NHS ambulance services... more than just patient transport
**Did you know?**

- Only 77 per cent of patients treated by the ambulance service are taken to hospital – this number is consistently falling as more patients are treated at the scene or in their own home.

- Figures suggest that at least half of the 77 per cent of patients taken to hospital could be treated at the scene of the incident or in the community.

- The demand on ambulance services nationally is rising by around six to seven per cent each year. This is roughly an extra 250,000 responses every year.

- The number of emergency calls that the ambulance service receives in England has increased by more than 115 per cent in the last ten years.

- Ambulance services in England consistently reach more than 75 per cent of Category A calls (those which are immediately life threatening) within eight minutes.

- The number of patient journeys that are not urgent or emergency has fallen by more than two million in the last five years as more care is delivered by ambulance staff at home or in the community.

- The ambulance service in England currently employs approximately 27,000 staff – roughly 17,000 of these are frontline dealing directly with patients.

- There are a number of different types of frontline ambulance service personnel including paramedics, emergency medical technicians, emergency care practitioners and community first responders. This reflects how the ambulance service is adapting to meet the needs of patients.

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1 National statistics: Ambulance services 2004/05
2 Taking healthcare to the patient: transforming NHS ambulance services. Department of Health, 2005
3 Department of Health: Workforce Statistics Census 2004

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**What is the NHS Confederation?**

The NHS Confederation brings together the full range of organisations that make up the modern NHS which include ambulance service NHS trusts. We act as an independent and powerful force in the drive for better health and healthcare. We do this by:

- influencing health policy and the wider public debate
- promoting excellence in employment to improve the working lives of healthcare staff
- supporting health leaders with information-sharing, networking and tailor-made services.
The ambulance service is perceived as the transport arm of the NHS, simply there to get patients from their homes or the scene of an accident to the nearest accident and emergency department. This may have been the case 20 years ago, but it simply is not true any more. Just like the rest of the NHS, the ambulance service is undergoing significant reform and change in order to treat patients better.

This report outlines key examples of how the ambulance service is directly improving patient care through health education, clinical development, delivering care at home and many other initiatives and schemes.

The NHS Confederation is publishing this report at a significant time for the NHS ambulance service. It marks the beginning of a period of change for ambulance trusts as the existing 31 trusts merge into 12 much larger organisations. A map of the new trusts is on page 12.

The ambulance service is making great strides to meet the growing needs of patients. It has moved beyond a service that transports patients to another place to receive care, into a service that now has the ability, skills and resources to bring care directly to patients in their own homes or at the scene of an incident.

Dr Gill Morgan DBE
Chief Executive, NHS Confederation
The number of emergency calls that the ambulance service in England receives each year has increased by more than 115 per cent in the last ten years. In 1994/95 the volume stood at 2.61 million; in 2004/05 this figure had risen to a massive 5.62 million.¹

This dramatic increase has meant that the ambulance service has had to become much smarter in how it assesses which patients need the most urgent care.

Prioritisation of calls into three categories has meant the most life-threatening cases receive the quickest response. The programme was first piloted in 1995 and then rolled out across the whole service by April 2001.

Non-urgent 999 callers are now offered more advice over the telephone by trained experts. Once the patient’s needs have been fully assessed, the ambulance service links that back into the most appropriate service for the patient, for example, a referral to their local GP or a local emergency nurse service.

Through the ambulance service working more closely with other local NHS organisations, the patient can be assured that they are receiving the right care, in the right place at the right time – and often avoiding an unnecessary trip to the local A&E department.

The call prioritisation programme has reduced the number of emergency incidents to which the ambulance service has had to send a crew. In 1994/95, before the programme was introduced, the ambulance service attended 2.61 million emergency incidents – exactly the same figure as the number of emergency calls received. By 2004/05 – three to four years after the programme had been rolled out nationally – the number of incidents attended was 4.53 million; 1.92 million less than the number of emergency calls taken.

Through better patient assessment and a more complex triage system of emergency calls, the ambulance service has been able to manage a massive increase in calls at the same time as delivering better patient care.

