Implications of the changing role of the Ambulance Paramedic for the interpretation of inappropriate calls: a review of the literature

James Radcliffe
Staffordshire University, UK

Geoffrey Heath
Keele University, UK

Correspondence address

James Radcliffe PhD,
Principal Lecturer in Health Policy,
Faculty of Health,
Staffordshire University,
Blackheath Lane,
Stafford,
ST18 0AD,
UK.
Phone 01785 353766
Fax 01785 353673
Implications of the changing role of the Ambulance Paramedic for the interpretation of inappropriate calls: a review of the literature

Abstract

Objectives: This article is a review of the literature on the changing role of the ambulance paramedic in the light of recent changes in UK Government policy towards the ambulance service.

Methods: A systematic review of the literature on the Ambulance Service in the UK was carried out with regard to the expanding role and skills of ambulance paramedics in assessing, treating and advising patients at the scene of an emergency call-out. This involved accessing papers on the impact of increasing call outs, debates about the appropriateness of emergency calls, the outcomes of changing patterns of ambulance service practices and the effects of the performance indicators appertaining.

Results: The review identifies the differences in the interpretation of the appropriateness of call-outs between ambulance callers and professionals. It also establishes that the contrast in perspectives has increased in importance as the number of call-outs has risen and the role of the paramedic has been developed. The narrow performance measurement regime in place intensifies this dilemma. These developments have implications for assessing the impact of improved ambulance services in terms of efficiency and effectiveness.

Conclusions: A more balanced set of performance indicators is required, which would clearly recognise the work done by ambulance paramedics on the ground. This should reflect the perceptions of professionals and users concerning appropriateness. In addition there were gaps identified in the literature, especially with regard to the managerial and policy implications of changes in the service.

Introduction

Formerly, the role of emergency ambulance staff was seen as concentrating on transporting patients speedily to Hospital Accident and Emergency (A&E) units. It is now accepted, however, that the role of the ambulance paramedic has evolved to encompass a greater range of skills to be applied in a wider variety of situations. Indeed this is part of a pattern of extending the practice roles of allied health professionals (such as paramedics, physiotherapists and radiographers) which has been undertaken more generally (McPherson et al., 2006). The Department of Health has acknowledged that

‘Traditionally ambulance services have been perceived as an emergency service... stabilising the patient’s condition sufficiently for rapid transport to hospital for definitive care...Ambulance services have changed their
traditional approach and are now embedded in urgent care as a whole.’ (Department of Health, 2005)

Similarly, the Commission for Health Improvement stated

‘Whereas ambulance staff might have been seen in the past as transportation services, they now play a more significant role in emergency care. Paramedics take responsibility for greater clinical decision making and they provide an increasing range of interventions.’ (Commission for Health Improvement, 2003)

This is sometimes characterised (or caricatured) as ‘stay and play’ versus ‘scoop and run’; although this is a simplistic distinction (Cooke, 1999; Roberts and Bleetman, 2002).

The publication of the Government’s policy statement on the Ambulance Service in 2005 was, however, a rather belated recognition of the changing role of emergency services. The increasing demand for ambulance services and the changing role of emergency care practitioners and community paramedics has been evident for at least the last decade both in the UK and in other similar systems, such as Australia (Clark et al., 1999). Furthermore, the existing performance measurement regime did not reflect the change (Heath and Radcliffe, 2007; Heath and Radcliffe, 2010).

These developments are not only interesting in themselves but also as part of a wider range of issues associated with changes in the role and purpose of the ambulance service. There is a considerable literature associated with individual issues centred on changing practices, which is useful to draw upon but, for the most part, does not link into the wider policy context. In this paper we aim to bring together some of the key literature to clarify the potential links and to encourage future research.

The literature on the emergency services can be grouped into a number of significant themes. Firstly, explorations into the causes of the increased number of emergency call-outs; secondly, studies into the identification of appropriate and inappropriate call-outs and the related issue of calls that do not result in transportations to hospital; thirdly, discussions of the impact of efficient emergency services on treatment and survival rates amongst patients; and fourthly, a critique of the narrow range of performance indicators. In particular, the contrast between the views of callers and emergency care professionals as to the appropriateness or otherwise of call outs is salient as it links the other issues.

