



## South Central Ambulance Service - Update

### MISUSE OF AMBULANCE SERVICE COSTS LIVES CAMPAIGN

South Central Ambulance Service (SCAS) launched an innovative media campaign in January 2012 in a bid to stop people calling 999 for non-life threatening reasons. With the service receiving 1,235 hoax calls and many more inappropriate calls from January 2011 to October 2011, this is an increasing problem that is putting people's lives at risk. Inappropriate calls include responding to the emergency of a man in "severe pain" and on arrival he wanted someone to pass him some paracetamol from a table less than two metres away; people calling 999 because they want a lift to visit a relative in hospital; or people injured with say a broken finger, which is not life threatening, but they have no money to get to A&E. There is one ambulance available per 33,000 people across Buckinghamshire, Oxfordshire, Hampshire and Berkshire. Each time an ambulance is used inappropriately it is not available to attend a life-threatening situation.

In a concerted effort to address this issue, SCAS headlined the campaign with a hard-hitting video shot in the style of a movie trailer, which showcases interviews with paramedics, real life emergencies and re-enactments of inappropriate calls and the impact they have. The video is available to view on [www.999southcentral.co.uk](http://www.999southcentral.co.uk) as well as on YouTube. The video was supported by extensive PR activity and received a considerable amount of local, regional and national media interest including ITV Meridian, BBC Oxford, Berkshire and Solent, The Sun, The Portsmouth News and The Journal of Paramedic Practice. The viral film has had approximately 70,000 views on YouTube and SCAS has attracted 939 new followers on Twitter.

The campaign also comprises a number of educational case study films which are being used to target and engage schools, care homes and GPs to help raise awareness of this increasing problem and encourage appropriate use of the service. Messages from the campaign are also being put on the fleet and as winter approaches the campaign will be re launched with a number of new initiatives including cinema and radio advertising.

Please promote the campaign and post this link on your websites, intranets and newsletters, as well as sharing it with your family and friends:

- <http://www.youtube.com/user/999SouthCentral>
- Follow SCAS999 on Twitter

## Lay Guide to Ambulance Service clinical quality indicators

One of the most common reactions we hear from patients is that in an emergency they want the ambulance to arrive quickly. Delays (perceived or otherwise) in receiving the care they need may also seem worse by the anxiety and stress of the situation. Ambulance trusts recognise this and understand that response time is important, but faster responses to patients are only one part of a process to deliver improved outcomes for patients. Ambulance trusts therefore need to focus on providing the best care at the most appropriate time and, where possible, to resolve issues on the first occasion. We appreciate that sometimes ambulance staff have to focus on the most critically ill patients (i.e. those with life-threatening conditions) but it is important that there are effective systems and the right level of resource to cope with all patients who call 999.

We are publishing a new set of ambulance clinical quality indicators that aim to provide patients with the information they need to be able to see the quality of care being delivered by ambulance services. These indicators will be published regularly and will be made available by each individual ambulance trust. This will mean that there will be information available to allow comparisons between one ambulance service and another. The set of indicators is designed to give a comprehensive picture of the quality of care but importantly also includes the views of service users on the care the ambulance trust has provided. Patient and public feedback is key to facilitating continuous improvement; and trusts will need to take account of this when looking to learn lessons and improve the service they offer. A first-class ambulance service is always keen to hear about suggestions for improvements in care.

The ambulance clinical quality indicators are not just about providing information, they also aim to encourage discussion and debate amongst ambulance staff, NHS managers, commissioners, and the general public about how good the care being provided locally is and how it can be improved.

Eleven clinical quality indicators will be measured from April 2011, and the remainder of this where this document sets out how these specific indicators will improve care.

**Service Experience Indicator** – most, if not all, ambulance trusts already undertake patient satisfaction surveys. We are now asking them to go beyond simply reporting the results of such surveys, and ambulance trusts will be required to demonstrate and publish how they find out what people think of the service they offer (including the results of focus groups, interviews and patient forums, rather than simply patient surveys) and how they are acting on that information to continuously improve patient care.

