



ASSOCIATION OF
AMBULANCE
CHIEF EXECUTIVES



Taking Healthcare to the Patient 2:

A review of 6 years' progress and
recommendations for the future

June 2011

This document has been produced by and on behalf of the Association of Ambulance Chief Executives
June 2011

www.ambulanceleadershipforum.com



ASSOCIATION OF
AMBULANCE
CHIEF EXECUTIVES



Taking Healthcare to the Patient 2:

**A review of 6 years' progress and
recommendations for the future**

June 2011



Introduction	3
National Audit Office report	4
1. Better survival rates for the seriously ill and injured	5
Getting to patients quickly	5
The Future for Targets	11
Providing the best possible care	13
Taking patients to the best place for their care	15
Air Ambulances – common standards and governance	17
Impact on survival rates	18
The future for care for seriously ill and injured patients	21
2. Resolving the needs of patients who do not need the accident and emergency department (A&E)	23
New skills in Delivering Mobile Primary Care 24/7	24
The future skill mix in ambulance services	27
Telephone advice – Hear & Treat	28
The future for telephone advice services	29
Single points of access & directory of service (DOS)	29
The future for the single point of access	30
Alternatives to the Accident and Emergency Department	32
Preventing emergencies	33
The Future in Urgent Care	36
Patient Transport Services	36
3. Even better patient experience	39
How patients rate their experience	39
Patient involvement	44
4. Higher staff satisfaction	45
Staff Survey	45
Improving skills	47
Leadership	51
Equality and diversity	52
Staff support schemes	54
Anti-violence campaign	55
5. Organisational improvement	57
The benefits of merger and close cooperation between ambulance services	57
Communications	61
Joint work on finance and commissioning	63
Being prepared	70
The next six years for ambulance services – Six recommendations	75
References/bibliography	79
Acknowledgements	82



Taking Healthcare to the Patient

Transforming NHS Ambulance Services



Introduction

The publication of *Taking Healthcare to the Patient* in 2005 set an agenda for considerable change and improvement in ambulance services across England.

There were more than 31 ambulance services in 2005. They merged to form twelve in total. This has led to improved leadership, greater collaboration, financial savings through joint procurement, much better resilience and most importantly advancements in patient care.

The new twelve services have achieved:

- Major advances in ambulance clinical education and training and the care provided to seriously ill patients
- Greater attention to the many patients who do not have a life-threatening condition
- Consistently high patient satisfaction levels
- Significant improvement in the speed of answering 999 calls
- Significant improvement in technology, infrastructure and emergency preparedness

The next five chapters describe the changes that ambulance services have made since 2005 in five key areas:

- Better survival rates for the seriously ill and injured
- Resolving the needs of patients who do not need the emergency department
- Even better patient experience
- Higher levels of staff satisfaction
- Organisational improvement

Not every change described was the direct result of the recommendations in *Taking Healthcare to the Patient*. Some could not have been predicted at the time, and others are the indirect consequence of the closer working the English ambulance service has achieved after merging into just twelve services. In each chapter we describe some of the recommendations of *Taking Healthcare to the Patient* to which the achievements relate.

While much has been achieved in the last six years, we still have much more to do and some thoughts on where next are outlined at the end of this review.

Thanks go to all who have contributed to this report and to those in ambulance services across England who have helped deliver all that is set out in this review.

Peter Bradley CBE
Chairman, Association of Ambulance Chief Executives

June 2011

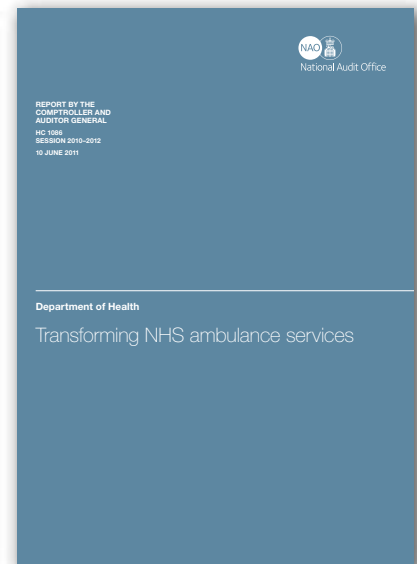
National Audit Office report

As this review was going to print, the National Audit Office published its report – Transforming NHS Ambulance Services. The report makes a number of recommendations aimed mainly at further improvements to the efficiency and effectiveness of our services. We welcome the report and its recommendations – many of which are already underway across ambulance services in England.

Specifically:

- We believe we do provide good value for money but recognise there is always more that can be done.
- We welcome scrutiny as we believe this can help improve our service which will ultimately benefit our patients.
- We are pleased the report recognises the pivotal role ambulance services play within the urgent and emergency care system – and that when we deliver efficiencies it has a significant impact on the rest of the NHS.
- We were already working on many of the recommendations in the report, for example we are offering more patients help and advice over the telephone while making sure patients get the right treatment by taking them to places other than hospital accident and emergency departments such as minor injuries units or urgent care centres.
- We are pleased that the report recognises the importance of minimising delays during the clinical handover at A&E and the impact delays have on ambulance availability.
- We are pleased the NAO report recognises the 'greatly increased speed' in which 999 calls are now answered.
- We welcome the support the report gives to our cost improvement programmes as we change the way we work while working hard to further improving patient care.

Individual Ambulance Trusts will want to discuss the report in their own organisations and with their commissioners. The Association of Ambulance Chief Executives will also work through the reports recommendations and agree any pieces of work that should be followed up nationally.



1. Better survival rates for the seriously ill and injured

One in ten 999 patients are at risk of dying; three factors improve their chances of survival:

- a fast response;
- high quality care from highly skilled ambulance clinicians; and
- being taken to a hospital that is appropriately skilled and equipped to deal with their emergency.

Over the last six years ambulance services have made good progress in all three areas.

Getting to patients quickly

In 2005/06 ambulance services in England reached 74.0% of the 1.6 million category A calls (serious and immediately life-threatening calls) they received, within eight minutes of the 999 call.

This was already a significant achievement. However, *Taking Healthcare to the Patient* identified that the 31 ambulance services of the time were not measuring this performance in the same way.

The clock for measuring the eight minute period started after the ambulance service call taker had established the "chief complaint" of the patient, this could be as much as two minutes into the 999 call and could also vary by trust. Crucially, the time the caller had had to wait to have their 999 call answered in the ambulance control room after being connected to the ambulance service switchboard was not included in the eight minute target. This situation meant that an ambulance service could succeed in achieving the eight minute target, yet this might not reflect the actual time the patient waited for a response. A true comparison of performance between ambulance services was impossible. *Taking Healthcare to the Patient* aimed to create a level playing field enabling each Ambulance Trust to be benchmarked against each other. From 1st April 2008, ambulance services had to respond to Category A patients within the eight minutes following the 999 call being connected to the ambulance service control room.

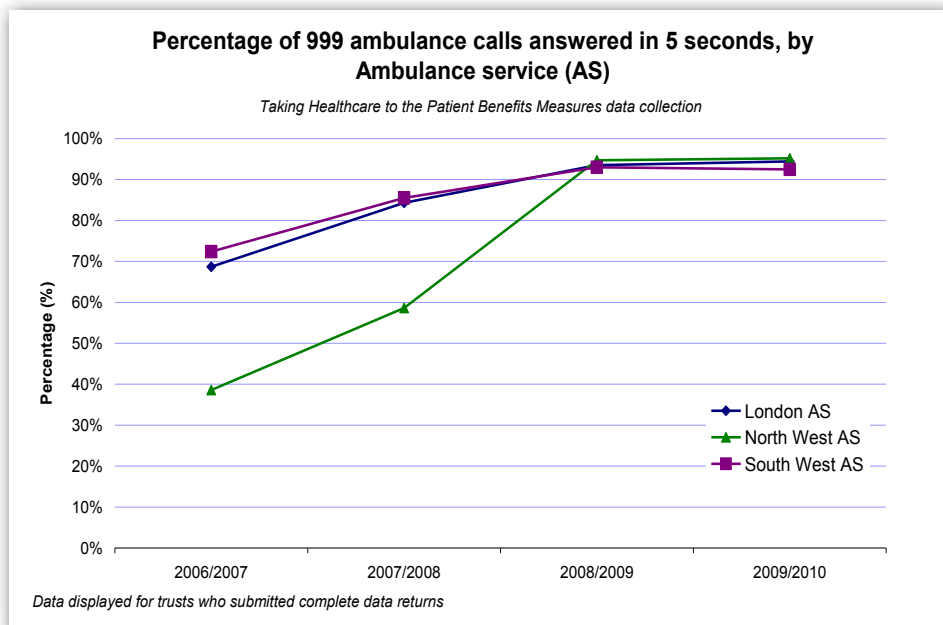
To the casual observer, it may not have seemed as if the eight minute target had changed at all. However, the change was significant; for most ambulance services it required reaching patients at least a minute and a half quicker than they had before. It also meant answering the 999 call much faster than ever before, this was important as previously it had not been uncommon for BT to have significant issues with how long operators had to wait for ambulance control rooms to answer 999 calls.

The introduction of this new way of measuring the target required ambulance services to speed up three things:

- answering the telephone;
- dealing with the telephone call; and
- sending a vehicle

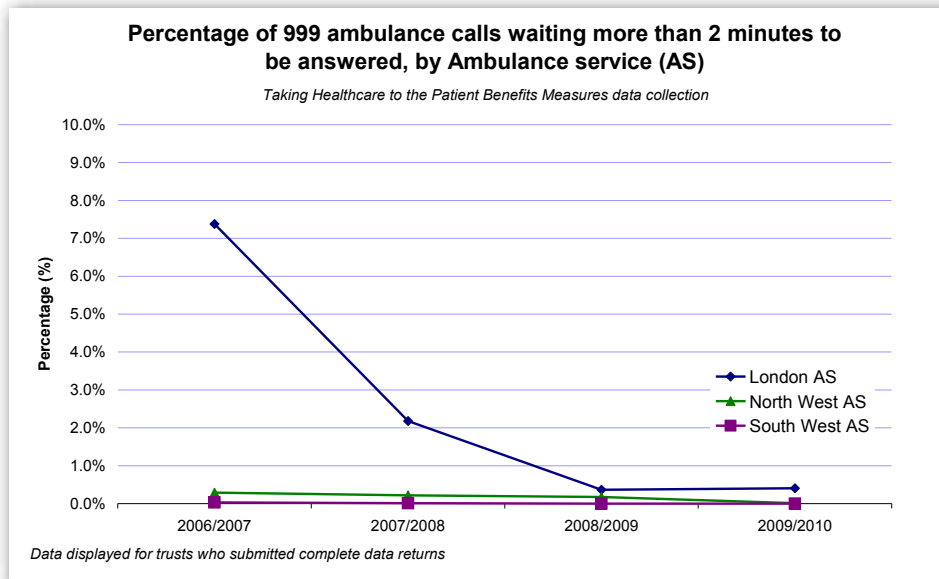
In fact ambulance services have studied every aspect of the call-taking process – from 999 call to the ambulance becoming available for its next call – and made each stage faster and more efficient.

Some services needed to change their telephone systems so that they could measure the “call connect” time for every incoming call. Most had to change shift patterns in their control rooms and take on more call taking staff so that there would always be enough people on duty to answer 999 calls within a target of 5 seconds. Likewise, the numbers and shift patterns of dispatch staff were changed.



Ambulance services answered approximately 90% of calls in 5 seconds in 2009/10, compared to 40% to 70% of calls in 2006/07¹.

Less than 1% of calls to the ambulance service waited more than 2 minutes (60 rings) before being answered in 2009/10 (BT DATA). A Significant improvement on previous years.



All services have introduced “caller line identity” (CLI) – a system whereby the phone providers – BT and Cable and Wireless – pass the address details of the phone number electronically at the same time as they put the 999 call through. This can save a lot of time establishing the patient’s address. Some services can also narrow down the location of mobile phone calls, so that they can get a vehicle moving before the full address is established.

Services studied how quickly call takers completed each part of the call-taking process. From this information, they were able to set standards for everyone to aim for and manage their success in meeting them. They could identify people who seemed to take a lot more time than average, and find out what could be done to improve their performance. The same principles were applied to the dispatch process, so that all ambulance dispatchers could be supported to work as efficiently as the best. The number of ambulances controlled by each dispatcher was reduced in most services, where it became clear that they were being asked to cope with more resources than could be managed efficiently.

Some services introduced “dispatch on address”. This means dispatching as soon as the address is available, instead of waiting for more information which could help determine the clinically appropriate response. In some circumstances that additional information could determine the safety of the location that crews were expected to enter. Services are able to send update information to the ambulance crew while they are on their way to the call. Some services wait long enough to be fairly sure that it will be a Category A call. However, some of the busiest services cannot afford to wait that long, and have introduced an element of automated dispatch. In other words the ambulance is allocated by the computer dispatch system. This can reduce the time before dispatch to below 20 seconds. But human oversight will always be needed, in case the computer dispatches to a less serious call just before another, more serious call, comes in.

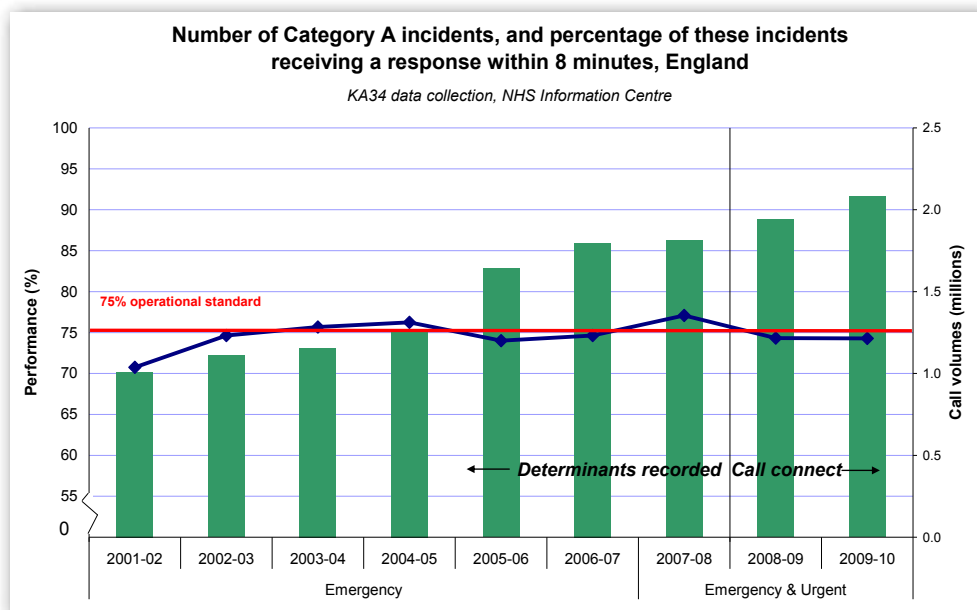
Ambulance services have paid more attention to the staff, systems and technology in their control rooms than ever before.

They have also looked at the whole call process, in order to have ambulances available to take calls as soon as they come in.

For example, ambulances mobilise about a minute sooner if they are already out and about, rather than at an ambulance station. Most services have negotiated that vehicles will be out on standby for the busiest parts of the shift, often parked up near a road intersection that means that they can reach any call quickly. Most services use sophisticated software which uses information on past call numbers and locations in order to predict future call patterns. By using this, control room staff can ask crews to stand by in the areas where the next calls are most likely to come up.

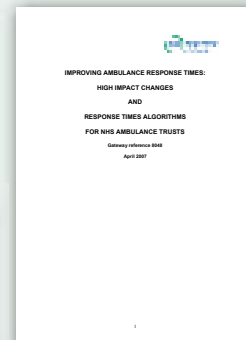
The times taken by ambulance crews in different parts of each job were examined, and variation questioned. Time spent at hospital after the patient has been handed over is a particular example. Ambulance managers are increasingly questioning hospitals that, for whatever reason, delay accepting patients from ambulance crews. Equally, they are challenging ambulance crews that habitually takes a long time at hospital after dropping off their patient and before becoming available for the next call.

The provisional data for 2010/11 indicates ambulance services got to 75.0% of the 2.1 million Category A calls they received within eight minutes of their 999 call being connected. This level of performance has been delivered in the face of the more challenging call connect standard and the near 30% increase in Category A calls since 2005/06.



Taking Healthcare to the Patient recommendations

- ✓ All ambulance services should prioritise calls in the same way. Prioritisation should be reviewed annually.
- ✓ For measuring 999 **Category A and Category B response times**, the clock should start when the **call is connected** to the ambulance control room. This will more closely match the patient's experience and can be consistently understood and applied by services.
- ✓ Good practice suggests that the phone should be answered within 5 seconds at least 95% of the time.
- ✓ The performance requirements for **category B response times** – and **category A transport times** – should be based on a single measure of **19 minutes for all services**.
- ✓ There should no longer be a requirement to report the number of Category B calls within 8 minutes.
- ✓ The Department of Health should ensure that support is made available (or commissioned) to support trusts in achieving optimum call activation, mobilisation, resource production and distribution, recognising that this will vary with rural and urban models.
- ✓ The Department should support services to understand and analyse their demand. Commissioners need to recognise the impact of increases in activity as well as striving for increased efficiency.
- ✓ The performance requirements for responding to patients whose GP calls 999 on their behalf (known as 'GP urgents') should be the same as for other 999 calls – with effect from April 2007. From April 2006, as an interim measure, the clock should stop for this group of patients when an ambulance clinician arrives at the scene.
- ✓ The Department should develop a national implementation support framework, with tailored support for those services with particular implementation challenges



The Department of Health, (including senior ambulance staff seconded to the DH,) The Emergency Care Intensive Support Team and the National Director of Operations Group all worked together to ensure ambulance services were supported to help implement the new targets.

Improving the emergency operations centre at Great Western Ambulance Service NHS Trust

This story of how Great Western Ambulance Service (GWAS) has invested in its emergency operations centres (EOCs) is an excellent example of the work trusts have done.

They increased and developed the number of staff in the EOCs and implemented a new single computer aided dispatch [CAD] and telephony system. Team structures, responsibilities, policies, procedures and protocols have been standardised throughout the trust creating a "virtual" EOC across the three sites.

- Centralised call-handling and call auditing – all 999 and healthcare professional (HCP) calls are now directed into the main trust EOC. The call audit team is also located centrally with the call-handlers so direct and timely feedback can be given
- Call-handling management – The trust separated the two core functions of the EOC (call-handling and dispatching) and implemented a separate call-handling management team. The call performance manager undertakes audit reviews of the Advanced Medical Priority Dispatch System (AMPDS)
- Key Performance Indicators (KPIs) have been developed, including:
 - Call answering within five seconds
 - Address verification within 20 seconds
 - Call length
 - Call wrap-up time
- AMPDS compliance to the accredited standard
- Call flow review – GWAS ensured that call-handlers are only dealing with incoming 999 and healthcare professional calls. Calls relating to dispatching and other routine calls have been given dedicated phone lines. To manage these calls and all outgoing calls the role of dispatch assistant was created.
- Developing the workforce – A detailed review of rotas was undertaken looking at the number of calls received per day, per hour using an ERLANG (a unit to measure the traffic in telecommunications) calculator and average call volumes. The establishment was restructured and staff recruited to match this demand.
- EOC performance meetings – Performance meetings are held regularly to review KPIs. Action plans to improve the level of service are monitored to ensure accountability for service delivery and engagement of all staff in the planned improvements.

These actions have resulted in a significant improvement in the trust's performance on the percentage of calls answered within five seconds from 65% in 2007-08 to 97.6% in 2009-10.



The Future for Targets

The Category A target has served to concentrate minds and has led to better outcomes for the small number of patients who do in fact need a quick response.

However, it has also led to some unintended consequences. For example, a vehicle may be sent and arrive before it becomes clear whether the patient really needs an ambulance; more than one vehicle is often deployed to a call, even though not all patients will need the number of staff sent; and, to achieve this, vehicles may be mobilised and then cancelled several times in a shift. Together, these effects are wasteful, unnecessary, and frustrating for ambulance crews, and mean the patient does not always receive the most clinically appropriate care.

Some of the technology that has been introduced to speed up the dispatch process means that there is no voice communication between the ambulance control room and ambulance staff. Where this is happening, crews report that the human link has been broken and they feel at the mercy of a computer.

Jeanette Turner of The University of Sheffield has produced an analysis for the Department of Health looking at *The Evidence for Using Response Times as an Ambulance Service Performance Measure*. Only in cardiac arrest (about 1% of 999 patients) do fast response times make a difference to **survival** rates. Time to receipt of definitive care is important in a number of other conditions, including myocardial infarction and stroke, and, the author points out, the ambulance service plays a role in ensuring that patients receive this care as soon as possible. Response time is a component of this, but, Turner points out, measuring this while not measuring other important aspects of the episode "can result in erroneous judgements". There is, she also found, no clinical evidence at all for the Category B target (see later for further discussion of this aspect).

The Government is committed to removing targets that are not clinically relevant. While the Category A target can be said to have *high* clinical relevance for *some* Category A patients, it is not sufficiently sensitive, leading to inefficient use of resources, and distraction from important strategic change. Members of the public want and expect a quick response from their ambulance service, so a balance needs to be found between targets that are clinically-important and targets that respond to public expectations.