**Carrying out the Review**

The review originated as part of a project examining increased call outs at a county ambulance service. (For more detail, see Heath and Radcliffe, 2006; Radcliffe and Heath, 2009). Consequently, the key literature around the changes identified in the research into emergency services was accessed. The process of commencing the literature search involved the use of a number of key words. These included ‘ambulance response
times’, ‘emergency call-outs’ and ‘appropriateness of emergency calls’. This search involved the use of CINAHL, Medline and Google Scholar. The themes that emerged were pursued further by following citations and references, and excluding articles where these were deemed to be peripheral to the main aims of our study. Relevant reports by governmental bodies were also accessed, which were not only valuable in themselves, but also revealed more references to pursue. Further sweeps of the literature ensued around the themes of the changing role of the ambulance paramedic and performance measurement. The literature search provided a rich source of papers, although it was more limited when reviewed for the policy implications of the key themes.

**Increasing Callouts**

In the first category, that of increasing call-outs, the NHS Confederation noted that the rise in ambulance call outs has been over 115% per cent in the last 10 years (NHS Confederation, 2005). Our own research (Heath and Radcliffe, 2006; Radcliffe and Heath, 2009) reveals a more detailed picture of these developments and we would argue that, if anything, the figures quoted in their document underestimate the problem that has confronted emergency services because of the way in which many calls are designated. However, there is a potential need for further detailed work as our study was of only one large county ambulance service and its call out records. It is unclear from the NHS Confederation report whether their figures included those calls which are designated as cancellations or solely those counted as completions. Furthermore, it appears from the evidence that there is some variation in the way in which Ambulance Services record their data and how the performance indicators are applied (see Heath and Radcliffe, 2007; Heath and Radcliffe, 2010).

One of the most significant studies is that of Wrigley et al. (2002) who examined trends in ambulance service usage in Wiltshire. This study covered the period 1988 to 1996 and saw a crude increase in use of 49% with the number of vehicles despatched increasing from 490 to 856. Urgent transports booked by GPs rather than in response to 999 calls rose over the same period, but from 44 to 60. Consequently, they concluded that the presumption that changing GP referral practices are causing the upsurge in demand is unfounded. Instead, they contended that it is mainly the result of demographic change in which ‘the fall in mortality across all age groups ….. lead us to conclude that the demand threshold is rising’. (p. 647) Other studies also noted that age was the key factor in determining ambulance usage in Australia, lending credence to Wrigley et al.’s view (Clark et al., 1999; Clark and Fitzgerald, 1999).

However, these findings were not supported by a study of changes in the workload of the London Ambulance Service between 1989 and 1999 (Peacock et al., 2005). Here no statistically significant increase in usage associated with age was found; rather gender was the most important variable, with the rate of increase in usage by men being significant. It was suggested that issues around male identity and risk taking, as well as the growth of street crime, may have been factors in this increase.
Wrigley et al. (2002) also argued that the response to this situation of rising demand should address caller perceptions of urgency since they state that ‘callers’ perceptions of urgency are known to be unreliable’ (p. 647). Consequently, they recommended that a wider range of responses to emergency calls should be provided to reduce the impact on Ambulance services.

**Appropriateness of Calls**

The issue of callers’ perceptions presents a further area of study and one which is potentially most contentious (Snooks et al., 1998). This is closely linked to research into A & E as well as the ambulance service. For example, Sanders (2000) has noted that the issue of what constitutes ‘inappropriate’ attendance at A & E is subject to dispute between patients and health professionals. Such differences can cause problems in attitudes held by health professionals towards patients who present themselves for treatment at A & E. The issue of differences in views between patients and health care professions was also explored in an American study which considered elderly patients’ perceptions and satisfaction with treatment in A & E, through the use of qualitative methods involving interviews and content analysis (Watson et al. 1999). The themes that emerged from this study included issues of information needs, waiting times and perceptions of professional competency.