**Outcome from acute ST-elevation myocardial infarction (STEMI) indicator** - STEMI is an acronym meaning "ST segment elevation myocardial infarction," which is a type of heart attack. This is determined by an electrocardiogram (ECG) test. We know that, for many conditions, your recovery will be more likely and quicker if you receive early treatment. Early access to reperfusion (i.e. where blocked arteries are opened to re-establish blood flow) and other assessment and care interventions are associated with reductions in STEMI mortality and morbidity. Measuring patient outcomes in this way will allow services to place performance in context and stimulate discussion on how to continually improve.

**Outcome from cardiac arrest: return of spontaneous circulation indicator** – This indicator will measure how many patients who are in cardiac arrest (i.e. no pulse and not breathing) but following resuscitation have a pulse/ heartbeat on arrival at hospital. We recognise that providing resuscitation as early as possible to those in cardiac arrest is likely to improve the chances of recovery. Clearly, the higher the survival rate the better.

**Outcome from cardiac arrest to discharge indicator** – We know that the ambulance service

play a vital role in saving patient's lives, but it is important to understand the effectiveness of the whole system in managing those patients who are in cardiac arrest. We will know from the indicator above how effective the ambulance service was in responding to and treating patients in cardiac arrest when the ambulance arrives at the hospital – but what about after the patient is in the care of the hospital? That is why this indicator measures the rate of those who recover from cardiac arrest and are subsequently discharged from hospital as a patient outcome.

**Outcome following stroke for ambulance patients indicator** – The Stroke: Act F.A.S.T campaign has been very successful in raising awareness to the public on the signs of a stroke (as well as TIA's, Transient Ischaemic Attacks (or “mini-strokes”)), and we know that prompt emergency treatment can reduce the risk of death and disability. The campaign promotes that when a stroke strikes act F.A.S.T:

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

This indicator will require ambulance services to measure the time it takes from that all important 999 call to the time it takes those F.A.S.T-positive stroke patients to arrive at a specialist stroke centre. We know that patients should be arriving at specialist stroke centres as soon as possible so that they can be rapidly assessed for thrombolysis, delivered following a CT scan in a short but safe time frame; this has been demonstrated to reduce mortality and improve patient recovery.

**Proportion of calls closed with telephone advice or managed without transport to A&E indicator** - Ambulance trusts are exceptionally good at handling and responding to 999 calls. But calling 999 does not necessarily mean that a ‘blue light’ emergency response is the best one. Similarly, with ambulance staff becoming increasingly skilled in treating patients at the scene even if an ambulance is sent, the front-line crew may be able to treat the patient then and there without the need to take them to an A&E department. On the other hand, alternative healthcare options, other than A&E, may be more appropriate for the patient.

This indicator should reflect how the whole urgent care system is operating, rather than simply the ambulance service or A&E, because it would reflect the availability and provision of alternative urgent care destinations and treatment of patients in the home. Knowing this will help improve urgent and emergency care services so that they offer the right treatment to patients in the right location at the right time.

**Re-contact rate following discharge of care Indicator** – if patients have to go back and call 999 a second time it is usually because they are anxious about receiving an ambulance response or have not got better as expected. Occasionally it may be due to an unexpected or a new problem. To ensure that ambulance trusts are providing safe and effective care the first time, every time this indicator will measure how many callers or patients call the ambulance service back with 24 hours of the initial call being made.

**Call abandonment rate** – the vast majority of people who phone 999 do so because they need to access emergency healthcare. If people do not get to speak to the ambulance service quickly they may hang up or try to receive the care they need elsewhere, for example turning up at A&E. This indicator will ensure that ambulance trusts are not having problems with people phoning 999 and not being able to get through so that 999.

**Time to answer calls** – It is equally important that if people/patients dial 999 that they get call answered quickly. This indicator will therefore measure how quickly all 999 calls that are received by the ambulance service get answered. The quicker the ambulance service answer the call, the quicker they can establish what is wrong with the patient so that the best type of response can be given. Answering the call quickly also provides reassurance to often very anxious and scared callers, who have called 999 because it is a real emergency.

