Performance Management and Public Sector Reform: The Norwegian Hospital Reform

TOM CHRISTENSEN

PER LÆGREID

INGER MARIE STIGEN

STEIN ROKKAN CENTRE FOR SOCIAL STUDIES

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Preface

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http://www.rokkansenteret.uib.no/vr/rokkan/ATM/index.html

The authors:

Tom Christensen is professor at the Department of Political Science, University of Oslo.

Per Lægreid is professor at the Department of Administration and Organization Theory and research director at the Rokkan Centre, University of Bergen.

Inger Marie Stigen is researcher at the Norwegian Institute for Urban and Regional Research
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Abstract

When New Public Management (NPM) reforms are introduced in various countries, one central element in the balance between political control and institutional and professional autonomy is the development of new performance management systems. One such system is Management by Objectives and Results (MBOR), based on an official OECD model. It presupposes that public goals are unambiguous, instruments easy to define, results easy to measure and report, and incentives easy to establish. Our thesis, however, is that modern management systems of this kind are neither neutral nor objective, but rather complex and discretionary structures embedded in a political–institutional context. To analyze how MBOR-type systems work in practice, we focus on a recent reform of the hospital structure in Norway. We analyze two types of reform effects: one connected with how regional and local executives in the new hospital system have experienced the effects and implications of the reform and how the effects varies by trust based and performance based management models. The other concerning the problems and dysfunction of the Diagnosis Related Groups (DRG) system in hospitals. Using a broad institutional perspective we show that the MBOR-system in Norway is in reality a mixed and complex system encompassing different kinds of logic. These include instrumental elements from the new performance-management systems combined with ad hoc preventive efforts by the political leadership, the influence of cultural path-dependency, elements of rather inappropriate self-interested action, and pressure from the environment.

Sammendrag

Når New Public Management inspirerte reformer innføres i ulike land, er utvikling av mål- og resultatstyringseknikker et viktig element for å ivareta balansen mellom politisk styring og institusjonell og profesjonell autonomi. Mål- og resultastyring bygger på forutsetninger om at målene er utvetydige, at det er lett å formulere virkemidler, å måle og rapportere resultater og å utvikle velfungerende incentivsystemer. Vår tese er imidlertid at moderne resultatstyringsteknikker av denne typen verken er nøytrale eller objektive, men heller temmelige komplekse strukturer som åpner for store skjønnsmessige vurderinger og som er vevd inn i en politisk–institusjonell kontekst. For å analysere hvordan mål- og resultatstryingsteknikker fungerer i praksis, har vi fokusert på sykehusreformen i Norge. Vi undersøker to ulike sider ved reformen. For det første hvordan ledere i lokale og regionale helseforetak vurderer ulike effekter og implikasjoner av reformen og hvordan dette varierer med tillitsbaserte og resultatbaserte styringsmodeller. For det andre hvordan det innsatsrelaterte DRG-baserte finansierings-systemet i sykehusene fungerer i praksis gjennom fokus på problemer og dysfunksjoner som kan oppstå. Ved hjelp av et bredt institusjonelt perspektiv viser vi hvordan mål- og resulttstyringsteknikker innenfor sykehusvesnet i realiteten er et blandet og komplekst system som er baert på ulike logikker. Disse omfatter instrumeltelle elementer fra NPM systemene kombinert med ad hoc inngrep fra politisk lederskap, betydningen av adminsitrative kulturer, tradisjoner og tillitssrelasjoner, elementer av upassende handlinger basert på egeninteresse og omgivelsdespress.

Introduction

When New Public Management-oriented reforms are implemented in public organizations there are different ways to assess the effects of these reforms. One, rather broad approach is to look at whether the reforms have changed the decision-making behaviour of central political and administrative actors or their role enactment in general (Christensen and Lægreid 2001, Pollitt and Bouckaert 2000). Often the focus in such studies is on whether reforms have resulted in changed patterns of influence and on how they have affected political control and democracy. A second, narrower approach is to examine the functioning of new management systems connected to NPM. One such central system is Management by Objectives and Results (MBOR). This is a performance–management tool encompassing three main components. First, the leadership must formulate clear, stable and consistent goals and targets and give subordinate bodies more leeway and discretion in their daily work. Second, subordinate agencies and units must report on performance and results using a well-developed system of performance indicators. Finally, the leadership must use the reported results to reward good performance and punish bad. The main hypothesis here is that this model will enhance efficiency without having a negative effect on other goals and values (Pollitt et al. 2004).