However, research also explores these issues from the perspective of health care professional and Barratt’s (1994) review of the use of London’s Ambulance service found that over a third of users did not need an ambulance and linked this to a failure by callers to identify clearly what is an emergency. Similarly, Victor et al. (1999) found that while the majority of calls to the London Ambulance service required an emergency response, 40% could have been dealt with by other agencies. Pallazzo et al. (1998) were more positive in that only approximately 16% were considered inappropriate users of the London service. However, in a further 19% of cases they were split in their assessment of the appropriateness of use by these patients. It may be argued that if professionals and health researchers have difficulties in deciding on appropriateness, then it is not surprising that many lay-members of the public have difficulties.

A more recent study of night time attendances at Glasgow Royal Infirmary in February, 2007, by Vardy et al. (2009) found that in the large majority of cases (around 80%) the use of the ambulance service was appropriate. In 60% of the other cases (i.e. 12% of the total), whilst it was appropriate to seek A&E treatment, the patient could have arrived by other means. Furthermore, as the study concerned night time users of the service, it may be skewed towards inappropriate calls. However, over half of the patients transported by ambulance were intoxicated on arrival and two out of seven were harmed by themselves or others. Whilst these transportations were, no doubt, appropriate under the circumstances, there is a sense in which they might well be regarded as avoidable.

This point may be linked to a further problem, that of repeat use by specific groups of patients and how the service views this use. An
American study identified alcohol use, seizure and respiratory problems as being the main groups of repeat users (Brokow et al. 1998) with acute alcohol intoxication the most important of these. The concern is that a small group of patients can be the cause of significant usage of the service. These are sometimes identified as ‘frequent flyers’. Dr Foster Intelligence (2006) estimated that over a million emergency admissions a year result from people being admitted repeatedly through A & E. Whether these are or are not inappropriate calls may not be the core issue here, but it is argued that with better primary care these patients could be managed more effectively outside hospital.

The Issue of Non-Transportations

A related issue is that of ambulance calls where some advice or treatment is given, but there is not a transportation to A & E. Originally, such transportations were seen as the sole purpose of the emergency ambulance service and, therefore, all calls not resulting in transportation might be argued to be inappropriate; but that is no longer the case.

Marks et al. (2002) pointed to the large number of calls not resulting in transportations to A & E, which impacts on responsiveness and efficiency measures. Their study in Nottinghamshire was the first to examine the epidemiology of patients not transported and the reasons for non-transportation. A bi-modal distribution of non-transported patients was found, with concentrations in early adulthood and the 65-90 age groups. Gender did not seem significant. Falls accounted for over a third of cases and were most likely to result in non-transportation; in contrast to all 999 calls, where ‘accident and other trauma’ was the most significant category. They held, with some caution, that if the large number of falls which were assigned low priority could be triaged to an alternative response, there would be an increase in the cost-effectiveness of the service. Indeed, the changing role and skills mix associated with ambulance crews and community paramedics has led to some research into how calls to the emergency services can be more appropriately assessed, at the point when the call is made as well as at the scene.

Marks et al. (2002), therefore, also noted the widespread introduction of priority based dispatch systems. These form a kind of ‘triage’ system designed to match urgency of response to the clinical needs of patients, using structured protocols and systematic questioning of callers (Nicholl et al., 1999). However, we would contend that the basis of Marks et al.’s argument is still the acceptance that the main purpose of the ambulance service is transportation to hospital/A & E. In contrast, O’Cathain et al. (2002) found that emergency medicine dispatch systems fulfilled a previously unmet need for general advice and resulted in higher caller satisfaction than before; although a minority of callers were unhappy that they were not treated as a high level emergency (which raises again the issue of varying perceptions of need). However, Gray and Walker (2008a) argued that computer aided dispatch systems, despite their usefulness, should be augmented by a system which used extended skills paramedics to triage to alternative pathways.
Research has also been carried out into such alternative schemes to a full ambulance response, such as Squires and Mason’s (2004) review of a paramedic practitioner (PP) scheme in Yorkshire and Thakore et al.’s (2002) exploration of a priority based dispatch system, based on the patient history provided by the caller. In the latter study a lesser designation of urgent call could be made, as opposed to a life-threatening case requiring immediate response. They argued that this would ensure that responses to a ‘true’ emergency would not be delayed by less urgent cases, and reduce the risks involved in emergency runs to crews and other road users. However, there were significant qualifications to the implementation of such approaches. Squires and Mason (2004) noted that perceptions of the PP scheme were almost evenly divided between those who thought it improved the service; those who felt it had no effect; and those who felt there was some deterioration.

