

Fighting the fire: a response to fire chiefs' proposal to run England's ambulance service

The fire and rescue service in England has proposed taking over and running the ambulance service. This has obviously sparked a great debate among both the ambulance and fire service industry. According to the Chief Fire Officers Association (CFOA), the ambulance service is struggling to meet its response targets of dealing with 75% of life-threatening calls within eight minutes, and believes the fire service could respond to life-threatening calls within eight minutes 90% of the time. This proposal is detailed below, followed by a commentary by Professor Malcolm Woollard, Honorary Consultant Paramedic and Director of the Pre-hospital, Emergency and Cardiovascular Care Applied Research Group at Coventry University, who argues why this idea is not workable.

Chief Fire Officers Association—Position Statement: a reviewed approach to service delivery and patient care

The Chief Fire Officers Association proposes that a jointly agreed review is commissioned by Communities and Local Government and the Department of Health to fully explore whether some services could be better delivered with a different approach, similar to that already in existence in many parts of the world.

The Chief Fire Officers Association propose that some elements of the ambulance service and the fire and rescue service could work more closely together which could potentially lead to combination, in order to realize significant benefits. This is consistent with the government's concept of 'Big Society'.

Potential benefits are many—there is a real opportunity to realize financial savings, whilst at the same time creating a better performing, more efficient, locally based service that meets local community needs—'Big Society'.

Experience across North America and in much of mainland Europe has been considered where emergency medical response is provided by the fire and rescue service. Already, in many towns and cities across

England, fire stations are located next to, or in very close proximity to, ambulance stations.

Despite the obvious synergies, however, the two organizations remain distinctly separate other than in the case of a small number of co-location schemes.

The fire and rescue service currently achieves 90% response times in five minutes or less while the ambulance service achieves 75% to life threatening calls in eight minutes. The fire and rescue service call volume is 1/6th of that of the ambulance service.

Where there is local appetite and in areas where ambulance services are not meeting attendance times, fire and rescue services could potentially offer extended service.

The fire service can also bring their extensive experience of community fire safety activity that has seen deaths and injuries from fires fall so dramatically in recent years.

This experience may help reverse the rising demand on emergency medical services. The Chief Fire Officers Association believes that not only would both services benefit from a closer working relationship but



that service delivery and patient care and public safety could be greatly enhanced. Both services could also see a reduction in operating costs at a time of great financial challenge.

The Chief Fire Officers Association wishes to enter in to informed dialogue regarding how emergency services can deliver the best possible service to the public. In summary:

- The fire and rescue service achieves 90% response times in five minutes
- The ambulance service achieves 75% to life threatening calls in eight minutes
- The experience of ambulance services which have commissioned FRSs to co-respond has shown that lives have been saved and response times to life threatening calls have improved by 7%.

Commentary: highlighting the flaws in the proposal made by the Chief Fire Officers Association

I write in response to the proposal of the Chief Fire Officers Association to take over the running of the 'emergency' component of England's Ambulance Services. My aim is to highlight the many flaws in this proposition.

The Chief Fire Officers highlight their lack of an accurate understanding of the work of the UK's ambulance services in a number of areas of their document, not least in their definition of the 'emergency' component of the ambulance service. The document implies that only some of the 999 calls made to the ambulance service are emergencies and that it is this proportion of the workload that they wish to assume the responsibility for.

Two key flaws

There are two key errors in their statements around this issue. First, they seem to indicate that, by definition, a 'medical' case is not a time critical emergency. Clearly, this is inaccurate as it ignores problems such as cardiac arrest, myocardial infarction, stroke, and a plethora of other conditions without a traumatic aetiology.

Second, it is implicit in the Chief Fire Officers' proposals to split the responsibility for urgent and emergency ambulance calls that they believe time-critical emergencies can be reliably identified at the point of the 999 call. This is not the case: all 999 call triage systems tend to over-triage a high proportion of cases into the 'potentially life threatening' category which, following contact with a clinician, are determined to be less serious. This is due to the difficulty of safely categorising patients without a face-to-face assessment, but clearly is a fail-safe determination.

