

Book Chapter

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Introduction

Management control can be seen as encompassing management attempts to direct and coordinate the activities of organisations towards the achievement of common goals (Coates, Rickwood and Stacey, 1983) whilst adapting to changes in their environments (Berry, Broadbent and Otley, 1995). R.N. Anthony, in his pioneering work, located management control at the tactical level in organisations between strategic planning and operational control. The purpose of management control is to implement strategies formulated at the strategic level (Anthony 1965; Anthony and Govindarajan, 1998). Monitoring success through performance evaluation, therefore, inevitably plays an important role in management control.

This chapter contributes to the themes of the volume concerning the use of performance management to support management control in organisations, by exploring the issues with regard to the public sector. It does this by examining in particular the recent, rather controversial, experience in the English ambulance service (a relatively under-researched area) where concerns over perverse incentives and unintended consequences loom large.

New Public Management

Attempts to measure and manage performance are a long standing feature of the public services, despite the inherent difficulties. De Bruijn (2002) gives an excellent account of the potential advantages, disadvantages and risks of performance evaluation systems, together with principles for their successful design. Since the 1980s, a number of common aspects and trends in performance measurement, review and verification have been identified in the public sector. For example, Robert Picciotto of the World Bank claimed that

“performance management is a visible component of the public sector reform movement which is spreading throughout the world in response to a wave of democratization, decentralisation and devolution of government services. It is a major tool of the new public management movement.” (Picciotto, 1999)

In particular, an enhanced role for performance management is a key feature of the 'New Public Management' (NPM). (See, for example, the celebrated accounts of Pollitt, 1986; Hood, 1991; Hood, 1995). Hood (1991) provided seven 'doctrinal components' of the NPM:

1. 'Hand on professional management' with an accountable management process which ensured freedom to manage.
2. 'Explicit standards and management of performance' through the setting of goals and performance measures which should preferably be quantitative.
3. More emphasis on output controls, with rewards linked to performance, as opposed to a more 'traditional' emphasis on input and process controls.
4. Clearer divisions of roles and units through purchaser/provider splits and the decentralisation of budgets.
5. An increased role for competition in the public sector.
6. A management style which involved greater 'flexibility' and the development of a more commercial orientation.
7. Greater control of resource use through rigorously applying downward pressure on costs.

Doctrinal components two and three, in particular, ensure that explicit standards, targets and measures of performance (of a notably managerial kind) form one of the main pillars of the NPM (Hood, 1995). Similarly, Power (1994; 1999) analysed the parallel development of an 'audit explosion' exemplified by value for money auditing in the public sector, which is heavily dependent on the use of performance indicators.

Performance indicators were, therefore, fundamental to a major change in the nature of public sector management which took place in the 1980s and 1990s. This change was international, despite variations and exceptions (Pollitt and Bouckaert, 2000), and has persisted in the UK despite changes in government (see, for example, Cutler and Waine, 2000; McLaughlin and Murji, 2001). This has been a somewhat peculiar development, however, as there are well established difficulties in using performance measurement in the public sector.

There is an extensive academic literature on the topic; much of which points to potential perverse incentives and unintended outcomes. (See Johnsen, 2005, for a thorough and most helpful review of the literature to that date). Nevertheless, many NPM reforms seem pre-occupied with organisational performance measurement despite variations within the reform movement (Carter *et al.*, 1995; Hood, 1995; Pollitt and Bouckaert, 2000; Talbot, 2005). Debates about targets, performance indicators and their unintended consequences, therefore, are an integral part of the NPM literature (Wankhade, 2011).

Heath and Radcliffe (2007) attempted to draw on these critiques in examining the performance measurement regime which then applied to the English Ambulance service. This concentrated solely on response times. The paper referred to a number of earlier discussions which had pointed out the perverse incentives and unintended consequences often associated with performance measurement and reporting regimes and argued that this applied in the case of the ambulance service.

Public Sector Context

In the public sector:

- objectives are difficult to define precisely;
- organisations have many differing and even contradictory objectives;
- outcomes are difficult to measure and outputs are frequently used as a proxy for outcomes;
- means as well as ends are significant in political contexts;
- responsibilities may be shared amongst many public agencies and partners;
- identifying causality is often difficult because of long time scales and numerous intervening variables.

There are many technical problems which can arise when performance indicators are used misguidedly. These are often associated with cost cutting and/or attempts to assert management control. They include:

- concentrating on outputs rather than outcomes, results rather than causes and economy and efficiency rather than effectiveness, equity or quality;
- focussing on the short term at the expense of the long term;
- using inappropriate but available comparators;
- using a limited range of unrelated indicators or, conversely, too many indicators leading to information overload;
- ignoring issues of controllability;

- treating indicators as definitive rather than as raising issues for exploration ('dials' rather than 'tin openers' in the terminology of Klein and Carter, 1988).