In December 2010 the Department of Health announced changes to



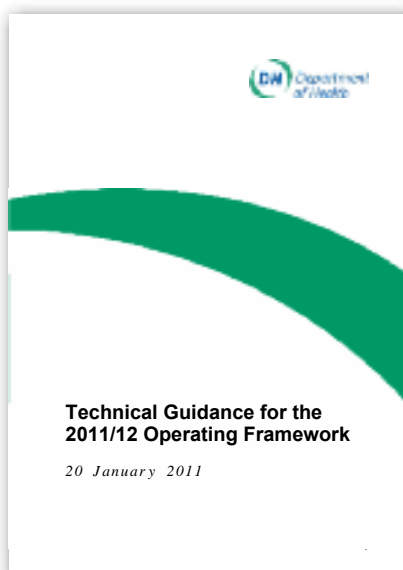
ambulance service targets from April 2011. The decision to remove Cat B and replace with clinical outcome indicators was a recommendation of Taking Healthcare to the Patient. The new clinical quality indicators introduced in April 2011 focus on improving patient outcomes, and balance measures of timeliness of care with measures that reflect whether the best possible clinical care has been delivered, and whether patients have been taken to the best place for their care. The clinical quality indicators are:

1. Outcome from acute ST-elevation myocardial infarction (STEMI)
2. Outcome from cardiac arrest – return of spontaneous circulation
3. Outcome from cardiac arrest - survival to discharge
4. Outcome following stroke for ambulance patients
5. Proportion of calls closed with telephone advice or managed without transport to A and E (where clinically appropriate)
6. Re-contact rate following discharge of care (i.e. closure with telephone advice or following treatment at the scene)
7. Call abandonment rate
8. Time to answer calls
9. Service Experience
10. Category A 8 minute response time
11. Time to treatment by an ambulance-dispatched health professional

Taking Healthcare to the Patient recommendations



The national performance requirements for category B response times should be replaced by clinical outcome indicators against which performance should be managed locally



Details of the clinical quality indicators for ambulance services are published in the Technical Guidance to the Operating Framework for the NHS in England 2011/12

The Department of Health has produced detailed guidance on how to measure ambulance performance. However, such guidance cannot cover all eventualities. The National Directors of Operations Group (NDOG) reviewed compliance against the guidance. They ensured that as far as possible ambulance services were reporting consistently. They have worked with the Department of Health to ensure that the guidance is as unambiguous as possible, and to check each other's compliance with it.

The ambulance service looks forward to using the data from the new indicators to benchmark and further improve clinical care.

Providing the best possible care

Ambulance services have made advances in clinical care over the last six years, changing and developing clinical practice and providing additional knowledge and skills for staff through improved education and training.



The education of Paramedics increasingly now rests with partnerships developed with the Higher Education Sector.

Over 20 undergraduate programmes have been developed and more are in preparation, all of which have strong links with their local Ambulance Trust's, which provide structured clinical placements.

In some cases, such as in the South East Coast Ambulance Service NHS Foundation Trust, all aspiring Paramedics are encouraged to undertake a BSc programme before applying for employment and existing technician staff seeking Paramedic status must complete a Foundation Degree course in Paramedic Science with the option of a 'top up' BSc year. Increasingly the paramedic profession is becoming a degree profession. Nonetheless the training remains very practically focussed, with a strong balance between academic work and on-the-job experience.

All services are now using 12-lead electrocardiograph (ECG) machines to acquire a heart tracing, which enables the early identification of a myocardial infarction (heart attack). The majority of ambulance clinicians are able to autonomously interpret the ECG.

When *Taking Healthcare to the Patient* was published, the national standard for care for patients with myocardial infarction was thrombolysis. Ambulance services were encouraged to train staff in delivering thrombolytic drugs out of hospital and all services were measured on how quickly their patients were thrombolysed. However, as will be discussed in more detail in the next section, most services are now taking patients directly to specialist care where the journey times justify this.

Many services have worked with the British Heart Foundation to place defibrillators in public places. This involves working with businesses and services like public transport providers and Transport for London to get defibrillators fixed in places where cardiac arrests may occur and to train the staff of those organisations in the use of the defibrillators. "Time to first shock" is a very important factor in survival from cardiac arrest. Over 40% of cardiac arrest patients who are defibrillated by a member of Transport for London's staff, survive to leave hospital (Hartley-Sharpe). This is compared to a nonetheless excellent survival rate in London of 21% in 2009/10 (Watson et al).

Most services have introduced equipment that assists paramedics to identify whether they have correctly placed endotracheal tubes. Intubation can only work if the tube is placed in the trachea and not in the oesophagus. End-tidal carbon-dioxide (CO²) monitoring allows crews to check that the tube is in the right place. This equipment is not universally available in every service, but all services intend that it should be so before long.

All services have introduced Laryngeal Mask Airways (LMAs) to enable a stepped approach to airway management and increasingly this is seen as the airway of choice.

Resuscitation techniques are constantly under review and there is now very strong evidence for more chest compressions than breaths. Three services are now training their staff in "Protocol C", which involves continuing to carry out chest compressions after it has been established that the patient has a "shockable" rhythm, and while the defibrillator is charging. This is designed to reduce to a minimum the time that the patient is receiving no chest compressions. Most services continue to follow the existing Resuscitation Council guidelines. These are revised from time to time on the basis of new evidence.

There is good evidence for cooling patients who have experienced a ventricular fibrillation cardiac arrest and in whom a pulse has been restored. There is some evidence that other arrest patients might also benefit from this therapeutic hypothermia. This is another example of a potentially expensive intervention which is worthwhile because of the benefit. Three services are now using this technique in all or part of their operational area.



Continuous Positive Airway Pressure (CPAP) is a method of assisting the breathing of conscious patients. It has been found that using this technique means that fewer patients need to be ventilated on the Intensive Therapy Unit (ITU) and their hospital stays may be shorter. The equipment is expensive but three services so far have introduced it with the aim of producing better results for patients.

Nine services have introduced specialist kits for managing severe bleeding. South Western Ambulance Service NHS Foundation Trust pioneered this, with the introduction of arterial tourniquets from military practice in 2005, which have saved the lives of many people with otherwise devastating injuries. Critical Care Paramedics at South East Coast Ambulance service NHS Foundation Trust

(SECAMB) have a critical haemorrhage kit containing Combat Action Tourniquets, chest seals and specialist splints.

Nine services have introduced no-touch cannulation techniques, using special equipment, in order to avoid the risk of infection.

Taking patients to the best place for their care

Clinical evidence supports taking life threatened patients to specialist centres where they see enough of the relevant type of case to develop expertise in that area of care. These units can also be commissioned to invest in the right equipment and levels of staffing to provide the best care throughout the 24 hours, which is not possible at every local hospital.



There were already some examples of ambulance services taking patients to specialist centres before *Taking Healthcare to the Patient* was published. An example is Newcastle, where stroke consultants have worked with the ambulance service for several years to ensure that stroke patients go to the hospital where the specialist care can be given (Nor et al).

Taking patients to specialist care has gathered pace since *Taking Healthcare to the Patient* was published.

Stroke is the brain equivalent of a heart attack. Over 110,000 people in the UK experience a stroke each year, with 60,000 deaths occurring annually. A stroke occurs when one of the vessels carrying blood to the brain either becomes blocked by a clot (ischemic stroke) or ruptures (haemorrhagic stroke). Without rapid intervention irreversible damage occurs, with 1.9 million neurons being lost every minute. Time saved is brain saved; the sooner thrombolysis is administered to dissolve the clot, the better.

During 2005 the National Audit Office reported that only 1% of stroke patients received thrombolysis; achieving 9% would result in an additional 1,500 patients fully recovering from their stroke. Ambulance services responded by working closely with their local stroke centres to develop pathways that enabled patients to be transported directly to centres able to deliver thrombolysis.

All ambulance services now have arrangements for taking stroke patients directly to stroke centres. This means that people will receive definitive treatment more quickly, including thrombolysis for the small group of stroke patients for whom it is suitable. For example, South Western Ambulance Service NHS Foundation Trust is achieving average hospital arrival to scanning times of under 10 minutes, in comparison to 45 before the pathway.



As with the changes to care for patients with myocardial infarctions, ambulance services have led the change, for example working with the National Audit Office to evaluate outcomes, the Royal College of Physicians to review local services, the UK Stroke Forum to develop education standards and NHS Improvement to support developments.

When *Taking Healthcare to the Patient* was published, ambulance services were measured on the time to thrombolysis for patients with myocardial infarction. London Ambulance Service initiated a

new protocol for treatment. Patients with confirmed myocardial infarction began to be taken direct to units which, 24 hours a day, were able to carry out emergency interventions such as angioplasty. By 2006 almost all London heart attack patients were taken to such a unit.

All services now take heart attack patients to specialist centres where they can gain rapid access to primary coronary interventions (PCI) such as angioplasty. The international clinical evidence shows that half as many deaths occur after heart attack if patients receive such therapy compared with thrombolysis. It has been national policy to take patients for PCI since 2009, although it needs to be remembered that thrombolysis remains the right therapy in areas of the country where journey times to hospital would be too long (120 minutes).

In parts of the country where evidence supports taking patients to PCI, services are working with cardiologists who would like to extend the number of acute coronary syndrome patients who are taken to a specialist centre. For example, London ambulance crews are identifying other rhythms, such as posterior infarcts, ST depression and left bundle branch block. The latter is a syndrome that may not be new, but London crews are being taught to recognise the signs that indicate that these patients should go to a specialist centre.

The number of patients with serious traumatic injury in the UK is very small. This means that there should be only a small number of specialist trauma centres. In parts of the world with trauma systems, survival rates are much higher than parts of the world which do not. Six English ambulance services currently take seriously injured patients to specialist centres. Where it does not happen, this is normally because no such centres exist.

Taking Healthcare to the Patient recommendations

- ✓ Ambulance services need to further improve their provision of cardiac care. There should be continued improvements in cardiac arrest survival and the treatment of acute coronary syndrome, including direct admission to cardiac catheter laboratories and continued roll-out of pre-hospital thrombolysis to treat cases of ST segment elevation myocardial infarction (where eligible) according to locally agreed care pathways.
- ✓ Rapid admission to stroke units should be agreed locally as protocols for stroke care involve.
- ✓ Ambulance services need to improve their treatment of major trauma, through partnership working with critical care networks and transport to the most appropriate provider
- ✓ There should be improved specialist transfer arrangements for emergency inter-hospital transfers including local agreements between ambulance and acute trusts on the equipment to be used.
- ✓ There should be greater emphasis on developing local agreements for rapid referral of patients where there is evidence of improved outcomes the earlier the treatment takes place, e.g. for stroke or heart attack
- ✓ There should be continuing improvement in governance and support for community responder schemes and the use of doctors to respond to Category A calls
- ✓ The Department of Health should commission a programme of work to build the evidence base for pre-hospital and out of hospital care

Air Ambulances – common standards and governance

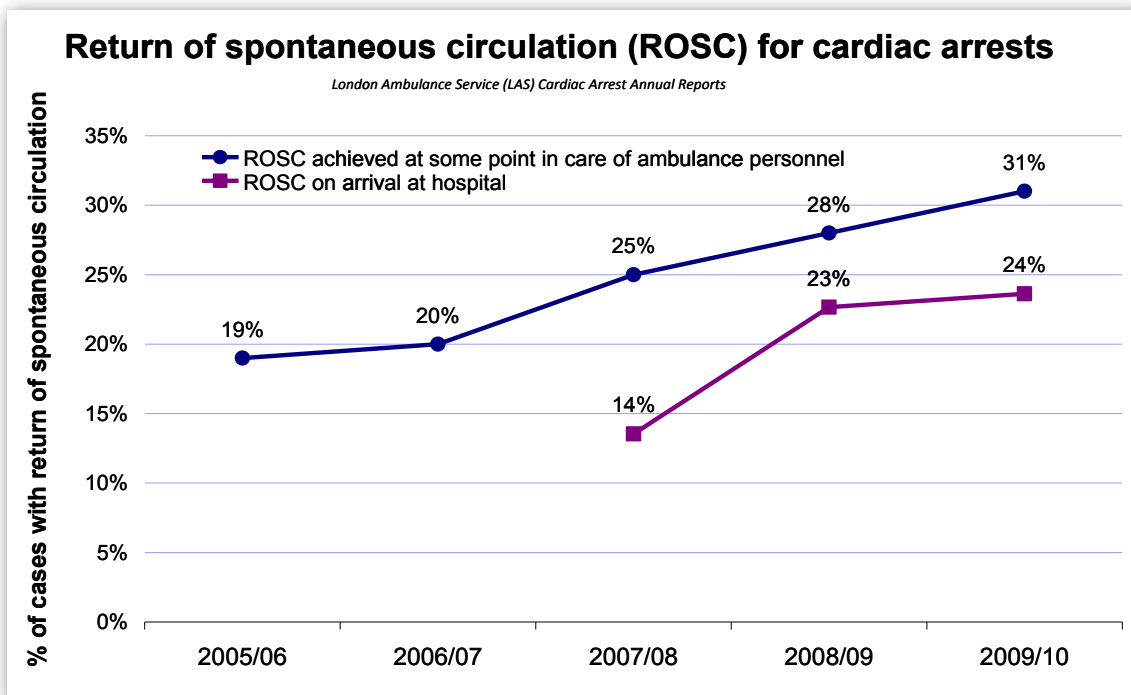
Air ambulance services in the UK are generally funded from charitable funds and staffed and tasked by NHS ambulance trusts. The Air Ambulance Working Group (AAWG) is a means by which the air ambulance charities and ambulance trusts cooperate to ensure common standards across the country.



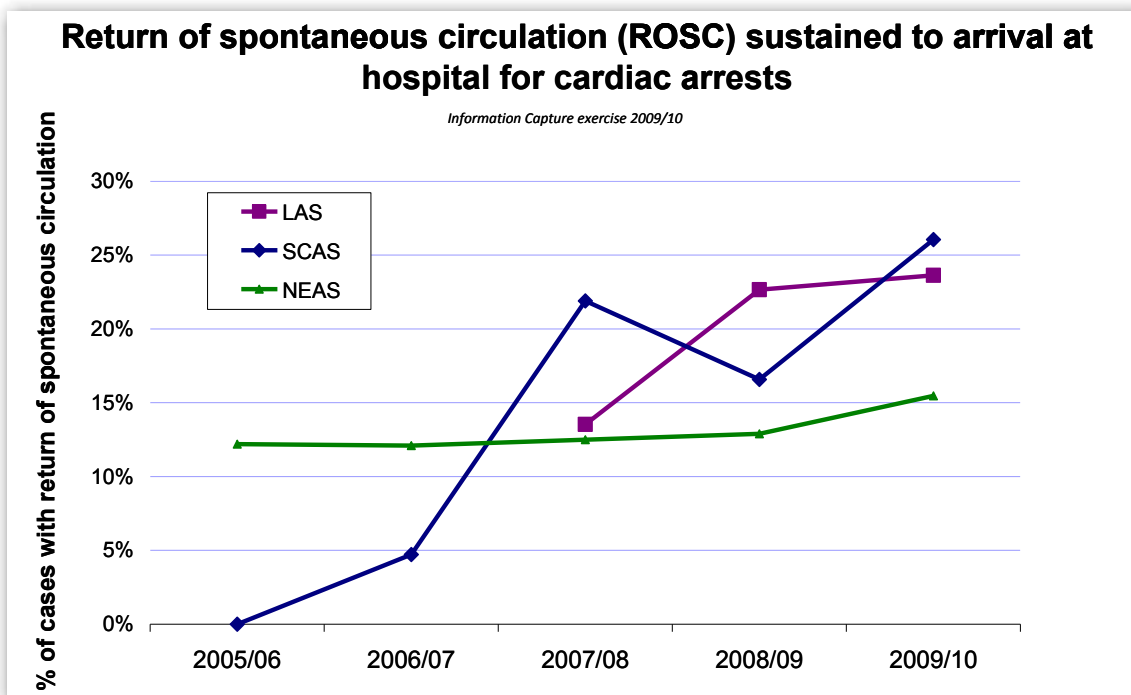
The AAWG produced a Framework for a High Performing Air Ambulance Service which provides examples of good practice to which air ambulance services can aspire and sets out ambitious improvements to support charities, ambulance services and staff to deliver world class care for patients.

In 2008 the Association of Air Ambulances was formed. This is a membership body representing NHS ambulance services and air ambulance charities and brings together representatives from 30 organisations across the UK. This group oversees the delivery of a series of work programs which are taken from the recommendations within the framework document.

Impact on survival rates

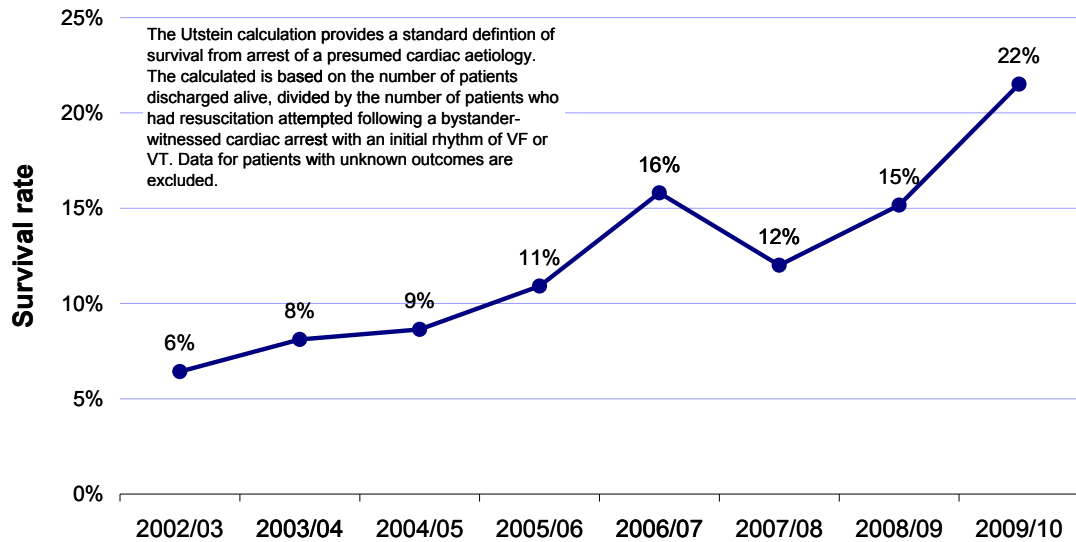


Return of spontaneous circulation (ROSC) rates have increased from under 20% in 2005/6 to over 30% in 2009/10 in London. By 2009/10, 24% of patients received resuscitation attempts following a cardiac arrest of a presumed cardiac cause had ROSC sustained to arrival at hospital.



Cardiac arrest survival to discharge (Utstein calculation)

London Ambulance Service (LAS) Cardiac Arrest Annual Reports



Survival rates to discharge following cardiac arrest in London have increased from 6% in 2002/3 to over 20% in 2009/10 [Utstein calculation]. With the introduction of national ambulance quality indicators, we will for the first time have national data for ROSC and cardiac arrest survival to discharge data available.

Measuring the quality of care

Sheffield University (Turner 2010) studied patient records from one ambulance service and found that in 75% of cases, there was no intervention, but only assessment. There is no reason to suppose that this situation was unique to that ambulance service. In other words, for a large majority of 999 patients, the role of the ambulance service is mainly to ascertain that there is nothing serious wrong.

This situation poses a big challenge to ambulance services in trying to measure the quality of care. It is only possible to measure **outcomes** for the life threatened minority of patients. For other patients it is necessary to measure the quality of the **intervention**.

In 2006-07 the National Ambulance Clinical Audit Steering Group took responsibility for taking forward a project to develop measures of clinical performance. (Siriwardena et al). Clinical Performance Indicators (CPIs) were developed in five areas of care: acute myocardial infarction; cardiac arrest; stroke, asthma and hypoglycaemia.

These were based on work already begun by some ambulance services and were chosen because they cover several key patient groups for whom there is evidence of the best interventions.

There are several indicators for each of the care areas. For example, for stroke, there must be a record of the Face Arms Speech Test (FAST), of the patient's blood glucose levels and of their blood pressure. In cases of asthma there must be a record of the patient's

respiratory rate and oxygen saturation levels before treatment, of their peak flow both before and after treatment, and of the treatment given. For some of the measures there may be exceptions. For example there should be a record of an MI patient being given an aspirin, or of an exception such as the patient refusing.

Ambulance services have developed ways of monitoring staff performance on these indicators. This means that staff can know how well they are doing on key areas of care. Paramedics can use this information in their portfolios as evidence of their continuing professional development. Some services have developed databases which are available on their intranets, so that staff can check how they are doing against the CPIs from the computers in their mess rooms.

It is also a way of spotting members of staff who are not performing well, and can be used to assist in professional development and training.

Ambulance services have also carried out national audits in some of the areas of care so that they (and their commissioners) can compare their performance on each of the measures. These audits have shown generally high compliance with the indicators, although they have also highlighted some differences which can be used by clinical leaders within ambulance services to highlight areas for improvement.

The government is committed to bringing all healthcare regulation together under the CQC and Monitor. In due course independent providers of ambulance services will be governed by the same quality requirements as those within the NHS.



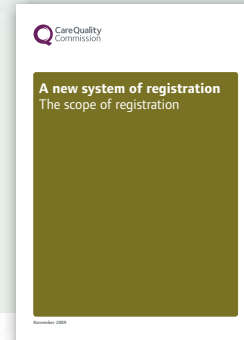
East Midlands Ambulance Services Research Team began only 5 years ago being awarded Designated Research Team status (now East Midlands Research Alliance). The Team have successfully gone from little or no research funding to one that has generated over £2.5 million in competitive bids in the past year alone. Current funding includes grants from the Health Foundation and the National Institute for Health Research.

Excellent collaborations have been developed with academic institutions (the Universities of Lincoln, Sheffield Swansea and Nottingham) and health service partners including Comprehensive Local Research Networks (CLRNs).

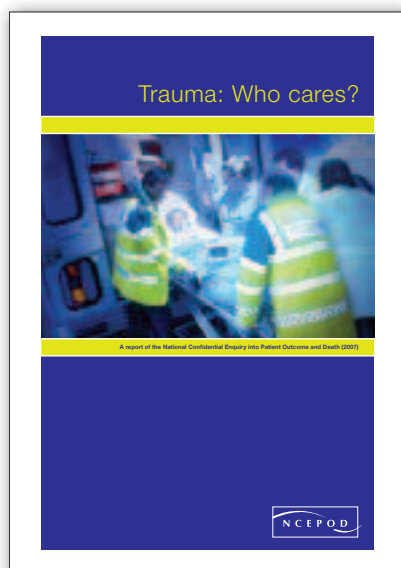
Efforts have been focused on quality improvement and translational research from the outset with particular interest in undertaking studies which show gaps in quality of care and how these deficiencies may be improved upon. This has led to a number of publications in international peer reviewed journals, national and overseas conference presentations and national awards.