The result of this is that, should the fire service proposals be implemented, they would receive a high proportion of the 999 calls they suggest should stay within the NHS—those requiring what their report describes as 'nursing' care.

It is also of note, however, that 999

call processing systems under-triage a percentage of 999 calls, missing between 20 and 30% of cardiac arrest cases. If the fire officers proposals were to be implemented these calls would be tasked to the remaining stub of the NHS ambulance service which would, arguably, have lost the capability of managing them.

The key issue with respect to splitting the 999 case load of the existing ambulance service is, however, one of affordability. An understanding of simple logistic principles demonstrates that if a single system is capable of handling all types of calls effectively it requires less resources to do so than when this workload is split between two organizations. Indeed this is a fundamental principle of the 'high performance ambulance services' in the USA that the fire officers report references, but it also fails to mention that the majority of such organizations are independent 'third services' and that almost none are run by fire authorities.

Cost savings and improved response times?

Perhaps the most erroneous claim is that the proposed take-over initiative would result in cost savings. The UK's ambulance services are regionalized—there are only 11 in England compared to 45 fire services. Further, ambulance trust management structures have been modernized and are consequently very 'flat' compared to the traditional hierarchical and pyramidal model adopted by fire services.

Since the fire brigades have repeatedly resisted regionalization, it is inevitable that they would wish to run ambulance services within their existing organizational and management structures, resulting in an increase in costs.

The Chief Fire Officers Association also claims that an amalgamation with the ambulance service would result in better response times. It is difficult to understand why they feel their officers



have the experience and management expertise to run organizations which typically respond to five times the volume of 999 calls that fire services do. But perhaps more significantly fire services have, in the recent past, vociferously declined the opportunity to work with ambulance services to drive down response times to life threatening medical emergencies such as cardiac arrests.

Co-responder schemes

'Co-responder' schemes formed a key part of the proposals to modernize fire services after their last strike, and essentially involved training fire-fighters as advanced first-aiders and equipping fire engines with automated defibrillators. Ambulance services would subsequently be able to request the dispatch of a fire appliance if it was closer to a time critical patient than the nearest ambulance.

Fire-fighters would then provide simple but life-saving interventions until the arrival of ambulance paramedics capable of providing more complex care.

Unfortunately this common-sense partnership approach has largely been rejected by fire services. Despite their relatively low 999 call volume and their resultant availability to respond to support (but not replace) ambulance services which are working at capacity, the Fire Brigades Union has consistently refused to take on this role and have even been to court to ensure it could not be imposed on them.

While neither fire service managers nor government officials have pressed this issue, huge sums of public money

have been wasted on equipping fire appliances with defibrillators regardless of the fact that the current role of the fire service means that most will never be used to save a life. A small number of retained fire fighters do, to their credit, staff co-responder schemes in the face of opposition from the majority of their colleagues, but in many of these services response times remain too long to have a significant impact. This is due to the employing fire authorities imposing normal operating procedures which require staff to report to the fire station to respond rather than going directly to the patient.

It is noteworthy that the Chief Fire Officers' report includes arbitrary response time and cardiac arrest survival standards which they imply would arise from their proposals, but provide no evidence that these could or would be achieved. It is also of concern that simple response times are emphasized without any discussion of the importance of providing high quality clinical care across the patient spectrum.

Case mix of the ambulance service

As an NHS paramedic, I am unconvinced that the Chief Fire Officers have a sound understanding of the role of the ambulance service or indeed of the type of patients that it responds to. The only experience fire-fighters have of the ambulance service is when we work together at road accidents and fires. However, these types of incidents make up a tiny fraction of the 999 workload of ambulance trusts: the significant majority of calls for an ambulance through the 999 system are not for patients with time critical emergencies but are, despite this, for people in need of skilled medical care.

Consequently, although the ambulance service is undoubtedly an emergency service, its overall caseload is more closely aligned with that of a GP surgery or a hospital emergency department than with the work of fire services. The 'emergency

care' knowledge and skills required of our staff are of importance, but increasingly they are also educated in areas of clinical practice which in the past were the reserve of general practitioners and community nurses. Complex high-level reasoning is an essential component of the ability to make differential diagnoses to support the development of care strategies across the patient spectrum, and requires a broad experience of all types of case. This increase in the breadth and depth of the scope of paramedic practice is not due to a change in case mix, however, but is rather a result of the recognition that we were otherwise unable to meet the needs of a large proportion of the

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patients we had always been called to.

