local guidelines arriving at hospitals with a hyperacute stroke centre within 60 minutes of emergency call connecting to the ambulance service</td>
<td>28</td>
</tr>
<tr>
<td>SQU03_6_1_2</td>
<td>FAST positive patients (assessed face to face) potentially eligible for stroke thrombolysis within agreed local guidelines</td>
<td>28</td>
</tr>
<tr>
<td>SQU03_6_2_1</td>
<td>The number of suspected stroke patients assessed face to face who received an appropriate care bundle</td>
<td>29</td>
</tr>
<tr>
<td>SQU03_6_2_2</td>
<td>The number of suspected stroke patients assessed face to face</td>
<td>29</td>
</tr>
<tr>
<td><strong>SQU03_7_1_1</strong></td>
<td>Of the patients included in the denominator, the number of patients discharged from hospital alive</td>
<td>71</td>
</tr>
<tr>
<td><strong>SQU03_7_1_2</strong></td>
<td>All patients who had resuscitation (Advanced or Basic Life Support) commenced/continued by ambulance service following an out-of-hospital cardiac arrest</td>
<td>71</td>
</tr>
<tr>
<td><strong>SQU03_7_2_1</strong></td>
<td>Of the patients included in the denominator, the number of patients discharged from hospital alive</td>
<td>71</td>
</tr>
<tr>
<td><strong>SQU03_7_2_2</strong></td>
<td>All patients who had resuscitation (Advanced or Basic Life Support) commenced/continued by ambulance service following an out-of-hospital cardiac arrest of presumed cardiac origin, where the arrest was bystander witnessed and the initial rhythm was VF or VT.</td>
<td>71</td>
</tr>
</tbody>
</table>
## Version control

<table>
<thead>
<tr>
<th>Version</th>
<th>Date issued</th>
<th>Changes made</th>
</tr>
</thead>
<tbody>
<tr>
<td>V0.4</td>
<td>1st April 2011</td>
<td>Original Guidance</td>
</tr>
<tr>
<td>V0.5</td>
<td>28th April 2011</td>
<td>Clinical Outcomes definitions greyed out until definitions fully completed</td>
</tr>
<tr>
<td>V0.6</td>
<td>21st June 2011</td>
<td>Changes to definitions following clarification from the National Ambulance Information Group</td>
</tr>
<tr>
<td>V0.7</td>
<td>8th July 2011</td>
<td>Added definition for emergency patient journeys data.</td>
</tr>
<tr>
<td>V0.8</td>
<td>10th August 2011</td>
<td>Amended clinical outcomes definitions based on advice from ambulance Directors of Clinical Care group.</td>
</tr>
<tr>
<td>V0.9</td>
<td>22nd August 2011</td>
<td>Amended clinical outcomes definitions for survival to discharge to make it clear that patients should be excluded from the indicator if no outcome data are available.</td>
</tr>
<tr>
<td>V0.10</td>
<td>12th January 2012</td>
<td>Inserted Annex A – Technical Annex for the Clinical Outcomes. Added row 7 to Table 1 in the SQU03_05 and SQU03_06 sections.</td>
</tr>
<tr>
<td>V1.0</td>
<td>5th March 2012</td>
<td>Amended the different call types to be one of ‘emergency’, ‘urgent’ or ‘Category A’. Updated Annex A to include v1.0 of the Technical Annex for the Clinical Outcomes</td>
</tr>
<tr>
<td>V1.1 &amp; V1.2</td>
<td>7th June 2012 &amp; 11th June 2012</td>
<td>Category A8 lines discontinued and replaced by Category A8 (Red 1), Category A8 (Red 2) and 95th percentile time for responding to Category A8 (Red 1).</td>
</tr>
<tr>
<td>V1.3</td>
<td>May 2013</td>
<td>Information to explain how NHS 111 affects data collection added to all Systems Indicators descriptions. References to KA34 data removed. Category A defined as encompassing Red 1 and Red 2 calls and their respective clock starts differentiated. Sentence removed: ‘A first responder is not a substitute for an ambulance response and an ambulance response should be dispatched to all calls attended by an approved first responder’. SQU03_1_1_2: Sentence removed - ‘Include non-urgent transport requests, which, after interrogation and the agreement of the caller, are treated as either Category A or C calls’. Time to Treatment – Explanation of the healthcare professionals exclusion deleted.</td>
</tr>
<tr>
<td>V1.31</td>
<td>August 2013</td>
<td>V1.2 Clinical Outcomes definitions removed in line with move to collection of 2013-14 data.</td>
</tr>
</tbody>
</table>

**Introduction**

The data for the Ambulance Quality Indicators will be collected on two separate forms:

- **Part 1 – System Indicators (AmbSYS)**
- **Part 2 – Clinical Outcomes (AmbCO)**

The reason for this is due to the timing of the availability of the data.

Data for Part 1 – Systems Indicators should be available from Ambulance Trusts’ own information system and relate to the initial call. Therefore, data should be readily available.

Data for Part 2 – Clinical Outcomes will need information passed back from other organisations (e.g. Acute Trusts), for the outcome to be determined. To allow for this, data for the same period as that for Part 1 will be collected on a second form to a slower timetable.

For all of the lines on these forms, AmbSYS and AmbCO, the basis for collection are set out below.
Collection Information
Level: Ambulance Trusts

Basis: Provider

Returns; Monthly Actual

All data will be submitted centrally via UNIFY2

Part 1 – Systems Indicators

HQU03_01a: Ambulance Clinical Quality- Category A (Red 1) 8 Minute Response Time

Detailed Descriptor:
Improved health outcomes from ensuring a defibrillator and timely response to immediately life-threatening ambulance calls

Data Definition:
HQU03_1_1_3: The number of Category A (Red 1) calls resulting in an emergency response arriving at the scene of the incident within 8 minutes. A response within eight minutes means eight minutes zero seconds or less.
HQU03_1_1_4: The number of Category A (Red 1) calls resulting in an emergency response arriving at the scene of the incident. If there have been multiple calls to a single incident, only one incident should be recorded.