**Time to treatment by an ambulance-dispatched health professional** – it is important that if patients need an emergency ambulance response that the wait from when the 999 call is made

to when an ambulance-trained healthcare professional arrives is as short as possible, because urgent treatment may be needed.

**Category A, 8-minute response time** – In truly life-threatening situations, the speed of an ambulance arriving could help to make the difference between life and death. This indicator measures the speed of all ambulance responses to the scene of potentially life-threatening incidents and importantly measures that those patients who are most in need of an emergency ambulance gets one quickly.

Each ambulance service will be publishing their results against each of these indicators from April 2011, along with an explanation of their local circumstances to place these results in context. This will help to explain any local reasons as to why the results may be different from other ambulance services, but it should also explain how they are working to continuously improve the quality of care they deliver to patients.

## **Clinical Excellence within South Central Ambulance Service**

South Central Ambulance Service (SCAS) continues to remain very focused on achieving excellent clinical outcomes for all of our patients. Over the last few years, we have developed our capability to audit our clinical performance in a number of key areas of our emergency clinical practice. Since the introduction of national Clinical Performance Indicators, which have included clinical care bundles for the management of heart attack, acute asthma, acute stroke, diabetic emergencies, and cardiac arrest, we have maintained an impressive track record of continuous improvement in the standards of care that we deliver to our patients. One of the key areas that we have invested in has been our ability to capture the high quality clinical care that our staff deliver from their clinical records, and for the first time, our staff now have the ability to be able to track and monitor their own clinical performance to inform their own future clinical practice and development.

Within the last twelve months, Ambulance Services in England have for the first time been monitoring the clinical outcomes of patients who have sustained a cardio-respiratory arrest in the community and we have been collecting data on the number of our patients that have arrived at hospital with a restored pulse, and equally as importantly, but more challenging, we have been collecting data on the survival of these patients to hospital discharge. This latter measure is a marker for the quality of care the patient receives from the whole emergency care system, including specialist care delivered in hospitals.

Over the last six months we have recognised that we need to do further work to improve the quality of our clinical data, particularly in the area of survival to hospital discharge data, and we have been working closely with our acute hospital trusts to ensure that SCAS obtains this data in a timely manner. We have also modified the design of our clinical records to facilitate this data capture and have emphasised the importance of staff maintaining high quality clinical records. The position is improving and we are receiving more data, quicker from our acute hospital trust partners.

The latest data we have from the National Department of Health Dashboard, confirms that for the month of April 2012 36.8% of our patients who had sustained a cardiac arrest in the community in whom resuscitation has been attempted had a pulse on arrival at hospital and that 13% of all patients who had survived a cardiac arrest survived to hospital discharge. The proportion of patients who had 'witnessed' cardiac arrests, in which the underlying cardiac arrest rhythm was more favourable (ventricular fibrillation or ventricular tachycardia), is even higher, although the numbers of patients are small. The current overall cardiac survival to discharge rate is reported in the United Kingdom medical literature as approximately 7%.

It is important that the limitations of this data are understood as the absolute numbers of patients who have been treated in cardiac arrest month on month is small, but the data will become more robust with the passage of time as the size of the dataset increases. At this time,

we have good evidence that the quality of care we currently deliver to our patients is good, but we are not complacent. We have had a number of initiatives in place to further improve the clinical care of patients in cardiac arrest, this includes our front line staff using up to date evidenced based cardiac resuscitation algorithms that are approved by the Resuscitation Council UK. All of our staff continues to receive regular refresher update training and performance review.

We are continuing to develop our community first responder's schemes in community areas to enhance the first link of the cardiac chain of survival, namely to try and ensure that basic life support and compressions are initiated as quickly as possible, and to facilitate access to early defibrillation. To complement the growth of our community first responder schemes, we are working with a number of charities to improve the distribution of semi-automatic defibrillators throughout the community at pre-determined locations based on probability of cardiac arrest risk, for example sports centres, shopping centres and railway transport hubs. We are also working on improving the visibility of these assets to our emergency control room staff in the event of reported cardiac arrest, again to improve access to early defibrillation by the public, prior to the arrival of our highly trained and experienced ambulance staff.

