**AMBULANCE QUALITY INDICATORS**

**Part 1 – Systems Indicators**

**Part 2 – Clinical Indicators**

**Version 1.31**

|  |
| --- |
| **Contents** |
|  |  |  |
| **Line Number** | **Line Descriptor** | **Page Number** |
| **Part 1 – Systems Indicator** |
| 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. | 6 |
| HQU03\_1\_1\_4 | The number of Category A (Red 1) calls resulting in an emergency response arriving at the scene of the incident. | 6 |
| HQU03\_1\_1\_5 | 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 | 7 |
| 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. | 8 |
| HQU03\_1\_1\_7 | The number of Category A (Red 2) calls resulting in an emergency response arriving at the scene of the incident. | 8 |
| HQU03\_1\_2\_1 | The number of Category A calls resulting in an ambulance arriving at the scene of the incident within 19 minutes. | 9 |
| HQU03\_1\_2\_2 | The number of Category A calls resulting in an ambulance able to transport the patient arriving at the scene of the incident. | 10 |
| SQU03\_1\_1\_1 | Number of emergency and urgent calls abandoned before being answered | 11 |
| SQU03\_1\_1\_2 | Total number of emergency and urgent calls presented to switchboard | 11 |
| SQU03\_2\_1\_1 | Emergency calls closed with telephone advice where re-contact occurs within 24 hours.  | 12 |
| SQU03\_2\_1\_2 | Emergency calls closed with telephone advice.  | 12 |
| SQU03\_2\_2\_1 | Patients treated and discharged on scene where re-contact occurs within 24 hours | 13 |
| SQU03\_2\_2\_2 | Patients treated and discharged on scene.  | 13 |
| SQU03\_2\_3\_1 | Emergency calls from patients for whom a locally agreed frequent caller procedure is in place | 14 |
|  | Total number of emergency calls presented to switchboard | 2 |
| SQU03\_8\_1\_1 | Time to answer calls (emergency and urgent), measured by median, 95th percentile and 99th percentile. | 14 |
| SQU03\_9\_1\_1 | Time to arrival of an ambulance-dispatched health professional dispatched by the ambulance service for immediately life-threatening (Category A) calls, measured by median, 95th percentile and 99th percentile | 15 |
| SQU03\_10\_1\_1 | Number of emergency calls that have been resolved by providing telephone advice.  | 17 |
| SQU03\_10\_1\_2 | All emergency calls that receive a telephone or face-to-face response from the ambulance service | 17 |
| 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 | 18 |
| SQU03\_10\_2\_2 | All emergency calls that receive a face-to-face response from the ambulance service | 18 |
| SRS17\_1\_1\_1 | Number of emergency journeys | 19 |
|  |
| **Part 2 - Clinical Indicators** |
| [SQU03\_3\_1\_1](#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. | 25 |
| [SQU03\_3\_1\_2](#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. | 25 |
| [SQU03\_3\_2\_1](#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. | 25 |
| [SQU03\_3\_2\_2](#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.  | 25 |
| [SQU03\_5\_2\_1](#SQU03_5_2_1) | 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 | 26 |
| [SQU03\_5\_2\_2](#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 | 26 |
| [SQU03\_5\_3\_1](#SQU03_5_3_1) | Patients with a pre-hospital diagnosis of suspected ST elevation myocardial infarction confirmed on ECG who received an appropriate care bundle | 28 |
| [SQU03\_5\_3\_2](#SQU03_5_3_2) | Patients with a pre-hospital diagnosis of suspected ST elevation myocardial infarction confirmed on ECG | 28 |
| [SQU03\_6\_1\_1](#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 | 28 |
| [SQU03\_6\_1\_2](#SQU03_6_1_2) | FAST positive patients (assessed face to face) potentially eligible for stroke thrombolysis within agreed local guidelines | 28 |
| [SQU03\_6\_2\_1](#SQU03_6_2_1) | The number of suspected stroke patients assessed face to face who received an appropriate care bundle | 29 |
| [SQU03\_6\_2\_2](#SQU03_6_2_2) | The number of suspected stroke patients assessed face to face | 29 |
| SQU03\_7\_1\_1 | Of the patients included in the denominator, the number of patients discharged from hospital alive  | 25 |
| 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 | 25 |
| SQU03\_7\_2\_1 | Of the patients included in the denominator, the number of patients discharged from hospital alive | 25 |
| 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.  | 26 |