Category A (Red 1) incidents: presenting conditions, which may be immediately life threatening and should receive an emergency response within 8 minutes irrespective of location in 75% of cases.

For Category A (Red 1) calls (the most time critical patients), the “clock starts” when the call is presented to the control room telephone switch. This will be the case for all calls received on control room telephone lines, from dedicated emergency lines or otherwise. For calls that are electronically transferred to the computer aided dispatch (CAD) system from another CAD the clock starts immediately when that call record is first received by an ambulance trust system.

The "clock stops" when the first ambulance service-dispatched emergency responder arrives at the scene of the incident. A legitimate clock stop position can include the response arriving at a pre-arrival rendezvous point when one has been determined as appropriate for the safety of ambulance staff in agreement with the control room. For example, a rendezvous point could be agreed for the following situations:
- Information has been received relating to the given location that the patient is violent and police or other further assistance is required.
- Information has been received that the operational incident because of its nature is unsafe for ambulance staff to enter.
For the purposes of the Category A (Red 1) 8-minute standard, an emergency response may only be by:

- An emergency ambulance; or
- A rapid response vehicle equipped with a defibrillator to provide treatment at the scene; or
- An approved first responder equipped with a defibrillator, who is accountable to the ambulance service; or when a healthcare professional is at the location of the incident, equipped with a defibrillator and deemed clinically appropriate to respond by the trust.

A Public Access Defibrillator with fully trained individual present, at the incident location.

Once a category (Red or Green) is determined, reporting should remain against the code that was in place within the CAD record prior to the arrival of a first response arriving on scene. It cannot be changed after a resource has arrived at scene.

All calls that have been passed from 111 as requiring an Red 1 ambulance response either electronically or manually should be be included in this indicator.

Where no call connect time is recorded, the earliest available time should be used for the clock start.
New line:
HQU03_1_1_5: Ambulance Clinical Quality- Category A (Red 1) 95th Centile Response Time

Detailed Descriptor:
The time to respond to the Category A (Red 1) calls

Data Definition:
The 95th centile of time from Call Connect of a Category A (Red 1) call to an emergency response arriving at the scene of the incident

Category A (Red 1) incidents: presenting conditions, which may be immediately life threatening.

For Category A (Red 1) calls (the most time critical patients), the “clock starts” when the call is presented to the control room telephone switch. This will be the case for all calls received on control room telephone lines, from dedicated emergency lines or otherwise. For calls that are electronically transferred to the computer aided dispatch (CAD) system from another CAD the clock starts immediately when that call record is first received by an ambulance trust system.

The "clock stops" when the first ambulance service-dispatched emergency responder arrives at the scene of the incident. A legitimate clock stop position can include the response arriving at a pre-arrival rendezvous point when one has been determined as appropriate for the safety of ambulance staff in agreement with the control room. For example, a rendezvous point could be agreed for the following situations:

- Information has been received relating to the given location that the patient is violent and police or other further assistance is required.
- Information has been received that the operational incident because of its nature is unsafe for ambulance staff to enter.

An emergency response may only be by:

- An emergency ambulance; or
- A rapid response vehicle equipped with a defibrillator to provide treatment at the scene; or
- An approved first responder equipped with a defibrillator, who is accountable to the ambulance service; or when a healthcare professional is at the location of the incident, equipped with a defibrillator and deemed clinically appropriate to respond by the trust.

A Public Access Defibrillator with fully trained individual present, at the incident location.

Once a category (Red or Green) is determined, reporting should remain against the code that was in place within the CAD record prior to the arrival of a first response arriving on scene. It cannot be changed after a resource has arrived at scene.

All calls that have been passed from 111 as requiring a Red 1 ambulance response either electronically or manually should be included in this indicator.

Where no call connect time is recorded, the earliest available time should be used in the calculation of the clock start.
New line:

HQU03_01b: Ambulance Clinical Quality- Category A (Red 2) 8 Minute Response Time

Detailed Descriptor:
Improved health outcomes from ensuring a defibrillator and timely response to immediately life-threatening ambulance calls

Data Definition:

HQU03_1_1_6: The number of Category A (Red 2) calls resulting in an emergency response arriving at the scene of the incident within 8 minutes. A response within eight minutes means eight minutes zero seconds or less.

HQU03_1_1_7: The number of Category A (Red 2) calls resulting in an emergency response arriving at the scene of the incident. If there have been multiple calls to a single incident, only one incident should be recorded.

Category A (Red 2) incidents: presenting conditions, which may be life threatening but less time-critical and should receive an emergency response within 8 minutes irrespective of location in 75% of cases.

For Category A (Red 2) calls (serious but less time-critical patients), the “clock starts” the earliest of:
- chief complaint information is obtained
- chief complaint (or Pathways initial DX code) information is obtained
- first vehicle assigned
- 60 seconds after Call Connect (i.e. 60 seconds after the time at which the call is presented to the control room telephone switch)

The "clock stops" when the first ambulance service-dispatched emergency responder arrives at the scene of the incident. A legitimate clock stop position can include the response arriving at a pre-arrival rendezvous point when one has been determined as appropriate for the safety of ambulance staff in agreement with the control room. For example, a rendezvous point could be agreed for the following situations:
- Information has been received relating to the given location that the patient is violent and police or other further assistance is required.
- Information has been received that the operational incident because of its nature is unsafe for ambulance staff to enter.