This paper will focus on a performance–management system of this kind. While MBOR systems may be seen as based on technical and objective evidence, our angle is that they are characterized by political processes (Aucoin and Jarvis 2004). There are some major reasons for this. One is that there are differences between the ideals and theories informing such systems and how they work in reality, i.e. it is difficult to fulfil the system's goals or intentions. Public goals are often broad and vague «mission statements» (Boyne 2003: 213), providing scope for ambiguity. Public managers have «room for interpretation», and strict business measurement methods are difficult to use (Noordegraaf and Abma 2003). This is related to the second feature, namely, that performance–management systems are embedded in a political–administrative context, where decisions taken and their practical implementation stem from a complex combination of environmental factors, cultural traditions and diverse, organizationally based interests furthered by those organizations' actors (Christensen and Lægreid 2001). Measuring performance is a politically complex task, and the search for a single best performance measure is thus a futile one. What is more, measuring performance may shape behaviour in both desirable and undesirable ways (Behn 2003).

We will analyze how the MBOR system works in practice by focusing on the case of Norway, where this system is now widely used in the public sector (Christensen and Lægreid 2002). More specifically, we will address how performance–management systems work by examining the management of the hospital system. The traditional Norwegian health care system has been characterized as a single-payer decentralized model (Byrkjeflot 2004, Kokko et al. 1998). This model has been challenged by comprehensive reforms over the past 10 years. In this paper we will focus on two such reforms. We start by focusing on the Norwegian Hospital Reform, prescribed by the

new Health Enterprise Act, which came into force in 2002. The reform set up new management principles for hospitals, based on a decentralized enterprise model. A main tool for regulating relations between central control and local autonomy is the performance–management system. One part of this system is the establishment of a quasi-contractual steering model, whereby the ministry allocates resources and specifies targets and goals for the various regional health enterprises by means of an annual steering document. The enterprises, in turn, are expected to report on performance through formal reports and a formalised steering dialogue (Opedal and Stigen et al. 2002 and 2003).

We will also examine the part of the hospital performance system that is integrated into financial management systems. Norwegian health enterprises are financed partly by funding or reimbursement from the government based on productivity. Performance-based funding of this kind – a sort of «money-follows-the-patient system» – was introduced in 1997. In addition, a sophisticated DRG (Diagnosis Related Groups Classification) system was established connected to this financial performance system. DRG is an activity-based funding system, whereby doctors code each patient's case according to a complicated typology of diagnoses. In theory, the severer the diagnosis, the greater the resources needed, and hence the more the hospital is reimbursed.

In this paper we will first present a theoretical perspective based on a broad institutional approach anchored in March and Olsen's (1989) institutionalism as well as in the agency literature (Pollitt et al. 2004). This approach will be contrasted with the official or practitioner model of performance management, which proceeds much more from the premise that performance–management systems are technical and objective. Second, we will introduce the Norwegian context by outlining the hospital reform and the activity-based funding system. Third, we will examine how the new performance-based management system works in practice. We will analyse to what degree the effects and results – internal and external – of the reform vary according to how the contract-steering model is shaped, or whether other factors like trust and cooperation are more important. Fourth, the activity-based financing system will be examined by focusing on individual cases. Finally, we will discuss our findings with reference to our theoretical approach.

The empirical basis of the paper is first, a mail survey of executive leaders and leader teams and all members of the executive boards of the 5 regional and 35 local health enterprises conducted in 2003. A total of 326 respondents answered the questionnaires and the response rate was 72 per cent (Opedal and Stigen et al. 2003). This group of respondents will have had first-hand experience of the reforms' effects on the working of the performance–management system, but will have less idea of the overall effects as seen from the perspective of the political executives and administrative leaders as well as by the clinics within the different hospitals. Second, the case studies of the DRG system are based on public documents from the government and the Audit Office, on press releases issued by the parliament (Storting), the Ministry of Health and the health enterprises, and on information from their web sites and media coverage in national and regional newspapers. There is also a body of secondary literature from various research projects that have studied both this case and other similar systems.

Theoretical perspectives

The introduction of NPM in many countries has been characterized by changes in the structure of their political–administrative systems from integrated to disintegrated or fragmented systems (Christensen and Lægreid 2001). This has been achieved by combining vertical structural specialization – more autonomy for general agencies, regulatory agencies and state-owned companies or enterprises – and increased horizontal specialization (single- purpose organizations) – differentiating between the government's roles and functions as owner, administrator, regulator, controller, purchaser and provider.

Closely connected with the NPM movement is the Regulatory Reform Program launched by the OECD in 1997, which is known as the practitioner's model (Pollitt et al. 2004). The new orthodoxy promoted by the OECD is to separate the regulatory role of the state from its roles as owner, policy-maker and commercial actor, to upgrade the status of competition to that of a major instrument, to deregulate and liberalize state monopolies, to reduce state ownership, to commercialise public services by introducing internal markets and quasi markets, to improve performance and efficiency and to make public spending more effective.

The OECD report on Norway focused on hospitals as a key sector. The hospital reform was seen as a significant step forward in the promotion of more patient choice and greater efficiency and as an important reform aimed at improving hospital management. However, it was criticized for not going far enough in promoting market mechanisms and for not doing enough to separate the state's roles as purchaser and provider (OECD 2003: 9). A key challenge is considered to be finding the right balance between local autonomy and central government control, or, put differently, to fulfil the government goal of «centralization of policy and decentralization of delivery responsibility».