Taking Healthcare to the Patient recommendations

- ✓ By April 2009, national performance requirements for **Category B response times** should be replaced by **clinical and outcome indicators** against which performance should be managed locally. This is an indicative timescale
- ✓ Development of clinical quality measures needs to be embedded into the full spectrum of ambulance service provision and directly linked to NSFs, NICE and JRCALC guidance. It is equally important that clinical quality development is embedded in the work of networks
- ✓ A system for accrediting independent ambulance providers should be introduced



The future for care for seriously ill and injured patients



Several reports published over the past twenty years have highlighted the shortcomings in the care of seriously injured patients. One of the more recent also pointed to the lack of progress in implementing change (Trauma, who cares). and the need for improved organisation of trauma services. This report included a focus on ambulance services, who historically would transport patients to the nearest receiving Emergency Department, irrespective of the facilities available, where many would subsequently require onward transfer for definitive care. The report also recognised the difficulties of managing these patients, particularly those with a compromised airway, and suggested better training and support for ambulance crews faced with challenging triage decisions, along with integration into regionalised trauma systems.

In 2010 the CEO of the NHS recognised the lack of progress in managing seriously injured patients in response to the National Audit Office report on major trauma and committed SHAs to plan for regionalised trauma services in 2011, with implementation by 2012.

Significant progress has been made in London, where 4 networks are now live, and where ambulance crews use a field decision triage tool to facilitate bypass decisions to major trauma centres. In other regions the pivotal role of ambulance services has also been recognised in implementing the delivery of specialised health care.

The ability to bypass local hospitals to access specialist care has changed the delivery of health care in a number of areas; acute coronary syndromes, stroke, as well as those who have experienced major trauma. Patients with specific care pathways can now expect to

be transferred directly to the most appropriate centre; this applies to patients with complex needs, for example those with left ventricular assist devices (LVADs), those awaiting transplantation, as well as those with specialist needs such as renal dialysis, oncology follow up etc. The number of hospitals able to offer 24/7 care for children is decreasing, leading to greater opportunities to access primary care, but also potentially longer travel times for those children who require inpatient assessment and management.

In the future we are likely to see more patients with acute coronary syndromes, but without STEMI, transferred directly for urgent, as opposed to emergency angiography. Those with vascular emergencies also benefit from treatment in a small number of specialist units. With additional training ambulance crews will recognise the significance of presenting symptoms and signs in a much larger number of patients, so potentially instituting care earlier and pre warning the receiving unit of the likely diagnosis. The management of sepsis provides a good example.

As the number of hospitals able to offer the full range of specialities decrease ambulance services will need to demonstrate flexibility and to access senior clinical advice in making the most appropriate triage decisions for an increasingly diverse groups of patients. The excellent progress described throughout this chapter now needs to become standard practice where that is supported by the evidence.



2. Resolving the needs of patients who do not need the accident and emergency department (A&E)

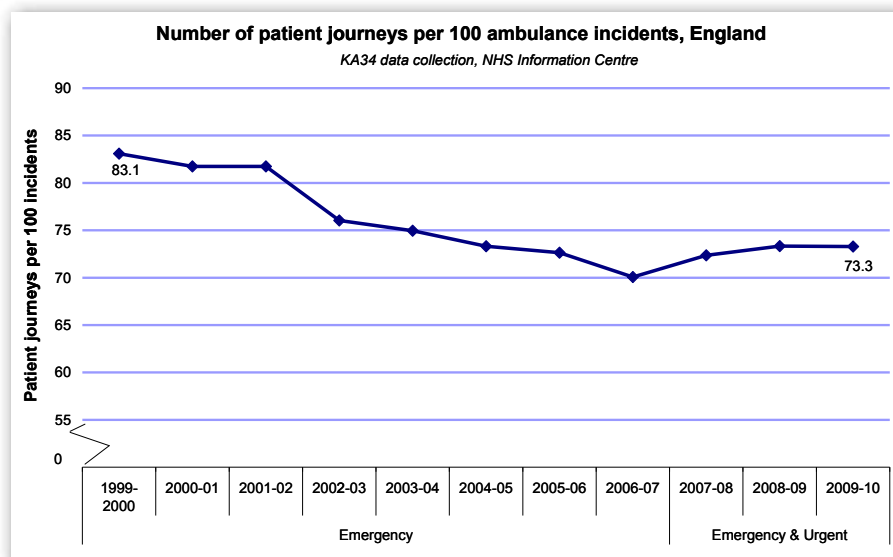
Ambulance service training, dispatch methods and targets have always been designed on the assumption that ambulance patients are seriously ill and injured. However, only around 10% of 999 patients have a life threatening condition.

Taking Healthcare to the Patient recommended that more attention be paid to the remaining 90%. As a result, they would get a better assessment of their needs, better care, and only be taken to an A&E department when necessary.

This would mean both better care and better value to the taxpayer.

While the valuable life-saving work of ambulance staff understandably gets the most public attention, it is often less difficult than the work for patients who do not have a life-threatening emergency. This is because the decisions involved are not as complex. They do not involve so many variables, and they are often more obvious. Deciding what to do when faced with a patient who has stopped breathing is actually less difficult than deciding what to do for a patient with multiple chronic conditions, who has no-one to look after them at home, but really does not need to be in hospital.

Meeting the needs of this group, the majority, of patients required ambulance services to expand staff skills, add telephone advice to the role of the operations centre, deploy staff differently, and find many more pathways to resolving patients' needs.



The number of patient journeys per 100 ambulance incidents has stabilised in recent years. Compared to 1999/2000 levels there are now 10 fewer patient journeys per 100 ambulance incidents, which reflect on the increased use of See and Treat and other efforts to provide levels of care that meet the clinical needs of the patient. It should be

remembered that percentage figures for patients conveyed / journeys might be expected to rise slightly as ambulance services increase the dispatch of an ambulance to those calls more likely to require transport rather than to the whole range of 999 calls.

Taking Healthcare to the Patient recommendations

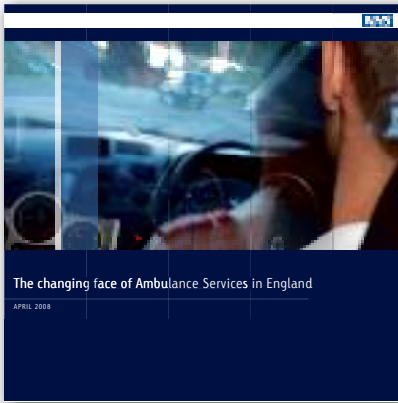
- ✓ There should be improved focus on the large number of patients calling 999 who require urgent primary or community care services
- ✓ Local networks should be able to put in place standards that are consistent with wider approaches to urgent care provision for non-urgent (Category C) patients

New skills in Delivering Mobile Primary Care 24/7

Most services have responded to this recommendation by developing a new 'practitioner' paramedic role with advanced assessment and decision making skills focused on the needs of patients with undifferentiated primary care requirements. These are sometimes called 'Emergency Care Practitioners' (ECPs) which was a term used by the former Modernisation Agency, although the job titles vary around the country.



'Specialist Paramedic' is the term used in the NHS Allied Health Professions Career Framework and this is considered the correct description by the College of Paramedics, the Professional Body for Paramedics, as it provides greater clarity for the public as to which profession is providing treatment. Perhaps most importantly, the title is also preferred by the UK statutory regulator, the Health Professions Council (HPC), which prefers to see those with an extended scope of practice continue to use a designation which contains the professional title that is protected by law. As of September 2009 there were over 720 'Practitioners' in England (NHS Staff Census, 2009), over 95% of whom are paramedics registered with the HPC.



As well as their extra education, these staff have training in a number of additional clinical techniques and a wider range of clinical practice related to primary care. For example they can clean and close wounds e.g. with steri-strips, tissue adhesive or sutures, can diagnose more conditions and have access to a range of drugs appropriate to their role using Patient Group Directives (PGDs). In future the extension of independent prescribing to paramedics could enhance their effectiveness to patients and the health care system.

Criticisms of these schemes have included the wide variations and inconsistencies in the amount and level of training and in their scope and locus of practice, and a lack of high-quality generalisable outcome-focused research, making it difficult for service users and commissioners to fully appreciate the potential utility of these staff (Woollard 2007). However, it is widely accepted that they can play a useful role in A&E attendance and admission avoidance.

Studies of the effectiveness of these roles have found that they are very successful at finding appropriate care pathways rather than the A&E department, (Mason et al, Cooper et al, Minney, Halter). These reports show between 50 and 66 per cent of patients not needing or not being taken to an emergency department, compared to the 25-30% not taken to A&E departments by paramedics. Similarly, South East Coast Ambulance Service NHS Foundation Trust's specialist paramedics convey around 58% of their patients to hospital, compared with 70% for other paramedics, with lower rates for more experienced staff.




However, it is sometimes difficult to fit the specialist paramedic role into an operational model that is designed to produce rapid responses rather than tailored responses. Some ambulance services have continued to send their specialist paramedics to any 999 calls, rather than focus them on the patients for whom they can make the biggest difference (Woollard et al 2010). Some Trusts believe this dilutes their impact; the alternative view is that benefits arise by operating across the full spectrum of 999 case mix leading to greater productivity. This concept is supported by research reporting that specialist paramedics change the care pathway for cases across the spectrum of acuity of 999 calls, with the greatest proportion of patients with altered care pathways falling within high (Category A) and medium priority (B) categories (24% and 22%, respectively, v 17% in the lowest priority (C) category) (Woollard, 2006). Hence, while some studies have found plenty of evidence that the specialist paramedic role saves money, or can save money (Minney, Mason et al), there is not yet conclusive evidence that they always do so, as cost effectiveness is largely a function of the system design they work within.

Given that the work specialist paramedics undertake is closely linked to primary care the South East Coast Ambulance Service NHS Foundation Trust, has recently developed a formal competence assessment of the Paramedic Practitioner curriculum by examination following academic guidance by the Royal College of General Practitioners, RCGP. In collaboration with St George's Hospital Medical School, University of London, SGUL, this examination has been designed, written and examined by the Ambulance Service for the

specialist paramedics, quality assured by SGUL and the RCGP, whose academic report has agreed that it is appropriate as a national qualifying examination.

This development has the full support of the College of Paramedics and has been led with the support of the local Postgraduate GP Deanery, who undertook formal evaluations of the role on behalf of the South East Coast SHA, which have been overwhelmingly positive. If adopted by Ambulance Trusts it would enable a national standard to be created, thereby contributing to patient safety and a quality standard to facilitate the flexible interchange of staff thought the country.

Taking Healthcare to the Patient recommendations

-  Ambulance clinical training needs to be designed around the case mix they deal with. Course content should therefore be reviewed.
-  Ambulance clinicians should increasingly undertake routine assessments of patients in their homes in partnership with the primary care team.
-  Ambulance services, PCTs, acute trusts, foundation trusts and SHAs will need to work together to review funding arrangements and priorities for the training of the overall urgent care workforce.

Community Paramedics in North East Ambulance Service NHS Trust

The Community Paramedics of the North East Ambulance Service NHS Trust have modernised health care in the rural localities of Northumberland with a more dynamic and proactive service than the traditional blue-light service which existed previously.

As well as responding to 999 calls, they also work closely with other healthcare professionals, such as GPs and nurses, to avoid unnecessary admissions to hospital when appropriate.

The difference comes from their increased involvement in primary health care and not just emergency patient management. This includes assisting the primary care team to keep patients in their own home. If GPs are busy, a Community Paramedic is dispatched, where appropriate, to assess the patient, report back to the GP and initiate appropriate treatment.

Since community paramedics started working in 2006, there has been a drop of nearly half of all patients from some of the most rural localities in north Northumberland being transferred to the local district general hospital because they are being seen and treated quicker in their communities.

An audit of health services in north Northumberland showed that of 36 patients attending the Wooler health centre, only four required further treatment at their district general hospital which is over two hours drive away. The rest were treated and discharged. Prior to the introduction of the Community Paramedics most, if not all, would have travelled to hospital, leaving the rural areas without Paramedic ambulance cover. Other aspects of the role include public education such as basic life support training and

regular talks to community groups such as the Women's Institute (WI) and residents of sheltered housing. This helps to break down barriers and ensures any feedback received can be acted upon.



East Midlands Patient Referral System

In Northamptonshire, an excellent example of cooperation between an ambulance service and an innovative group of GPs, Paramedics, Community Paramedics and Emergency Care Practitioners can obtain a second opinion from the patient's GP before making the final decision on care. The patient's GP, or the out of hours service, undertake to get back to the ambulance crew within ten minutes or so of their request.

More patients can be left at home, but they have a clinical safety net. The GP has a record of what has happened so that follow-up can be arranged. They also undertake to call ahead to the hospital if they feel that the ambulance service should take the patient there. Thus someone is expecting the patient when they arrive, and they will not have to wait in an A&E department.

Four patients a day received this support in the first three months of the service. Their conditions included headaches, falls, diabetic problems, allergies and abdominal pains. There were no untoward incidents and the service has been made permanent, with plans to extend it across the East Midlands area.

In this way many patients will be saved an avoidable journey to hospital – and the NHS will save valuable resources, while providing better care.

The future skill mix in ambulance services

The evidence that exists supports the further development of the Advanced Practitioner role. However, it will require considerable investment in the ambulance sector before the economic benefits are realised elsewhere in the health and social care system. The current economic environment is not conducive to making investments of this nature without absolute certainty that savings will result.

It is also clear that two models of 'see and treat' are emerging. Firstly, there are some Trusts with much larger numbers of Advanced Practitioners who require very little clinical field support and act as autonomous practitioners. Secondly, there is a mixed model where, particularly in urban areas (which often do not have good primary care services but greater numbers of acute trusts) existing Paramedics are used to undertake 'see and treat work' and are supported by a network of clinical field supervisors. Both models can work and a further assessment of their relative benefits will be needed over the next two years.

Telephone advice – Hear & Treat

The triage system used by ambulance services to prioritise calls is very good at safely identifying which patients must get a quick response. This is what it is designed to do. But it acts like a net with small holes. In capturing the vast majority of the patients who need a very quick response, it also sweeps up many patients who do not have an emergency need. This is partly about the design of the system itself and partly about the way it is being used in the UK.

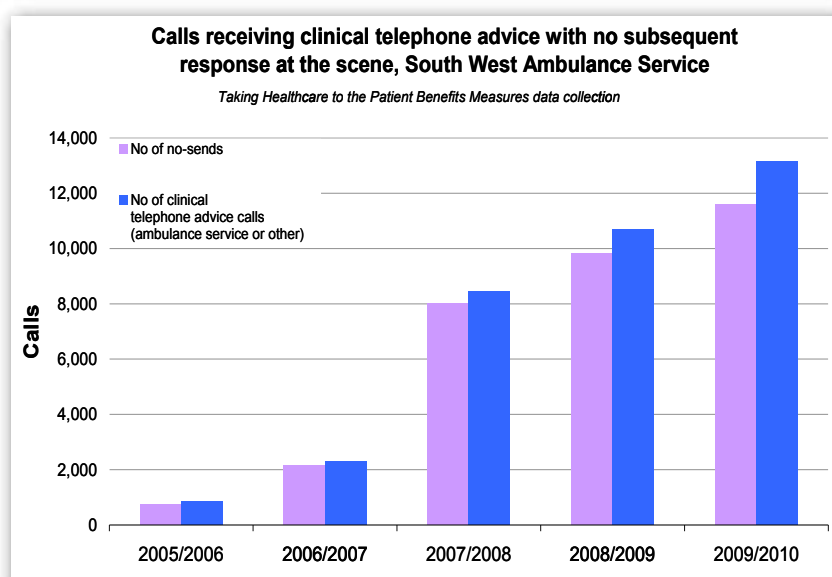


Once an initial assessment is made, and it is clear that the patient is not immediately life-threatening, there is time to establish what the patient really needs.

To determine what a patient actually needs often requires a longer and different conversation between the caller and a clinically-qualified advisor, usually using decision-support software like that used by NHS Direct. This can be a member of ambulance service staff, although, in addition, NHS Direct is able and willing to take referrals from ambulance services and will accept specific types of calls.

The outcome of the advice session might be that an ambulance or a single responder is sent. However, it might be advice on self-care or advice to see a GP the next day, or to go directly to a minor injuries unit or other treatment centre.

Ambulance services have varied in their take-up of the telephone advice option since it was first shown to be safe and popular with patients. Even services that use telephone advice a lot have probably not fully exploited its potential, and the seasonal variations seem to indicate that services use NHS Direct's service more when they are under pressure, rather than consistently throughout the year.



The number of ambulance calls which are managed through clinical telephone advice has increased significantly over the last 5 years and the South West is a good example of this. Almost 90% of these calls result in no vehicle being sent to the scene (where clinically safe and appropriate). South Western Ambulance Service NHS Foundation Trust has a technical interface between their Computer Aided Dispatch system and the NHS Direct software. Therefore they can transfer call information to NHS Direct, so that patients do not need to repeat any details when they are transferred to the NHS Direct service.

Recently South West have changed 999 call prioritisation software from MPDS to NHS Pathways and are now producing the first element of advice and referral. Using EMDs, it is hoped that this approach will further increase hear and treat numbers.

The future for telephone advice services

There is considerable scope for extending the amount of clinical advice offered by ambulance services, both to 999 callers and potentially to people accessing the new non-emergency number, 111.

Single points of access & directory of service (DOS)

Several services have set up access points so that patients and health professionals can find what they need any time of the day and night.

For example there is an integrated “hub” for health and social care in Gloucestershire, part of Great Western Ambulance Service, through which GPs can gain access to what their patients need – for example an emergency home care service or short term admission to a bed in a care home. Without services like these, patients would more than likely end up in an A&E department. The Coventry and Warwickshire locality of the West Midlands Ambulance Service runs a call centre for health professionals and members of the public seeking access to urgent care.

In the North East, the ambulance service is one of three pilot sites for the new three-digit non-emergency health number: 111. The key to the success of this will be that whether the patient rings 999, 111 or indeed their GP's out of hours number, they will get through to someone who will make a quick assessment of the urgency of their needs. Using NHS Pathways, a prioritisation system designed for use by NHS services, the urgency of need is quickly established. A life threatened patient can then be sent an ambulance straightaway, even if the caller did not use the 999 number.



A patient with a less serious condition will be asked further questions designed to establish what care they need, and by accessing a directory of available services, the call taker will be able to refer the patient to the service they need. This might mean the patient making their own way to a minor treatment service close to home, arranging a GP appointment for the patient, or sending someone to provide care at home.

Taking Healthcare to the Patient recommendations

- ✓ To facilitate coordination of urgent care provision, response hubs – which may be virtual or physical – must be able to deliver assessment, information, resource dispatch and referrals (including bookable appointments) in real time.
- ✓ All services should use a single 999 call prioritisation system and use the most up to date version available. Consideration should be given to prioritisation systems being standard across urgent care providing this can be done safely.

The future for the single point of access



**When it's less urgent
than 999**

The NHS, in partnership with the Department of Health, is introducing the new NHS 111 to provide an easier to use, integrated 24/7 service that will enable the public to access the right service, first time. When NHS 111 is rolled out nationally, it will replace the NHS Direct 0845 4647 telephone number. Until then, NHS Direct will continue to provide its current service. While the telephone number will no longer exist in the long term, the Department expects an ongoing role for NHS Direct, alongside other providers, in delivering the NHS 111 service. The Department expects the implementation of the NHS 111 service will also drive improvements in the way that urgent and emergency health care services are delivered and help to make them more effective and efficient.

Of course it is not the telephone number that will create savings and efficiencies. Efficiencies will be gained from integration with the other 24 hour telephone services, such as the 999 service, and with the ability to identify what the patient needs and to get them that care. Fewer patients will be passed from service to service, and fewer will be treated in expensive settings, distant from their own homes.

Taking Healthcare to the Patient recommendations

- ✓ Ambulance services need to work more closely with urgent care providers to ensure consistent standards of call taking and response.

“Single point of access” in County Durham and Darlington:

Since October 2005 the North East Ambulance Service (NEAS) has been operating a single point of telephone access using NHS Pathways and a Director of Services. People ringing their GP out of hours are redirected to another number which is actually in

the ambulance control room. North East Ambulance Service uses NHS Pathways to assess patients quickly and identify what they need.

The call operator is then able to refer the patient to the health care professional who is best placed to provide them with the treatment they need. This is done using a directory of services that includes “real-time” information on which urgent care services are available locally – such as GP surgeries, out-of-hours services, walk-in centres and urgent care nursing teams. If patients would benefit from attending one of the 24/7 urgent care centres, then NEAS can send a vehicle to transport them.

Setting up these units has ensured that accident and emergency units are free to deal with the more serious cases. It has also made the NHS less confusing to access for patients.

The NEAS telephone service has been extended further to become part of the trial of a new national three digit number – 111 – which will make it even easier for patients to access urgent care services.

Clinical Desk at Great Western Ambulance Service:

Staffed by qualified paramedics, nurses and emergency care practitioners (ECPs), the clinical desk is based at the trust's main operations centre. The clinical support desk provides three core functions:

- Telephone advice and referral where appropriate for Category C callers (7% of calls are routinely transferred to NHS Direct based at the same site)
- Receives crew referrals from clinicians at scene – with an aim to find alternative clinical pathways for patients
- Provides 24/7 clinical advice and support to clinicians based in field operations



Currently the primary function is to screen Category C calls once these have been transferred to the clinical desk. The clinician on the desk then carries out an assessment of the patient's needs using a system called Priority Solutions Integrated Access Management (PSIAM). This decision support software ensures the patient receives the most appropriate response and in the majority of cases this is aimed at preventing an unnecessary ambulance response and therefore avoids inappropriate attendance at hospital by providing advice to the caller or using established referral pathways to other healthcare services.

Where a patient does need to attend hospital, the clinician can also arrange a direct admission to hospital wards and community hospitals. Which is done in consultation with the paramedic or emergency care practitioner at scene. An agreed time for transportation can also be arranged negating the need for an emergency response.