For the purposes of the Category A (Red 2) 8-minute standard, an emergency response may only be by:
- An emergency ambulance; or
- A rapid response vehicle equipped with a defibrillator to provide treatment at the scene; or
- An approved first responder equipped with a defibrillator, who is accountable to the ambulance service; or when a healthcare professional is at the location of the incident, equipped with a defibrillator and deemed clinically appropriate to respond by the trust.

A Public Access Defibrillator with fully trained individual present, at the incident location.

Once a category (Red or Green) is determined, reporting should remain against the code that was in place within the CAD record prior to the arrival of a first response arriving on scene. It cannot be changed after a resource has arrived at scene.
All calls that have been passed from 111 as requiring a Red 2 ambulance response either electronically or manually should be included in this indicator.

Where no call connect time is recorded, the earliest available time should be used in the calculation of the clock start

**HQU03_02: Ambulance Clinical Quality- Category A 19 Minute Transportation Time**

**Detailed Descriptor:**

Patient outcomes can be improved by ensuring patients with immediately life-threatening conditions receive a response at the scene, which is able to transport the patient in a clinically safe manner, if they require such a response.

**Data Definition:**

- **HQU03_1_2_1:** The number of Category A calls (Red 1 and Red 2) resulting in an ambulance arriving at the scene of the incident within 19 minutes. A response within 19 minutes means 19 minutes 0 seconds or less.
  The total number of Category A calls (Red 1 and Red 2), which resulted in a fully equipped ambulance vehicle (car or ambulance) able to transport the patient in a clinically safe manner arriving at the scene within 19 minutes of the request being made.

- **HQU03_1_2_2:** The number of Category A calls (Red 1 and Red 2) resulting in an ambulance able to transport the patient arriving at the scene of the incident.
  The total number of Category A calls (Red 1 and Red 2), which resulted in a fully equipped ambulance vehicle (car or ambulance) able to transport the patient in a clinically safe manner arriving at the scene of the incident.

Category A (Red 1 and Red 2) incidents: presenting conditions, which may be immediately life threatening and should receive an ambulance response at the scene within 19 minutes irrespective of location in 95% of cases.

Whichever is earlier, the clock starts when either:
- the initial responder makes a request for transport to the control room, or
- the information received from the emergency caller indicates that transport is needed, in which case the clock starts either when the call is presented to the control telephone switch Red 1 or for Red 2 calls the earliest of:
  - chief complaint (or Pathways initial DX code) information is obtained
  - first vehicle assigned or
  - 60 seconds after Call Connect (i.e. 60 seconds after the time at which the call is presented to the control room telephone switch)

The "clock stops" when the first ambulance service-dispatched emergency responder arrives at the scene of the incident. A legitimate clock stop position can include the vehicle arriving at a pre-arrival rendezvous point when one has been determined as appropriate for the safety of ambulance staff in agreement with the control room. For example, a rendezvous point could be agreed for the following situations:
- Information has been received relating to the given location that the patient is violent and police or other further assistance is required.
Information has been received that the operational incident because of its nature is unsafe for ambulance staff to enter.

For the purposes of the Category A 19-minute standard, transport is defined as a fully equipped ambulance vehicle (car or ambulance) able to transport the patient in a clinically safe manner.

**NOTE:** only the first ambulance response to arrive at the scene of the incident should be included where more than one ambulance response has been despatched.

Once a category (Red or Green) is determined, reporting should remain against the code that was in place within the CAD record prior to the arrival of a first response arriving on scene. It cannot be changed after a resource has arrived at scene.

All calls that have been passed from 111 as requiring a Red ambulance response either electronically or manually should be included in this indicator.

Where no call connect time is recorded, the earliest available time should be used in the calculation of the clock start.

**Monitoring Data Source:**

Ambulance Computer Aided Dispatch system

**SQU03 01: Ambulance Clinical Quality- Call Abandonment Rate**

**Detailed Descriptor:**

The percentage of emergency and urgent calls abandoned before the call was answered

**Data Definition:**

*SQU03_1_1_1: Number of emergency and urgent calls abandoned before the call was answered*

*SQU03_1_1_2: Total number of calls. Number of calls (emergency and urgent) presented to switchboard.*

If there have been multiple calls to an incident, all calls should be recorded in this line.

From 01 April 2007, all “urgent” calls have been prioritised and classified in the same way as emergency calls. These “urgent” calls should be included in both the numerator and denominator for this indicator.

Calls that have been passed electronically from 111 as requiring an ambulance response should not be included in this indicator.

Calls that have been passed manually via telephone from 111 as requiring an ambulance response should be included in this indicator.

**Monitoring Data Source:**

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SQU03_02: Ambulance Clinical Quality- Re-Contact Rate Following Discharge of Care

Detailed Descriptor:

Unplanned re-contact with the ambulance service within 24 hours of discharge of care (discharge by clinical telephone advice, or following treatment at the scene)

Data Definition:

(a) Re-contact rate following discharge of care by telephone

SQU03_2_1_1: Emergency calls closed with telephone advice where re-contact occurs within 24 hours of the initial call. Emergency calls closed with telephone advice where re-contact with the ambulance service via 999 occurs from the same location and patient gender within 24 hours of time of discharge of the initial call.