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### Summary statistics of emergency calls and emergency incidents 1994/95 to 2004/05 (totals in millions)

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<tr>
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Source: Health and Social Care Information Centre, 2005

¹ Health and Social Care Information Centre, 2005
Smarter patient assessment – a better deal for callers

With more than 3,000 emergency calls a day, the London Ambulance Service is frequently left stretched. In the past, these calls were responded to on a first-come, first-served basis regardless of how sick the patient was.

This meant a patient with a broken leg would have a resource dispatched to them before a patient with a heart attack if that was the order the calls had been received.

This cannot be good for either the health service or the patient, and in recent years there has been a focus on triaging the patient so that they can receive care appropriate to their needs, within the time frame, and in the appropriate place.

It means patients can now receive any number of different responses from an emergency ambulance, to a minibus, to telephone advice on how to deal with their problem, to a referral to a healthcare partner for care.

For example, when 32-year-old Lorna’s daughter Jaimee awakes screaming in pain, her mother dials 999 and speaks to an emergency medical dispatcher. She is guided through a series of questions ensuring that Jaimee is conscious, breathing, alert and orientated.

After several more structured questions, and only about 60 seconds into the call, it is apparent that Jaimee is not suffering from a life-threatening or serious illness, and she has now stopped crying. Having calmed Lorna, and relieved any fears that something may be seriously wrong, the dispatcher ascertains that Jaimee has earache.

The call is passed across to a clinically qualified advisor who then takes Lorna through a series of more in-depth questions to establish the best type of care to provide for Jaimee overnight. It is eventually recommended that Jaimee has some paracetamol to help with any pain or discomfort, and that Lorna contacts her GP in the morning.

This means that the emergency ambulance is kept available for more critically-ill patients and that Jaimee receives the most appropriate care for her needs.

Source: London Ambulance Service NHS Trust
In the past, ambulance services have been designed around delivering critical care – often in the form of resuscitation or cardiac care. It has been the responsibility of ambulance staff to stabilise the patient and transport them to the nearest hospital to receive further treatment – official figures from the Department of Health show that 77 per cent of emergency calls result in an emergency patient journey – usually to A&E.

However, surveys have found that of those 77 per cent of patients, only 40 per cent are admitted to hospital and at least 50 per cent could have been treated at the scene of the incident or in a community setting (out of hospital).\(^1\)

Through improving clinical practice by embracing new technology, new clinical techniques and empowering ambulance staff with a wider mix of skills, the ambulance service can ensure that patients receive first-rate care more quickly in the most appropriate setting.

However, in addition to improving clinical practice in trauma settings, the ambulance service is also working hard to develop clinical services within the primary care setting – closer to patients’ homes.

A key turning point has been the development of the emergency care practitioner who has a wide range of additional skills beyond paramedics, for example:

- greater patient assessment and examination skills
- the ability to treat minor injuries and illnesses
- the management of patients with long-term conditions.

Continuing professional development beyond critical care and trauma

Coventry and Warwickshire Ambulance Service NHS Trust provides an increasing amount of higher education.

Emergency care practitioners (ECPs), who can come from a nursing or paramedic background, can be trained at three levels – degree, certificate or diploma.

ECPs rotate in primary care or secondary care on a 50 per cent basis with the ambulance trust. This strengthens their learning and development opportunities and improves clinical governance. ECP courses are fully subscribed and the trust also mentors joint paramedic/nurse degree pre-registration students.

Source: Department of Health, 2005

\(^1\) Taking healthcare to the patient: transforming NHS ambulance services. Department of Health, 2005
**Saving lives through new ways of treatment**

International guidelines for resuscitating patients from cardiac arrest follow the recommendations of the European Resuscitation Committee. The guidelines are reviewed every five years.

Sussex Ambulance Service NHS Trust recognised that five years was a long time to wait for new guidelines when science was developing so quickly. In mid 2004, 18 months before the new international guidelines were due to be published, the trust started rolling out a new type of resuscitation method – Protocol C – as an observational study.