Many of these issues arise in connection with the ambulance service performance measurement regimes we investigated.

Similarly, the behavioural aspects of inappropriate schemes are well established. The indicators can come to be seen as ends in themselves rather than leading to learning and dialogue, with unmeasured or unmeasurable aspects of performance neglected. As we have suggested, schemes may have unintended and even perverse consequences. These dangers are reinforced where single dimension measures are used, indicators are closely linked to reward and sanction or there is a crude 'league table' approach. As Picciotto (1999) points out, there is a danger of moral hazard; i.e. efforts being directed towards measured results rather than improving quality. At worst outright manipulation of results can take place. Again there is evidence that this applied in the case of the ambulance service, especially with regard to motivating dysfunctional behaviour (see, for example, Heath and Radcliffe, 2007; Heath and Radcliffe, 2010; Wankhade, 2011). Significantly, a number of papers (Hood, 2006; Radnor, 2008; Bevan and Hamblin, 2009) used the English ambulance service to substantiate their arguments concerning 'gaming' in public services.

Discussions on performance within the wider public sector include controversies concerning top-down, bottom-up or balanced approaches to performance measurement (OECD-PUMA, 1994, 1997); quality and performance (Morgan and Murgatroyd, 1994); and accountability and performance (Power, 1994; Hillison *et al.* 1995). The critique of performance measurement centres around the complexities of running public services (Talbot, 2005); transaction-costs (Hood *et al.* 1999); manipulation and deception (Bevan and Hood, 2006); unintended consequences (Smith, 1995); and the performance paradox (Meyer and Gupta, 1994). Agreement is also lacking in the literature about a precise definition of performance, methods of measurement, whether performance measurement increases efficiency of services and on issues of accountability (Neely 1995; Neely *et al.*, 1999; Pollitt, 2001; De Bruijn, 2002; Greiling, 2006).

The literature reveals many models of performance but few offer clear theoretical explanation or empirical validation (Talbot, 2005). The work of Meyer and Gupta (1994) on "paradoxes of performance" suggests a weak correlation between performance indicators and performance itself over a given period of time. Performance measurement has also come under criticism for its lack of integration within the democratic process and poor implementation (Public Administration Select Committee, 2003).

New Public Governance

These issues have emerged across a wide range of countries and institutions as part of a more general concern with the impact of NPM and its appropriateness outside the Anglo-Saxon world, which championed the NPM approach. Christensen and Lægård (2007, p.9) have noted how the post-NPM world is one of 'mixed models and increased complexity'. Denhardt and Denhardt (2000), for example, present a New Public Service (NPS) approach as a viable alternative to old public administration and the NPM, calling for a greater public participation in the delivery of public provisions. The emphasis is not on steering (NPM) or rowing (public administration), but serving. Liddle (2007) argued that a new public governance model (NPG) would strengthen democratic control over decision making and citizen involvement, as well as improving public trust in government institutions and types of services provided. However, governance (like NPM in many ways) lacks a precise definition and has been used in different context and applications (Tendler, 1997; Minogue *et al.*, 1998).

Osborne has developed a model of New Public Governance that contrasts the main components of NPG with those of NPM (2006; 2009; 2010). The key features of the NPG model arise out of its emergence from Institutional and Network theory which place an emphasis on the pluralist nature of the state. He contends that governance has become increasingly problematic

‘It posits both a *plural state*, where multiple interdependent actors contribute to the delivery of public services, and a *pluralist state*, where multiple processes inform the decision making system.’ (Osborne, 2010, p. 9).

He argues that this pluralism requires that public services engage more with their environment than has been the case in the past. This includes the idea emerging from policy network theory that engagement with more members of the public through increased networks can reverse the trend towards lower levels of participation in the traditional political process (Guy Peters, 2010). However, Guy Peters does note that such an approach may not resolve the problems of representative democracy as it does not guarantee that those who dominate the present decision making system will not dominate this new approach.

However, Osborne contends that the focus of NPG would place the organisation within its environment and its emphasis is on ‘Negotiation of values, meaning and relationships’ (2010, p. 10). For him, this would result in a more sustainable public service model with

greater levels of public trust in the decision making process. However, he does caution that the approach he adopts towards NPG should not be seen as normative, but rather as the development of an analytical tool for future research into public services.