SQU03_2_1_2: Emergency calls closed with telephone advice. Number of successfully completed emergency calls that have been resolved (i.e. where advice has been given with any appropriate action agreed with the patient), with no resource arrived at the scene of the incident, by

– a designated healthcare professional accountable to the Trust providing telephone advice only, or;
– calls dealt with by a healthcare professional accountable to the Trust, or;
– call dealt with through decisions supported by clinical decision support software, or;
– calls passed to another organisation working with the Trust through an agreed contract or Service Level Agreement, or Directory of Services.

Only count 1 re-contact per 24 hours. This indicator should capture the number of individual patients (identified by same location and patient gender) who re-contact 999 within 24 hours of their initial call.

All locations should be captured within this indicator. There should be no exclusions for non-residential addresses or events.

If the patient’s gender is unknown on the re-contact, it should be included, to ensure no patients are missed.

The second call from the patient (the re-contact) cannot count as the primary contact for a further call.

All calls that have been passed from 111 as requiring an ambulance response either electronically or manually should not be included in this indicator.

From 01 April 2007, all “urgent” calls have been prioritised and classified in the same way as emergency calls. However, these “urgent” calls should not be included with data for emergency calls for this indicator.
Exclusions (for components ‘a)’ and ‘b)’ of this indicator)

This indicator measures patients re-contacting 999 within 24 hours of original emergency call; the following calls should be excluded from the numerator:
- Re-contact for different patient
- Patients transported after first attendance on scene

Re-contact rates are based on address and gender information, rather than patient level information. Therefore it should be noted that data may not be available for:
- patients calling from public places;
- patients calling from locations not in their own home for first contact;

(b) Re-contact, following discharge of care from treatment at the scene

**SQU03_2_2_1:** *Patients treated and discharged on scene where re-contact occurs within 24 hours.* Patients treated and discharged on scene where re-contact with the ambulance service via 999 occurs from the same location and patient gender within 24 hours of time of their initial call.

**SQU03_2_2_2:** *Patients treated and discharged on scene.* Number of patients treated at the scene only.

Only count 1 re-contact per 24 hours. This indicator should capture the number of individual patients (identified by same location and patient gender) who re-contact 999 within 24 hours of their initial call.

All addresses should be captured within this indicator. There should be no exclusions for non-residential addresses or events.

If the patient’s gender is unknown on the re-contact, it should be included, to ensure no patients are missed.

The second call from the patient (the re-contact) cannot count as the primary contact for a further call.

All calls that have been passed from 111 as requiring an ambulance response either electronically or manually should not be included in this indicator.

From 01 April 2007, all “urgent” calls have been prioritised and classified in the same way as emergency calls. However, these “urgent” calls should not be included with data for emergency calls for this indicator.

Exclusions (for components ‘a)’ and ‘b)’ of this indicator)

This indicator measures patients re-contacting 999 within 24 hours of original emergency call; the following calls should be excluded from the numerator:
- Re-contact for different patient
- Patients transported after first contact
Re-contact rates are based on address and gender information, rather than patient level information. Therefore it should be noted that data may not be available for:
- patients calling from public places;
- patients calling from locations not in their own home for first contact;

(c) Proportion of emergency calls from patients for whom a locally agreed frequent caller procedure is in place

**SQU03_2_3_1: Emergency calls from patients for whom a locally agreed frequent caller procedure is in place**

Emergency calls from patients for whom a frequent caller procedure is in place should be reported, and the narrative explanation of performance for this component of the indicator should refer to what actions the trust is taking to manage and provide an appropriate clinical service to these frequent callers.

Frequent caller procedures should be locally determined; these procedures should relate to individual patients and be agreed with that individual and the main care provider (e.g. GP, Mental Health Service).

**SQU03_2_3_2: Total number of emergency calls.** Number of emergency calls presented to switchboard.

The following calls should be excluded from the numerator and denominator of this indicator:
- Duplicate or multiple calls to an incident where a response has already been activated;
- Hang-ups before coding is complete
- Caller not with patient and unable to give details
- Caller refuses to give details
- Hoax calls where response not activated
- Response cancelled before coding is complete (e.g. patient recovers)

This line is fed directly from line SQU03_1_1_2

**Monitoring Data Source:**

Ambulance Computer Aided Dispatch system

**SQU03_08: Ambulance Clinical Quality- Time to Answer Call**

**Detailed Descriptor:**

The time to answer calls (emergency and urgent)

**Data Definition:**

**SQU03_8_1_1:** Time to answer calls (emergency and urgent), measured by median, 95th percentile and 99th percentile. Time to call answering, measured by:
- median time spent between Call Connect and call answer (i.e. the time below which 50% of calls were answered)
59th percentile of times from Call Connect and call answer (i.e. the time below which 95% of calls were answered)
- 99th percentile of times from Call Connect and call answer (i.e. the time below which 99% of calls were answered)

Call Connect refers to the time at which the call is presented to the control room telephone switch.

From 01 April 2007, all “urgent” calls have been prioritised and classified in the same way as emergency calls. These “urgent” calls should be included with data for emergency calls for this indicator.

Excluding:
- Calls abandoned before answer

This is to be reported in seconds

Where no call connect time is recorded, the call should be treated as having a Time-to-call-answer of zero seconds.

Calls that have been passed electronically from 111 as requiring an ambulance response should not be included in this indicator.

Calls that have been passed manually via telephone from 111 as requiring an ambulance response should be included in this indicator.