Early results have been encouraging, and 24% of Category C calls are been assessed and managed through the clinical desk function. The trust is expecting to manage 800 calls per month via telephone advice only as the clinical desk is developed

A number of services, including London, Great Western, South Western and South Central, have introduced clinical support desks, staffed by experienced paramedics. In some services their primary role is to provide telephone advice to less urgent 999 callers, while some have a separate team providing advice. Clinical support desks are available to give advice to crews on a range of matters, ranging from tricky clinical situations, cases where patient's capacity to consent to treatment needs to be assessed, and occasions when crews are attempting to secure an appropriate care pathway for their patient.

Alternatives to the Accident and Emergency Department

While many 999 patients do not need to go to the A&E department, many do need assessment, treatment, advice and/or further care.



Many ambulance services have introduced alternative pathways for their patients and trained and empowered their staff to use them. Among the many examples:

South Central Ambulance Service has developed pathways into mental health services for appropriate patients and London Ambulance Service crews can access all of the minor injuries units within their operational area.

Some services, including South Central, have developed arrangements to refer uninjured fallers to specialist teams that can assess the reasons for falling and set up arrangements to prevent repeat events. Since July 2010, SCAS has seen the number of referrals increase from 1% - 70% of all non conveyed fallers over the age of 65. The average of 40 referrals in a good month shot up to over 400 in the first month of operation.

The ambulance service has taken over the running of two minor injuries units in Weymouth and Portland. This means that the service is always present in a part of the South Western ambulance service's patch where they previously found it difficult (and expensive) to meet response times, at the same time as ensuring a cost effective local service for patients with minor problems, so that they do not have to travel too far for their care.

Paramedics in South Western Ambulance Service NHS Foundation Trust are able to provide a higher level of assessment to patients experiencing a mild asthma attack,

providing a course of steroid tablets to speed the patients recovery and reduce the likelihood of experiencing another attack. They are also able to risk assess patients experiencing a transient ischaemic attack, enabling lower risk patients to be referred immediately to a specialist clinic for an out patients appointment, avoiding long unnecessary waits in an Accident and Emergency Department.

Preventing emergencies

As was highlighted in Taking Healthcare to the Patient, we enter millions of people's homes each year and this provides a fantastic opportunity to get important messages across to the public on both preventing emergencies and promoting good health. It is fair to say that we have only just scratched the surface with this over the last six years, however there are a number of excellent examples of where work has taken place and here we have a few of them.

- Some care homes regularly call ambulances for their residents, sometimes simply to help lift a patient who has fallen, even though most homes are funded to train their staff to lift patients safely and buy the necessary equipment. West Midlands and London, ambulance services have worked with such care homes to encourage them to fulfil their obligations to their residents and only call an ambulance when it is clinically necessary
- In most parts of the country there will be a number of patients who call the ambulance service regularly. Often they have a mix of complex of physical health and social needs, perhaps complicated by addiction or mental health problems. Some services, such as London, South Western and West Midlands, have set up schemes to address the particular needs of these patients. The London Ambulance Service has appointed a social worker to help work on the most complex cases
- Ambulance services have introduced systems for meeting their duties under safeguarding legislation. Ambulance crews are given a mechanism for reporting suspect abuse and neglect of children and vulnerable adults. Administrative staff collate this information, communicate it to local authority social services departments and, where possible and appropriate, communicate back to crews the results of their actions. In the West Midlands, where the scheme was introduced in 2009, ambulance crews are issued with a key ring on which the 24-hour number for the contact point is printed. This is a useful reminder of the scheme
- South Western and South East Coast Service NHS Ambulance Foundation Trusts initiated the "Know Your Blood Pressure" public education programme, working with the Stroke Association. In the South West 28 venues were established in public places such as supermarkets, where the public could be screened for high blood pressure and an irregular heart beat; both major risk factors for experiencing a stroke. In 2010 all Ambulance Trusts joined the campaign, with thousands of people being screened across the country and hopefully many stroke and heart attacks have been averted by early identification.
- North West Ambulance Service provides a mobile retinal screening programme to diabetes patients in Cumbria and North Lancashire, a cost effective way of using expensive screening equipment to serve a dispersed, rural community

Reducing Preventable Falls – A Case Study from East of England Ambulance Service NHS Trust

There is clear evidence that a number of falls are preventable, and that the ambulance service could be a key partner in ensuring this happens. The East of England Ambulance Service (EEAS) has developed its work around falls in three key areas:

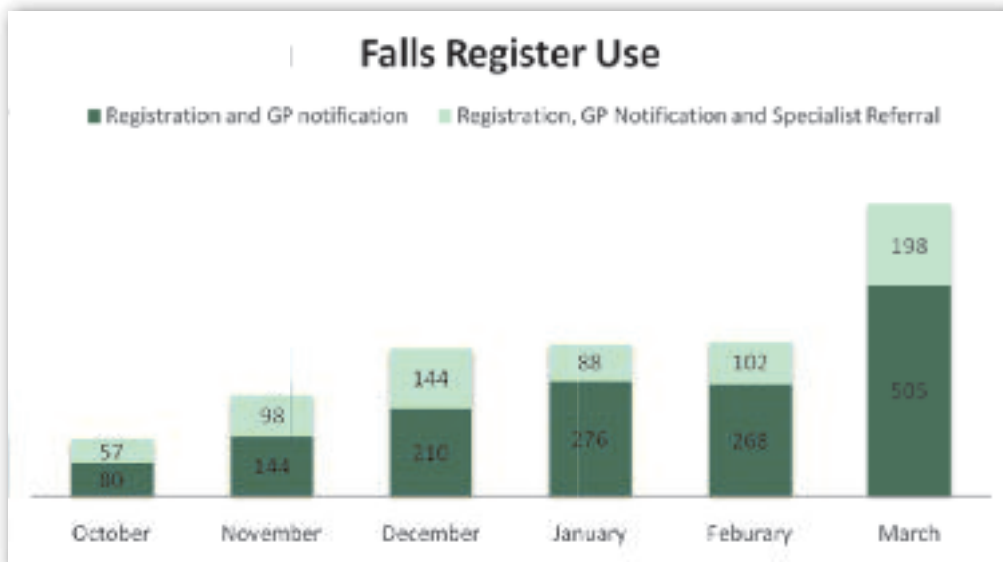
- Register and referral
- Prevention
- Response

Each of these areas have been developed in various ways to improve the quality of care developed for patients calling the service who have fallen.

Register and referral

A register and referral system was developed based on a trigger tool. Clinicians use the trigger tool to identify key areas which contribute to falls prevention, and can access an electronic system 24/7 (with the patient's consent) to record the details so they can be passed onto other

appropriate healthcare professionals. EEAS has developed a directory of specialist falls services so that in some areas, as well as a notification of a fall to the General Practitioner, a specialist team in the community is also informed.



Prevention

The Trust established a regional falls forum and work has been focused on the development of the register and plans to analyse trends in the register and other data sets held by the ambulance service. Using this data and working with members of falls forum, EEAS aims to reduce preventable falls using jointly-held action plans. The Trust has been present at a number of health forums highlighting the significant number of falls calls attended and how the health community as a whole needs to work on the prevention agenda.

Response

The Trust has continued to explore different options for responding to patients who have fallen. The Trust received the national health and social care award for the falls response project running in west Hertfordshire and received regional innovation funding for its project in east and north Hertfordshire, as well as being advocated as a best practice example of innovation funding. This scheme focused on providing both clinical and social care to the patient at the point of call. The results have shown increased admission avoidance rate, and early access to social care provision.

Taking Healthcare to the Patient recommendations



Ambulance clinicians can play a role delivering health promotion and education for self-care. They can also train community responders, teach CPR to local communities and also help support health screening programmes

Mobile Response service in Devon

Serving people who have a home pendant alarm, this service is staffed by ambulance Care Assistants. They are trained and equipped to carry out basic life support should that prove necessary, but their extra training is designed to help them secure the right care and support for vulnerable patients whose emergency does not require the A&E department.



When a client presses their alarm they get through to a call centre, where they and the call taker together work out what is needed. The call centre then will contact the clinical hub (South Western Ambulance Service's operations centre).

One of the main advantages of the Mobile Response Service is the joint working and multi – disciplinary decision making they take part in, along with the referral pathways they have access to.

The mobile responder can refer to a range of organisations such as:

Care Direct	Occupational therapist
Care Direct Plus	Falls Assessment teams
Emergency Duty Team	Devon Doctors
Rapid Response	District Nurses
Reablement Centres	General Practitioner

The Mobile Response team have helped to support people with immediate social care needs such as emergency care and equipment (for example frames and commodes) by working closely with different social care organisations such as, Devon Doctors, Rapid Response, the Emergency Duty Team and many other organisations.

A majority of the incidents the Mobile Response Service respond to are for support with non injury falls or social care issues. 88% of the incidents responded to by the Mobile Response Service were for non injury falls or social care needs, where the Mobile Response Service staff would have used joint working and multi-disciplinary decision making skills.

The Future in Urgent Care



There are some excellent examples of new skills, new systems and cooperation between ambulance services and partners in healthcare, and in social care too.

For the most part, these initiatives have become part of mainstream provision in the services where they exist. However some initiatives are still operating as pilots or add-ons, while most of the service continues to be provided in the old ways; sometimes the initiatives, although demonstrated to work, are still concentrated in parts of services, rather than part of normal working practice across the whole service. Most ambulance services have carried out some changes, but have not yet embraced all of the potential for providing better care throughout the service – from telephone advice, through enhanced assessment and decision-making through to a

referral system for patients who do not need A&E

The Ambulance Service recognises that the pace of change needs to be much quicker going forward. To do this it will need commissions support and whole system buy-in – appropriate pathways of care can and should be used by the ambulance service but they need to be available consistently and for much larger number of patients in the future.

Patient Transport Services

Patient Transport Services (PTS) are the way that patients get to their scheduled hospital appointments. This transport is available to any patient whose medical needs prevent them making their own way to hospital.

PTS is the most commercialised part of ambulance service work. Generally it is still hospitals that buy the service on behalf of the patients who use their service. However Primary Care Trusts are increasingly getting involved in commissioning, which has the potential for economies of scale. It is a competitive market and many contracts are held by private sector organisations.

Ambulance services have met nationally to share ideas, experience and best practice in the provision of PTS.

- Services have redesigned to be able to offer extended hours provision. Some have 24/7 capability, seven days a week;
- As much as 30% of bookings are made on the day of travel now. In the past many services did not accept same-day bookings;
- Some hospitals have commissioned dedicated services to take patients home or transfer them between sites;
- Patients have been heavily involved in creating service standards. For example there are now national standards for transport of renal patients;



- Performance requirements include response times together with patient satisfaction outcomes as measures of success;
- PTS staff have been given extra training so that they can assist emergency staff and care for appropriate emergency patients;
- Staff have been trained to identify health and fire risks in patients' homes and make referrals to appropriate help;
- Technology, and particularly making sure that the PTS and emergency arms of ambulance services have the same technology means that PTS staff and vehicles are available to help in major emergencies;

Some services have developed apprenticeships, recognising that some people start in PTS with the ambition of moving on to work in emergency care.

Taking Healthcare to the Patient recommendations



Patient Transport Services operating hours should be better structured around patient need e.g. being able to take patients home after day care or surgery so that avoidable overnight or weekend admissions are prevented. The implications for planned and emergency transport provision should be considered as part of local service planning in order to optimise impact.



3. Even better patient experience

How patients rate their experience

Patients using the emergency ambulance service report very good experience of the care they receive.

The first and only comprehensive national patient survey of 999 patients was undertaken in 2004 for the Commission for Health Improvement (CHI) and published by its successor organisation, the Healthcare Commission. In that survey:

- 95% of patients reported that the call taker had listened to them carefully and less than 1% that they had not listened
- 84% felt very reassured by the call taker and only 1% did not feel reassured at all
- 94% of patients reported that the crew definitely listened carefully and only 1% felt that the crew did not listen
- 93% had complete confidence in the ambulance crew's skills and only 1% had no confidence
- Overall, 98% of patients rated their experience of the care they received as excellent, very good, or good, and none reported it as poor.

These reports of positive experience may of course be taken on face value. People do indeed feel that the service they receive is good, and their responses to surveys do not provide ambulance services with many pointers about how to improve.

However, it is worth probing further. It is possible that the high scores are partly explained by a "gratitude effect": one is so relieved and grateful for a quick and professional response that one does not think further about whether it could have been better in any way. Another issue may be the short amount of time that the patient spends with the ambulance service. The average ambulance job is about an hour long. During a stay in hospital, a patient sees more people and has more interventions. There is more time both to have a bad experience and to think about it.

In 2010 East Midlands Ambulance Service developed a three year Patient Experience Strategy which aims to capture patient experience in a variety of ways. The strategy seeks to deliver improvement in services and the experiences of patients and their relatives/carers.

The Trust Board receives patient stories using a variety of methods and covering a range of services and patient groups:

- Mapping a patient who called 999 and was conveyed to hospital (A&E).
- A complaint (adult with long term condition)
- A compliment (from the mother of a child with a learning disability)
- A review of a high volume caller (an adult with learning disability).

- Mapping of the patient transport service (PTS), to include frequent user for a long term condition and urgent investigation.

The 2004 national survey contributed to the annual rating of ambulance services. The idea was that different services might be rated differently by patients, thus demonstrating something significant about the comparative quality of the 31 ambulance services of the time. In fact the scores that patients gave were so high for all services that they could not be used to tell services apart. This is one reason that the exercise has not been repeated annually.

Also, it is particularly difficult and expensive to conduct an ambulance patient survey, compared with other parts of the health service, because the home address is not available for many patients, and sometimes, for example when the patient is unconscious throughout an incident, there may even be no name recorded. Also, ambulance trusts vary in how they store information, for example keeping paper copies only, scanning some or all of the records, and having electronic databases for some or all of the patient information. It is difficult to develop a national standard sampling method. A lot of staff time must be spent on trying to arrive at a good usable sample for a survey, but since little will be learned from a normal survey that can help a service improve, the expense involved should be questioned.

In 2008 the Care Quality Commission, the successor to the Healthcare Commission, published a national survey of "Category C" patients. Since April 2006 there has been no nationally determined time-target for responding to Category C patients, and ambulance services respond to these patients in different ways and within different timescales. It was regarded as valuable to discover whether there was any variation in patients' experience of the service.



Once again, extremely good experience was reported. 73% of patients rated their overall care as excellent, and another quarter said it was good or very good 82% felt their care was "definitely" explained to them and another 15% felt that it was explained "to some extent" However, 12% of patients felt that the ambulance should have arrived sooner than it did.

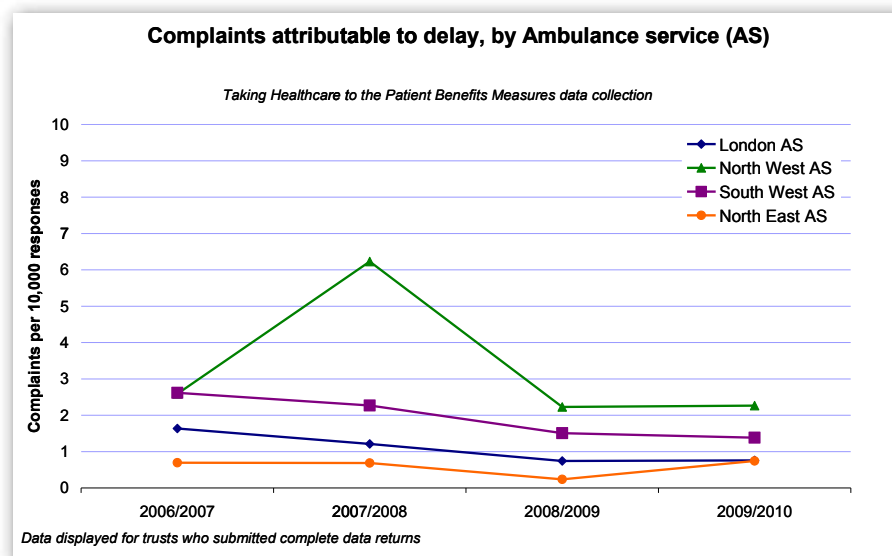
The Category C Patient Survey included questions about how reassuring and informative the ambulance staff were. Over 85% of patients found the control room staff "definitely reassuring" and only about 1% had not felt reassured. More than 85% of patients who received telephone advice felt definitely reassured by them and only 2% did not feel reassured. Of patients who saw a member of ambulance service staff, over 90% found them to be reassuring. 83% said the ambulance personnel explained their care and treatment in a way they could understand.

The 2004 survey did offer a number of areas for improvement for services across the

country. Nearly a fifth of patients felt that the crew had not done enough to relieve their pain, and a fifth reported that they did not fully understand the explanations the crew were giving them.

Pain management is one of the areas covered by the National Clinical Performance Indicators (CPIs) measured by ambulance services for patients who are suffering an ST Elevation Myocardial Infarction (STEMI); a type of heart attack. Since the implementation of the National CPIs in 2008, the assessment of pain in patients suffering a STEMI has increased by over a third meaning that 85% of patients now receive a pain assessment. In turn, as more pain assessments are being undertaken there is a greater understanding of the patient's pain and the need to relieve this. As such, 75% of patients now receive analgesia to relieve their pain; a third more patients than in May 2008 when the first National CPI was measured. (National Ambulance Clinical Audit Steering Group 2009 & 2011)

While there is always scope for improvement in any service, it looks as though ambulance services are doing well on these two crucial measures.



In 2009/10 there are fewer than 3 complaints from patients for every 10,000 ambulance responses.

Taking Healthcare to the Patient recommendations

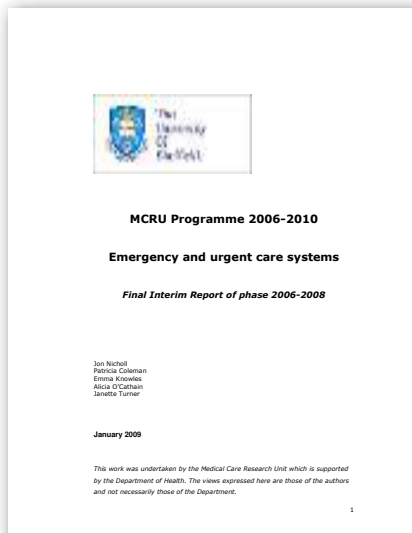


Pain should be better assessed and pain relief more widely used, particularly with children



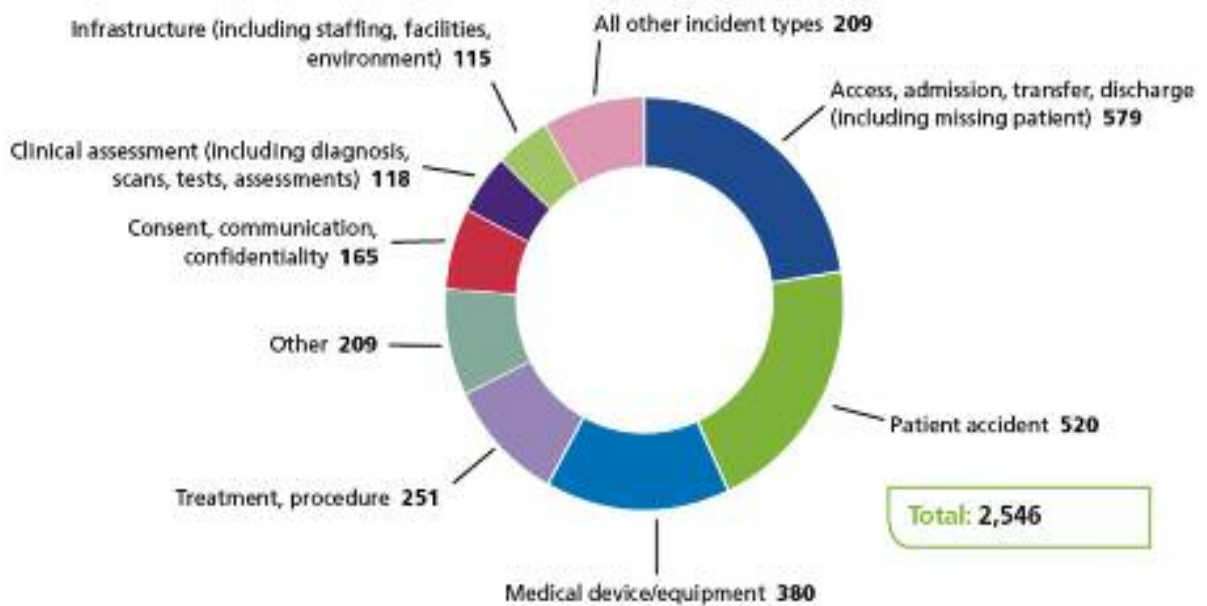
Measures of patient outcome and experience should be used to promote evidence based practice and assess how far ambulance services and local health economies are delivering high quality care.

South Western Ambulance Service NHS Foundation Trust (SWASFT) has invested in web based reporting for all incidents to support the culture of open reporting to enable the Trust to embed learning from lessons identified from the analysis of data.



The new incident reporting system DATIX has provided a rich data source for the trust to take action based upon evidence of areas which needed strengthening to improve patient care. In addition, the system enables upload to the National Learning Reporting System held by the National Patient Safety Agency which collates data on all ambulance services to share trends identified and alert trusts to rising incidents throughout the NHS for combined action if required.

SWASFT incident reporting system reported just over 60 serious incidents in the years 2007 to 2009 and within the trend analysis it became clear that there was an issue with a former brand of defibrillator. Since that time the learning has influenced the decision for the Trust to procure different defibrillators which has eradicated the problem identified.



Reported incident types in ambulance services in England – July 2008 to June 2009, National Patient Safety Agency, 2010

The future for patient surveys

The few attempts to understand patients' experience of their ambulance service care have not proved extremely useful, either for the regulator who commissioned them or the ambulance services they were about. However ambulance service managers know, for example from the "free text" comments offered by patients, or from complaints that they receive, that we cannot assume that the service is perfect.