Performance Score Cards

It has been recognised for some time in the accounting literature that reliance on a single measure of performance, such as Return on Investment, can be misguided and, therefore, multiple models of performance evaluation have been developed. The best known of these is the *Balanced Scorecard* (BSC), which was introduced by Kaplan and Norton in 1992 and has been developed by them and others through a number of versions since. (See, for example, Kaplan and Norton, 1992; Kaplan and Norton, 1996a; Olve *et al.*, 1999.) Other chapters in this volume refer to these developments in more detail (?; ?)

Briefly, the BSC is a framework to assist the design and implementation of strategic performance management in organisations by integrating external and internal perspectives, short term and long term objectives, financial and non-financial measures, and leading and lagging indicators. In the original version of the BSC, the dimensions of organisational performance are classified into four perspectives:

- **Financial Perspective**
- **Customer Perspective**
- **Business Process Perspective**
- **Organisational Learning and Growth Perspective**

The four perspectives are held to be inter-linked and none is pre-eminent (see Figure ?.1). However, as originally formulated they have proved to be of limited relevance for many organisations. Consequently the BSC has been adopted flexibly in practice and, subsequently, more perspectives suggested, such as one for corporate social responsibility or sustainability (Olve *et al.*, 1999).

Figure .1 about here

There have been problems of appropriately trading-off and weighting performance on one perspective against that on another (success on other perspectives, for example, may be accompanied by increased cost). Also the BSC is a strategic instrument and initially there were some difficulties in linking the strategic to the tactical and operational levels. Now the use of *strategy maps*, which are 'visualisations' of an organisation's objectives, targets and plans, are advocated to counter difficulties in 'drilling down' from the strategic level (Kaplan and Norton, 1996b).

Intriguingly, although initially less well known elsewhere, a similar approach, called the *Tableau de Bord* (TdB), has been practised in France since the 1920s (Lebas, 1996). The TdB is less formal than the BSC and is intended as a 'piloting' instrument (hence it is sometimes translated as the 'dashboard'). Any particular dashboard is customised around critical success factors and key performance indicators (financial and physical) specific to the organisation.

There has been considerable debate regarding the merits of the BSC versus those of the TdB. (See, for example, Epstein and Manzoni, 1998; Nørreklit, 2003; Bourgignon *et al.*, 2004; Bessire and Baker, 2005; Bukh and Malmi, 2005.) Nevertheless, despite these disagreements and some difficulties in practice, it is generally agreed to be logical to adopt some form of multiple performance evaluation model rather than to rely on a single indicator. However, the previous performance measurement regime in the English ambulance service did not fit with this.

Changing Role of Paramedic

A major issue affecting the nature and role of performance indicators applying to the Ambulance Service relates to the changing role of the ambulance service personnel, most notably that of ambulance or community paramedics. 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. The Department of Health has acknowledged that

‘Traditionally ambulance services have been perceived as an emergency service... stabilizing 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)

Paramedics are increasingly making use of their skills at the scene of incidents, potentially enhancing the patient experience and impacting on survival rates prior to accessing hospital care. 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)

Consequently, it was deemed necessary to develop the skills of ambulance crews and paramedics through an increasingly high level of education and training, providing enhanced triage capability at the scene and a wider range of treatment (Ball, 2005). Paramedic training and education has moved into Higher Education (Till and Marsh, 2015) and new specialist paramedic roles such as the paramedic practitioners (PP), emergency care practitioners (ECP), critical care practitioners (CCP) and community paramedics (CP) have been developed across different ambulance trusts in England. These roles allow paramedics equipped with enhanced knowledge and skills to make complex decisions about patient care. Till and Marsh (2015) argue this has resulted in better triage and treatment at the scene by crews. The Paramedic Evidence-Based Education Project (PEEP) developed by Allied Health Solutions, was aimed at moving towards standardized education and training to ensure consistency across the profession. However, it highlighted considerable variations in the current education and training models; for example, in the length, content and academic level of the associated educational programmes, which may act as a barrier to the full professionalization of the workforce (Lovegrove and Davis, 2013).

The development of ECPs, dating from 2000, entailed a major redesign of the paramedic’s role (Ball, 2005). Cooper *et al.* (2004) established that the then still emerging role of the ECP focused on advanced assessment and patient management skills. ECPs were significantly more likely to treat patients at the scene than ordinary

paramedics and less likely to have them conveyed on to an A&E department. Both ECPs and stakeholders felt that the additional training of the ECP improved their clinical practice. The Treat and Refer approach also entailed staff with enhanced skills using new protocols regarding non-transportation of patients. Compared to routine practice, there were similar conveyance rates to A & E, but more time was spent at the scene with greater assessment. Patient satisfaction ratings were similar or higher (Snooks *et al.*, 2004). However, there were some safety concerns and issues around managing change; whilst, interestingly, there were difficulties in persuading some patients that they did not need to go to A & E.