Despite this, the Chief Fire Officers' report naively and inaccurately suggests that the case mix of ambulance services has changed in the last fifteen years and that we formerly dealt with a higher proportion of victims of accidents and other forms of trauma. This is simply not true: in reality the main change in this time period is a massive and consistent increase in the volume of all types of 999 calls.

Similarly, it is inaccurate to suggest that paramedics were originally intended to be 'trauma medics'—both here and in the USA, the paramedic profession was developed specifically to reduce mortality from out-of-hospital cardiac arrests. If paramedics

were only dispatched to the victims of trauma, their utilization rate would be very low indeed (and therefore they would be very cost-inefficient) and research suggests that their impact on mortality would be minimal. It is in the management of medical emergencies that paramedics have the biggest impact on outcome.

Differences between the two professional groups

Culturally, fire-fighters and ambulance clinicians are very different: fire-fighters are trained and drilled to follow pre-set plans of action and expect to be instructed at any incident by an officer. Paramedics, however, are registered practitioners, often educated to degree level, and are expected to work autonomously without direction and to be independently accountable for their actions. A hierarchical, semi-militaristic approach to managing patients with complex conditions and presentations simply does not work.

As a former Deputy Chief Ambulance Officer, the fundamental difference in culture between the two professional groups was brought home to me when, after what seemed to be interminable negotiations, I obtained agreement from my local fire service to base one of my ambulances and its crew at a fire station to help us speed response times. This arrangement lasted only six weeks before the fire service kicked the ambulance crew out: the fire-fighters were complaining that they kept being woken up during their night shifts by the ambulance going out to respond to 999 calls.

Fire services running ambulance services in the USA

Inevitably, the UK Chief Fire Officers are indicating the USA as an example of fire services running ambulance services. The history of our two countries is very different, however. Until the early 1970's, the only ambulance services in the USA were small private organizations which users had to pay for. When

government legislation made it mandatory that local authorities provide a 'free' ambulance service many looked to the fire service as the only existing county-wide emergency services. But in the UK we already have well established ambulance services, and these have been an integrated part of the National Health Service (where it would seem that patients naturally belong) since 1974. I have been fortunate to work with ambulance services all over the world, including many run by large urban fire services in big cities in the USA.

In almost all the examples I saw, the fire service marginalized its own ambulance services, with funding intended for health care being diverted into the purchase and staffing of expensive fire appliances which, as in the UK, spent most of their time idle while the under-resourced ambulance division worked flat out. Paramedics were typically assigned a lower status than fire-fighters despite having a significantly greater education, and managers with responsibility for ambulance work were assigned lower grades than those responsible for fire and rescue services, even though the former were managing five times the workload.

In almost all of these combined organizations, fire-fighters were required to undertake 'co-responding' duties but most did not welcome this role, stating that they 'joined the fire service to fight fires, not to look after old ladies and deliver babies...'

Whilst working as a consultant, I remember being asked to review the tape of a 911 call in which a dispatcher used MPDS pre-arrival instructions to direct the delivery of a baby before the paramedics arrived on scene.

My feedback was that she had done a superb job under very challenging circumstances and should be given a commendation. I was told I was missing something but had to listen to the tape twice more until I realised that whilst the dispatcher was explaining to the husband how to deliver the baby, the room where this was taking place was full of fire-fighter EMTs who were just standing back and watching the whole event.

There were one or two exceptions to this dismal picture but they were in the very significant minority, and not surprisingly the most cost effective (that is, 'high performing') ambulance services with the shortest response times in the USA do not form part of a fire-service but are run as independent organizations.

Sharing resources

The fire report suggests that an amalgamation would save costs by sharing resources such as station buildings, 'back office' services such as finance and HR, and infrastructure such as radios. This is at best obfuscation: since the preferred proposal is that the fire service takes over only a small proportion of ambulance work the remaining stub of the NHS ambulance service would still need to provide all of these facilities independent

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of the fire authorities. Additionally, the suggestion that the Ambulance Radio Replacement Project (ARRP) is an 'expensive legacy system' is disingenuous—all three emergency services upgraded to the same digital radio system to allow interoperability and already share the costs of the infrastructure.