**Monitoring Data Source:**

Ambulance telephony system

**SQU03_09: Ambulance Clinical Quality- Time to Treatment**

**Detailed Descriptor:**

Time to arrival of ambulance-dispatched health professional, for immediately life-threatening (Category A) calls

**Data Definition:**

*SQU03_9_1_1: Time to arrival of a health professional dispatched by the ambulance service for immediately life-threatening (Category A Red 1 and Red 2) calls, measured by median, 95th percentile and 99th percentile. Time to arrival of an ambulance-dispatched health professional, measured by:
- median time spent to arrival of an ambulance-dispatched health professional (i.e. the time below which 50% of incidents reported the arrival of an ambulance-dispatched health professional)*
- 95th percentile of times to arrival of an ambulance-dispatched health professional (i.e. the time below which 95% of incidents reported the arrival of an ambulance-dispatched health professional, for example “95% of incidents reported the arrival of an ambulance-dispatched health professional within [x] minutes”)
- 99th percentile of times to arrival of an ambulance-dispatched health professional (i.e. the time below which 99% of incidents reported the arrival of an ambulance-dispatched health professional, for example “99% of incidents reported the arrival of an ambulance-dispatched health professional within [x] minutes”)

The clock start for this indicator:
Red 1:
- call is presented to the control telephone switch

Red 2 calls the earliest of:
- chief complaint (or Pathways initial DX code) information is obtained
- first vehicle assigned or
- 60 seconds after Call Connect (i.e. 60 seconds after the time at which the call is presented to the control room telephone switch)

This clock start position reflects this indicator’s aim to:
- Ensure the appropriate resource is dispatched to meet the clinical needs of the patient [i.e. chief complaint information is obtained]
- Avoid perverse incentives to dispatch healthcare professionals to all calls regardless of the clinical need of the patient [i.e. clock start of chief complaint, rather than Call Connect/call presented to ambulance control room telephone switch]
- Maintain best practice in timely handling and answering of ambulance calls [i.e. clock start is capped at 60 seconds following presentation of the call to the ambulance control room telephone switch]

Only Category A, Red 1 and Red 2 (immediately life-threatening) calls should be used for analysis; Any “urgent” calls from a healthcare professional which are categorised as Category A Red 1 or Red 2 should be included with data for emergency calls for this indicator.

Healthcare professionals include Doctors, Paramedics, Nurse or Ambulance Technicians accountable to, and/or dispatched by, the Ambulance Trust.

This definition of healthcare professionals excludes Emergency Care Support Workers, Emergency Care Assistants, Community First Responders, and static defibrillator sites. Therefore calls that are not closed by healthcare professionals, as defined above, attending the scene should be excluded from this indicator.

This is to be reported in minutes, so 4 minutes 30 seconds would be reported as 4.5 minutes

All calls that have been passed from 111 as requiring an Red ambulance response either electronically or manually must be included in this indicator.

Where no call connect time is recorded, the earliest available time should be used in the calculation of the clock start in accordance with the Red 1 and 2 definitions above.

Monitoring Data Source:
Ambulance Computer Aided Dispatch system
SQU03_10: Ambulance Clinical Quality - Ambulance calls closed with telephone advice or managed without transport to A&E (where clinically appropriate)

Detailed Descriptor:

Measure the proportion of patients managed appropriately without the need for an ambulance response at the scene, or onward transport to Type 1 and 2 A&E departments.

Data Definition:

Emergency calls closed with telephone advice

SQU03_10_1_1: Number of emergency calls that have been resolved by providing telephone advice. Number of successfully completed emergency calls that have been resolved (i.e. where advice has been given with any appropriate action agreed with the patient), with no face-to-face resource, by
  – a designated healthcare professional accountable to the Trust providing telephone advice only, or;
  – calls dealt with by a healthcare professional accountable to the Trust, or;
  – call dealt with through decisions supported by clinical decision support software, or;
  – calls passed to another organisation working with the Trust through an agreed contract or Service Level Agreement, or Directory of Services.

SQU03_10_1_2: All emergency calls that receive a telephone or face-to-face response from the ambulance service. All emergency calls that receive a telephone or face-to-face response from the ambulance service at the scene of the incident, excluding those calls where a face-to-face, contact and likely transport has been pre-determined, from Healthcare Professional calls, whether urgent or immediate as none of these calls can currently be re-triaged for an alternative outcome such as hear and treat.

Exclusions
The following calls should be excluded from the numerator and denominator of this indicator:
- Duplicate or multiple calls to an incident where a response has already been activated;
- Hang-ups before coding is complete
- Caller not with patient and unable to give details
- Caller refuses to give details
- Hoax calls where response not activated
- Response cancelled before coding is complete (e.g. patient recovers)

All calls that have been passed from 111 as requiring an ambulance response either electronically or manually should not be included in this indicator.

From 01 April 2007, all “urgent” calls have been prioritised and classified in the same way as emergency calls. However, these “urgent” calls should not be included with data for emergency calls for this indicator.

Incidents managed without the need for transport to A&E (Emergency Department)
SQU03_10_2_1: Patient journeys to a destination other than Type 1 and 2 A&E + number of patients discharged after treatment at the scene or onward referral to an alternative care pathway

Number of incidents resulting in a transport to a destination other than Type 1 and 2 A&E or treated at scene. Emergency only.

SQU03_10_2_2: All emergency calls that receive a face-to-face response from the ambulance service.
All emergency calls that receive a face-to-face response from the ambulance service.

Patient journeys

Each incident conveyed is counted as an individual transport. Number of incidents without requiring onward conveyance is counted as an individual treated at the scene. Trusts should include only those patients conveyed as a result of an emergency call made by a member of the public or organisation.

It should be noted that the activity currency is a single incident even though it may result in more than one patient journey.

Emergency patient journeys to a destination other than Type 1 and 2 A&E – Include those incidents which result in an emergency patient journey to all other destinations other than Type 1 or 2 A&E departments. An example of this could be conveying a patient to a minor injuries unit or a Walk-in Centre, a specialist stroke or cardiac centre, GP service or any other health or social care service.