Mason *et al.* (2007a) concluded that the use of ECPs was improving ways of working locally and facilitating the reconfiguration of service delivery. It led to reduced attendances at A&E and reduced admissions, shorter episode times and higher levels of satisfaction. Furthermore, it seemed there were cost savings, particularly with regard to reducing operational costs; although a significant investment in training expenditure was also required. Similarly, Gray and Walker (2008a) found that 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. Halter *et al.* (2006) and Hill *et al.* (2014) also concluded that these specialist roles have reduced the conveyance of patients to emergency departments, thus reducing the costs associated with ambulance journeys.

In addition, Halter *et al.* (2006) found that care provided by ECPs was considered equal or considerably better than that provided by traditional ambulance practitioners; especially with regard to 'thoroughness of assessment'. Similarly, Mason *et al.* (2007b) examined a scheme which used 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 there were some concerns regarding the level of inter-agency cooperation required and the amount of training and operational costs. Snooks *et al.* (2013) noted that the adoption of enhanced telephone triage and Treat and Refer protocols by English ambulance services had been accompanied by a decline in conveyancing rates from 90% in 2000 to 58% in 2012.

The continuing need to develop a professional work force has been highlighted in several policy documents and workforce development is seen as an integral element of the ambulance modernisation programme (National Audit Office, 2010; AACE, 2011; National Audit Office, 2011; NHS England, 2013; NHS Confederation, 2014; 2015). Blaber and Harris (2014) regard the development of clinical leadership for paramedics as the *sine qua non* of ambulance professionalization. However current evidence regarding the implications of new specialist paramedic roles on patient safety and quality of care is rather mixed.

A recent ambulance scoping review (Fisher *et al.* 2015) has demonstrated the lack of quality information available regarding ambulance service patient safety in the UK. The study cautioned that operational pressures including performance targets are still seen as more important than patient safety for ambulance services. There are some concerns about patient safety and quality of care (Fisher *et al.*, 2015; O'Hara *et al.*, 2015; Turner *et al.*, 2015). These include issues around assessment and referral of older people with a fall who were left behind at the scene (Halter *et al.*, 2011), about the safety of patients while making decisions about treating them at the scene (Tohira *et al.*, 2013) and the safety of patients involved in decisions not to convey (Fisher *et al.*, 2015; O'Hara *et al.*, 2015). The National Audit Office expressed a different sort of concern. Although advanced practitioners could potentially reduce transfers of patients to A&E by 30% and some services were fully utilising their greater skills, most ambulance services were simply using them alongside other paramedics without focussing on where they could have most impact on conveyance rates. Moreover, the call categorisation systems in most services were not sophisticated enough to send them to only the most suitable calls (NAO, 2011)

Nevertheless, the Keogh Urgent and Emergency Care Review (NHS England, 2013) emphasised the significant role of the ambulance services in the urgent and emergency care networks and their contribution towards reducing pressures in A&E has been widely acknowledged (NHS Five Year Forward View, 2014; NHS Confederation, 2014; 2015). Thus, despite some controversy, there have been significant developments in the reconfiguration of ambulance service activity in ways which should add value to the patient. This raises a number of issues. In particular, for performance evaluation there is the challenge of how to devise a performance measurement regime which reflects the increasingly multifaceted nature of ambulance work. Indeed, these developments were constrained by the contradictory influence of the performance indicators applied to the ambulance service, as we aim to show in the next section. 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; Wankhade, 2011; Heath and Wankhade, 2014).

Previous Performance Evaluation regime

The four key performance indicators which applied were concerned only with response times, as shown in the table below (Department of Health, 2005; Healthcare Commission, 2008).

Figure .2 about here

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 ignores what happens subsequently at the scene and meant that ambulance services were not being judged on the total package of care they provided. There were, instead, just a few indicators of output rather than outcome in only one dimension of performance. This contrasts with the tendency towards multi-dimensional models of performance management, exemplified by the BSC and TdB.

Moreover, the effects of the regime were reinforced by the league table approach which was adopted, with notable perverse effects. The focus on results rather than causes and the narrow range of indicators led to the regime becoming notorious for 'gaming'; such as distorting activity and manipulating reported results. It fell, therefore, into many of the pitfalls in the academic literature and became highly controversial (Heath and Radcliffe, 2007; Heath and Radcliffe, 2010; Wankhade, 2011).

As we have seen, the Department of Health has promoted an enhanced role for paramedical activities at the scene (Department of Health, 2005), but this wider role was not reflected in the performance measures. Moreover, as the Healthcare Commission stated, 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). Therefore, aspects of performance other than response times tended to be played down.