Thakore et al. (2002) argued that the triage system would depend on educating the public more clearly about the role of the ambulance service. Moreover, it requires callers, often in distressing circumstances, to be able to reliably relay information on the patient’s history for an accurate assessment. In our own research, initial classification by the dispatcher was frequently revised by the paramedics at the scene. As Thakore et al. state

“It is unreasonable to expect a layperson caller to make an informed judgment on level of response required. Many ‘inappropriate’ 999 calls are perceived as justified by the caller.” (2002 p. 128)

Furthermore, there is understandable sensitivity in the way such systems are operated. Thus Nicholl et al. (1999) found little evidence of under-prioritisation, but Marks et al. (2002) reported some apparent over-prioritisation.

A study of ambulance services in London and the West Midlands (Dale et al., 2003; Dale et al., 2004) examined the feasibility of using telephone assessments for low priority (category C) calls to identify the patients less likely to require A&E care or hospital admission, as a response to the persistent growth in demand for emergency ambulance care. The findings of the study supported the view that telephone assessment, triage and advice to non-urgent callers offered a safe alternative to the dispatch of an emergency ambulance. However, the authors expressed some caution regarding the safety of the intervention in a small minority of cases and advocated further research before the initiative was replicated in order to define more clearly which callers can best benefit from telephone advice.

Snooks et al. (2004a), in reviewing the literature concerning ‘on-scene alternatives’ to transportation to emergency departments, focused on the characteristics of patients not conveyed, the skills of crews to triage such patients and the need for secure and reliable protocols to enhance this role. They argue that, although rising demand and increased recognition of the variety of cases attended by emergency ambulance crews have led services to explore options, such as on-scene assessment and referral or advice, rather than conveyance to A & E, there was a reluctance to make
changes without supporting evidence. This applies particularly to the triage skills of staff to decide upon appropriate care pathways. In evaluating a system of 'Treat and Refer', which relied on the development of referral protocols, Snooks et al. (2004b) reported that ambulance crews and patients found such an approach acceptable, but also encountered continuing concerns with safety and security.

**Impact of Efficient Ambulance Services**

Whist these developments have been taking place, much effort has also been devoted to reducing the time taken by ambulances to arrive at the scene of emergencies (Ball, 2005); in part, at least, because this is promoted by the performance management regime (Heath and Radcliffe, 2007). Research into the impact of improved response times has been conducted in Scotland, covering a period from 1991-1998 (Pell et al., 2001). A significant improvement in the survival rate of victims of heart attack was identified, which ranged from 6% to 8% when response time improved from 15 minutes to 8 minutes and a further reduction of 10-11% when reached in 5 minutes. It was argued, therefore, that improving response times to 5 minutes from an average of 15 minutes could more than double survival rates. However, this has been countered in another paper where it was contended that the input required to achieve such response rates was neither feasible, nor, more particularly, could be cost effective (Dewar, 2001).

Whilst response times are clearly important, efficiency also concerns what happens at the scene. Patients of the London Air Ambulance service were found to arrive at hospital later than a comparable land ambulance case as crews were spending longer at the scene, conducting more intensive management of the patient. In addition, patients were triaged to hospitals with appropriate skills etc. (Nicholl et al., 1995). Similarly, a study of cases of cardiac arrest, found that paramedics tended to spend longer at the scene than ambulance technicians using basic techniques and semi-automatic defibrillators (Guly et al., 1995). This implies that paramedics were making use of their skills and thus delaying the ambulance from starting its journey to the hospital. Such delay might be at the expense of the patient, as Guly et al. (1995) appear to suggest, or alternatively it may enhance the patient experience as a result of the improvement in skill mix amongst emergency clinicians. This is a crucial issue as it is part of evolving government policy to promote an enhanced role for paramedical activities at the scene, both in terms of providing care and giving advice.