The report's statement that 'box ambulances' are old-fashioned is simply astonishing: for most of the 25 years of my paramedic career, I had to staff cramped unmodified bread vans painted to look like an ambulance, and like most of my clinical colleagues (and

patients) I welcomed the improvements in working space and patient comfort arising from the relatively recent introduction of purpose-designed 'box' ambulances.

The proposal that paramedics would never again be standing by idle at the side of the road and would instead be tasked on health promotion activities is another example of fire officer naivety—standby locations are predicated by 999 call patterns, and centralising ambulance vehicles in 'community hubs' rather than dispersing them in accordance with demand would lengthen response times significantly. This proposal is also a clear indication that fire officers have no conception about how high the workload of ambulance services is, or indeed how best to manage it. But they can be assured that off-duty paramedics do indeed get involved in public health work—for example, our input into the Stroke Associations' 'Know your own blood pressure campaign' has been significant and highly commended.

Other proposals

The report makes a number of other proposals such as closer working with voluntary aid societies such as St John Ambulance and the use of private ambulance companies to supplement staff absences. Neither are new ideas and both have already been implemented by NHS ambulance services for some time. Similarly, the suggestion of a national clinical ambulance committee is not novel—the Joint Royal Colleges Ambulance Liaison Committee has undertaken this role for many years and its guidelines group has a world-wide reputation for excellence in the development of national evidence-based clinical guidelines for ambulance professionals.

The suggestion that ambulance service Hazardous Area Rescue Teams (HART) should be transferred to the fire service makes little sense, as their role is predominantly a clinical one. Although HART operatives undergo a number of weeks of technical training to support their role, this represents a tiny fraction of the time spent on their clinical education. This is why the

decision was taken to train paramedics in technical access skills formerly only existing within the fire service, as opposed to training fire-fighters in the clinical skills of paramedics.

Conclusion

As discussed previously, the suggestion that a fire service take-over of emergency ambulance work would result in a 'high performance ambulance service' is not borne out by experience in the USA. More significantly, UK fire services have not themselves adopted the logistical principles which form the core of this organisational strategy, and it therefore seems bizarre that their chief officers suggest that despite this they are best placed to implement it in English ambulance services.

It is also surprising that the experience of Staffordshire Ambulance Service is quoted as a basis for these proposals, given the concerns raised about some of this organization's management and reporting practices in a number of enquiries.

The current UK ambulance services have, however, already implemented high performance management strategies—the

reason that some paramedic vehicles are on standby at the side of the road is because historical logistical data have indicated that these are the best locations from which to respond to 999 calls in the shortest possible time.

As a clinician, I am particularly disturbed that the Chief Fire Officers make it clear in their report that their main motivation for making their proposals is to protect their own organizations, with the suggestion that patient care could be improved being proffered only as a means of preventing budget cuts being applied to fire services rather than for its own sake. I would suggest that this is a disconcerting echo of my experience of how USA fire departments view the ambulance services which they run.

As stated by the Chief Fire Officers in *EMS - a discussion paper (executive summary)* (2010):

'While Government has announced that spending in the Department of Health (DH) has been ring-fenced from Treasury spending cuts, the Department of Communities and

Local Government (CLG) is facing spending cuts of between 25 and 40%. This is likely to result in real pressure on front-line local authority-based services, such as the fire and rescue Service. If this is not to be translated into front-line cuts, fire and rescue services must be innovative and creative in meeting the financial realities.'

This is not the first time that elements within the UK fire services have made similar proposals. In the past, common-sense has prevailed and the complimentary but very different roles of the fire and ambulance services have been provided by discreet specialist organizations.

But if the chief fire officers persist in insulting the management and clinical skills of ambulance professionals by suggesting they can do a better job, perhaps ambulance service managers should consider applying their proven ability to control costs by streamlining and regionalizing management structures to the UK's expensive and under-worked fire services.

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