Consequently, over time a great deal of controversy arose regarding the performance measures, leading to a report from the Commission for Health Improvement (CHI, 2003). The Commission recognised that measuring outcomes of emergency ambulance care is complicated by the difficulty ambulance trusts may face in obtaining data from acute hospital trusts and in the problems of developing data bases across organisational boundaries. Nevertheless, the Commission concluded that

‘A priority for ambulance trusts must be to develop credible measures of outcome... (which) should be included among ambulance service key targets in future.’ (op. cit. p. 22)

Similarly, the Audit Commission (1998), whilst acknowledging the difficulties, had held that an examination of outcomes was required for the proper evaluation of care. Consequently, the Department of Health (2005, p. 56) proposed that for patients

presenting conditions which may be immediately life threatening, the first two performance measures be retained.

‘For all other patients, ambulance trusts are to be assessed on the overall quality of care provided... ’

The proposed wider set of indicators was not forthcoming immediately, although standardisation was attempted through the ‘Call to Connect’ targets, which defined response times more stringently and reduced the variation in interpretation (Wankhade, 2011) but had further perverse effects (Woollard *et al.*, 2010).

New Ambulance Performance Regime

In December, 2010, however, the then new coalition government announced the introduction of a range of ‘clinical’ quality indicators for ambulance services to take effect in April, 2011. Timeliness was still seen as important, but no longer the only important factor (Department of Health, 2010a). The eleven indicators additionally include indicators of outcome or processes relevant to outcome but not cost (in contrast to the BSC perspectives). They were set out initially in broad terms (Department of Health, 2010b - see Figure ?.3)

Figure .3 about here

A paper (Cooke, 2011) by the then National Clinical Director for Urgent and Emergency Care gave more detail. The proposals were based on three principles: the regime should be evidence-based, move from a target-culture to one of continuous improvement in clinical care and provide information to patients and the public to enable them to judge the quality of care provided. The indicators were intended to focus on outcomes where available or otherwise on process measures which have a proven link to outcome (Cooke, 2011). Ambulance services, therefore, are expected to share information and work with others in a whole systems approach.

The results of the indicators are published monthly in the form of a dashboard for each of the ambulance services in England. These were presented as four clinical indicators and eight process or systems indicators. (Calls closed via telephone advice and following

treatment at the scene are now shown separately, as are re-contact rates.) From 2012, Category A calls were divided into Red 1, the most time-critical, and Red 2, which are serious but less time-critical (Department of Health, 2012a). The clinical indicators are published after the systems indicators because of the time required for the outcomes of patients transported to A&E by ambulance to be established (Gov. UK, 2013). It was intended that a narrative account of the experience of ambulance service users should also be presented, but patient experience is not currently reported (Heath and Wankhade, 2014).

The new indicators are meant to be considered as a set which forms the basis of patient-centred continuous improvement. It is accepted that each indicator taken individually has weaknesses and there is also the danger that one can be improved at the expense of another, which is not acceptable (Cooke, 2011). The set of indicators is reviewed annually, although it is not clear how this is being done.

The approach underlying the dashboard responded to the debates concerning the previous performance management regime. Criticisms of that regime and research into the role of the ambulance paramedic both seem to have influenced the changes. Thus Cooke (2011) acknowledged that concentrating on time targets, without examining the quality of care, gave rise to perverse incentives. It is necessary, therefore, to know the outcomes of clinical interventions in order to improve the situation, especially as many patients previously taken to A&E are now dealt with in other ways.

In the new approach using indicators as targets was rejected as this was held to give no incentive to aim for more than the target. Instead the indicators were intended to promote a culture of continuous improvement whereby feedback motivates learning and innovation to gain further improvement in a virtuous circle. Such a culture, if indeed implemented effectively, would also act against tendencies to gaming (Heath and Wankhade, 2014).

Moving from a very limited set of indicators to a much broader one, however, whilst welcome in itself, may also give rise to difficulties. The measures may indeed turn out to be a balanced set of indicators or they may make assessment of service performance too complex to be meaningful. Issues may arise of trading off performance on one measure against another. It may be that, in practice, some of the indicators will be stressed (most likely response times), simplifying the issues faced but facilitating gaming.

Quality Accounts

More or less contemporaneously with the adoption of the dashboard, the Health Act 2009 required most organisations which provide NHS services in England (including

ambulance services) to publish Quality Accounts annually from April 2010 (Department of Health, 2012b). The accounts are intended to promote a number of desirable, but potentially conflicting objectives:

- scrutiny of, debate about and reflection on the performance of NHS organisations;
- accountability of service providers, both upwards and outwards towards stakeholders;
- benchmarking of performance;
- continuous, evidence-based quality improvement programmes; and
- engagement of stakeholders.