**Version control**

|  |  |  |
| --- | --- | --- |
| **Version** | **Date issued** | **Changes made** |
| V0.4 | 1st April 2011 | Original Guidance |
| V0.5 | 28th April 2011 | Clinical Outcomes definitions greyed out until definitions fully completed |
| V0.6 | 21st June 2011 | Changes to definitions following clarification from the National Ambulance Information Group |
| V0.7 | 8th July 2011 | Added definition for emergency patient journeys data.  |
| V0.8 | 10th August 2011 | Amended clinical outcomes definitions based on advice from ambulance Directors of Clinical Care group.  |
| V0.9 | 22nd August 2011 | 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.  |
| V0.10 | 12th January 2012 | Inserted Annex A – Technical Annex for the Clinical Outcomes.Added row 7 to Table 1 in the SQU03\_05 and SQU03\_06 sections. |
| V1.0 | 5th March 2012 | 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 |
| V1.1 & V1.2 | 7th June 2012 & 11th June 2012 | 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). |
| V1.3 | May 2013 | 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.SQU03\_02: Ambulance Clinical Quality- Re-Contact Rate Following Discharge of Care: Rewording of SQU03\_2\_1\_1.Emergency Calls Closed with Telephone Advice – Improved wording for SQU03\_10\_1\_2 and SQU03\_10\_2\_2. ‘Major A&E departments’ defined instead as Type 1 and Type 2 A&E departments. Number of Emergency Patient Journeys renamed as ‘Number of Transported Incidents.’ Definition altered to reflect this change. Outcome from acute STEMI - Component (a), regarding thrombolysis removed. Components of care bundle updated: ‘no chest pain’ added to Notes 1(b); the words ‘appropriate’ and ‘paracetamol’ added to 1(d).Outcome from Stroke for Ambulance Patients – further references to ‘unresolved transient ischaemic attack patients’ added at (b), SQU03\_6\_2\_1 and SQU03\_6\_2\_2.Annex A technical guidance updated. |
| V1.31 | August 2013 | V1.2 Clinical Outcomes definitions removed in line with move to collection of 2013-14 data. |

**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:

Ambulance telephony system

**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 c*alls 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 c*alls 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)

- 95th 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 a 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 1 - calculation of care bundle delivery and valid exceptions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Patient ID | Care bundle criterion 1 | Care bundle criterion 2 | Care bundle criterion 3 | Care bundle delivered? |
| 1 |  |  |  | Yes |
| 2 |  |  | x | No |
| 3 |  | Exception | x | No |
| 4 | Exception | Exception | x | No |
| 5 |  |  | Exception | Yes |
| 6 | Exception | Exception |  | Yes |
| 7 | Exception | Exception | Exception | Yes |

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*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Patient ID | Care bundle criterion 1 | Care bundle criterion 2 | Care bundle criterion 3 | Care bundle delivered? |
| 1 |  |  |  | Yes |
| 2 |  |  |  x  | No |
| 3 |  | Exception | x | No |
| 4 | Exception | Exception | x | No |
| 5 |  |  | Exception | Yes |
| 6 | Exception | Exception |  | Yes |
| 7 | Exception | Exception | Exception | Yes |

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.



*Reproduced from London Ambulance Service: Cardiac Arrest Annual Report: 2007/08*

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.

**Not collected in UNIFY2**

**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 user 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.

****