‘Ambulance clinicians should be equipped with a greater range of competencies that enable them to assess, treat, refer or discharge patients.’ (Department of Health, 2005)

Our own research would support the proposition that much ambulance activity at the scene may be both worthwhile and undervalued (Heath and Radcliffe, 2006; Heath and Radcliffe, 2007).
Extending roles and skills

Consequently, it is necessary to continue to develop the skills of ambulance crews and paramedics through increasingly high level education and training, which will enable them to engage in safe and reliable triage activity on the scene, as well as provide a wider range of treatment (Ball, 2005).

This argument may be linked to the development of Emergency Care Practitioners (ECPs), dating from 2000, which entailed a major redesign of the paramedic’s role (Ball, 2005). Cooper et al. (2004) noted that the emerging role of the ECP, whilst somewhat unclear at that time, focused on advanced assessment and patient management skills. They explored the ways in which the role of the ECP varied from that of the ambulance paramedic. Significantly, ECPs were significantly more likely to treat the patient at the scene and less likely to have the patient conveyed on to an A & E department. ECPs and stakeholders agreed that the additional training received by the ECP had improved their clinical practice.

The Treat and Refer approach likewise entails staff with enhanced skills being trained to use new protocols regarding non-transportation of patients. Compared to routine practice, there were similar conveyance rates to A & E, but a longer time was spent at the scene with more in depth assessment. Patient satisfaction ratings were similar or greater (Snooks et al., 2005). However, there were some safety concerns and issues around managing change in introducing complex clinical and service developments. Interestingly, again there were difficulties in persuading some patients that they did not need to go to A & E.

Mason et al. (2007a) report on a project to evaluate appropriateness, satisfaction and costs in respect of ECPs, compared to more traditional approaches to emergency care. They concluded that the availability of ECPs was affecting positively ways of working locally and the reconfiguration of service delivery. The use of ECPs led to reduced attendances at A & E and reduced admissions, shorter episode times and higher levels of satisfaction. Furthermore, they suggest, although cautiously, that the ECP model of service delivery may give cost savings; particularly with regard to reducing operational costs, although a significant investment in training expenditure was also required. (In general the literature reports a paucity of studies evaluating cost-effectiveness in this context. See, for example, McPherson et al., 2006).

In reviewing patients’ experiences of care provided by ECPs compared to traditional ambulance practitioners, Halter et al. (2006) found that the care provided by ECPs was considered equal or considerably better; especially with regard to ‘thoroughness of assessment’. Fewer patients dealt with by ECPs were being conveyed to A & E, suggesting that utilising ECPs to explore alternative treatments improves patient satisfaction. Similarly, Mason et al. (2007b) examined the benefits of a scheme by the South Yorkshire ambulance service, utilizing extended skills practitioners to assess and, if necessary, treat older people with minor injury or illness in the community. They concluded that the initiative provided a clinically
effective alternative to standard ambulance transfer in such cases; although they had some concerns regarding the level of inter-agency cooperation required and the amount of training and operational costs.

For Gray and Walker (2008b), advanced practitioners who can assess and treat at the point of access are increasingly important and can provide potentially significant cost savings to the NHS. Bevington et al. (2004) even argued that the development of new roles at Essex Ambulance Service, including ECPs, contributed to the rapid improvement in performance there from zero to two stars.