Protocol C is a revised protocol for resuscitation of cardiac arrest patients. Instead of ambulance staff delivering a shock immediately on arrival, they commence chest compressions for about two minutes, before shocking the patient and then return to chest compressions for a further two minutes immediately after the shock has been given, without any rhythm check.

Protocol C has proved very successful. Not only has it improved the return of spontaneous circulation in patients being treated out of hospital by 35 per cent in 2005, survival rates have improved appreciably.

Protocol C was very counter-intuitive and went against what paramedics had been taught in the past. Sussex Ambulance Service NHS Trust therefore had to ensure that extra time was given to train ambulance staff. This was to allow trainers to go into more detail about the new method to ensure staff understood the benefits of Protocol C.

As expected, the new international guidelines for resuscitating cardiac arrest patients that were published in late 2005 are very similar to the Protocol C method.

Source: Sussex Ambulance Service NHS Trust, 2006
There has been a shift in health policy over recent years. The white paper on community health and care services signalled a change of direction – to move care from hospitals back into the community. The ambulance service has a key role to play in this period of NHS reform. It has started to, and will continue to, broaden the scope of services that it can deliver to patients.

Maximising care in the community – particularly at home – is another area that the ambulance service is showing its increased strength and capabilities. More and more ambulance staff are now being trained and educated in how to carry out home assessments and perform basic procedures such as diagnostic tests.

The development of the ECP has been a huge stride forward in enabling the ambulance service to broaden out into home care. The aim of the role is to provide experienced pre-hospital care professionals with additional skills, knowledge and abilities required to treat patients more appropriately in the primary care setting. In particular:

- greater patient assessment and examination skills
- treatment of minor injuries and minor illnesses
- management of patients with long-term conditions

In addition to being able to treat and discharge patients at the scene, ECPs can also refer patients to specialist primary care units, including GPs, nursing teams and medical specialities in acute trusts such as surgical teams on call. They are also able to prescribe a wider range of prescription drugs than paramedics currently administer.

Through playing a larger role in treating patients in their own home or within the community setting, it is thought that the ambulance service can help to reduce A&E attendances by more than a million.

Developing a wider skill set and providing more care in the community may be seen as a waste of emergency resources by some people. However, official figures from the Department of Health show that only ten per cent of patients calling 999 have a life-threatening emergency. The majority of callers have an urgent primary or social care need. For example, a large number of calls are from elderly people who have fallen in their homes and need immediate assistance. Many callers don’t have any injury at all but in fact have social care needs or mental health problems.

It is clear that the needs of patients are changing and the ambulance service is simply adapting to meet those changing needs.

New ways of working improve patient care

Essex Ambulance Service NHS Trust was one of the first 12 national pilot sites to develop the ECP role. The trust currently has 70 trained and operational ECPs with 15 in training and funding for a further 15 paramedics to be trained.

ECPs across Essex have taken only 14 per cent of their patients to A&E, with 14 per cent being referred to another health or social care service, and 64 per cent treated at the scene.

Prior to the introduction of ECPs, Essex Ambulance Service on average conveyed 70 per cent of all patients to A&E. Patient satisfaction rates are high for the service provided by ECPs.

Source: Department of Health, 2005

1 Our health, our care, our say. Department of Health, 2006
2 Taking healthcare to the patient: transforming NHS ambulance services. Department of Health, 2005
Care at home – bringing services to the patient

North East Ambulance Service NHS Trust has developed its home care services in line with Peter Bradley’s report Taking healthcare to the patient and the white paper on community health and care services.

North East Ambulance Service NHS Trust has been trialling a number of services available to patients in their own homes – one of which is blood testing which is currently being trialled in the Gateshead area.

The trust has joined forces with Queen Elizabeth Hospital in Gateshead to develop a scheme that allows blood samples to be taken from patients in their own homes.

The scheme not only relieves pressure from hospital staff but also means that patients are not inconvenienced by having to go to hospital for such a simple procedure.