In 2009 the CQC commissioned the Picker Institute to produce a development report on ambulance surveys (Daly, 2010). The work for the report included stakeholder consultation and a literature review designed to inform a decision about how to conduct patient surveys in future.

The report notes that patients state that they value fast response times, and also speak very highly of the human interactions with both call takers and ambulance crews. Other interviewees, inside and outside ambulance trusts, expressed enthusiasm for surveying patients' whole experience of the urgent care system, covering the time from starting to feel ill and the decision to try to get help from one service or another, through to the end of the experience, for example in the emergency department or at the end of a telephone advice session. It was suggested that a patient survey might be used to test the proposed indicators for measuring the performance of the whole urgent care system, a piece of work that has been underway in the department of health for some time.

The CQC rightly has an obligation to include patients' experience in its assessment of NHS organisations and the other organisations that it will regulate. However it has proved difficult to achieve a cost effective survey method that is useful both to tell ambulance services apart and to give them pointers for service improvement.

There is a pilot under the auspices of the Organisation for Economic Co-operation and Development (OECD) to survey patient experiences of acute sector care. Also, work is going on in the Netherlands to look at the experiences of patients using emergency services including A&E, ambulances and the Dutch version of NHS Direct. There may be scope to learn from this work, and to use the results as a way of benchmarking English ambulance services against those of other countries. There might also be value in making comparisons with the other emergency services.

The Service Experience indicator in the new Ambulance Clinical Quality Indicators will also provide an opportunity to benchmark the patient's experience across ambulance Trusts, it is envisaged that this indicator will be developed in line with the work published by Sheffield University's Medical Research Unit (Nicol J, Coleman P et al MCRU Programme 2006 – 2010)

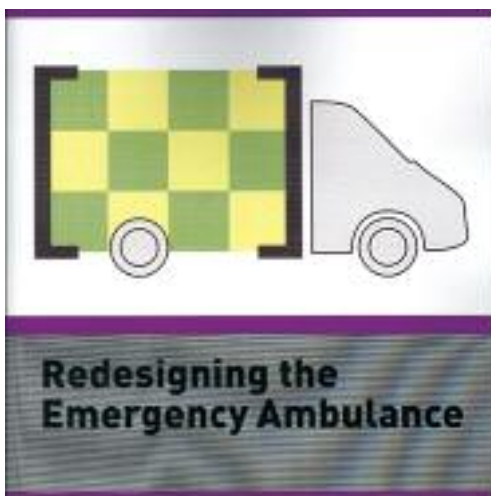
Patient involvement

We cannot leave the topic of patient experience without mentioning some of the excellent work ambulance services have done to involve patients in their work.

South Western Ambulance Service NHS Foundation Trust has teamed up with fellow emergency services and voluntary sector groups as part of the government's Pacesetters Programme to produce health advice and information DVDs aimed at hard to reach groups with particular health issues. Farmers are one such group, and South Western Ambulance Service has also produced a DVD in English, Russian and Polish, aimed at the many migrant workers in that part of the country.

London Ambulance Service NHS Trust has introduced an eight-day development programme for staff who take part in public education and engagement activities. The course includes modules focusing on participants' self-awareness, as well as improving their skills and knowledge to enable them to engage with the public more effectively.

The London Ambulance Service NHS Trust has also involved people with learning disabilities in the development of a booklet in easy-read text, explaining what people should do when they are ill, what services are available, and what to expect if they call 999.



Members of the public have been involved in the Ambulance Redesign Project. This national NHS funded project involves ambulance staff and patients assisting designers from the Royal College of Art to redesign the interior of a front line ambulance. A key component of the project is co-design, whereby the users of the new ambulance interior are an integral part of the design process. At each stage the design challenges were tested and improved upon through the participation of staff and feedback from various public representatives. This approach has enabled the project to include in the design the ideas and experience of users, as well as the knowledge and

expertise of the designers to propose an ambulance design fit for the 21st century. As well as taking part in assessing vehicle design, patient representatives also sit on the steering group which comprises representatives from various NHS departments, ambulance service trusts, manufacturers and university research departments

4. Higher staff satisfaction

Of all the improvements in ambulance services over the last six years, improving staff satisfaction and morale has remained one of the biggest challenges facing Trusts.

Staff Survey

The National Social Partnership Forum (SPF) has worked with the Ambulance Service Human Resource Directors Group on key areas to improve survey results. Specifically, the SPF identified stress, violence, bullying and harassment, staff engagement and appraisal as of concern to Ambulance Services. The SPF have supported partnership seminars and conferences to proactively work with the service to help address these issues, bringing in research to understand the context of similar types of organisations and using their leadership, capacity and capability to take this forward.

In their key findings report on the 2010 survey, the CQC stated:

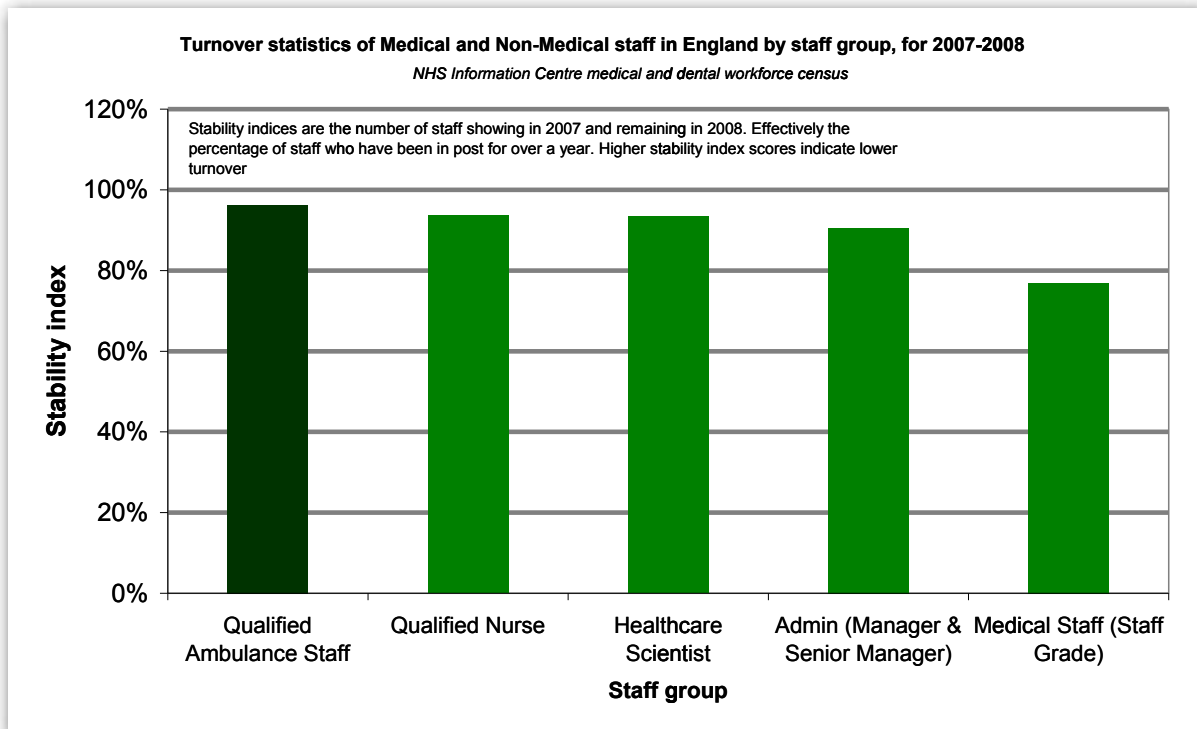
'It should be noted that ambulance staff work in a distinct and different environment to others in the NHS. As in previous year's, staff working in NHS ambulance trusts report poorer experiences on many of these issues although there are significant improvements since the 2009 survey. There has been an increase in the proportion of ambulance trust staff receiving an appraisal (increasing from 47% in 2009 to 70% in 2010), training in health and safety (up from 45% in 2009 to 55% in 2010) and equality and diversity (up from 31% in 2009 to 45% in 2010). The percentage of ambulance staff witnessing potentially harmful errors, incidents and near misses has decreased from 37% in 2009 to 34% in 2010.'

Ambulance Services have seen an improvement in National Staff Survey results in 21 areas for the 2010 year. Most significantly, there has been a year on year upward trend in appraisal levels and staff with Personal Development Plans with a 23% point increase this year for appraisal coverage.

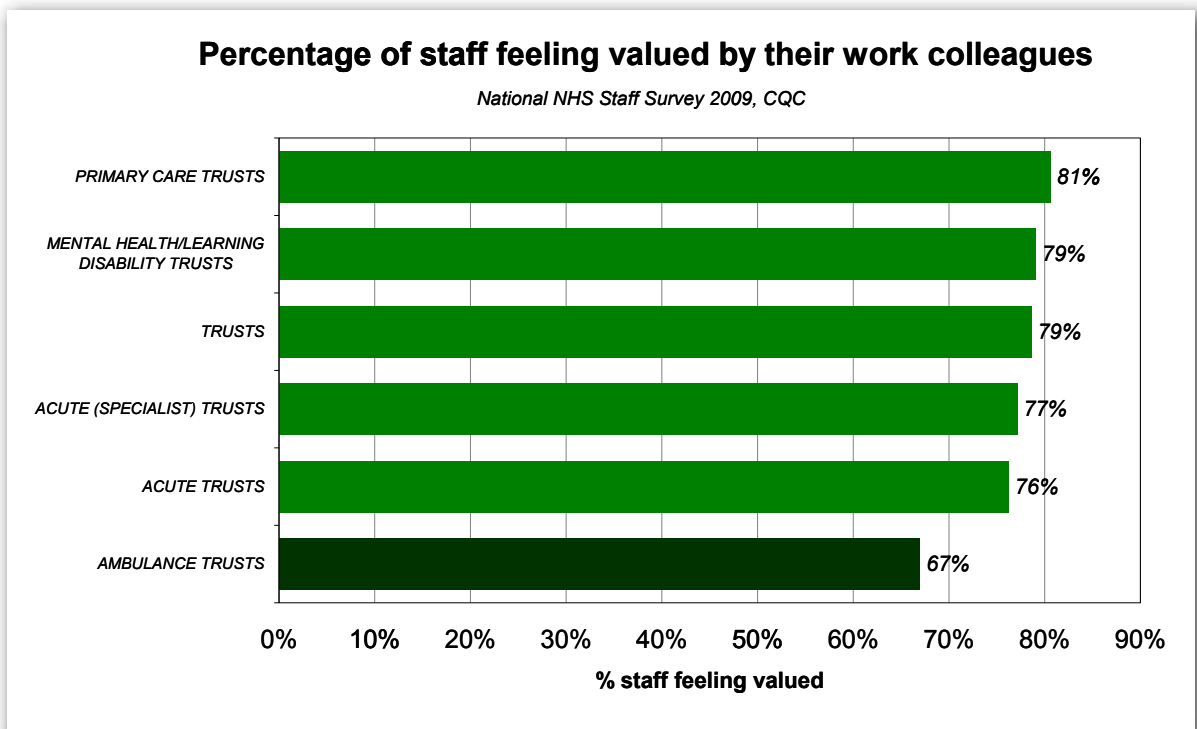
Even so, front-line ambulance service staff consistently report the lowest satisfaction levels of healthcare workers, and high levels of bullying and harassment from patients, members of the public and colleagues. There has been some improvement in these measures over the last few years and in fact ambulance staff turnover is very low and many staff, particularly front-line staff, stay in their jobs for many years.

It is possible though, that the nature of ambulance work does contribute to feelings of discontent. The pressure to meet response times means that managers spend much of their time managing resources rather than relating to their staff. Training and appraisals can indeed be neglected at times when a service is trying to maximise the amount of time spent on operational work. At these times, ambulance crews can feel very pressurised, and as if their clinical skills matter less than how quickly they drive.

Ambulance staff were both more likely to work additional hours (79% said they had done so) and to be paid for them (69% compared with 29% for the NHS as a whole). Also, ambulance staff tend to work far more unsocial hours than most other NHS workers. It is possible that, if their scores were compared with other NHS workers with similar shift patterns, the differences in satisfaction levels might not be so great.



The ambulance workforce is more stable, with lower turnover, compared to other healthcare workforces.



Staff in the ambulance service report lower levels of feeling valued by colleagues, compared to other healthcare workforces. More than a third of staff report feeling dissatisfied that their line manager does not ask for their opinion before making decisions that affect their work in the National Staff Survey from 2006/07 to 2009/10. Similarly, approximately a third of respondents to the National Staff Survey during the same time

period commented that they often think about leaving their current employer. Over a third of respondents also felt dissatisfied with the extent to which their Trust values employees' work. Interestingly, this dissatisfaction is not reflected in Trust turnover statistics.

Many efforts have been made to support staff and to engage them. The rest of this chapter provides a selection of good practice and examples of some of the work that has been done in the last six years.

Improving skills

Taking Healthcare to the Patient recommended that ambulance services should have;

Five-year workforce plans

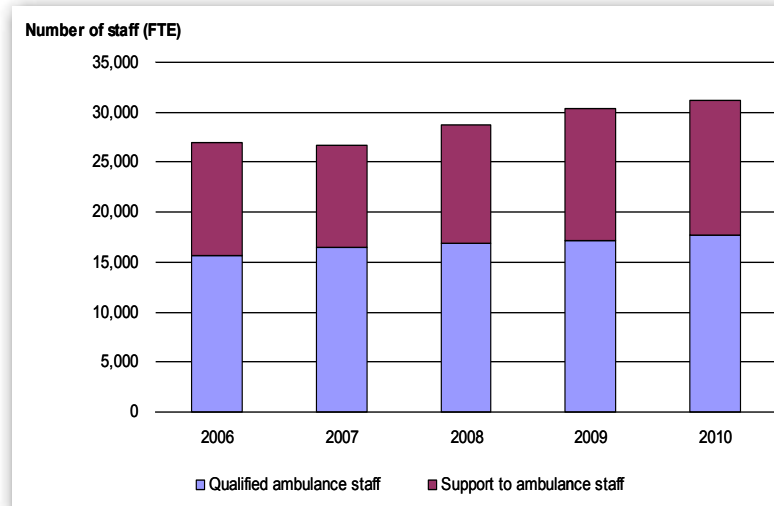
All Ambulance Services produced a five year workforce development plan to support their service delivery strategy at the end of March 2007. The plans provided projections of the changing shape of the workforce over the next five years and set the direction of travel for the shape and development of the workforce nationally. Whilst there are similarities in the direction of travel for each Service, workforce models are planned to meet the needs of different delivery models reflecting the local context with no 'one best' model or a national model identified.

The biggest change has been seen in the skill mix of the emergency and urgent services workforce with all Services changing the skill mix from Emergency Medical Technicians and Paramedics to Emergency Care Support Workers, Paramedics and Senior or Advanced Practitioners. Although the scale and speed of change has varied the change in skill mix is sufficiently consistent across all Ambulance Services to provide a clear vision of the development of the workforce over the last five years.

The number of staff working for the ambulance service has increased over the last five years from 28,600 to over 33,200, an increase of 16 per cent against a NHS average of 8 per cent. Since 2006, full-time equivalent qualified ambulance staff numbers have increased by 12 per cent, compared with an eight per cent increase in qualified clinical staff in the NHS, for example.

Ambulance trusts are now handling more calls over the telephone by providing clinical advice to callers (known as 'hear and treat'), treating patients at the scene ('see and treat') and conveying patients to a wider range of care destinations. Education programmes have been put in place to enhance the skills of current Paramedics through the introduction of a Community Paramedic module which focuses on clinical assessment and decision making, safety netting, accessing and utilising alternative care pathways and avoiding unnecessary conveyance and hospital admission.

Staff numbers



Note: Qualified ambulance staff includes paramedics, emergency medical technicians, advanced practitioners and ambulance service managers but does not include ambulance trainees.

Source: NAO analysis NHS Information Centre data

A standard competency framework and core training syllabus for call-handling staff

A small sub group of the National Directors of Operations Group convened to develop a control room competencies and career development programme. Independent specialist advisors gave advice on international best practice for call handling and dispatching. The result will be a recognised and accredited programme of higher education and learning for this group of staff. The proposals have been shared by Skills for Health and are currently out to wider consultation before publication on the ambulance leadership website.

A Career Framework for Ambulance Service Practitioners Project

The Ambulance Service has been working in partnership with Skills for Health to develop the Career Framework for Ambulance Service practitioners. The project utilises the Skills for Health Employability Skills Matrix for the Health Sector as a foundation. The matrix identifies the transferable functional and personal skills, qualities, attributes and behaviours required at each level of the Career Framework for Health, from level 1 (initial entry level jobs) through to level 9 (more senior roles). Ambulance Services and Skills for Health are building upon this foundation, aligning practitioner roles to the career framework levels. This has been undertaken through mapping and populating the patient pathway, evaluating and considering the skills, attributes, behaviours, responsibilities and accountabilities required of each role, and the learning, education and qualifications required to support each level. The Career Framework aims to clarify practitioner roles and educational requirements for each role, and supports skills escalation, talent management and career development.

In addition, clinical leadership is being developed within each skill level alongside the national work to develop the Clinical Leadership Competency Framework for Allied

Health Professions (commissioned by the National Leadership Council) and the College of Paramedics curricula review. This will ensure that developing Scopes of Practice are integrated and consistent in all ambulance sector roles.

The development work for this project has been completed and the Career Framework is out for consultation across all services and with all professional bodies.

To aid integration, there should be a move to higher education delivered models

Higher education for paramedics is central to achieving a modernised ambulance workforce that is able to provide a greater range of mobile urgent care. Making the transition will equip ambulance clinicians with a greater range of competences and underpinning knowledge whilst maintaining the vocational nature of their training. It will also aid integration with the wider NHS, making it easier for staff to move to and from ambulance roles within their careers. Practice placements will now account for approximately 50% of new programmes and the development of the infrastructure within Ambulance Services to support these placements has been an important part of the transition planning.

The Institute of Healthcare and Development Paramedic training programme will no longer be recognised by the Health Professions Council from 2013. All Ambulance Services across the UK have moved or are moving to a model of higher education at Diploma/Foundation Degree level from this date. Programmes have also been developed to support Technicians and Paramedics who wish to 'top up' their IHCD qualifications to Diploma level.

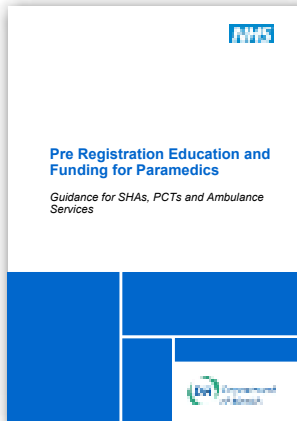
A Transition Group oversaw a number of work streams that completed in March 2008. These included the development of standards for practice placements and training for the preparation of clinical educators/tutors to mentor student Paramedics.

In addition Ambulance Services ensured the following were in place for planned student Paramedic numbers:

- Induction programmes
- Driving instruction
- Practice placement facilitator/co-coordinator to manage practice placements
- Mentorship to support students on placement
- Sufficient accommodation and facilities for students including library and IT facilities

All Services now have mentorship, preceptorship and coaching policies in place and have introduced models of clinical supervision for all front line staff. The cohesiveness of the Services, College of Paramedics and Health Professions Council is paramount to further develop our approach to supporting workers and establishing robust clinical leadership.

The Department of Health, in conjunction with Strategic Health Authorities should review education funding arrangements



Pre Registration Education and Funding for Paramedics - Guidance for SHAs, PCTs and Ambulance Services Directors of Finance was published in June 2008. This guidance provides information on the transition to Higher Education for paramedic pre registration education and describes the recommended education model, guidance on commissioning and future funding of education programmes.

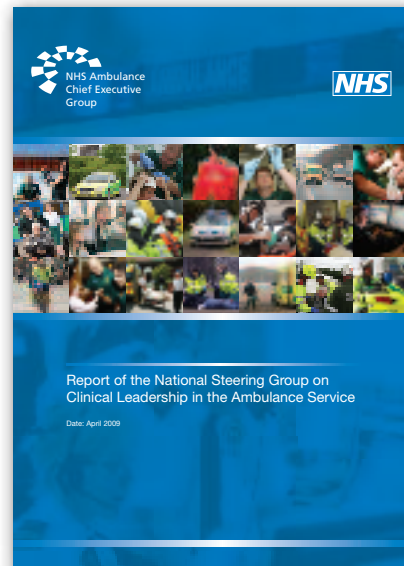
This document provides information on the current transition to Higher Education for Paramedic pre registration education and training.

Taking Healthcare to the Patient recommendations

- ✓ The Department should work with SHAs and ambulance services to develop a five year workforce development plan. There should be a standard competency framework and core training syllabus for call-handling staff.
- ✓ There should be significantly improved clinical supervision, support, audit and quality assurance in ambulance control rooms to provide clinical direction and advice.
- ✓ To aid integration, there should be a move to higher education delivered models of training and education for ambulance clinicians. Initial registration should be at diploma or foundation degree level
- ✓ There should be improved opportunities for career progression, with scope for ambulance professionals to become clinical leaders. While ambulance trusts will always need clinical direction from a variety of specialties, they should develop the potential of their own staff to influence clinical developments and improve and assure quality of care
- ✓ The Department, in conjunction with SHAs, should review funding arrangements where necessary to facilitate consistent access to funding. Funding of ambulance clinician education and training should be consistent with the arrangements for other non-medical clinical professions
- ✓ When recruiting and designing new roles, ambulance services should also focus on the competencies, underpinning education, attitudes and behaviours required to deal with patient need and consider the increased use of and diversification into intermediate grades (between PTS and emergency ambulance grades) as well as more advanced and specialist clinical grades

Leadership

It is evident that strong leadership and management capability underpins organisational and individual performance, and that the quality of leaders and managers has a significant impact upon the degree to which staff feel valued, have a positive work experience, and report their perception of the organisation. In response to the recommendations concerning leadership and management, the Department commissioned research to understand the leadership and management development needs across the Ambulance Service. Through the 'Future Leaders Study', the Ambulance Service worked together, engaging in focus groups, questionnaires and interviews, which led to 12 recommendations for leadership development in the Ambulance Service.