Performance Indicators and the Ambulance Service

Thus there have been significant developments in the reconfiguration of ambulance service activity which may well be seen as adding value to the patient. However, these developments have been constrained by the contradictory influence of the performance indicators applied to the ambulance service. This point is referred to briefly in a number of papers in the literature (e.g. Gray and Walker, 2008a; Gray and Walker, 2008b) and we have tried to explore it in more depth elsewhere (Heath and Radcliffe, 2007; Radcliffe and Heath, 2009; Heath and Radcliffe, 2010). We rehearse the relevant points below.

The four key performance indicators for the service all relate to response times, as shown in the table below (Department of Health, 2005; Healthcare Commission, 2008).

<table>
<thead>
<tr>
<th>STATUS</th>
<th>PERFORMANCE INDICATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately life threatening</td>
<td>Response within 8 minutes irrespective of location in 75% of cases. Full equipped ambulance in attendance within 14/19 minutes of initial call in 95% of cases (unless control room decides an ambulance is not required)</td>
</tr>
<tr>
<td>(Category A)</td>
<td></td>
</tr>
<tr>
<td>Urgent need for hospital care</td>
<td>Patient should arrive at hospital within 15 minutes of arrival time specified by the doctor in 95% of cases</td>
</tr>
<tr>
<td>defined by doctor</td>
<td></td>
</tr>
<tr>
<td>All other patients</td>
<td>Response within 14 minutes (urban) or 19 minutes (rural)</td>
</tr>
<tr>
<td>(Category B/C)</td>
<td></td>
</tr>
</tbody>
</table>

National Performance Requirements for Ambulance Services

Rapid response times are clearly important (although they can be achieved in ways which create unnecessary risk and stress: see Sanders and Gough, 2003). However, concentrating on the time taken for vehicles to arrive at the scene of an incident meant that ambulance services were not being judged on the total package of care they provided.
Thus, as we have seen, the Department of Health seeks to promote an enhanced role for paramedical activities at the scene (Department of Health, 2005), but this wider role is not reflected in the performance measures. Moreover, as the Healthcare Commission states, most services perform well against national standards; but, not surprisingly, performance is more variable in those aspects which receive less national attention (Healthcare Commission, 2008). Significantly, The Commission for Health Improvement (2003) held that ambulance trusts must make a priority of the development of credible outcome measures to be included in their key targets.

There is a vast literature concerning the uses and abuses of performance indicators in the public sector (Johnsen, 2005). In Heath and Radcliffe (2007), we referred to a number of earlier papers which pointed out the perverse incentives and unintended consequences often associated with performance measurement and reporting regimes. Research into performance measurement in public management suggests that dangers arise from using single dimension measures, league tables, etc. (see, for example, Heath and Radcliffe, 2007, and Heath and Radcliffe, 2010) and there is evidence that this applies in the case of the ambulance service, especially with regard to motivating dysfunctional behavior. Interestingly, some recent papers (Hood, 2006; Radnor, 2008; Bevan and Hamblin, 2009) use ambulance service examples specifically to substantiate their cases concerning ‘gaming’ in public services.

Discussion

The ambulance trust concerned in our study (see Radcliffe and Heath, 2009; Heath and Radcliffe, 2010) had seen a large increase in calls, and especially in cancellations. However, it would be misguided to assume these were inappropriate calls. In fact the term ‘cancellation’ is potentially misleading and subsumes a range of varied activities. Because of the emphasis on response times and transportations to an end destination, there may be a major underestimation of the value and cost-effectiveness of activities at the scene. This emphasis was reinforced by the performance measurement regime being concentrated on response times.

Furthermore, the narrow set of indicators has become less relevant in the light of evolving government policy which promotes a wider role for ambulance crews and ‘ambulance clinicians’. However, the indicators inevitably remain an important driver of behavior. The need for a balanced set of indicators is well established, therefore, and the government’s proposed development of a broader range of measures (Commission for Health Improvement, 2003; Department of Health, 2005; NHS Confederation 2005) was thus to be welcomed; although it may not go far enough (Heath and Radcliffe, 2007). Moreover, we would argue that the process of developing new indicators should be deliberative and involve as wide a range of stakeholders as possible.