Treatment at the scene – Include those incidents where patients were treated at the scene by the ambulance service and as a result of that treatment no patients required onward transportation for further treatment. If, as part of that treatment, the ambulance trust staff arranged, for example, an appointment for the patient at a GP surgery or a follow-up home visit from a health professional that should also be counted as treatment at the scene. Responses where ambulance trust staff attended an incident and advice was given but no clinical intervention was necessary with no onward transportation required, then that should also be included as treatment at the scene.

From 01 April 2007, all “urgent” calls have been prioritised and classified in the same way as emergency calls. However, these “urgent” calls should not be included with data for emergency calls for this indicator.

Calls from a Healthcare Professional should be excluded from this indicator as a likely transport and destination has been pre-determined, whether urgent or immediate as none of these calls can be transported to an alternative destination or treated at scene.

All calls that have been passed from 111 as requiring an ambulance response either electronically or manually should be included in this indicator

Definitions of Type 1 & 2 A&E destinations can be found in the NHS Data Dictionary.

Monitoring Data Source:
Ambulance Computer Aided Dispatch system
**SRS17_1_1_1: Number of Transported Incidents**

**Detailed Descriptor:**

The number of emergency and urgent incidents resulting in a patient being transported to Type 1 & 2 A&Es.

**Data Definition:**

The number of Incidents resulting in a patient being transported.

Include only those incidents which resulted in a patient being conveyed as a result of an emergency call made by a member of the public or organisation, or as a result of being categorised as requiring an emergency response following a referral by a health care professional or electronically transferred to the computer aided dispatch (CAD) system from another CAD system.

Journeys without patients should be excluded.

Emergency incidents resulting in a patient being transported to Type 1 and 2 A&E (as defined in the NHS Data Dictionary) – include those emergency and urgent journeys provided by the Trust where a patient is transported to a Type 1 or Type 2 A&E department only.

All calls that have been passed from 111 as requiring an ambulance response either electronically or manually should be included in this indicator.

From 01 April 2007, all “urgent” calls have been prioritised and classified in the same way as emergency calls. These “urgent” calls should be included with data for emergency journeys for this indicator.

**Monitoring Data Source:**

Ambulance Computer Aided Dispatch system
Part 2 Clinical Indicators

SQU03_03: Ambulance Clinical Quality- Outcome from Cardiac Arrest – Return of Spontaneous Circulation

Detailed Descriptor:

Outcome from cardiac arrest, measured by return of spontaneous circulation (ROSC) at point of arrival of the patient at hospital. Recording of ROSC at hospital indicates the outcome of the pre-hospital response and intervention.

Data Definition:

(a) ROSC at time of arrival at hospital (Overall)

SQU03_3_1_1: Of the patients included in the denominator, the number of patients who had return of spontaneous circulation on arrival at hospital.

Time of arrival refers to point of arrival of the patient at the receiving hospital.

SQU03_3_1_2: All patients who had resuscitation (Advanced or Basic Life Support) commenced/continued by ambulance service following an out-of-hospital cardiac arrest.

(b) ROSC at time of arrival at hospital (Utstein Comparator Group)

SQU03_3_2_1: Of the patients included in the denominator, the number of patients who had return of spontaneous circulation on arrival at hospital.

Time of arrival refers to point of arrival of the patient at the receiving hospital.

SQU03_3_2_2: All patients who had resuscitation (Advanced or Basic Life Support) commenced/continued by ambulance service following an out-of-hospital cardiac arrest of presumed cardiac origin, where the arrest was bystander witnessed and the initial rhythm was VF or VT.

Monitoring Data Source:

Ambulance Trust data (including clinical and computer-aided dispatch (CAD) data) collected as per National Ambulance Service Clinical Quality Group guidance and definitions (see Annex A).

SQU03_05: Ambulance Clinical Quality- Outcome from acute ST-elevation myocardial infarction (STEMI)

Detailed Descriptor:
This indicator has two components:

(b) The percentage of patients suffering a STEMI who are directly transferred to a centre capable of delivering primary percutaneous coronary intervention (PPCI) and receive angioplasty within 150 minutes of emergency call.

(c) The percentage of patients suffering a STEMI who receive an appropriate care bundle.

Data Definition:

(b) The percentage of patients suffering a STEMI and who, following direct transfer to a PPCI centre receive primary angioplasty within 150 minutes of emergency call

SQU03_5_2_1: Patients with initial diagnosis of ‘definite myocardial infarction’ for whom primary angioplasty balloon inflation occurs within 150 minutes of emergency call connected to ambulance service, where first diagnostic Electrocardiogram (ECG) performed is by ambulance personnel and patient was directly transferred to a designated PPCI centre as locally agreed

SQU03_5_2_2: Patients with initial diagnosis of ‘definite myocardial infarction’ who received primary angioplasty, where first diagnostic ECG performed is by ambulance personnel and patient was directly transferred to a designated PPCI centre as locally agreed

Exceptions include

1. Secondary transfers to PPCI from non-PPCI capable hospitals
2. Delay obtaining consent,
3. Cardiac arrest,
4. Ambulance procedural delay (This includes any pre-hospital delay outside the control of the ambulance service, eg incorrect address, difficulty finding address, unable to gain entry to patient’s house, patient reasons eg initial refusal to go to hospital or extended domestic arrangements, adverse weather conditions, stabilising the patient, crew had to wait for boat, helicopter delay, wait for police to gain entry, failure to cannulate.)
5. Sustained hypertension,
6. Clinical concern about recent cerebro-vascular event or recent surgery,
7. Other exclusions on clinical grounds which have been formally approved in discussions with MINAP

(c) The percentage of patients suffering a STEMI who receive an appropriate care bundle

SQU03_5_3_1: Patients with a pre-hospital diagnosis of suspected ST elevation myocardial infarction confirmed on ECG who received the STEMI care bundle.