Some parts of the Quality Accounts are mandatory and set out in guide lines, but most of the content of the report was intended to be determined locally, including the performance indicators reported in them. Quality Accounts were to be developed, therefore, by engaging stakeholders, including service users, and the accounts were intended to be easily understandable and readily accessible (Department of Health, 2010c). Research suggested that, prior to the launch of Quality Accounts, representatives of local communities welcomed the idea of increasing accountability for quality improvement via these accounts. However, they were concerned that issues would arise around reliability of information, presentation and understandability, trading off priorities, and establishing meaningful dialogue and consequent actions (Foot and Ross, 2010).

A subsequent study (Foot *et al.*, 2011) suggested that early published Quality Accounts justified this caution. There was considerable variation in the contents and presentation of the accounts (e.g. the number of quality measures and the aspects of performance measured), which also had numerous technical limitations (e.g. the measures were often presented without definition, context or discussion). Disappointingly, given the 'philosophy' underlying the approach, involvement of stakeholders was also regarded as weak. There was a lack of comparative data which limited the accounts as instruments of accountability. Foot *et al.* (2011) argued, therefore, for greater consistency and some mandatory content (including some performance measures), whilst maintaining a local dimension. Reporting of a small set of core indicators was indeed mandated later (Department of Health, 2012c; 2013). The indicators which must be reported by ambulance trusts are shown in figure ?.4 . They are selected from the dashboard indicators, although on what basis is not clear.

Figure .4 about here

The local development of accounts seems desirable in terms of promoting stakeholder engagement, deliberation, reflexivity and accountability, and in responding to specific local requirements for information. However, it does mean that each ambulance service in England could produce markedly different types of report, hampering comparability and benchmarking. The diverse set of audiences for Quality Accounts means they are intended to serve potentially contradictory purposes; particularly in terms of how far they can support both internal processes for quality improvement and external accountability (Heath and Wankhade, 2014).

The 'bottom up philosophy' of Quality Accounts is also at odds with that of the dashboard, which is a standardised set of indicators, imposed 'top down'. Thus English ambulance services must now address two performance measurement regimes, both of which seem an improvement on the previous regime, but which differ considerably.

Organisational Culture

Simons (1999) has identified four 'levers' which organisations may use to implement management control. These are dealt with in more detail elsewhere in this volume (see ?;?) and so are discussed here briefly. They are:

- **Belief Systems**

The explicit sets of definitions which are communicated formally and reinforced systematically by senior managers to provide basic values, purpose and direction for the organisation (cf. organisational culture).

- **Boundary Systems**

The explicit statements in formal information systems which define specific risks to be avoided and how they are to be avoided (e.g. audit controls).

- **Diagnostic Control Systems**

The formal information systems which managers use to monitor organisational outcomes and to correct deviations from pre-set standards of performance (e.g. budgeting).

- **Interactive Control Systems**

The formal information systems which managers use to involve themselves in the decision activities of their subordinates by regular dialogue.

Figure .5 shows how the levers are linked in Simons' conceptual framework. Simons argues that organisations need to have a range of control instruments because it is necessary to have the appropriate balance between various factors which affect the performance of the organisation, such as:

- Freedom and constraint;
- Empowerment and accountability;
- Bottom up creativity and top down direction;
- Experimentation and efficiency;
- Innovation and stability;
- Emergent and intended strategy.

It is more effective, therefore, if management exerts control through the full range of levers rather than a single one; as long as they support and complement each other, rather than conflict (e.g. where budgetary control might emphasise financial rewards and the organisational culture intrinsic rewards). However, the levers do not automatically align with each other. Also what is the appropriate balance between them will vary from organisation to organisation and from time to time.

Figure .5 about here

Control in organisations can be seen as supporting efforts to achieve corporate objectives, whilst adjusting to changes in the organisation's environment. Following Simons, therefore, such control by senior management seems most easily exercised where there is a strong unitary organisational culture which encompasses executives' values and is in line with the other levers of control. This does not correspond well to the situation of the English ambulance service.

This is particularly significant because changing organisational cultures rather than structures has become a fashionable prescription for health service reform in the UK. However, changing cultures is not easy as an organisation's culture is subject to various local contingencies (see, for example, Wankhade *et al.*, 2015). Therefore, the issues of how organisational cultures are perpetuated and how organisational cultures and sub-cultures support resistance to attempts at organisational change are important. Ogbonna and Harris (2014) suggest that factors such as historical legacy, subcultural dynamics and external influences can, under relevant circumstances, promote a level of cultural perpetuation which acts as a strong barrier to efforts at culture management and change.