The expectation engendered by this official model (Pollitt et al. 2004) or the «public interest perspective» (James 2003) is that structural devolution and more managerial autonomy combined with performance management will improve performance and efficiency without having negative side-effects on other values like control and democracy. Our argument is that this is a hypothesis and not an evidence-based fact and therefore needs to be examined through empirical studies (Christensen and Lægreid 2004b).

One potential problem is that political executives will lose control and that it will be difficult to maintain trust. Aggregative processes and institutions may push aside integrative ones, to use March and Olsen's (1989) concept. Overall these changes seem to have resulted in political executives' losing political control and in administrative leaders, agency leaders and state commercial leaders gaining influence (Pollitt and Bouckaert 2000). This has prompted efforts by political executives to regain control, i.e., deregulation and increased autonomy for subordinate units has been followed by attempts to introduce more central control and reregulation, in an attempt to reduce ambiguity about when political executives may intervene and to develop a variety of performance–management systems (Christensen and Lægreid 2004c, Gregory 2003).

Obviously, there is a dynamic interplay between increasing autonomy for agencies and state commercial entities and the political–administrative control of those units. In prescribing both enhanced autonomy and more control and re-regulation, NPM reforms perpetuate an enduring tension and conflict. On the one hand, subordinate organizational units are to gain more autonomy, both from the political leadership and from other actors. On the other hand, central political control is to be enhanced by strengthening frame-steering and regulatory power. Political authorities are to abstain from involvement in individual cases while at the same time strengthening their role as general regulators through the formulation of laws and rules or by the use of other general control instruments. In practice, however, this is not easy, because political executives are constantly confronted by individual cases, often of a problematic nature, leading to controversial attempts to intervene and also to the development of performance–management systems that may potentially give them more control. Often political executives operate according to a reactive political logic that may be at odds with administrative–economic logic and technical systems (Christensen and Lægreid 2002). One problem for performance–management systems is that they potentially allow the involved parties to «cheat» (Hood 2002).

The dynamics and tensions indicated reflect the fact that the NPM movement generally and the performance management system specifically are double-edged swords or hybrids that assume both autonomy and control. On the one hand, they are based on economic organization theories, like public choice or principal–agent models, which are based on the assumption of distrust (Boston et al. 1996). Agencies and state commercial units are assumed to be self-interested bodies that need to be controlled through specified performance contracts, performance control and assessments. Thus there is an element of centralization and the slogan is «make the managers manage».

At the same, the NPM movement is also derived from management theories whose basic assumption is mutual trust. According to these theories, subordinate units and superior bodies have common interests and the only way to increase the efficiency of public bodies is to give operating managers more discretion and leeway in deciding how to use allocated resources. The best way to improve organizations is supposedly to allow more autonomy and flexibility. Thus there is an element of decentralization and the slogan is «let the managers manage».

One of the main doctrines of NPM is managerial discretion combined with transparent targets and ex-post control by result or performance (Hood and Bevan 2004). In setting targets, evaluating output information and applying rewards and sanctions it represents a specific type of regulatory system. Performance management allows a lot of autonomy and flexibility in the use of allocated resources and in choosing the means and measures. However, the price public bodies have to pay for their increased freedom is to accept a more rigid performance–management system, which includes performance indicators and performance monitoring and assessment. The system is thus a mixed one that prescribes both centralization and decentralization and it is an empirical question in which direction it will tend in practice.

In this paper we set out to challenge the official practitioner model by applying a broader theoretical approach derived from the work of Pollitt et al. (2004). It is a combination of conventional organizational research and neo-institutionalism and uses a

broad institutional perspective (Christensen and Lægreid 2001). According to this approach, changes and reforms are both encouraged and discouraged by institutions (March and Olsen 1989, Brunsson and Olsen 1993). There is an interplay between institutional and historical links, conscious and planned reform initiatives, negotiations among different actors, and adjustment to external forces. Three dimensions are essential in this approach. First, the logic of appropriateness is a dominant logic of action (March 1994). Second, goal formulation is often an endogenous process. Third, history is not efficient, and path-dependency and traditions may prevent or modify reform efforts (March and Olsen 1989). The development of performance management will be examined and interpreted in terms of context. Both the historical–institutional context of national style of governance and the style of institutional regulation, based on specific identities, histories and dynamics, will be studied (Olsen 1997). The challenge is to describe and provide a better understanding of the dynamic balance between the institutional spheres of the market, professional expertise, autonomous subordinate units, and political and administrative executive actors in the field of hospital reform.