We will continue to monitor our clinical performance very closely and we are determined to achieve the best possible outcomes following cardiac arrest, and indeed for all emergencies that we manage in the community.

**John Black**  
**Medical Director**  
**SCAS**  
**September 2012**



## The Ambulance Clinical Quality Indicators in more detail

Providing a fast response in an emergency is vital – but it is only one part of the treatment process. In April 2011, a new method of measuring ambulance service performance was introduced. Ambulance Care Quality Indicators don't just reflect how long it took to travel from "A" to "B" they also show the standard of care delivered from the moment the patient dials 999 so we can better monitor all of the factors which go into providing the best service possible. We know the importance of listening to what people have to say when it comes to identifying possible improvements. That's why we publish the Ambulance Care Quality Indicators each month.

### **1) Indicator: Outcome from acute ST-elevation myocardial infarction (STEMI)**

STEMI is a type of heart attack. This is determined by an electrocardiogram (ECG) test. We know that a patient is more likely to recover if they receive early treatment.

**Performance:** There is no identified target for this but the desired outcome is for a high proportion of patients to have received early reperfusion (timely thrombolysis and primary angioplasty; delivery of care bundle) and all components of assessment have been consistent during the early months of the financial year. Our performance is 83% for Primary angioplasty and for delivery of the STEMI care bundle 40.64%.

**Action:** The Trust will continue to scrutinise all cases, and break each incident down into its constituent elements. Staff have been issued with advice to help with keeping on scene times to a minimum. Processes in the Emergency Operations Centre will be reviewed as part of the ongoing improvement in reducing on scene and journey times. SCAS is working closely with the South Central Cardiovascular Network to improve the pathways with the Acute Trusts for direct access to Hyperacute Stroke Units.

Work is currently being undertaken to understand which elements of the patient journey are likely to prevent the patient reaching a hyperacute stroke centre within 60 minutes. This involves looking at each incident to look at the initial call and how the incident has been prioritised within the Emergency Operations Centre (EOC) and then what resource has been sent.

- **STEMI (ST Elevation Myocardial Infarction) Call to Needle**

This clinical practice has been withdrawn with patient receiving primary angioplasty (PPCI), which is more effective for the patient. SCAS does not record data for this measure as the trust no longer undertakes thrombolysis.

All stocks of thrombolytic drugs have now been removed from the trust's vehicles with good access to heart attack centres across South Central the best practice is to deliver the patient direct to the catheter lab with as much pre-alert notice as possible reducing the call to balloon time.

- **STEMI (ST Elevation Myocardial Infarction) Call to Balloon**

The trust has improved its performance against this measure throughout the year. The trust's performance is far exceeding the CQC target and above the national average for all ambulance trusts in England. The trust is now working with acute hospital trusts to reduce the Door to Balloon times.



The trust is currently working towards improving pre-alerts, especially out of hours, so as to help the acute trusts to reduce the door to balloon times. This is a joint target for ambulance and acute trusts to work in seamless partnership to achieve the reduction in call to balloon times. Call to door times has been improved significantly by education and feedback between the ambulance service and acute hospital trusts.

- **STEMI Care Bundle** (Proportion of cardiac patients who received all elements of the optimal care package)

Following analysis of its processes, and delivering improvement in its analgesia (pain relief) administration, SCAS has continued to improve in this area. There are discussions at the National Ambulance Directors of Clinical Care meetings around reviewing the care bundle for STEMI patients, in the light of new evidence which will further enhance the care of this group of patients.

The care bundle focuses on only two forms of analgesia, morphine and Entonox, where as SCAS has a much larger formulary of analgesia. This causes us to have a reduced score for analgesia administration as SCAS staff use a stepwise approach to the management of pain by using more appropriate medicines that reduce risk or by using a combination of analgesics managing pain more effectively.

The use of GTN, which is a vaso-dilator is being reviewed by the national ambulance Medical Directors group as there is evidence that it has no benefit to patients that do not have chest pain, even if they are having a STEMI. The trust is waiting for the evidence to be reviewed and will make any changes to practice if required.