SQU03_5_3_2: Patients with a pre-hospital diagnosis of suspected ST elevation myocardial infarction confirmed on ECG

Notes

1. Components of the care bundle for STEMI patients, in line with National Ambulance Service Clinical Quality Group guidance, are presented below, with their exceptions in parenthesis.
a. Aspirin given (Patient refusal, contraindication to drug)
b. Glyceryl trinitrate - GTN given (Patient refusal, contraindication to drug, no chest pain)
c. Two pain scores recorded (Patient refusal/Patient unable/Patient unconscious)
d. Appropriate Analgesia given – Options available are Morphine, Entonox and paracetamol (Patient refusal/Patient not in pain/Contraindication to drug(s))

Exceptions
An exception to the care bundle can only be counted where there is an exception to the delivery of one or more elements and each of the remaining elements have been delivered.

The table below sets out examples to illustrate whether a care bundle has been completed, not completed, or whether there is an exception from administering the care bundle.

Where there is a valid exception to the care bundle, this case should be recorded in both the numerator and the denominator for this indicator.

The number of such exceptions may be monitored separately and referred to in the narrative for the indicator to share learning (for example, where there are high numbers of exceptions due to patient refusal of an element in the care bundle).

<table>
<thead>
<tr>
<th>Patient ID</th>
<th>Care bundle criterion 1</th>
<th>Care bundle criterion 2</th>
<th>Care bundle criterion 3</th>
<th>Care bundle delivered?</th>
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<tr>
<td>7</td>
<td>Exception</td>
<td>Exception</td>
<td>Exception</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Monitoring Data Source:

(b) The percentage of patients suffering a STEMI who are directly transferred to a centre capable of delivering primary percutaneous coronary intervention (PPCI) and receive angioplasty within 150 minutes of emergency call.
Myocardial Ischaemia National Audit Project (MINAP) data

Acute trusts are required to work and support ambulance trusts in the provision and timely linking of data to ensure that outcome information is captured as accurately, and for as many patients as possible.

(c) The percentage of patients suffering a STEMI who receive an appropriate care bundle. Ambulance Trust data collected as per National Ambulance Service Clinical Quality Group guidance and definitions (see Annex A)

**SQU03_06: Ambulance Clinical Quality- Outcome from stroke for ambulance patients**

Detailed Descriptor:
(a) The percentage of Face Arm Speech Test (FAST) positive stroke patients (assessed face to face) potentially eligible for stroke thrombolysis, who arrive at a hyperacute stroke centre within 60 minutes of emergency call.

(b) The number of patients with symptoms of suspected stroke, or unresolved transient ischaemic attack, assessed face to face who received an appropriate care bundle.

Data Definition:

(a) The percentage of Face Arm Speech Test (FAST) positive stroke patients (assessed face to face) potentially eligible for stroke thrombolysis, who arrive at a hyperacute stroke centre within 60 minutes of emergency call.

SQU03_6_1_1: FAST positive patients (assessed face to face) potentially eligible for stroke thrombolysis within agreed local guidelines arriving at hospitals with a hyperacute stroke centre within 60 minutes of emergency call connecting to the ambulance service

SQU03_6_1_2: FAST positive patients (assessed face to face) potentially eligible for stroke thrombolysis within agreed local guidelines

Exclusions that may be considered for inclusion in local guidelines
1. Patient refusal
2. Complete resolution of symptoms before arrival at stroke centre [transient ischaemic attack (TIA)]
3. Advance Directive for refusal of treatment (ADRT)
4. Patients who are not clinically safe for bypass to hyperacute stroke centre (i.e. patients with seizures/agitation; Glasgow Coma Scale score below 8; time critical features (airway problem, reduced consciousness)

(b) The number of suspected stroke, or unresolved transient ischaemic attack, patients assessed face to face who received an appropriate care bundle.

SQU03_6_2_1: The number of suspected stroke, or unresolved transient ischaemic attack patients assessed face to face who received an appropriate care bundle. This refers to patients with a new onset/presentation of suspected stroke symptoms, or unresolved transient ischaemic attack. It does not exclude patients with previous stroke or transient ischaemic attack who have a new onset of symptoms.

SQU03_6_2_2: The number of suspected stroke or unresolved transient ischaemic attack patients assessed face to face. This refers to patients with a new onset/presentation of suspected stroke symptoms, or unresolved transient ischaemic attack. It does not exclude patients with previous stroke or transient ischaemic attack who have a new onset of symptoms.

Notes
1. Components of the care bundle for suspected stroke or unresolved transient ischaemic attack patients, in line with National Ambulance Service Clinical Quality Group guidance, are presented below, with their exceptions in parenthesis:
   a. FAST assessment recorded (Patient unable/patient declined)
   b. Blood glucose recorded (Patient refusal)
c. Systolic and diastolic blood pressure recorded (Patient refusal/Time critical features (airway problem, reduced consciousness))

**Exceptions**

An exception to the care bundle can only be counted where there is an exception to the delivery of one or more elements and each of the remaining elements have been delivered.

The table below sets out examples to illustrate whether a care bundle has been completed, not completed, or whether there is an exception from administering the care bundle.

Where there is a valid exception to the care bundle, this case should be recorded in both the numerator and the denominator for this indicator.

The number of such exceptions may be monitored separately and referred to in the narrative for the indicator to share learning (for example, where there are high numbers of exceptions due to patient refusal of an element in the care bundle).