Owing to the intensification of the reform process over the past few years, there is a need for a more detailed empirical scrutiny of how reforms are implemented and what effects and implications they have. While certain effects are expected and often promised, they are seldom reliably documented (Christensen, Lægreid and Wise 2003, Pollitt and Bouckaert 2000). We operate with an extended effect concept, which not only focuses on internal administrative and technical–economic effects but also includes external political effects (Olsen 1996). Thus performance management will be studied in a wider democratic context.

The case of Norway

The context

The hospital reform and performance management. In 2002 responsibility for Norwegian hospitals was transferred from the counties to central government. Ownership was thereby centralized to a single body – the Ministry of Health – and an ownership department was established to perform this function; administrative and oversight functions were organized in two subordinate agencies. The reform also set up new management principles for the hospitals based on a decentralized enterprise model. The reform thus implied centralization, decentralization and commercialization at the same time (Lægreid, Opedal and Stigen 2003).

The reform was prepared in a closed and rapid decision-making process and the underlying organizational thinking was rather ambiguous and not very well developed (Herfindal 2004). One of the main challenges of the reform is to balance the autonomy of regional and local health enterprises and political control by the central government. On the one hand, the minister of health has full responsibility for conditions in the health sector. On the other hand, the enterprises are given enhanced local autonomy, with their own executive boards and general managers. The latter have powers of authority to set priorities and manage regional and local health enterprises within a

certain framework. The reform potentially strengthens overall central government ownership responsibilities and control, but it also simultaneously represents a decentralized system of management. Thus, it is a rather tension-ridden reform that allows for a variety of practices.

The hospitals changed their organizational form from that of public administration entities to become part of regional health enterprises (RHE). Five regional health enterprises with separate professional boards were established under the Ministry of Health, and these, in turn, organized approximately 250 institutions (mostly hospitals) into 35 local health enterprises (LHE) under regional jurisdiction. The health enterprises are separate legal entities and are thus not an integral part of the central government administration. Fundamental health laws and regulations, policy objectives and frameworks are, however, determined by the central government and form the basis for the management of the enterprises. Moreover, the organization of the enterprises stipulates in several ways how the owner may exercise control. These are some of the main features of an MBOR-type performance–management system.

First, central government appoints the regional board members, none of whom are politicians. The only group that has any formal representation is health enterprise employees and preference is given to so-called professional board members with experience from executive boards in the private sector. Second, the owner exercises control through the Health Enterprise Act, through the articles of association, steering documents (contracts), and through decisions adopted at the annual enterprise meeting. The ministry has attempted to separate the formal steering dialogue (the «line dialogue») from the more informal arenas of discussion (the «staff dialogue»). Third, the government finances most hospital activities and there is also a formal assessment and monitoring system – with formal reports on finance and activities to the ministry.

In summary the reform provides for decentralized management and delegation of financial responsibility while at the same time allowing the minister of health to instruct the regional health authorities and overturn board decisions in all cases (cf. OECD 2003). Consequently, the reform by opening up for stronger state direction and initiative appears to represent a break with the stated goals of greater autonomy and delegation under the modernization program for the public sector (Byrkjeflot and Neby 2004, Grønlie 2004, Lægreid, Stigen and Opedal 2004). A key challenge is how to balance the autonomization of the management process and delivery responsibility with the centralization of control and policy issues. We believe the reform contains potential inconsistencies – a tension between centralizing and decentralizing and between economic and management ideas (Boston et al. 1996). The potential deviation between theory – representing an official practitioner model – and practice in the new system is not only connected to the larger question of how to balance political control and enterprise autonomy but also to the influence of the political–institutional context on the more specific working of performance–management systems. How easy is it to develop performance indicators that are specific and easily measurable? How much discretion and qualitative judgment is involved and how do environmental, cultural and instrumental factors interact in reality in the working of such systems? Has the system in practice turned into a formal performance–management model or is it a combination of a trust-based system based on dialogue and a formal contract system?

We will also ask whether there are differences between the local and regional levels. One argument is that the performance–management system works better the further it is removed from the political level. Owing to differences between political logic and management logic, the main problem with the performance–management system seems to be at the interface between politicians and managers (Christensen and Lægreid 2002). Thus we would expect the performance–management system to work better for local health enterprises than for regional health enterprises, which are closer to the political level. A counter-argument is that proximity to the political level would make executives in the regional health enterprises more loyal to the performance–management system. The government appoints the board members at the regional level and many of them have experience from the private sector and are thus more dedicated to the system. At the local level there might be a more explicit mix of traditional, trust-based governance and the new steering techniques. There may also, however, be less loyalty to the system and it may be more vulnerable to cheating. This leads us to the next point.

The DRG system and activity-based funding. Diagnosis Related Groups (DRG) is a classification system that groups in-patients by principal diagnosis and other features in order to obtain homogenous resource groups. Resource consumption is calculated for each DRG group, reflecting the average cost of treatment in that group. In Norway DRG has mainly been used for resource allocation and is now integrated into an activity-based funding system. Funding of in-patients' treatment is linked to activity level, calculated as DRG score per hospital stay, reflecting differences in the estimated resource consumption between patient groups (Modell 2004). Each group of DRGs has an estimated price based on average resources used for a hospital stay for patients in this group (Lian 2003).