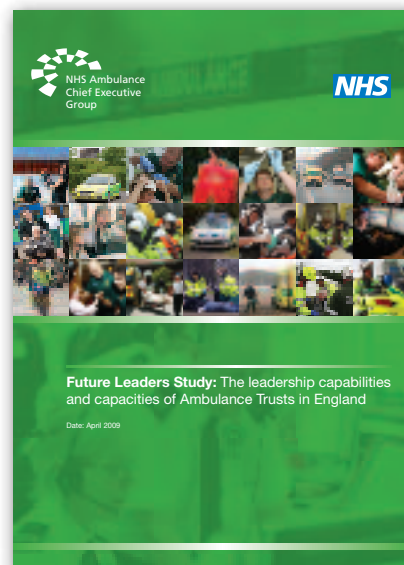


In addition, the Service has contributed to wider national work to develop the Clinical Leadership Competency Framework for Allied Health Professionals, and the National NHS Leadership Framework.

Learning from this research and involvement has influenced the development of clinical supervision models, mentorship development, accredited leadership development programmes and bespoke in-house leadership and management development interventions.

Most Ambulance Services have invested in providing a diverse portfolio of leadership and management development opportunities from Trust Board to frontline and aspiring managers that includes:

- Programmes for directors and senior managers to support transformational change including individual development and engagement in leadership skills and behavioural diagnostics to support personal development planning.
- Development of clinical leadership through engagement in service improvement and patient safety programmes.
- Strategic development sessions for senior managers to ensure involvement in business planning and organisational development.
- Development of a Coaching and Mentoring Network, ensuring qualified coaches and mentors are accessible to support the Trust and the wider healthcare community development needs.
- Accredited (CMI) leadership and management development programmes.



- Bespoke leadership and management development to support first line managers and team development.
- Introduction of the Productive Leader series to support performance, productivity and staff satisfaction.

NHS Constitution

The NHS Constitution captures the purpose, principles and values of the NHS and outlines a series of rights and pledges to patients and staff to enable the service to provide the highest quality of care. This 'deal' with staff gives a minimum commitment from organisations' in employment practices, commits to staff development and support and clearly outlines what staff can expect from their employer. Ambulance Services have proactively engaged with the constitution to push learning and development higher up the agenda and develop a new deal with staff in particular around essential education, appraisal and personal development planning.

The Human Resource Directors Group have developed a reporting system using an agreed set of indicators, that will allow performance monitoring and benchmarking across all services.

Taking Healthcare to the Patient recommendations



The Department should fund a programme of management and leadership development for ambulance staff, having first commissioned research to understand development need (Research was commissioned).

Equality and diversity

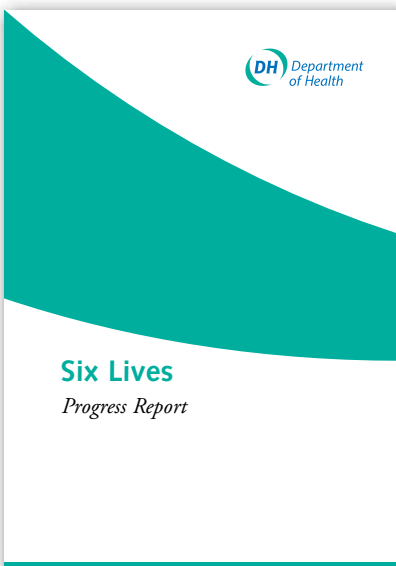
Ambulance services have worked together to promote equality and diversity in the workplace as well as in patient care. A National Diversity Forum is in place that supports organisations in addressing equality issues. As well as work to support data monitoring, workplace participation and preparation for the introduction of the Equality Act, the Group is preparing for the introduction of the Equality Delivery System including developing a performance dashboard for all Trusts. In addition, a review of the Joint Royal Colleges Ambulance Liaison Committee's guidelines for the provision of clinical care has started. These guidelines govern all ambulance care in the UK and are based on the best evidence of clinical care. This will be the first time that they are examined for whether they adequately take into account any differences associated with gender, sexuality, race or religion.



Regular National Briefing documents have been produced highlighting key legislative changes and good practice around the six strands of diversity. The Ambulance Diversity Forum, in association with the Ambulance Service Association has also created, or updated, a number of useful publications including the Multi Lingual Emergency Phrasebook. There is also a Cultural Community handbook, available in both A4 and pocket size, which provides guidance to staff on the issues they may need to take into account when treating people from a range of religious and cultural groups. Finally a Multi Lingual Medical Dosage Phrasebook has been developed in partnership with Doncaster PCT.

In 2006/7 in partnership with the NHS Institute for Innovation, two separate development events were held to address the under representation of black and minority ethnic staff in leadership positions.

South East Coast Ambulance Service NHS Foundation Trust (SECAMB) led on the development of recruitment material to support recruitment of black and minority ethnic staff to Ambulance Trusts. SECAMB and North East Ambulance Services have also been recognised by NHS Employers as exemplar equality and diversity Trusts and awarded "NHS E&D Partner" status. North East Ambulance Service has been recognised within the top 100 public and private sector organisations to work for by the Stonewall Workplace Index.



East Midlands Ambulance Service was the first ambulance service to develop in, conjunction with regional health facilitators, a comprehensive Learning Disabilities training package for staff at two levels. People with Learning Disability and their Carers are whenever possible involved in the delivery of the level 2 training. This education was commended as a best practice example in Department of Health (2010). Six Lives: Progress report. DH

In March 2011 the department of Health published a number of best practice guides for adult safeguarding. EMAS was cited as an example of best practice with regard to systems and assurance in the document entitled 'The Role of Health Service Managers and their Boards.'

Taking Healthcare to the Patient recommendations



Ambulance services should take increased steps to support the recruitment of black and minority ethnic staff – some progress, but much more to do.

Partnership between employers and trade unions

London Ambulance Service NHS Trust has been identified as an excellent example of engagement and partnership working in a report covering the private and public sectors which was prepared for the department of business, innovation and skills (MacLeod).

The authors noticed that the change in relationships came when the London Ambulance Service was widely regarded as a failing organisation, with performance poor and public confidence low.

Both sides came together to begin discussions on a critical path to recovery. Senior managers admitted publicly that the service was struggling – an honest admission that was vital in gaining the trust of staff who were only too aware of the situation. Both sides accepted that the relationship between the unions and management was dysfunctional and was itself contributing to the difficulties at service and station level, with constant threats of industrial action, petty disputes erupting regularly and large numbers of grievances. Above all they recognized that the poor relationship made it difficult to get issues of importance to staff discussed and resolved. Engagement was at a low ebb. (MacLeod, p 95)

A framework agreement was written and agreed, describing a commitment to new ways of relating and setting out the areas requiring discussion over the period of its operation. A new representative structure was developed, with shared responsibilities for professional running of meetings and handling of disagreements.

This does not of course mean that disagreements never arise. What it does mean is that they are handled respectfully and constructively.

It took widespread recognition that the organisation was failing for this change to come about. All public sector organisations will be under pressure over the next few years, which will require similar levels of realism and a similar willingness to talk and to listen.

There is a perception in some quarters outside the ambulance service that relationships with Unions are not as constructive as they could be and because of that, bringing about modernisation and workforce development has been difficult. This is far from the case in fact and both Unions and employers have worked together, locally and nationally over the last few years to bring about significant change and modernisation.

Staff support schemes

Ambulance clinical staff are out on their own and in pairs and do get to see a good deal of distress and pain. While dealing with life threatening emergencies can lead to post-traumatic stress, going to the less serious calls can be just as wearing.

In line with the NHS Constitution, Trusts provide support and opportunities for staff to maintain their health, well-being and safety. In the ambulance sector we recognise that many of employees will potentially be exposed to both individual and successive distressing situations and will work in a situational environment that would not normally be encountered by other health care workers.

A range of services are offered across Trusts include: -

- Confidential counselling through the Occupational Health Department
- Through an Employee Assistance Programme (EAP) which provides staff with 'Lifeworks' – a toolkit of personal and professional resources you can use everyday. 'Lifeworks' offers a confidential service 24/7.
- A Staff Support Network. A team of volunteers from across the Trust all of whom have extensive experience within the Ambulance Service. Volunteers in the Staff Support Network are there to help staff who work in all sectors of the Trust come to terms with things they have observed or dealt with over the phone such as traumatic incidents (cot deaths, serious road accidents, murders and serious injuries) and problems staff may have at work (training issues, relationships with colleagues).
- Confidential Helpline. This service puts staff in contact with a Non-Executive Director and was introduced for the benefit of staff who, for whatever reason, may feel unable to raise a problem through normal channels.
- Specialist Harassment Advisors have been introduced to provide guidance, assistance and advice on the prevention and/or remedy of bullying and harassment
- Access to trained mediator(s) within Trusts.
- Chaplaincy support – Chaplains working for Trusts that are available to offer support to staff.

Anti-violence campaign

Recent work by EMAS on risk address warning markers, through a Risk Address Warning System has seen the development of a multi-agency approach to dealing with violent or aggressive persons in the workplace. Extensive work has been undertaken across regions, various constabularies and statutory bodies, which has allowed for a standardised intelligence led approach to proactively managing risk, and the potential damaging effects, from such incidents on staff. For each known 'risk' incident staff are provided with the most up-to-date information, and where required the best possible support from each agency as required without question.

This system has since been recognised as industry best practice by NHS Protect, and has been incorporated in their national procedure document for all NHS Trusts – "Procedures for placing a risk of violence marker on electronic or paper records". Further work has continued to incorporate this work into lone worker risks, and now allows lone workers to be proactively warned of related risks where-ever they may be. An at the time unseen by-product of this close working relationship with the Police, has also seen huge improvements in how to proactively manage the outcomes of violent incidents and provide information to staff and between the agencies. Consequently during the year 2009-2010 secured sanctions for all reported violent incident were at 79.99% up from 67% the previous year. This being the highest figure by some margin for the entire NHS. Regular internal publicity of such cases has also seen improved reporting, a greater more inclusive feeling and improved satisfaction amongst staff.

Engaging Staff in Continuous Improvement

South Central Ambulance Service NHS Trust has developed a Continuous Improvement Programme to engage and involve staff at all levels of the organisation in improving the service. It is based on the philosophy that the people who do the work are the experts on how to improve it.



The programme has a number of elements:

Bright ideas: a suggestion scheme in which has led to the adoption of new equipment or kit; saving energy and reducing waste; information for patients and members of the public

Spotlight (rapid improvement) events: local events to work on a specific issue or problem over 3-5 days, involving people from the work area and others with relevant expertise or skills. These events are held around once a month and are an opportunity to use problem solving tools like “lean”.

Continuous improvement projects: are an opportunity for front-line staff to take twelve weeks away from their normal role to work on a project they have designed themselves. Each aims to produce an improvement to patient care, staff development or processes and systems. The staff are given training in service improvement tools, project management and stakeholder engagement. They are paired with a sponsor and a mentor as well as receiving supervision and support from the service development team.

25 members of staff have run projects over the past two years and have tackled topics such as improving appraisals, end of life care, improving Emergency Care Assistant assessment, on-line clinical training, reducing demand from nursing homes, increasing referrals to falls teams, and public education on use of 999.

Coaching and mentoring – ongoing support and coaching is provided to individuals or teams delivering improvement activities

Continuous improvement training – training is available to all staff on project management, stakeholder engagement, influence and impact, lean thinking, service improvement tools, problem definition and problem solving.

Information and advice – regular information is circulated on leading edge thinking on continuous improvement, good practice elsewhere, internal and external networks, and ‘how to...’ guides on service improvement tools and techniques.

5. Organisational improvement

Time and time again over the past six years, ambulance services across England have shown their ability to work together to achieve improvements and agreement on national policy quickly and effectively. This includes procurement, national flu planning, workforce policies, Olympics preparation and Clinical Performance Indicators.

The benefits of merger and close cooperation between ambulance services

Several benefits have come from merging the English ambulance services into twelve, the borders of which have matched those of the current strategic health authorities.

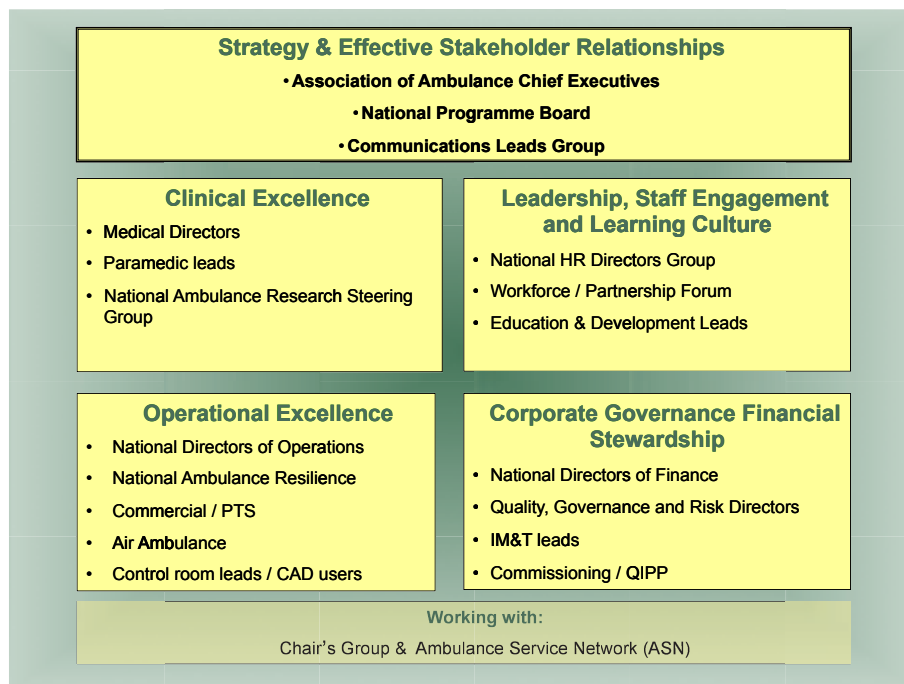
The Isle of Wight Ambulance Service maintains a unique position, rather than function as a separate Trust, the Island's Ambulance service is integrated with the Isle of Wight NHS Primary Care Trust. This integration has allowed the Isle of Wight Ambulance Service to develop enhanced patient care with seamless access to all health-based services and the effective joint working has been key to the service achieving call connect targets. Although a small ambulance service, it is able to react quickly to national directives, with a large partnership organisation for support.

The unique situation of the Isle of Wight and the increasing demand for specialised treatment of patients at mainland healthcare facilities called for the introduction of the innovative 'Jumbulance' to the Island's fleet of emergency vehicles. This custom built vehicle has multi-patient functionality, offering flexibility to become an off site intensive care, minor injuries or diagnostic imaging unit as well as a mass casualty incident vehicle. Also by working in partnership with the Emergency Department, GP Out of Hours, and Unscheduled Care including Social Services and Mental Health, the Isle of Wight Ambulance Service has been able to create a whole systems approach and maximise resource utilisation; providing a front loaded patient care system, in line with the primary objective of 'Taking Healthcare to the Patient'.

Mergers are inevitably difficult to manage, challenging to cultures, and can be painful for individuals. Despite the investment required, for example in bringing control rooms together or bringing IT systems together into one, the English ambulance services have calculated that merger has led to annual savings of nearly £12 million (This excludes savings through joint procurement).

The mergers have also led to much greater cooperation between ambulance services. The chief executives of the services meet every other month and also hold a national programme board quarterly to assure national pieces of work are on track. There are also a range of national Director groups including Human Resources Directors, Medical Directors, Operational Directors and Finance Directors. The eleven ambulance Chief Executives make up the Association of Ambulance Chief Executives.

The following schematic outlines the national governance and programme management structure that is in place under the auspices of AACE.



National Groups

Twice a year all the chief executives and directors meet together, along with their Chairs, at the Ambulance Leadership Forum. These meetings have been a chance to share good practice, consider future changes, and hear opinions and ideas from both inside the health sector and other fields.

Benefits of the closer working that has resulted from merger include:

- joint work on communicating with the public and patients;
- stronger commissioning of ambulance services;
- saving money through national procurement;
- learning from each other's good practice, and working together to develop improvements.



The Ambulance Leadership Forum (ALF) has now become a regular event that enables leaders and senior managers from all the NHS ambulance services to meet, share best practice and discover new ways to bring national excellence to the way they manage their local services. ALF also welcomes senior attendees from Wales, Scotland and Northern Ireland as well as our island colleagues Guernsey, Jersey and the Isle of Man and the Isle of White.

A major part of its success has been in listening to experts from outside the NHS both from home and abroad. Recently ALF attendees have appreciated talks from Unipart, Serco Health, and Nandos restaurants as well as a variety of leading academics, clinicians and policy makers. A major strength of the Ambulance Sector in England is that it can now act together on national issues. Coming together either at group meetings or national events further enhances national relationships and linkages that have supported many of the developments outlined elsewhere in this document.

The NHS Confederation Ambulance Service Network (ASN) gives a lobbying voice and helps to represent ambulance services by providing a strong and independent voice for UK ambulance services and helping ambulance services work more closely with the rest of the NHS and other key stakeholders in health and social care

The ASN vision is to work with their members to provide world-class services nationwide for patients with life threatening conditions and those suffering from major trauma, and an integrated and seamless services across health and social care, including a range of urgent care services available 24/7

Advancing prehospital research



East Midlands Ambulance Services Research Team began only 5 years ago being awarded Designated Research Team status (now East Midlands Research Alliance). The Team have successfully gone from little or no research funding to one that has generated over £2.5 million in competitive bids in the past year alone. Current funding includes grants from the Health Foundation and the National Institute for Health Research.

Excellent collaborations have been developed with academic institutions (the Universities of Lincoln, Sheffield, Swansea and Nottingham) and health service partners including Comprehensive Local Research Networks (CLRN).

Efforts have been focused on quality improvement and translational research from the outset with particular interest in undertaking studies which show gaps in quality of care and how these deficiencies may be improved upon. This has led to a number of publications in international peer reviewed journals, national and overseas conference presentations and national awards.

Research activity in EMAS continues to increase year on year from Regional studies to major trials and the importance of front line staff working as Research Champions has been essential to the success.

The National Ambulance Research Steering Group (NARSG) was formed up in 2007 to meet the increasing need to coordinate ambulance services to collaborate on and lead prehospital and emergency services research. The purpose of the group is to support the strategic development of ambulance and prehospital research and to seek active involvement, ownership, participation and collaboration with trust board and executives, academic bodies and research funding bodies (Sirirwardena AN, Donohoe R, et al 2010)

The NARSG has representation from Ambulance Trust research leads, the Directors of Clinical Care






(DOCC) group and members from other research groups such as the National Institute for Health Research (NIHR) Injuries and Emergencies Special Interest Group and the EMS999 Research Forum. The focus has been to develop partnerships between ambulance services and other prehospital research groups and networks to improve the quality and quantity of prehospital research in the UK and this has led to the development of good working relationships, sharing of best practice and a number of specific activities which have been supported or steered by the group. This includes leading, collaborating, critically reviewing and implementing research and crucially developing improved systems of research governance. The Injuries and Emergencies Special Interest Group was funded as one of 26 Speciality Interest Groups of the UK Clinical Research Network Coordinating Centre and has good prehospital representation.

Recently, priority areas for prehospital and emergency research have been identified (SnooksH, Evans A et al 2008) The key priorities included identification of clinically relevant performance measures for use across the whole emergency medical service system and not just the ambulance service, development of alternative methods of patient management to reduce transports to emergency departments and research evidence to underpin the delivery of clinical care. Ambulance services have collaborated on a research capacity review which has led to work to increased capability and capacity for research in many trusts. Most trusts are now working closely with their Comprehensive Local Research Networks (CLRNs) to support studies on the NIHR portfolio. This has provided funding for research leads, research champions, service support and other infrastructure costs.



Significant challenges remain for research in the prehospital arena. For example, clinical trials continue to be problematic because of the particular difficulties of consent and the short-lived nature of patient care in this setting. Although the situation is improving due to better national coordination, stronger collaboration between prehospital care and academic groups, improved funding and growing experience and expertise, significant investment of resources is required to support high quality research which will provide evidence for further transformation of ambulance services and prehospital care.

Taking Healthcare to the Patient recommendations

-  There should be a reduction in the number of services broadly in line with SHA boundaries
-  The Department should resource and support the development of regional forums for operational directors and for service modernisation/strategy leads to share good practice and innovation
-  The Department should provide similar support for clinical directors to come together at a national level
-  Ambulance managers need to continue to focus on their own development as professional healthcare managers, understand the impact that their services can have on patient outcomes and work with their colleagues to enhance quality of care. Leadership needs to focus more fully on cross-organisational team work, building relationships and coaching and supporting staff to improve patient care
-  *Taking Healthcare to the Patient* recommended that ambulance services follow "national best practice on clinical audit and research, including continued development of clinical guidelines appropriate to ambulance services"

Communications

The National Ambulance Communications Leads' Group, set up in 2007, has been able to deliver a unified national voice for ambulance services when communicating with different audiences.

Delivering a number of PR campaigns, communication plans, good practice toolkits and media handling strategies, members of the group have created a 'community of common interest' to support the national group of ambulance Chief Executives in delivering ambulance service strategy.

Ambulance service communications leads all work closely with their regional communications leads at the SHA, primary care trusts and hospital trusts. However, as the only ambulance communications lead person in their region, members of the group find it invaluable to work with ambulance communications colleagues nationally on common issues - sharing experiences, good practice, giving support and mutual aid. This has led to an over-arching national team being developed to sit hand-in-hand alongside the teams within which the communications leads work at their own organisations. This is of even greater advantage to ambulance services which are unique organisations, in that they are not only a critical part of the NHS, but are also one of the key emergency services, alongside police forces and fire and rescue services. Collaborative working with colleagues at the Ambulance Service Network (ASN) also gives ambulance services greater flexibility in delivering key messages.

The group has clear terms of reference and an annual work-plan agreed by national ambulance Chief Executives. Members work alongside the Chief Executives and ambulance director groups to support the development of ambulance service strategy and plans.