## 2) Indicator: Outcome from cardiac arrest: return of spontaneous circulation (ROSC)

This indicator will measure how many patients who are in cardiac arrest have been helped to regain a pulse/heartbeat by the time they arrive at hospital. The aim of this indicator is to reduce the proportion of patients who die from out of hospital cardiac arrest. The return of spontaneous circulation is calculated for two patient groups: The overall rate measures the overall effectiveness of the urgent and emergency care system in managing care for all out of hospital cardiac arrest patients; the rate for the Utstein comparator group applies to a subset of all cardiac arrest patients and provides a more comparable measure of management of cardiac arrest for patients where timely and effective clinical care can particularly improve survival.

**ROSC for Utstein group** (Proportion of patients whose cardiac arrest was witnessed and arrived at hospital with a pulse)

**Performance:** There is no specified target for this indicator but SCAS is continuing work to improve performance in these areas. Our current performance for the Utstein group is 52.54%. Our overall ROSC performance is 31.13%. The higher the ROSC rate the better.

Due to the small sample size involved, SCAS will continue to review its performance. SCAS's overall ROSC rate is consistent with existing published UK survival rates and there are initiatives to improve the early intervention to greatly improve outcomes.

**Action:** SCAS are increasing the number of community responders that have an important role to improving the outcome for patients that have a cardiac arrest. The success that is seen in London can be attributed to the vast number of defibrillators that are placed in the offices and buildings which give very early access to defibrillation, significantly improving the outcome for the patient. Our Community Responders are trained and live within the community to provide the same such early defibrillation in towns and villages across South





Central, working with the ambulance crew to increase the chance of achieving a Return of Spontaneous Circulation on arrival at hospital.

Defibrillators in the community project is also being expanded, placing defibrillators where large groups of people gather, such as shopping centres, cinemas or village shops, so early defibrillation can be achieved on the spot.

### **3) Indicator: Outcome from cardiac arrest to discharge indicator –**

It is important to understand the effectiveness of the whole system in managing patients who suffer a cardiac arrest. That's why this indicator measures the rate of those who recover from cardiac arrest and are then discharged from hospital alive.

#### **Survival to discharge for Utstein group**

(Proportion of patients whose cardiac arrest was witnessed and survived to leave hospital alive)

#### **Performance:**

There is no identified target but the desired success is that the higher survival rate the better. SCAS will continue to review and improve its performance in this area, which remain at expected levels from published literature. SCAS is participating in a cluster randomised control trial using a mechanical chest compression device for patients in cardiac arrest that may further improve ROSC and survival to discharge from hospital. Obtaining timely mortality and survival data from acute hospitals continues to be challenging and is contributing to delays in reporting of survival to hospital discharge data.

A patient's survival to discharge from a cardiac arrest is very complex as it has a significant number of factors that need to be taken into account. The most obvious is what has caused the cardiac arrest in the first place. If the arrest is due to a chronic condition such as cancer then the likelihood of a successful resuscitation is very low for instance.

**Action:** SCAS has made significant effort to build relationships with acute trusts to obtain this information but is reliant on good will at the moment. Steps have been taken at Board level to formalise this process and these are starting to improve the flow of data.

### **4) Indicator: Outcome following stroke for ambulance patients**

We know that prompt emergency treatment can reduce the risk of death and disability from a stroke. This is why people at the scene should act quickly. This indicator will require ambulance services to measure the time it takes from the 999 call to the point where a F.A.S.T-positive stroke patient arrives at a specialist stroke centre.

**Stroke care bundle** (Proportion of stroke patients who received all elements of the optimal care package)

**Performance:** There is no identified target but the desired outcome is for the highest percentage of FAST positive stroke patients to arrive at a hyperacute stroke centre within 60 mins. Our current performance is 52.34%. Our current performance for the indicator requiring the highest percentage possible of suspected stroke patients receiving a care bundle, is 60.65%.





## South Central Ambulance Service **NHS**

NHS Trust

SCAS has very good performance in the care of Stroke patients but re-enforces the need to maintain the level of care at any opportunity to avoid any drop in performance.

**Action:** Training has recently been given to ensure that stroke patients are cared for in line with best practice guidelines.