The DRG system was first introduced in the USA as a research project in the 1970s and applied by the US health insurance fund Medicare from the 1980s onwards. The DRG ideas came to Norway in the mid-1980s (Aas 1985, Torjesen 2004) and experiments with resource allocation based on DRGs started in the early 1990s. Despite considerable implementation problems and no clear efficiency gains (Mellemvik and Pettersen 1998, Pettersen 1999, Lian 2003), nation-wide activity-based funding of somatic hospitals based on the DRG system was introduced in 1997. Since then DRG-based performance indicators have been used by central government to allocate resources to health enterprises. In recent years, between 30 and 60 per cent of total funding has been based on such indicators.

The main intention behind the use of DRG in Norway was to increase hospitals' level of activity and not to cut total expenditure in the health care sector. The DRG system is integrated into an activity-based funding system and works as a management tool used in contracts between regional health enterprises and hospitals, as a means of introducing performance targets in hospitals and as an incentive for increased productivity. Activity-based funding systems have been used to a lesser degree in clinics (Kjekshus 2003). This may, however, change as a result of the introduction of value-based management, unitary management models and the transformation of hospitals into health enterprises (Torjesen 2004, Torjesen and Gammelsæter 2004).

On the surface, DRG seems to be a technical–economic system with efficiency potential. However, if one regards such a system not as fair and unbiased, but as built

on complexity and professional discretion, then a potential exists for the development of intricate strategies to obtain more money from the government. In fact, it is a partly discretionary system that allows latitude for different rational strategies between levels and actors, and special arrangements have been introduced to avoid negative side-effects, such as methods for controlling «DRG-creep» or cheating on the system (Lian 2003).

One reason for this potential loose coupling of ideals and practice is that it is rather difficult to create a fair system in which resources used and reimbursed are exactly proportionate. This might lead to the most «valuable» patients being more sought after than those who represent a financial «burden». Another reason is that it is left to the doctors' discretion to decide what diagnosis – one with higher, medium or lower rewards – to make. Although there are professional norms of appropriateness that prevent constant abuse of such a system, it still offers a lot of leeway. Third, patients may have multiple problems, and it is then left to doctors' professional judgement to rank main and secondary diagnoses. This could also potentially result in various strategies to obtain greater rewards. Fourth, the DRG system differentiates according to what phase of treatment a patient is. A multi-problem patient is, for example, more valuable to a hospital in the earlier phases of treatment, while reimbursement is lower in the later, recovery phases. This may lead to hospitals or different units within one hospital competing for patients. All these potential problems and «perversions» of such a financial–performance system need to be taken into account by the central political and administrative leadership and by the regional and local boards and their directors. We will ask whether this system lives up to its declared main goal of increasing efficiency without negatively affecting other goals, or whether it leads to jeopardy, negative impact or perverse effects (Hesse, Hood and Peters 2003).

The hospital reform: trust-based or performance-based management?

In this section we will describe and analyze the effects and outcome of the hospital reform by focusing on internal administrative effects and external effects on users and patients. We will relate this to MBOR as a performance–management system and to the theoretical perspectives outlined. We will contrast two management models. The first is a trust-based model, informed by a combination of hierarchical control and traditional cultural elements, based on a high level of mutual trust and understanding between regional health enterprises and subordinate hospitals, but also between the local, regional and central levels in the health policy sector. This model envisages a high degree of decentralization and local autonomy. The intention is to let the managers manage and thus enhance cost-efficiency by giving them discretion in using allocated recourses. There is a well-developed system of dialogue, cooperation and informal networks and contact patterns. This model is more in line with the traditional Norwegian model of mutual cooperation and consensus but also contains unmistakable management elements.

The other model is a performance–management model, which is based to a greater extent on distrust. Hospitals and local enterprises pursue their own interests based on local rationality and institution-specific goals, which are not necessarily consistent with the goals of central government. The same goes for the regional health enterprises. They thus need to be controlled via formal contracts and management systems, monitoring and assessment arrangements. The idea is to make the managers manage by use of steering documents, formal steering dialogues, performance–management techniques and enterprise meetings. This model is more in line with the new official regulatory model of the OECD and with NPM reforms.

Proceeding from the idea of political design and loyalty, we would expect the performance–management model to be better developed and have stronger effects at the regional level than at the local level. Seen from an institutional perspective we would expect the institutional tradition to enhance a trust-based system of government at the local level and the performance–management model to run into greater compatibility problems when confronted by the hospital culture.