Examples of work undertaken by the group include:

- Production of a good practice toolkit for ambulance trusts going through foundation trust consultation and associated communications.
- Development of a communication framework to support the national ambulance flu and winter pressures plan.
- Implementation of a national initiative, working with the Stroke Association, to raise awareness of stroke.
- Adoption and tailoring of NHS 'choose well' messaging and campaign materials to promote the right use of NHS services, including 999.
- Development of a major incident toolkit supported with a major incident tabletop exercise.
- Development of a staff engagement resource pack.
- Handling strategies on individual issues, for example, ambulance response times, national target changes, hospital turnaround times, skill mix, winter pressures, key announcements and publications.

The group was shortlisted in 2009 for the National NHS Communications Awards for Best Communications Team and was commended for its work.

Public campaigns such as zero tolerance of abuse and violence against ambulance staff; "Know Your Blood Pressure Campaign" to promote stroke awareness and ambulance materials to support the Department of Health public awareness campaign "Choose Well"

Joint work to produce common messages on flu and winter illnesses Toolkits to help trusts communicate on Foundation Trust applications, during major incidents and winter illness

The ambulance communications group was shortlisted last year for the National NHS Communications Awards for Best Communications Team in 2009 and were commended for their work.



Joint work on finance and commissioning

Commissioning:

Following the mergers of ambulance trusts in 2006 commissioners around the country adopted the 'lead commissioner' approach in each region to simplify the lines of communication for contracting and performance monitoring purposes. Each ambulance service is funded by the Primary Care Trusts within its operational area – as many as 31 PCTs. In each case they clubbed together to fund one manager to take full time responsibility for commissioning and performance managing the ambulance service. This has led to much greater coherence and efficiency in ambulance commissioning.

Over the past 3 years ambulance and commissioning representatives have worked with the Department of Health to develop a standard national contract that now determines the relationship between trusts and their commissioners, with the leads acting formally as the 'coordinating commissioners' on behalf of all PCTs in the relevant ambulance trust areas.

From early 2007 lead commissioners have met regularly, under the auspices of the NHS Confederation PCT network. They have produced a draft strategy for the commissioning of ambulance services, as key players in the unscheduled care system, in the future. This document reflects the major aspirations of the ambulance trusts themselves.

The NHS Confederation has facilitated meetings between the PCT network and Ambulance Service network to assist in further development of the commissioners' strategy and reflection upon progress with the contractual arrangements to date. The 2011 Health and Social Care Bill provides for the devolution of commissioning responsibilities to local GP commissioning consortia, with the intention of ensuring that health services are more responsive to local conditions and wishes. Ambulance services do need to become better at responding to local initiatives, for example to refer patients to GPs, or to community services commissioned by GPs. Ambulance services also have a strategic significance, in respect of emergency preparedness, and citizens have an expectation of an emergency response which is broadly the same, wherever they happen to be.

Discussion continues as to how to achieve the best of both: both comprehensive and consistent provision of care *and* responsiveness to local differences in the care landscape.

Taking Healthcare to the Patient recommendations



There should be a lead PCT for each ambulance service which is responsible for commissioning ambulance services for all the PCTs in that area

Payment by Results (PbR):

In 2005/06 Payment by Results was introduced in the acute sector. This is a method of identifying the normal cost of particular treatments and funding organisations accordingly. It is a mechanism that commissioners can use to make costs more transparent and to reduce them, and that providers can use to identify their efficiency compared to their neighbours.

For ambulance services and their commissioners, PbR could be used to encourage more appropriate care for patients who do not need to go to the emergency department, the result being both better care *and* potential savings. Alongside the development of Foundation Trusts, PbR could be used to encourage ambulance services to invest in new services or better ways of providing current services.

In 2007/08 a review by the DH PbR team led to an invitation to ambulance trusts to pilot the potential introduction of PbR to ambulance services. A working group including DH representatives, pilot ambulance trust representatives and local commissioners was created. The brief for the group was for each ambulance trust to develop their own versions of PbR allowing a future assessment as to whether common currencies and/or tariffs could be introduced. Each pilot trust produced a project plan. Regular quarterly meetings were arranged to check the progress among the sites and discuss emerging issues.

The sites met to discuss emerging currencies and whether existing data capture systems were capable of reporting PbR level of detail and whether they would provide data integrity. This has continued to be a crucial issue for all sites. It has led to continuing significant improvements in data reporting across the pilot sites.

Whilst pilot site development took place, in September 2009, DH published the results of a wider PbR evaluation exercise. This provided fresh impetus to the project by suggesting that PbR was viable for ambulance services and common currencies could be introduced.

In January 2010, pilot trusts and a number of commissioners settled upon some simple common currencies; "Call/Hear"; "Hear and Treat"; "See and Treat" and "See and Convey". All present agreed to introduce local rather than national tariffs. Subject to the agreement of all ambulance trusts and their commissioners it is hoped that these currencies will be adopted across the sector for ambulance A&E services from 1st April 2012.

Ambulance Procurement Improvement

Taking Healthcare to the Patient identified that there was scope for savings in vehicle and other capital procurements. After the English ambulance services were merged they got to work to turning this into a reality.

Three areas were focused on:

- Reviewing and if needed, improving, the procurement arrangements within each newly-merged service
- Working together nationally to achieve savings through standardisation of design, scheduling of ordering and bulk procurement
- Improved safety, design and resilience of ambulance vehicles and equipment through better supply chain management

A team of three people, hosted by the North West Strategic Procurement hub, are dedicated to the ambulance services in England.



They have concentrated so far on the procurement of vehicles (including equipment), fuel, maintenance, uniforms and IT and telecommunications equipment.

For example, there used to be more than 40 different designs of ambulance in use in England together with a wide range of equipment. There is now one agreed standard ambulance design. So far, savings are around 26% of the previous spend.

Other savings achieved include:

- £145,000 through bringing ambulance medical consumable purchases into existing national contracts
- £200,000 through a similar exercise on telecommunications contracts
- Negotiating a new national agreement for the maintenance of medical equipment
- £720,000 through a new contract with four suppliers of medical gases
- £2,000,000 through a national tender for the provision of defibrillators

As a result of the work so far, ambulance services saved over £3,000,000 on strategic procurement during the 2008/9 financial year, for a small investment of £120,000. Much more is expected from continuing this valuable work.

Taking Healthcare to the Patient recommendations



The Department of Health should explore the scope for further efficiencies through national procurement and outsourcing of appropriate support services by reviewing common capital procurements particularly for fleet, but also potentially for other aspects.

Risk & Safety, Security and Governance:

A national *Risk and Safety sub-group* has worked to promote a consistency of approach between ambulance trusts in England and, wherever possible including Wales and Scotland, in relation to risk & safety, to share information and the spread of best practice.

A national *Security sub-group* was established to ensure effective arrangements for safety and security management are implemented across Ambulance Services by providing specialist advice on matters relating to safety and security, identifying best practice and disseminating appropriately to all ambulance trusts. Activities have included:

- Reviewing and revising the existing guidelines on the Management of Violence and Aggression, in line with the NHS Security Management Service's (NHS SMS) "A professional Approach to managing security in the NHS"
- Developing guidance on Lone Working
- Developing guidance, as appropriate, on the use of personal protective equipment (including "stab resistant vests")
- Learning from, and sharing with, visiting speakers from Counter Fraud, the Centre for Protection of National Infrastructure, and NHS Security Management Services.
- Maintaining close liaison with the CPNI /CNI on high level security issues linked to counter terrorism and subsequent 'prevent' measures across the ambulance service

The *Governance sub-group* has been equally proactive in pursuing consistency and information-sharing. This has included benchmarking across ambulance trusts for Serious Untoward Incidents, Complaints & PALS Concerns, National Patient Safety Incidents, RIDDOR Incidents, Clinical Claims, Employer Liability Claims and Public Liability Claims for 2008/09 and liaising with Risk & Safety colleagues to implement recommendations arising in the areas of safer manual handling, achievement of timescales of RIDDOR incidents and patient safety incidents

- Mapping the new CQC Essential Standards against the NHSLA Risk Management Standards, Core Standards, IG Toolkit and Auditors Local Evaluation.
- Sharing of best practice with regard to NHSLA Risk Management Standards, CQC Registration and Essential Standards (and formerly the HCC Core Standards)

Foundation trust (FT) status for ambulance trusts:

In June 2007 it was announced that ambulance trusts would be able to apply for foundation status from April 2009. Since that time the sector has worked closely with the DH FT team and the regulator, Monitor, to understand the requirements of FT status and to develop the infrastructure of the eleven English ambulance Trusts that would allow them to meet the exacting governance, financial and quality standards to ensure their sustainability.

A group of 'FT leads' met regularly to maintain a common understanding of the 'FT journey' and support each other through the early diagnostic phase of discovery and development. Progress is now being driven locally, determined by the circumstances of each trust and as this report goes to print, South East Coast and South West Ambulance services have now been awarded Foundation Trust status

Infection Prevention and Control

Infection Prevention and Control has been a huge issue for the NHS as a whole over the last few years, with the much publicised importance of reducing deaths and infections associated with the healthcare environment. Most of the publicity has of course been attached to antibiotic resistant bacteria such as MRSA.

Ambulance services already had a fair record in this area. For example, when they swabbed ambulances to assess levels of bacteria, they found the levels to be low. Regardless of that, it was necessary for all ambulance practices to be examined as part of the overall NHS effort to reduce infection.

The Healthcare Commission, as the regulator was then called, carried out a number of unannounced inspections of ambulance services' infection prevention and control arrangements in 2009 and 2010. They examined premises and asked staff about their knowledge of correct procedures. A number of areas for improvement were identified in most ambulance services, although some services have been identified as offering best practice in infection control. For example South Western Ambulance Service was awarded the National Patients Safety Agency award in 2010 for its Cleaner Care Campaign.



The measures being introduced to reduce the risk of infection to even lower levels are:

- Nationally standardised infection prevention equipment, based on evidence of best practice
- The use of alcohol hand gel and wipes
- Introduction of disposable blankets in some services
- "Bare below the elbow" uniform policies, including the purchase of fob watches for ambulance crews to use
- Rigorous cleaning policies at stations, for both vehicles and equipment
- "Make ready schemes" – teams of staff who equip and prepare ambulances, ensuring that they are clean

Information Management and Technology

After Ambulance trusts merged in 2005 to form regional organisations, Trusts have been better placed to modernise their systems by adopting appropriate national or regional solutions. The major areas of improvement are described below.

There are many examples of multiple legacy systems that have been decommissioned allowing savings to be reinvested into front line patient services. Yorkshire Ambulance Service for instance merged three isolated 999 communications centres to one Virtual 999 Communications Centre (VCC) that supported all areas of Yorkshire, provided high performance and was resilient against multiple-system failure or the loss of a site. The project took three years to complete and was carried out in a number of phases, migrating each former Trust onto a single telephony system and a single Computer Aided Dispatch (CAD) system. Using a single CAD system provides the flexibility for staff to work from multiple sites and take calls from any location across the YAS patch.

Dispatchers can allocate resources across the whole geographical region, helping to reduce allocation times and deal with major incidents. Reporting from the single CAD is easier to manage, quicker and more consistent for all areas of the Trust. YAS now runs one scalable, flexible and robust virtual communications centre serving all areas of the county. This makes best use of the YAS communications and operational resources and aids timely, consistent patient care across the Trust, wherever people live.

Trusts continue to research and deploy innovative ways of using new technology (e.g. Voice over IP telephony, mobile telephone applications and system virtualisation) to deliver optimised and efficient information technology solutions to support patient care and was implemented to replace voice communication systems in English Ambulance trusts. Every ambulance trust replaced their legacy analogue radio system with a new digital solution that offered many advantages including greater clarity, additional capacity, increased resilience and very importantly, interoperability with other ambulance and emergency organisations. This has allowed the ARP to be deployed within major incident vehicles ensuring robust communication is available for national responses.

As mentioned previously ambulance trusts have supported the piloting of 111 services for non-emergency calls. The 111 service allows calls to be triaged based on clinical need and then referred to an appropriate healthcare provider. Care may still be provided by an ambulance response but where a more appropriate local service is available the patient can be safely referred. 111 will reduce inappropriate ambulance responses, will minimise inappropriate referral to acute care and will ensure that patients receive the right care in the right environment. IT systems ensure that a patient receives a seamless service irrespective of provider.

Ambulance trusts have traditionally used paper patient report forms to capture details of given to patient care. A copy of the duplicated paper form was handed over to hospitals while another copy was processed and audited within the ambulance trust.



Trusts are now moving to electronic patient report forms (EPRF). EPRF is supported in most areas through the national Connecting for Health programme.

The EPRF offers clear capture of patient care details, electronic handover of information at hospital and rapid access to audit data within the ambulance trust. EPRF requires partnership working across the healthcare community to support the transfer of the patient record ensuring that all health providers have access to timely, quality information on patients.

Ambulance Radio Programme

On 19 July 2005 the Department of Health awarded a contract to Airwave Solutions Ltd to provide a new digital radio and communications system for NHS Ambulance Trusts in England. The implementation of the Airwave Radio Programme (ARP) was led by the Department of Health with involvement from all ambulance services.

- The Airwave network is more resilient and has far greater coverage, including underground, than was available with the old analogue networks;
- Voice quality is greatly improved. Messages can be clearly understood first time, reducing unnecessary radio traffic and potentially dangerous delays;
- The system can be used to communicate direct to emergency departments;
- The Airwave network is encrypted which provides secure communications that protect patient confidentiality;
- Ambulance services and crews can communicate across all thirteen ambulance services in Great Britain;
- The network is also shared with other emergency responders;
- Both of these features are particularly vital during a major incident when ambulance services come to each others' aid, and all the emergency services work in coordination;
- The network and the associated control room systems are more flexible than the systems they replaced. The configuration can be altered to fit varying operational and organisational models. This means that trusts have an increased ability to respond to changing organisational demands;
- A national contract for the service means that there is a standard technology model across trusts. This increases the ability for trusts to respond to organisational changes, and saves money.



Each ambulance service in England is now connected to Airwave's digital radio network and full implementation was complete at the end of 2010. The Airwave network is shared with the other emergency services, and is common to all ambulance trusts, including those in Wales and soon in Scotland.

Being prepared

Since the publication of the Review of Ambulance Services (DH, 2005), Ambulance Services have made considerable improvements in the arrangements for preparing for Major Emergencies and our response to Major Incidents. Furthermore, existing arrangements between individual Ambulance Trusts have been strengthened following the creation of fewer larger Ambulance Trusts to configure a response on a National level and develop common ground between Ambulance Services and other government response agencies.

The mergers of Ambulance Trusts further strengthened the Emergency Preparedness Board (EPB). The Membership to the Board includes Emergency Preparedness Leads from all Ambulance Trusts in England. Bringing together a multi disciplinary team proficient in delivering a suitable response within their own area and also with the understanding that governance and inter-operability across Ambulance Trusts would firmly exist. This bridge has secured the effective and efficient utilisation of support during times of Mutual Aid. The Board draws on specialised knowledge from the Department of Health and meets quarterly. The board, Chaired by an NHS Ambulance Chief Executive, reports directly to the Association of Ambulance Chief Executives (AACE) who sets Annual Objectives and signs off the workstreams as well holding the Board to Account for delivery.

The EPB prepared a National Resilience Strategy. Following completion and approval by ACEG, the following areas were agreed as areas of National significance to enable a successful joint working partnership:

Training and Development, Business Continuity, Commissioning and Funding, Equipment and Development, Special Operations and Policies, Procedures and Plans.

Training and Development has been under way to prepare occupational standards for Commanders and Emergency Preparedness Practitioners. This ongoing work will ensure a



common standard within Ambulance Trusts. Further work is being taken forward in relation to standardisation of equipment and training for frontline operational and Control Room staff as well as Commander Training.

A follow up Capacity and Capability Audit was conducted in each Ambulance Trust in 2010 which followed the initial Audit in 2007. Follow up action plans have been developed in order to sustain the momentum of improvement from the initial Report.

Furthermore, Trust arrangements have been reviewed and enhanced following the Inquest in the London Bombings, Cumbria shootings and other Major Incidents in recent years.

There is an Emergency Preparedness Coordinator in post who supports the co-ordination of the workstreams and objectives as well as services the EPB.

Communication links and regular updates between other Agencies such as ACPO, CFOA, NPIA, DH, Cabinet Office, etc have also been strengthened as a consequence of the new arrangements put in place.

Whilst significant investment in time and money ensures an enhanced model of response by individual Services, it was decided to further support a combined response by introducing a National Ambulance Co-ordination Centre (NACC). Based within the London Ambulance Service Headquarters, the NACC is available to co-ordinate a response model on a National level to pre-planned and unplanned incidents. A primary or supportive NACC can be made available at West Midlands Ambulance Service. This significant development was instigated following the 2009 Swine Flu pandemic and will be tested as part of the arrangements for the Olympics.

After every incident or event, planned or un-planned, there are lessons to be learned. Ambulance Services have a shared system for recording such occurrences and have the ability to identify what action needs to be taken and by whom. This is publicised and discussed as appropriate at a National Lessons Learnt events and the EPB.

Significant steps have been made in the development of Emergency Preparedness. The competency of all involved continues to drive forward the improvements required to enhance the model of response. There is an ever-increasing evolution of possible incident patterns that threaten our homeland and therefore, as objectives are met, we continue to adapt, evaluate and challenge our practices to suit. We recognise the very significant progress and achievements of our staff in individual Ambulance Trusts and other colleagues such as DH that forms the basis for further improvements which we continue to take forward for the benefit of patients and for the protection of our staff.

Coroners Recommendations following the London Bombings of 7/7 2005

The Rt. Hon Lady Justice Hallett DBE recently presented her findings following the inquests into the deaths of 52 members of the public on September 7th 2005. In all nine recommendations were made and the London Ambulance Service NHS Trust will be working with other agencies to ensure they are moved forward.

National Pandemic Flu/Winter Planning

Every winter presents challenges to the National Health Service, and ambulance services play their part in planning for these.

Planning for the possibly serious consequences of the 2009/10 flu pandemic was a good example of how this works.

Using information about the way flu was starting and spreading in Scotland and parts of England, ambulance services worked with the Department of Health to understand the best and worst case scenarios for the winter months.

Not only could there be many more 999 calls, but the worst case scenario was that up to 25% of staff might be absent through their own or family member's illness. The impact of this on the ambulance service's ability to deliver responses was modelled, and found to be very serious. It was necessary to put plans in place to ensure that when ambulance services were under such enormous pressure they would nonetheless continue to respond to the patients who needed a life-saving response. It might mean cancelling any activity that took away from front-line performance, including training and planning and all the things that are needed to prepare for the future. But cessation of such activities would be necessary in the short term.



In the event, the worst fears about flu were not realised. However, as a result of planning for that, ambulance services are now much better prepared for a similar problem. There is now a national plan for how to deal with increasing levels of pressure on the service, which goes beyond geographical boundaries. After all, viruses don't bother about administrative borders!

England, Scotland, Wales & Northern Ireland ambulance services all participated in the planning and agreed to be part of a memorandum of understanding – offering mutual aid to each other when needed, and also to contributing staffing and support to the National Coordination Centre based at the London Ambulance Service which will come into place if and when a national emergency happens.

Hazardous Area Response Teams (HART)

The Department of Health Emergency Preparedness Division (DH EPD) started the Ambulance Hazardous Area Response Teams (HART) programme in Autumn 2005.

HARTs are specially trained and equipped ambulance clinicians who attend incidents involving a chemical, biological, radiological, nuclear or explosive (CBRNE) element. Before HARTs, ambulance staff did not have the training to go into the high risk "inner cordon" at such incidents, and had to wait outside for the casualties to be brought to them by police or fire service colleagues who did have this training.



HART clinicians are trained to work in dangerous and contaminated environments such as those resulting from a terrorist attack, but their skills, knowledge, equipment and training mean they can also be available 24/7 to respond to a range of 'day-to-day' hazardous incidents. For example they can go into collapsed buildings, work at height or in confined spaces, and attend industrial accidents and complex traffic collisions and natural disasters such as flooding.

Each HART unit comprises 42 paramedics, specially selected against a behavioural competency-based framework, trained and equipped to work inside the inner cordon of these types of events. There are currently 12 fully operational teams in place, and funding for three further teams secured. The DHEPD is working closely with the devolved administrations who wish to introduce a HART capability. Having the same capability in all countries will make offering mutual aid much easier.

Preparing for the 2012 Olympic and Paralympic Games

Preparation for the 2012 Olympic and Paralympic Games began in 2007. Although the Games and associated cultural events will be concentrated in London, many other parts of the UK will be hosting sporting events and visitors.

The International Olympic Committee Medical Technical Manual (2005) states that: 'It is essential that the local level of medical care to the community is not compromised during the Games period'. In other words, ambulance services' primary duty during Games-time will be to ensure that service to the wider community is no worse as a result of the extra demand during that time.

Nine million tickets will be available for the 2012 Games. This presents an enormous challenge for the ambulance service given the scale of provision required in venues, for athletes and spectators, and to fulfil its role in ensuring safety and security. In addition, this will mean a significant increase in visitors in 2012, more population-movement across the capital and nationally, and an expected rise in day-to-day core demand.



Beyond the capital, various events will be hosted around the country with football, sailing, rowing and cycle road races all expected to attract large crowds. The torch relay will be passing within half an hour's travelling time of 95% of households in the UK. Given the scale of the demand placed on London, ambulance services across the UK will be providing staff during the 2012 Games to help ensure that the extra resources required are available. Co-ordination of pre-planned aid is therefore ongoing with input from all Trusts nationally.

The London Ambulance Service's Olympic Games Planning Office has been producing operational and contingency plans for each of the Olympic and Paralympic venues and developing a better understanding of what the "Games-effect" is likely to be.