This argument is important for the ambulance service where serious attempts have been made to reform cultural values around the professionalization of paramedics. The identity of the paramedic as a multi-skilled clinical professional is intended to supersede that associated with the role which concentrates only on rapid transportation to A&E. Similarly, values around the notion of the ambulance service as the 'health arm of the emergency services' are to be replaced by those associated with the 'emergency arm of the health service'.

However, there is evidence that this transformation of culture has not been totally successful (McCann *et al.*, 2013; Wankhade *et al.*, 2015). The tendency for rapid response to be pre-dominantly valued in the existing culture supported resistance to embracing professionalization wholeheartedly. Wankhade (2012) reported that a variety of assumptions, values and beliefs were held in the sub-cultures of different occupational 'tribes' (i.e. executives, middle managers, paramedics and control room staff) at the ambulance service he researched, rather than a dominant belief system.

Moreover, Radcliffe and Heath (2009) argued that organisational sub-cultures and the performance management regime then in place reinforced each other in countering efforts at reform. Attempts to bring 'top-down' cultural change also come up against the pressing need to deal with issues like increasing demand and declining resources (Wankhade and Brinkman, 2014). However, Radcliffe and Heath also contended that the influence of central government in favour of professionalization did have some effect. Thus historical legacy, subcultural dynamics and extra-organisational influences all played a part. Notably, however, the views of service users had a limited impact on the culture(s).

The changing role and identity of ambulance personnel and the conflict between professional cultures and management objectives around this, have significant implications for government policy. At the same time, this phenomenon adds to our understanding of management control. The English ambulance service presents an interesting case, therefore, where the senior executives' belief system is countered by both resistant sub-cultural norms *and* the diagnostic lever (i.e. the predominant performance indicator: rapid response times).

Discussion

The ambulance performance management regime has moved from a single measure model to a wider set of indicators and this has been generally welcomed. The thinking behind the dashboard reflects the debates about the previous performance measurement regime. Both the criticisms of the regime and the research into the changing role of the ambulance service seem to have influenced the reforms. However, within the larger debates between NPM and NPS or NPG, it is important to examine the extent to which the current ambulance performance frameworks exhibit public involvement and patient participation.

It is unclear as to how and to what extent the views of ambulance staff and other stakeholders were accessed and used in setting up the dashboard or how they participate in the revisions promised. Quality Accounts, on the other hand, echo the NPS/NPG literature on participation. However, there are questions about the practical issues which arise and the extent to which they do contribute towards the ambitious objectives of more debate and reflection on performance, greater stakeholder engagement and so on. The extent to which the dashboard and Quality Accounts are based on different approaches to performance reporting and accountability may also prove significant.

An emphasis on the negotiation of values, meaning and relationships is central to NPG (Osborne, 2010). This is also of critical importance when considering the problem of implementation, particularly where such a process involves attempts to modify the prevailing culture. Pressman and Wildavsky (1973) demonstrated that central government policy initiatives are often not implemented fully or as intended when applied locally. Policy implementation studies have now moved away from seeing the process as a top-down management problem, in which any deviation from the original intentions is perceived as being a management failure, to one which is more the end result of a period of negotiation and consensus building (Susskind, 2006; Hill and Hupe, 2014).

Indeed, the idea that policy outcomes are the result of a 'negotiated order', in which those affected by the policy play a part in its implementation by how they respond to that policy, is a key to understanding the nature of policy 'success' and 'failure' (see Barrett and Fudge, 1981). Such an approach is also found in Lipsky's concept of 'street-level bureaucracy' which contains within it concerns 'to recognise the validity of the perspective of low level officials *and* of the public to whom they relate' (Hill and Hupe, 2014, p. 199). It may be argued then that the development of a set of performance measures which involves an awareness and understanding of the perspectives of users and those delivering the service, as well as those of senior managers, will result in a more sustainable and effective regime.

This approach has similarities to that of Crozier and Friedberg (Crozier, 1964; Crozier and Friedberg, 1980). They see organisations as both the setting for conflict and confrontation between organisational 'players', which they characterise as games, and for their resolution. Actors pursue stratagems to meet their own needs or objectives through 'games playing'. However, these games have the paradoxical effect of integrating the actors into the organisation, because the rules of the game are accepted by the players. Power is then "a bargaining relationship over time within a framework of constraints which the actors cannot easily change. As a bargaining relationship, the power game centres around the predictability of behaviour." (Crozier, 1976, p.307)

Thus Crozier and Friedberg do not see the players in their games as being equal. Instead power is seen as a central feature of organisational life, which cannot be reduced to the formal authority structure. In their model, *uncertainty explains power*. Crozier (1976) argues that "Regulation is not achieved by command, evaluation and control, but indirectly by the results of games where each partner fights for his own interests...and must cater to the wishes of a stronger partner..." (p.303). Those in a position to cope with uncertainty have informal power over those who are dependent on their choices. (Thus skilled manual workers or public sector professionals, for example, may have sway over those who manage them.) However, social constraints prevent actors taking too much advantage of their power, otherwise organisations would cease to function. Moreover, they accept their inferiority in one game because they are always part of other games where they may be in a superior position.