Another positive gained from this scheme is a reduction in the number of planned/special journeys made by the Patient Transport Service. Currently, patients, predominantly the elderly and those with poor or limited mobility, are transported to and from hospitals to have a blood sample taken.

The Director of the Patient Transport Service at North East Ambulance Service, Arthur Lemin, said:

‘This is just one of the great opportunities the North East Ambulance Service Patient Transport Service can develop for patients. We want the future of the patient transport service to develop from taking the patient to and from hospital, to a service which can provide care in the homes of the patients.’

Source: North East Ambulance Service NHS Trust
The white paper on community health and care services\footnote{Our health, our care, our say. Department of Health, 2006} outlines a clear strategy for improving the way the NHS supports the 17 million plus people living with a long-term condition in the UK. The Department of Health’s current Public Service Agreement includes a target of improving the care of people with long-term conditions and reducing emergency bed days by five per cent by 2008. The ambulance service has a key role to play in this process.

The ambulance service, in partnership with local GP and nursing teams, will undertake routine assessments of patients with long-term conditions in their own homes.

ECPs will be fundamental as they have greater patient examination and assessment skills than other paramedics or technicians. They specialise in the treatment of minor injuries and illnesses but are also trained in the management of long-term conditions.

The ambulance service’s responsibility in the management of long-term conditions shows that it is not just one of the three emergency services but an integral part of the NHS.

Tailored responses ensure patients receive the care that is right for them

\textbf{Essex Ambulance Service NHS Trust} has recognised that patients with long-term conditions often need a more tailored response than the average 999 caller.

The trust has developed a database of patients living in the Essex area with a long-term condition. This database then links up with the system in the trust’s control room. Therefore, if a patient with a long-term chronic condition calls 999, ambulance staff know that the patient may need a different type of response from the service.

Depending on the state of the caller it may be that an ECP is a more appropriate response than a paramedic in an ambulance. If an ECP is sent to assess the patient, they can then link the patient back into community care, whether this is a referral to their local GP or community matron or a more specialised service such as a diabetes or asthma clinic.

Through ECPs working within the community they have the ability to build strong relationships with local service providers. Therefore, they can ensure that the patient receives the most appropriate care in the right setting, and hopefully avoid an unnecessary trip to hospital.

Chief Executive, Anthony Marsh, said:

‘Through being more mindful about the way we respond to calls from patients with long-term conditions, we can ensure that they are given the right care by the right person in the right place – this often is not in hospital.’
The ambulance service has the skills and expertise to educate different groups of people within society about their health. This may be done solely by ambulance staff or in partnership with other local healthcare providers such as community nurses and family doctors.

As the ambulance service has become more integrated within the primary care setting, more work has been undertaken on training within the local health community.

Patient education in the community saves local lives

Westcountry Ambulance Services NHS Trust has developed a number of health education schemes in the local community:

A team of operational ambulance personnel from the trust have joined forces with Derriford Hospital in Plymouth, as well as various other local allied health professionals and voluntary organisations, to provide training in infant resuscitation to parents who care for children who are liable to suffer from a number of medical conditions and/or complications. Training is either delivered in parents’ home or on the paediatric ward of Derriford Hospital.

The scheme, which has now been running for a number of years, has saved many lives of young children across the region.

A mother from Plymouth who saved her young daughter’s life after attending the training said:

‘I definitely back the scheme 100 per cent. I think every mother should learn. If the paramedics had not come round when they did my daughter might not be here now. I could never thank them enough for teaching me how to save her life.’

Westcountry Ambulance Services NHS Trust provides free emergency life support skills training through the Heartstart scheme co-ordinated by the British Heart Foundation.

Since the introduction of the initiative in April 1998, 25,000 members of the public have been trained in the basic skills needed to save lives.

One trainee said:

‘I think the training is extremely worthwhile. I have been treated by paramedics on numerous occasions before for an on-going medical condition and their knowledge and help have always been wonderful. I wanted to give something back.’