A new London Ambulance Service event control facility was completed in December 2010, which will be operational during Games-time and feature heavily in internal and external testing programmes. An Olympic and Paralympic Deployment Centre will be used for staff and vehicle deployment to venues and the cultural events that will be occurring. Partnership-working with Olympic bodies, such as the London Organising Committee for the Olympic Games and the Olympic and Paralympic Security Directorate, is ongoing.

The next six years for ambulance services – six recommendations

As can be seen from this review, much has been achieved for our patients in the last six years and we have a lot to be proud of as NHS ambulance services, however there is still much more we want and need to do.

Taking Healthcare to the Patient is as relevant today as it was six years ago – a case of work in progress or better described as transformation in progress. The plan six years ago was to complete mergers → achieve new targets → transform our services by delivering the set of wide ranging recommendations. Of course merger and new targets were very much part of the transformation process and these were never going to be linear activities. We have been transforming, but we would all admit that the speed of transformation has been affected by the amount of time and attention we have all had to give to achieve challenging response time targets and dealing with wider changes in the NHS. It has felt all consuming at times, particularly against a backdrop of year on year increases in 999 demand.

Most of the recommendations in *Taking Healthcare to the Patient* have been implemented, whilst some are still underway, or have been overtaken by events. However we are all ambitious to develop and it is fair to say that we haven't made as much progress in some areas as we would have liked. With the more complex challenges and range of patients our staff deal with, clinical leadership and support is an increasingly important priority both in ambulance control rooms and out in the field. Thousands of new frontline staff coupled with a strong desire to significantly increase hear and treat



and see and treat means high quality clinical leadership is needed more than ever before - supporting, mentoring and challenging clinical practice – across our services. **1. We need more, visible, clinical leadership in action.**

Of the five key areas reviewed in *Taking Healthcare to the Patient 2*, one area that remains a challenge is improving staff satisfaction. Although it has been pleasing to see the progress made in the 2010 staff survey results in the areas of education and training and staff appraisal, we still have a workforce that by and large feels undervalued and wants more support. This is partly linked to response time targets and in particular the unintended consequences that too narrow a focus can produce at least some of the time.

We are pleased that the recommendation in *Taking Healthcare to the Patient* – the removal of the Category B response time target and replacing it with clinical quality outcome measures has been implemented this year. **2. We now need adjustment to the Category A target to allow time to gather key patient condition information before dispatching a resource.** This we believe we can do whilst at the same time 1) protecting our existing world class 999 call answering times, 2) maintaining national compliance with performance measuring and 3) ensuring calls to cardiac arrests are singled out to receive the absolute fastest response. These improvements have been achieved since the implementation of call connect.

This technical change is needed to help reduce double dispatching and en route cancellations, thereby freeing up ambulances for other calls and at the same time improving staff morale. I am firmly of the view that a change to the Category A target; a genuine and visible focus on the new clinical quality outcome indicators by management (and all staff); a strengthening of clinical leadership and support, coupled with the implementation of meaningful staff engagement programmes will improve staff satisfaction and morale.

Six years ago we also worked hard to draw up long term workforce plans and these have helped recruit and train many thousands of new frontline staff. We now have more State Registered Paramedics than ever before which is a good thing. However along the way we have seen a whole new range of roles introduced. And while we shouldn't be nationally prescribing all roles, **3. There is a need to ensure we all have transparent and coherent clinical career structures in place from Emergency Care Assistant through to Consultant Paramedic linked to the Skills for Health career framework.** A pack that any new recruit can pick off a shelf and say – I know what each role is, what the education and training requirements for each are and what I need to do to work my way to the top over the coming years.

We touched briefly six years ago on the whole area of public health and prevention and while we highlight some very good examples of this in the report we need to take a leaf out the Fire Service book in terms of their local community safety initiatives and educating the public. We have the best possible ambassadors to undertake health promotion and prevention work, we need to see a step change in our approach. **4. We need to make time for a group of our staff, with the right knowledge and skills, to work in local communities helping to educate and improve health. Crucially we need a way of measuring the impact and value of this work.** We have seen some examples in this report of how quality, governance and risk

management have improved in ambulance services in recent years. The increasing recommendations for ambulance services from HM Coroners following inquests, coupled with improvements in our own systems for identifying and investigating serious incidents brings with it not only the challenges of implementing any actions but also evidencing organisational learning as a result. **5. We must be able to demonstrate cross organisational learning as a result of serious incidents.**

Finally, 6. Going forward we all need a clear vision and simple statement of intent that our staff and external stakeholders can support and understand;

A consistent message, underpinned by organisational values that are upheld and really do mean something.

We said six years ago that we wanted to create organisations that looked, felt, behaved and delivered differently. That aspiration still holds true today and there are a number of examples in this review of this.



- We are the largest single emergency and urgent care provider in our areas with world class call handling, very high levels of patient satisfaction and a mobile workforce with a can do attitude. We are increasingly working with a large range of partners to deliver new and innovative care to ensure that the millions of patients we deal with every year receive the right care in the right place with minimal hand offs and duplication.
- We are increasingly treating and then transporting patients with critical illnesses and injuries directly to specialist centres and are working to evidence an improvement in health outcomes for patients with specific cardiac conditions, stroke and major trauma. **At this critical end of the spectrum of care we deliver our role is to maximise survivability.** Going forward we believe our regional coverage, our capacity management systems, directories of services and state of the art technology and resilience puts us in a strong position to manage critical care transfers and optimise the use of specialist beds/facilities and be a key player in the delivery of the new 111 Service. **999 and 111 is part of a single spectrum of contact and response.**
- We enter millions of peoples homes each year and are well placed to offer prevention/health promotion advice to a wide range of healthcare users; elderly fallers are just one such group. Early detection of diabetes and high blood pressure provide another example. With our locally based staff, we can strengthen our work with local authorities, GP consortia and the new Healthwatch organisations to offer tailored packages of health advice and information to reduce harm and improve health.



In less than six years time all ambulance trusts in England will be Foundation Trusts, and will have been for some time. This will have brought a greater focus on accountability to our staff and the public – more looking outwards than upwards. We will have been operating a tariff based payment system for a number of years and will all have delivered significant cost savings as part of our cost improvement programmes. We will be leaner, more productive and will have years of clinical outcome data to evidence the improvements in care we have made for our patients. We will have saved more lives and improved the lives of ten thousands of others and we will have a workforce that feels a real sense of clinical focus, one we all share, led and supported by increasing numbers of senior ambulance clinical leaders. We will have delivered the many service developments and innovations outlined in our integrated business plans. This will include many of us running 111 services and leading a greater range of urgent and emergency care initiatives locally. And we will have strong and meaningful links with all our key stakeholders.

It is an important time for the Ambulance Service I am confident that we can rise to the future challenges we face. This includes addressing with partners the NAO recommendations. I believe that six years on we are better led, more resilient and have more confidence in what we do and what we can do. We are more central to the delivery of urgent and emergency care than ever before. Clinically and economically evidencing that contribution remains our challenge and one I know we are all up for.

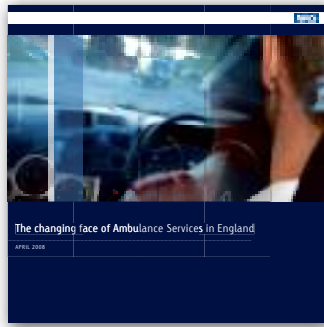
I couldn't be prouder of what the Ambulance Service does in England, its agility, can do attitude and ability to agree and then enact things nationally in a matter of days remains unique not only in the NHS but in emergency services also. We constantly surprise colleagues at what we can do and how quickly we do it. What an Ambulance Service we do have – as the saying goes, sometimes you don't know how lucky you are and never has that been more true than in our case.

Peter Bradley CBE
June 2011

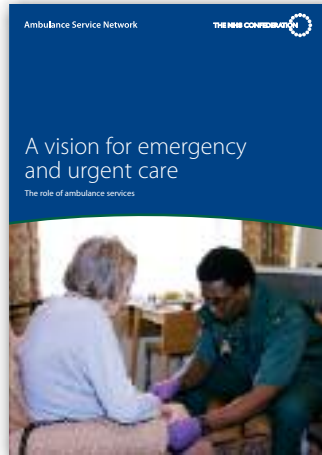
References/bibliography

- Care Quality Commission, (2008) Category C Ambulance Service User Survey 2008
- Care Quality Commission (2010) Supporting Briefing Note: Issues Highlighted by the 2009 NHS Staff Survey in England, London, CQC
- Cooper, S., Barrett, B., Black, S., Evans, C., Real, C., Williams, S., and Wright, B., *The Emerging Role of the Emergency Care Practitioner*, Emergency Medical Journal, 2004; 21: 614-618
- Daly, L., Category B and C Ambulance Survey: Development Report, Picker Institute, Europe, 2010
- Department of Health, *Taking Healthcare to the Patient: Transforming NHS Ambulance Services*. DH Gateway 5133. June 2005
- Halter, M., Marlow, T., Tye, C. and Ellison, G.H.T, Patients' experiences of care provided by emergency care practitioners and traditional ambulance practitioners: a survey from the London Ambulance Service Emergency Medical Journal 2006: 23:865-866
- Hartley-Sharpe, C.J., *First Responder Strategy*, London Ambulance Service, 2010
- Healthcare Commission, Patient Survey Report, 2004 – ambulance services
- MacLeod, D. and Clarke, N., Engaging for success: enhancing performance through employee engagement, A report to Government, Department for Business, Innovation and Skills, July 2009
- Mason, S., Coleman, P., O'Keeffe, C., Ratcliffe, J., and Nicholl, J., *The evolution of the emergency care practitioner role in England: experiences and impact*, Emergency Medical Journal 2006; 23: 435-439
- Minney, H., *Measuring the Benefits of the Emergency Care Practitioner*, Skills for Health, 2007
- National Ambulance Clinical Audit Steering Group, 2009. Report on National Ambulance Service Clinical Performance Indicators Baseline Audit: May – September 2008.
- National Ambulance Services Clinical Quality Group, 2011. Results of STEMI Clinical Performance Indicator Audit, Cycle 6 – November 2010. National Clinical Quality Improvement Framework for Ambulance Services.
- Nor AM; McAllister C; Louw SJ; Dyker AG; Davis M; Jenkinson D; Ford GA. *Agreement between ambulance paramedic- and physician-recorded neurological signs with Face Arm Speech Test (FAST) in acute stroke patients*. Stroke 2004, 35(6), 1355-1359.
- Siriwardena AN, Donohoe R, Stephenson J, Phillips P. Supporting research and development in ambulance services: research for better health care in prehospital settings. Emerg Med J 2010;27: 324-326.
- Siriwardena, A.N., Shaw, D., Donohoe, R., et al. *Development and Pilot of Clinical Performance Indicators for English Ambulance Services* Emergency Medical Journal 2010 27: 327-331
- Snooks H, Evans A, Wells B, Peconi J, Thomas M, 999 EMS Research Forum. What are the highest priorities for research in pre-hospital care? Results of a review and Delphi consultation exercise (accessed 13 January 2009). Journal of Emergency Primary Care (JEPHC) 2008;6: 1-20.
- South Western Ambulance Service NHS Trust, *The Changing Face of Ambulance Services in England*, April 2008
- Turner, J. The Evidence for Using Response Times as an Ambulance Service Performance Measure. A paper produced for the department of Health, 2010
- Watson, L., Viridi, G., Donohoe, R., *Cardiac Arrest Annual Report: 2009/10*, London Ambulance Service, July 2010
- Woollard, M. 2007 *Paramedic Practitioners and emergency admissions* BMJ 335:893 Ocy 2007
- Woollard M, O'Meara P, Munro G. What price 90 seconds: is 'Call Connect' a disservice to 999 callers? (Commentary). Emerg Med J, 2010;27(10):729-30
- Woollard M. The role of the paramedic practitioner in the UK. JEPHC, 2006;4(1):990156 [online]. Available at: www.jephc.com/full_article.cfm?content_id=337
- Wilson S, Cooke MW, Morrell R, Bridge P, Allan T (2002) *A systematic review of the evidence supporting the use of priority dispatch of emergency ambulances*, Prehospital Emergency Care, 6 (1), 42 - 49 (1090-3127)
- Nicol J, Coleman P et al MCRU Programme 2006 – 2010. The emergency and urgent care system Final Report

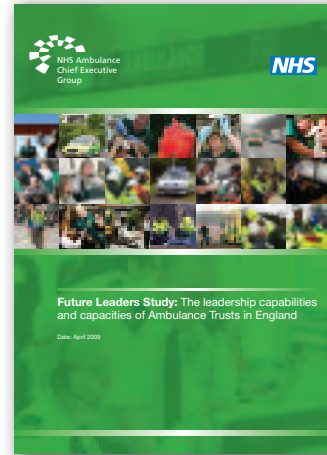
Relevant publications since Taking Healthcare to the Patient



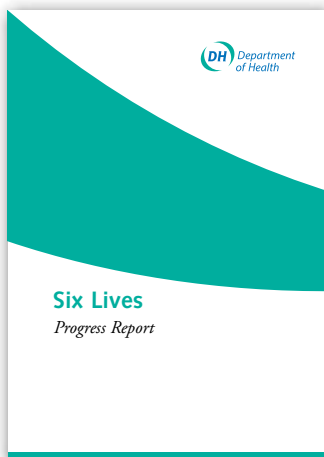
The changing face of Ambulance Services in England



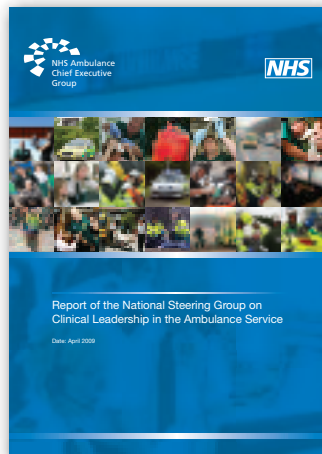
A vision for emergency and urgent care



Future Leaders Study: The leadership capabilities and capacities of Ambulance Trusts in England



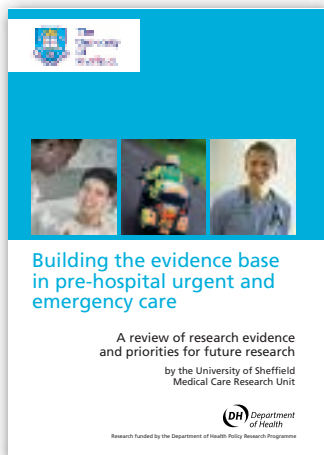
Six Lives – Progress Report



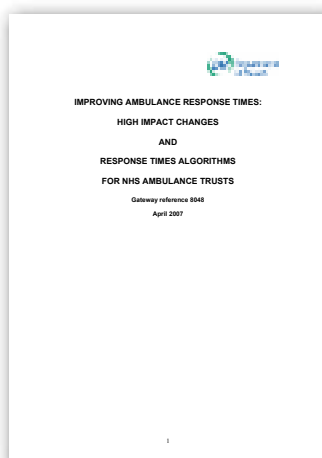
Report of the National Steering Group on Clinical Leadership in the Ambulance Service



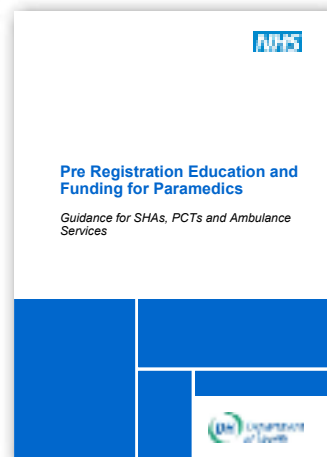
Changing Times



Building the evidence base in pre-hospital urgent and emergency care

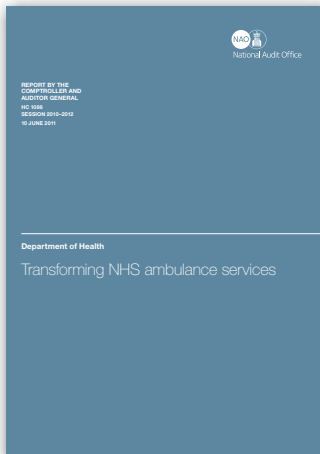


High Impact Changes

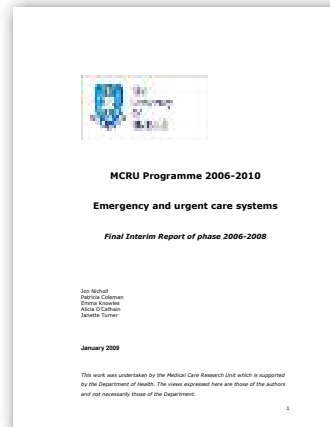


Pre Registration Education and Funding for Paramedics

Relevant publications since Taking Healthcare to the Patient



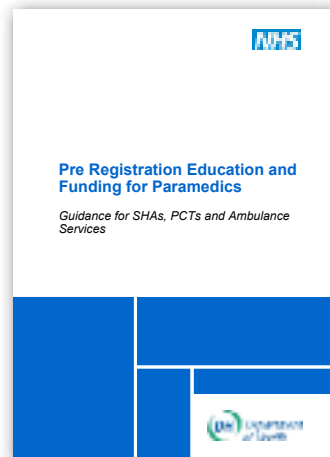
Transforming NHS ambulance services



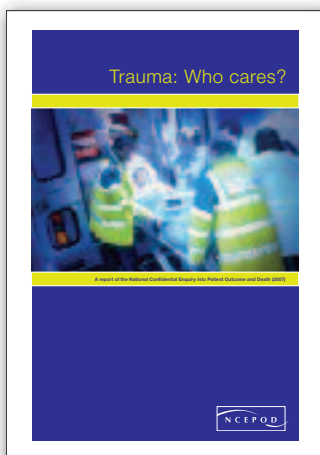
Emergency and urgent care systems



Tackling demand together



Pre Registration Education and Funding for Paramedics



Trauma: Who cares?



Framework For A High Performing Air Ambulance Service

Acknowledgements

Thank you to all who contributed material, ideas and comments to the writing of this report.

Kathy Jones – Lead Author, Independent Consultant: Values In Practice

The Chief Executives of Ambulance services in England:

CEO Lead for:

Hayden Newton,

East of England Ambulance Service NHS Trust

Operations

Paul Phillips,

Formerly East Midlands Ambulance Service NHS Trust

Information Management and Technology

Martin Flaherty,

Interim CEO Great Western Ambulance Service NHS Trust

Simon Featherstone,

North East Ambulance Service NHS Trust

Risk Safety and Governance, Payment by Results; Access

Darren Hurrell,

North West Ambulance Service NHS Trust

Communications and Patient Transport Services

Will Hancock,

South Central Ambulance Service NHS Trust

Finance and Procurement

Paul Sutton,

South East Coast Ambulance Service NHS Foundation Trust

Equality and Diversity

Ken Wenman,

South Western Ambulance Service NHS Foundation Trust

National Partnership Forum and Human Resources

Anthony Marsh,

West Midlands Ambulance Service NHS Trust

National Resilience and Security

Dave Whiting,

Yorkshire Ambulance Service NHS Trust

Clinical Care

Peter Bradley,

Chairman Association of Ambulance Chief Executives

Department of Health
National Ambulance Director

The Workstream Leads:

Lynne Paramour	South Western Ambulance Service NHS Foundation Trust
Ossie Rawstone	Great Western Ambulance Service NHS Trust
Murray McGregor	West Midlands Ambulance Service NHS Trust
Mike Dinan	London Ambulance Service NHS Trust
David Farrelly	East Midlands Ambulance Service NHS Trust
Phil Collins	North West Ambulance Service NHS Trust
Bob Williams	North West Ambulance Service NHS Trust
Geraint Davies	South East Coast Ambulance Service NHS Foundation Trust
Mark Norbury	c/o West Midlands Ambulance Service NHS Trust
Sofia Jabeen	West Midlands Ambulance Service NHS Trust

And:

Sivakumar Anandaciva, Urgent and Emergency Care Analysis, Commissioning Analysis & Intelligence Team, Department of Health

Jonathan Brotherton, Emergency Care Intensive Support Team, Office of Strategic Health Authorities

Claire Burden, Emergency Care Intensive Support Team, Office of Strategic Health Authorities

Paul Constantinou, Electronic Media & Design Manager, London Ambulance Service NHS Trust

Amy Day, Head of Communications, NHS Ambulance Service Foundation Trust

Russell Emeny, Programme Director, Emergency Care Intensive Support Team, Office of Strategic Health Authorities

Karen Hallt, Patient Survey Manager, Care Quality Commission

Juliette Harrison, Research and Survey Officer, Care Quality Commission

Chris Hartley Sharpe, Ambulance Operations Manager, London Ambulance Service NHS Trust

Gillian Hodgetts, Head of Communications and Public Relations, South Central Ambulance Service NHS Trust

Steve Irving, Executive Officer, London Ambulance Service NHS Trust

Melodie Juste, Communications Manager, South Western Ambulance Service NHS Foundation Trust

Norma Lane, Executive Director of Delivery, South Western Ambulance Service NHS Foundation Trust

Russ Mansford - Strategic Ambulance Adviser, Department of Health Emergency Preparedness Division

Andy Parker, Head of Emergency Operations Centres, Great Western Ambulance Service

Anna Parry, Deputy Head of Olympic Planning/Programme Manager, London Ambulance Service NHS Trust

Sara Randall, National Ambulance and A&E Policy Manager, Urgent and Emergency Care Branch Directorate of Commissioning & System Management, Department of Health

Clare Sandling, Section Head - Ambulance Policy, Urgent and Emergency Care Branch, Department of Health

Ian Seccombe, NHS Staff and Patient Surveys Lead, Care Quality Commission

Sangeeta Sooriah, Senior Policy and Research Officer for the Ambulance Service Network

Adrian South, Deputy Clinical Director, South Western Ambulance Service NHS Foundation Trust

Margaret Vander, Head of Patient & Public Involvement and Public Education, London Ambulance Service NHS Trust

Steve West, Association of Ambulance Chief Executive (AACE) Business Manager



Taking Healthcare to the Patient 2:

A review of 6 years' progress and
recommendations for the future
June 2011



ASSOCIATION OF
AMBULANCE
CHIEF EXECUTIVES

www.ambulanceleadershipforum.com