We distinguish between indicators of trust and cooperation, on the one hand, and indicators of formal performance–management techniques on the other hand. We ask to what extent executive leaders and board members of health enterprises agree with various statements about the relationship between health enterprises and other actors, using a scale from 1 to 5 (very much agree). The following assertions are used as indicators of management-based trust and cooperation: «There is a high level of trust between regional health enterprises and the Ministry of Health», «There is a high level of trust between local and regional health enterprises», «Cooperation between health enterprises in the region is good», «Regional health enterprises' steering of local enterprises is characterized by dialogue and cooperation».

To measure performance–management techniques we use the following assertions: «Performance accountability for health enterprises is clarified in a precise way in the contracts and steering documents between regional and local health enterprises», «The enterprise meeting and contracts give local health enterprises sufficient means for steering», «The health reform has improved the development of quality performance indicators», «It is difficult to distinguish between 'steering dialogue' and 'staff dialogue'», and «The steering document from the owner is too detailed».

The level of trust between the regional level and the central level is rather high (see Table 1 next page). Board members and executive leaders report that they have a high level of trust in the Ministry of Health, something that partly reflects the fact that regional board members have been recruited by the ministry. The table also shows quite a high level of trust between regional and local health enterprises, but a relatively lower level of cooperation. Fewer than half of the respondents agree that management relations between the regional and local levels are characterized by cooperation and dialogue.

When it comes to the formal performance–management system almost 8 out of 10 board members and executive leaders in the regional health enterprises say that the formal steering document from the ministry is too detailed. This practice runs counter to the reformers' intention of steering at a distance by concentrating on general and strategic issues and leaving the details to the enterprises. In addition, quite a few

respondents said it was difficult to separate the formal steering dialogue specified in the articles of association from the more informal areas of discussion, consultation and networks. Two out of three executives at the local level agree that performance accountability is clarified in the formal contract and steering documents. Despite this, fewer than half of the respondents report that the formal documents and procedures are sufficient to steer local health enterprises. And only slightly more that 50 per cent of the executives at the local level say that quality indicators have been developed to any great extent. In contrast, 81 per cent of executives at the regional level report the development of quality indicators.

Table 1. Variables showing attitudes towards trust relations and performance–management models. Regional Health Enterprises (RHE) and Local Health Enterprises (LHE). Percentages.

	RHE	LHE
Trust relations:		
Agree that there is a high level of trust between regional health enterprises and the Ministry of Health	66	-
Agree that there is a high level of trust between local and regional health enterprises	63	60
Agree that cooperation between health enterprises in the region is good	52	37
*The steering of local health enterprises by regional health enterprises is characterized by dialogue and cooperation	-	43
Performance management:		
It is difficult to separate the «steering dialogue» from the «staff dialogue»	43	-
The steering document from the owner (the Ministry) is too detailed	79	-
** Quality performance indicators have been developed to a great extent	81	54
Agree that performance accountability for the health enterprises is clarified in a precise way in contracts and steering documents	-	68
*Agree that there is sufficient steering of the health enterprises through the enterprise meeting and the contracts	-	47
N (average)	56	248

*This question was only put to local health managers (N=90), not board members
**This question was only put to regional health managers (N=21), not board members

There are high positive significant intra-correlations among the indicators on trust, cooperation and vertical dialogue (see Appendix Table 1A and Table 1B). For local executives there is an especially strong correlation between high mutual trust between the local and regional level and vertical steering based on dialogue and cooperation. Second, the trust, cooperation and dialogue variables do not vary in a significantly negative way with the formal performance system. On the contrary, there are some

significant positive correlations, indicating that the two sets of independent variables are more complementary than alternative. This indicates that there might not be a conflict between trust based and performance based management systems (Johnsen 2001). The paradox is however that on the one hand performance management systems build on assumptions of distrust between superior and subordinate agencies. But un the other hand a certain level of trust is necessary for making the performance management system work. Third, there are positive inter-correlations among the indicators for the formal performance system, but these are weaker than those for the trust/co-operation/dialogue indicators. Fourth, the inter-correlations are generally stronger at the local level than at the regional level.

Effects of the hospital reform

The effect variables, reflecting the main goals behind the reform, are based on the following questions: «Based on your experience with the hospital reform, to what degree would you say there have been improvements in the following areas in your health region (health enterprise)?» The areas chosen for this paper are «More equality in the health service», «Shorter waiting lists/waiting time», «More user influence», «More closure, merger, and specialization of hospitals» «More efficient financial management», «More efficient personnel management» and «More professional and performance-based management». The first three categories are indicators of external effects and the last four of internal effects. For each of these categories the respondents were asked to evaluate the effects on a scale from 1 (very weak improvements) to 5 (very strong improvements). We also include a variable based on a question about overall evaluation of the reform so far: «All in all, how successful do you think the health reform has been so far?»