Friedberg (2009) explains that the approach is based on 'borrowings' of two key concepts from American social science: Dahl's concept of *the relational theory of power* and Simon's concept of *bounded rationality*. The positional theory of power stresses the interactions between interdependent but partially autonomous individuals pursuing their own personal strategies in terms of their expectations of other actors' likely behaviour. This behaviour is 'rational', therefore, in terms of satisficing under imperfect knowledge. The social order of organisations is the emerging (and possibly temporary) outcome of the boundedly rational but purposeful behaviour of the participants.

Moreover, Crozier (1964) identified a workers' sub-culture in the organisations he studied, which was adopted by all staff except new or marginalised employees, despite all other differences (such as class background or political allegiance). There was, therefore, only a short learning period before new members were socialised into the dominant set of beliefs and attitudes by a process of autonomous group development. The main features of the sub-culture concern demands for independence and autonomy and oppose the goals of the organisation and the aims of management. However, whilst this is a rigid system of attitudes and beliefs, derived from the pressure of the group, practical behaviour is not entirely determined by it, but also affected by other considerations. Management attempts to use both formal authority relationships and informal arrangements to guide group

solidarity, the effects of the sub-culture and the power struggle to a conflictual but stable equilibrium (Crozier, 1964).

Conclusion

The recent history of performance management in the English ambulance service presents an interesting case, where factors like perverse incentives and sub-cultural resistance act to impede top-down management efforts. New Public Governance would suggest that effective performance evaluation regimes require the participation of stakeholders, including service users and employees. Implementation theories suggest central government policies are unlikely to be implemented effectively without recognising the perspectives of employees in a negotiated order. The work of Crozier and Friedberg suggests that paramedics and control room staff are likely to have strong sub-cultures valuing independence, which support the significant relational power they derive from their specialist expertise. Our case points to the validity of all these suggestions.

The research reviewed broadly supports the policy of expanding the role of ambulance paramedics and the development of a wider range of performance indicators. However, the literature suggests that not involving stakeholders may incur resistance to change. The policy implications resulting from this include the need for government to engage more readily with ambulance paramedics and other professionals in the continuing refinement and implementation of performance measurement tools, especially if attempts to change organizational culture are to be effective.

In addition the issue of involving users of the service is relevant. Different perspectives may emerge concerning the purpose of the ambulance service when users are increasingly involved. NPG is a response to an era in which governance and implementation has become more difficult and the divorce between user and provider perspectives have continued. Greater user involvement may be a challenge to service providers and user perspectives on the purpose of the service will need further research. Similarly, there may be an important issue surrounding a generational difference between older ambulance personnel and more recently trained professionals with a wider range of skills, where the traditional view of the ambulance service as simply the emergency transport of patients is challenged.

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Figures

Figure .1 The Balanced Scorecard

Financial

How do our investors see us?

Customer

Perspective

How do our customers see us?

Vision

Organisational

Learning & Growth Perspective

How can we innovate and improve?

Business

Process

Perspective

What must we excel at?

Figure .2 National Performance Requirements for Ambulance Services

STATUS

PERFORMANCE INDICATOR

Immediately life threatening (Category A)

Response within 8 minutes irrespective of location in 75% of cases.

Fully equipped ambulance in attendance within 14/19 minutes of initial call in 95% of cases (unless control room decides an ambulance is not required)

Urgent need for hospital care defined by doctor

Patient should arrive at hospital within 15 minutes of arrival time specified by the doctor in 95% of cases

All other patients

(Category B/C)

Response within 14 minutes (urban) or 19 minutes (rural)

Figure .3 List of Ambulance Clinical Quality Indicators

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&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
The eight minute response time concerning immediately life threatening cases and provision of transport within nineteen minutes where needed	
	11
Time to treatment by an ambulance-dispatched health professional	

Figure .4 Quality Indicators to be included in English

Ambulance Service Quality Accounts

1

Percentage of Category A telephone calls resulting in a response at the scene of the emergency within eight minutes.

2

Percentage of Category A telephone calls resulting in an ambulance response at the scene within nineteen minutes.

3

Percentage of patients with pre-existing diagnosis of ST elevation myocardial infarction who received an appropriate care bundle.

4

Percentage of patients with suspected stroke who received an appropriate care bundle.