**Table 1 - calculation of care bundle delivery and valid exceptions**

<table>
<thead>
<tr>
<th>Patient ID</th>
<th>Care bundle criterion 1</th>
<th>Care bundle criterion 2</th>
<th>Care bundle criterion 3</th>
<th>Care bundle delivered?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>✓</td>
<td>Exception</td>
<td>x</td>
<td>No</td>
</tr>
<tr>
<td>4</td>
<td>Exception</td>
<td>Exception</td>
<td>x</td>
<td>No</td>
</tr>
<tr>
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<td>Yes</td>
</tr>
<tr>
<td>7</td>
<td>Exception</td>
<td>Exception</td>
<td>Exception</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Potential eligibility for thrombolysis**

Trusts are encouraged to clearly define their local criteria for determining eligibility for thrombolysis (including local exclusions), and this information may be referred to in the narrative for this indicator.

**Monitoring Data Source:**

(a) The percentage of Face Arm Speech Test (FAST) positive stroke patients (assessed face to face) potentially eligible for stroke thrombolysis, who arrive at a hyperacute stroke centre within 60 minutes of emergency call.

Ambulance Trust data (including clinical and computer-aided dispatch (CAD) data) collected as per National Ambulance Service Clinical Quality Group guidance and definitions (see Annex A)

(b) The percentage of suspected stroke or unresolved transient ischaemic attack patients (assessed face to face) who receive an appropriate care bundle.

Ambulance Trust data collected as per National Ambulance Service Clinical Quality Group guidance and definitions (see Annex A)
SQU03_07: Ambulance Clinical Quality- Outcome from cardiac arrest – Survival to discharge

Detailed Descriptor:

a) Survival to discharge – Overall survival rate
b) Survival to discharge – Utstein Comparator Group survival rate

This survival to discharge measure reflects the effectiveness of the whole urgent and emergency care system in managing out of hospital cardiac arrest.

Data Definition:

a) Survival to discharge – Overall survival rate

SQU03_7_1_1: Of the patients included in the denominator, the number of patients discharged from hospital alive

SQU03_7_1_2: All patients who had resuscitation (Advanced or Basic Life Support) commenced/continued by ambulance service following an out-of-hospital cardiac arrest

b) Survival to discharge – Utstein Comparator Group survival rate

SQU03_7_2_1: Of the patients included in the denominator, the number of patients discharged from hospital alive

SQU03_7_2_2: All patients who had resuscitation (Advanced or Basic Life Support) commenced/continued by ambulance service following an out-of-hospital cardiac arrest of presumed cardiac origin, where the arrest was bystander witnessed and the initial rhythm was VF or VT.

The denominator and numerator for this indicator should exclude patients for whom outcome data was not available. For example, the diagram below sets out that the value for lines SQU03_7_2_1 should be 55 patients and the value for line SQU03_7_2_2 would be 458 rather than 527, as no outcome data was available for 69 patients who otherwise should have been included in the denominator.
Monitoring Data Source:

Survival to discharge information will be obtained from clinical and operational information from ambulance trust records, and data obtained from national databases and hospital sources as per National Ambulance Service Clinical Quality Group guidance and definitions (see Annex A).

Although the denominators for the survival to discharge indicator (i.e. lines SQU03_7_1_2 and SQU03_7_2_2) have the same definition as the denominators in the SQU03_03 Return of Spontaneous Circulation indicator (i.e. SQU03_3_1_2 and SQU03_3_2_2) it should be noted that the values of the denominators in the survival to discharge indicator may be lower as outcome data may not be obtained from acute trusts for all patients. Acute trusts are required to work and support ambulance trusts in the provision and timely linking of data to ensure that outcome information is captured as accurately, and for as many patients as possible.

Trusts are encouraged to use the narrative section for this indicator to set out the number of patients for whom full outcome data were not obtained, and to provide information on why these data could not be obtained.
SQU03_04: Ambulance Clinical Quality - Service Experience

Detailed Descriptor:

Narrative on how the experience of users of the ambulance service is captured, what the results were, and what has been done to improve the design and delivery of services in light of the results.

Data Definition:

There is no one definitive data source or method for understanding the experience of service users. Ambulance services have therefore been given the flexibility to develop and commission the methods they feel are most appropriate for understanding and assessing the experience of their users.

However, this indicator should include a qualitative understanding and description of user experience, and should not be restricted to reporting quantitative measures of user satisfaction from questionnaires. This indicator aims to ensure that the health needs and issues which matter most to patients (in all call categories), such as timeliness and being treated with dignity, are being effectively met.

Providers are expected to provide a narrative which sets out:

1. What work they have undertaken to understand and assess the experience of a wide and representative range of patients, carers and staff, reflecting the 24 hour nature of the service, over the whole of the previous quarter
2. What the results of these assessments were
3. What has been done to improve services in light of these results
4. What the outcome has been in terms of improved user experience

It is important that all four components of the narrative are completed. For example, it is not enough to note that users have been asked “Were you treated with dignity and respect?” or that discovery interviews have been conducted (Component 1); or to report the percentage of users reporting dissatisfaction on this measure, or anonymised narrative information summarising the interviews (Component 2); providers should also say what they have done to improve services (Component 3), and what the outcome was in terms of users reporting an improvement on this particular aspect of their care (Component 4).

Basis for Accountability:

This data will be reported for all Ambulance Trusts at a Trust-wide level.

Collection Information

Level: Ambulance Trusts

Basis: Provider

Returns;
Monitoring Data Source:
Please see data definitions section

Annex A

The technical guidance for the Ambulance Clinical Outcomes indicators is linked below.