First, the reform is evaluated as more successful by respondents at the regional level, than by those at the local level (Table 2). The same tendency is also obvious when the respondents are asked to evaluate specific areas. One way of interpreting this is that executives at the regional level are generally more loyal to the reform and identify more closely with it than local executives, who are more likely to represent the traditional hospital culture. Thus, there might be more wishful thinking, rhetoric and symbols at the regional level than at the local level, which is closer to the world of practice.

Table 2. Experience of effects of the hospital reform. Percentage of respondents who agree that there have been improvements in the following areas.[1] Regional Health Enterprises (RHE) and Local Health Enterprises (LHE)

	RHE	LHE
Evaluation of overall effect:		
So far the health reform has all in all been a success	75	52
External effects:		
More equality	33	16
Shorter waiting lists/waiting time	82	69
Greater user influence	45	17
Internal effects:		
Closure, merger and specialization of units	35	13
More efficient financial management	86	61
More efficient personnel management	52	35
*More professional and performance-related management	76	58
N= (average)	56	253

* At the regional level this question was only asked to the health managers (N=21), not to the board members.

Board members and executive managers of health enterprises have primarily experienced shorter waiting lists and waiting times for patients, improved financial management and generally more professional and performance-related management as an effect of the hospital reform. Few report more service equality or improvements in the functional specialization of hospitals. The improvements in personnel management are also less apparent than in other management areas. The results seem to indicate that, from the perspective of health enterprise leaders, some main goals of the reform have been largely fulfilled, while others are lagging behind. The change of organizational model seems to have had a greater impact on efficiency than on equality (Boyne et al. 2003, Christensen 2003).

Explaining variations in effects

The next question on which we focus is how the scores for trust relations and performance–management indicators relate to the indicators of external and internal effects. We first examine the bivariate correlation between each set of variables and the

[1] Meaning respondents answering alternatives 4 and 5 on the question.

effect indicators and then do a multivariate analysis of the relative importance of the various independent variables for external and internal effects.

Tables 2A and 2B in the Appendix show the bivariate correlations between the two sets of independent variables and the effects of the hospital reform. The main result is that there is a lot of consistency. Respondents scoring high on trust, cooperation and dialogue at the local and regional level see more positive external and internal effects than those who scored low on trust. What is more, the performance–management system affects perceptions of the effects of the hospital reform. Those who report that accountability has been clarified by contracts and steering documents and who believe that performance indicators have been developed to a great extent see more positive effects than the others. While trust relations have a significant effect both at the local and regional level, the performance–management system seems to have greater effects at the local level.

The multivariate analyses mainly confirm the findings from the bivariate analysis (Tables 3 and 4). First, when we control for other variables, both trust relations and the performance–management system influence the variation in external and internal effects and implications of the hospital reform.

Table 3. Regional health enterprises. Summary of regression equation by effect indicators and cooperation/performance indicators. Standardized Beta Coefficients. Linear regression[2]

	Overall evaluation of the reform	External effects			Internal effects		
		Service equality	Shorter waiting lists	Greater user influence	More closure, merger, specialization	More efficient financial management	More efficient personnel management
Trust:							
Trust RHE/Ministry	.21*						
Trust RHE/ LHE	.07	.29*	.57***	.61***	.17	.19	.15
Local cooperation	.46***	.23	.09	-.10	.15	.21	.17
Performance management:							
Too detailed steering document					.34***		.18
Multiple R	.56	.47	.63	.54	.48	.36	.37
R2	.32	.22	.40	.30	.23	.13	.14
Adjusted R	.48	.19	.37	.27	.19	.10	.08
F-statistics	7.9	7.3	17.1	10.2	5.3	.2.1	2.5
Sign of F	.000	.002	.000	.000	.003	.026	.070

***: significant on .01 level, **: significant on .05 level, *: significant on .10 level

Second, there are significant differences between the local and regional level. At the regional level the trust-related variables seem to be more important than the performance–management system variables when it comes to external and overall effects, while trust variables have no significant effect on the internal results of the reform. We observe that detailed steering documents seem to have an effect on closure, merger and functional specialization of hospitals. At the local level the importance of quality-performance indicators seems to have a significant effect on both external and internal effects, but so do trust relations between regional and local health enterprises.

[2] Only variables that have a significant correlation in the bivariate analyses are included. More professional performance management is not included because of low N (21).