Source: Westcountry Ambulance Services NHS Trust
The ambulance service in England employs about 27,000 staff. It is because of the hard work and dedication of these staff that the ambulance service has achieved extremely high patient satisfaction scores in recent years. The most recent patient survey conducted by the Healthcare Commission showed that 98 per cent of patients were overwhelmingly satisfied with the service they received from ambulance staff.¹

There has been a national drive from the Government to build on the existing skills of ambulance staff.

Through developing a wider mix of skills, more ambulance staff will be able to treat patients in their own homes, help in the management of long-term conditions, deliver more care at the scene of the incident and reduce hospital admissions.

At least a million of the people taken to A&E each year could be treated at the scene, in their own homes or in the community.

The review of ambulance services in England, published in 2005 by the Department of Health², focused heavily on the professional development of ambulance staff.

Peter Bradley, National Ambulance Advisor and Chief Executive of London Ambulance Service NHS Trust said in the report:

‘Education, learning and development for all staff must be a priority to ensure they have the appropriate skills, behaviours and knowledge to meet the professional standards expected of them.’

Through empowering ambulance staff to have more competence, qualifications and skills and supporting them in becoming more autonomous, the service can have a positive direct impact on patients’ lives.

Investing in staff development

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¹ Healthcare Commission NHS Patient Survey 2005
² Taking healthcare to the patient: transforming NHS ambulance services. Department of Health, 2005
Improving patient care through better use of staff expertise

East Anglian Ambulance Service NHS Trust first deployed community paramedics in 2000 as a cost-effective method of improving rural town response times, demonstrating a visible NHS ambulance presence to rural communities and bringing a link into primary care.

Over 40 community paramedics have been integrated into GP surgeries and community hospitals, together with 700 lay responders who cover these ‘patches’ providing defibrillator and basic life support care when the paramedic is absent. They also support GPs in undertaking home visits both in and out of hours and undertake diagnostic testing within the surgery. Many are involved with running clinics for conditions such as asthma or diabetes.

These community paramedic schemes have also been implemented in busy and deprived urban areas, still working out of local GP surgeries and linking with nursing, social and mental health teams to offer 999 callers alternative pathways of care.

Category A (presenting conditions which may be immediately life threatening) 999 response times in the rural towns have improved dramatically from baselines as low as 16 per cent within eight minutes to averages of around 80 per cent following community paramedic deployment.

One Norfolk-based scheme is seeing quite dramatic changes in the outcome of emergency activity. Audit of similar GP practice areas within North Norfolk PCT has shown that for the GP practice with community paramedics (compared with practices without paramedics):

- A&E attendances are 32 per cent lower
- There has been a 27 per cent reduction in emergency hospital admissions.

Source: Department of Health, 2005
On 1 July 2006, the number of ambulance trusts fell from 31 to 12. (See maps for details). This marked a new era for the ambulance service of professional and clinical development as it became more integrated in community healthcare and able to deliver a wider scope of services to patients beyond just patient transport and emergency care.

Where next for NHS ambulance services?
This report has dispelled the myth that the ambulance service solely provides patient transport. The case studies demonstrate that ambulance trusts not only provide more than patient transport but also offer patients much more than emergency care.

Looking further into the future, ambulance trusts will be working hard to achieve foundation trust status. The Government wants all acute and mental health trusts to be in a position to apply to be a foundation trust by the end of 2008. It has also signalled a willingness to explore foundation trust status for ambulance trusts.

There is a drive within the ambulance service to become more autonomous, independent, strategic and professional, with more financial freedom and the power to make important local decisions – all qualities of a foundation trust. Therefore, foundation trust status would seem like the next natural progression for the ambulance service following the latest reconfiguration.

Working with the Foundation Trust Network, the NHS Confederation will assist ambulance service members in their understanding of what it will mean to become foundation trusts in the future at both an organisational and governance level.
Acknowledgement
We would like to thank all the contributors for their involvement in the production of NHS ambulance services... more than just patient transport.

Further information
For more information on the issues raised in this report, please visit
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