However, there is the danger that, embarked upon simplistically, such a move would raise difficulties and may actually reinforce the more traditional concept of the ambulance services solely as a means for the
transport of patients to A&E. Health economists have argued in the past that the nature of health services is such that the introduction of markets into healthcare is problematic because of information asymmetry. (See, for example, Blaug, 1998.) The key issue here is the knowledge gap between healthcare professionals and their ‘customers’ which means that the concept of the perfectly informed customer central to classical economics is absent. It may well be that the problem of information identified by Thakore et al. (2002) is the key obstacle to the closer involvement of the public in this process.

The consequent need for a process of ‘educating’ the public about the nature of the service and the nature of emergencies becomes a significant issue. The ‘public’ served by the emergency services is varied as is the range of activities; the public’s perceptions of the role of the service may be inherently simple and conservative; and the culture of the service itself may also be conservative and at times defensive in its approach to the users and conflictual in its relationship with other healthcare professionals with their own aims, objectives and performance measures to fulfil.

This presents an interesting case study of the problems arising from changes in perceptions about the nature of a modern health service, which involves users as well as health care professionals. For political scientists and policy analysts these changes are of particular interest in that they reveal the way in which the promise made by Government of a modernised health service has then resulted in changing expectations from users. This has led to increased demands being placed on the NHS, resulting in potential areas of tension between users and service providers. This is due to health care professionals often seeing the modernisation agenda as a threat, while the changing expectations of the public are sometimes characterised as unrealistic. (See, for example, Newman and Kuhlmann, 2007, who explore these tensions, whilst emphasising the complexities of the issues, in a most enlightening way.)

**Conclusion**

The role of the ambulance paramedic and ambulance crews has changed and continues to change. Both the NHS Confederation (2005) and the Department of Health (2005) acknowledge that there has been a ‘key turning point’ with the development of the emergency care practitioner with ‘additional skills beyond paramedics’ (NHS Confederation, 2005). The literature, therefore, points to the development of extended skills paramedics (such as ECPs) in line with government policies and supported by formal protocols and computerized dispatch systems. The research is broadly supportive of this development, but with some caveats. The use of ECPs has the potential to reduce the running costs of the service considerably, whilst improving quality and focus, although significant ‘one off’ costs associated with training are also necessary. Associated with this development has been increased recognition of the value of giving advice and of treatment at the scene where transportation to A & E does not occur.
However, this is not reflected well in the current emphasis on calls, transportations and response times. As we have seen, the narrowness of the performance indicators applied to the ambulance service has been problematic. Consequently a wider range of performance indicators should be developed, which recognise the changing role of health care professionals associated with the Ambulance Service, the significant increase in the number of call outs which result in activity at the scene and the priorities of users.

Moreover, these recent developments make defining appropriate and inappropriate calls even more difficult and this constitutes a potential barrier between professionals and their ‘clients’. A more balanced set of targets may reduce the conflicting perceptions of callers and professionals concerning what are appropriate call outs. This should also result in a full recognition of all the work performed by the ambulance service.

There is a need, therefore, for further research from policy and political science perspectives into the way in which government has dealt with the changing role of the service. This would examine how it has made use of New Public Management concepts to initiate changes in the organisation and performance management of ambulance services as part of the overall modernisation of the NHS. As Newman (2001) noted, the ‘emphasis on national standards plus local flexibility appeared to reflect supposed shifts in the role of state’ but more particularly presented a range of models which resulted in ‘confusing messages about the relationship between government, the professions and the public’. We would argue that the ambulance service presents an opportune case to investigate this relationship. Most notably the relationship between the professionals in the ambulance service and the public as users needs to be explored in future research.
References


Dr. Foster Intelligence (2006) *Keeping People Out of Hospital: The Challenge of Reducing Emergency Admissions*, [www.drfoster.co.uk](http://www.drfoster.co.uk)

Gray, J. and Walker, A. (2008a) *AMPDS categories: are they an appropriate method to select cases for extended role ambulance practitioners?* Emergency Medicine Journal, 25, pp.601-603


NHS Confederation (2005) NHS ambulance services...more than just patient transport