Table 4: Local health enterprises. Summary of regression equation by effect indicators and cooperation/performance indicators. Standardized Beta Coefficients. Linear regression[3]

	Overall evaluation of the reform	*External effects*			*Internal effects*			
		Service equality	Shorter waiting lists	Greater user influence	More closure, merger, specialization	More efficient financial management	More efficient personnel management	More professional performance management
Trust								
Trust RHE/ LHE	.29**	.23**	.16**	.14**	.28***	.22***	.02	.09
Local cooperation	.16**	.09		.15**	.12*	.04	.08	.09
Performance management								
Quality performance indicators	.37***	.28***	.20***	.32***	.19***	.26***	.30***	.43***
Performance accountability clarified in steering documents	.09	.02	.07	.00		.12*	.08	.13**
Multiple R	.61	.44	.31	.43	.42	.44	.35	.53
R2	.38	.20	.10	.19	.18	.19	.12	.28
Adjusted R	.37	.18	.09	.17	.17	.18	.11	.26
F-statistics	31	11.7	8.9	11.5	14,9	.12.4	7.1	19.8
Sign. of F	.000	.000	.000	.000	.000	.000	.000	.000

***: significant on .01 level, **: significant on .05 level, *: significant on .10 level

The main finding from the analysis is that variations in external and internal effects of the hospital reform can be traced back both to trust relations and to the formal performance–management system. Well-developed quality performance indicators and a clarification of performance accountability by use of contracts and formal steering documents make a difference, but so do mutual trust relations and steering of local health enterprises by the regional level through dialogue and cooperation. We can also see that trust relations have a relatively stronger impact on external effects than on internal effects. At the regional level trust relations and local cooperation seem to be

[3] Only variables that have a significant bivariate correlation are included in the table. Because of high inter-correlation between «Trust between RHE and LHE» and «Regional management based on dialogue and cooperation (R=.70) only one of the variables is included in the table. The variable «sufficient steering through enterprise meeting and contract» is excluded due to low N.

more important than the performance–management system, especially when it comes to external effects.

When it comes to the more controversial issues of merging, closure and functional specialization of hospitals, detailed steering documents from the ministry seem to be important for executives at the regional level. The ministry has intervened in quite individual cases of closure and merger of local hospitals, emergency and maternity wards (Lægreid, Opedal and Stigen 2003). In 2002–2003 there were 13 extraordinary enterprise meetings, indicating a rather proactive and intervening ministry (Opedal 2004). Increased political salience, illustrated by a more active parliament (Opedal and Rommetvedt 2004) and the emergence of local lobby groups, makes it more difficult for the ministry to increase the autonomy of regional health enterprises. Thus, both the formal performance–management system and mutual trust relations between the regional and central level might come under pressure, resulting in a loose relationship between those features and perceived effects of the hospital reform. At the local level trust relations seem, however, to be important for comprehensive functional specialization. One lesson from this analysis seems to be that it is easier to see the positive implications of both the performance–management system and of the trust relations when focusing on the relationship between the local and regional level than between the regional and central level. This does not, however, exclude the possibility of cases at the local level that challenge both trust relations and the performance–management system. This will be illustrated in the next section.

The DRG-system and activity based funding: increased efficiency or unintended consequences?

The main focus of DRG use has been in resource allocation and pricing. In the Norwegian tax-funded health care system, where the financing and ownership of hospitals are public, the aim of using DRG financing is to improve the control of hospital productivity (Mikkola et al. 2002, Magnussen 1995). Since 1997 an increasing proportion of the grants from the central government to the counties (regional health enterprises from 2002) had been based on average DRG-based cost per in-patient treated, a tendency that is now being reversed.

Several negative effects of the DRG system, such as «DRG-creep», patient selection and early discharge from hospital are well known (Mikkola et al. 2002, Donaldson and Magnussen 1992). DRG-creep means that patients are placed in higher-priced DRGs than their actual state of health would warrant. This is a well-known dysfunction of the system, which is vulnerable to attempts by hospitals to increase revenues by «creative» coding of patients (Modell 2004). Already in 1985 it was pointed out that the system offered opportunities for a systematic incorrect high coding of patients' diagnoses in order to obtain maximum funding (Aas 1985). DRG creep can be of three different types (Hsia et al. 1988, Midttun et al. 2003). First mis-specification, meaning that the wrong diagnosis is applied or that the diagnosis does not fit the case report. Second, miscoding by reporting treatment or procedures that have not been conducted. Third,

re-sequencing – i.e., changing the sequence of diagnoses or reporting a secondary diagnosis as the main diagnosis in cases when this would result in higher reimbursement. As indicated earlier, DRG may lead to hospitals engaging in many intricate strategies to obtain more money from the government.

Following the introduction of activity-based funding founded on the DRG system, both productivity and expenditure increased in Norwegian hospitals, resulting in severe budget-deficit problems. Waiting times have decreased, but there has also been a decrease in overall cost-efficiency, partly due to increased wages for physicians and nurses (Lian 2003). Activity-based funding is not very popular among clinic directors in hospitals. The DRG system has little legitimacy, due both to features of the system itself and to the practical problems of pricing individual cases. Moreover, a main critique is that central aspects of the hospital's activities are not possible to quantify (Lian 2003). Another lesson from the DRG system combined with performance-based funding is that activities that do not yield a net income tend to be given low priority (NOU 2003:1). This may result in patients with chronic diseases and «soft services,» such as research, habilitation, rehabilitation and psychiatry losing out in the competition for resources (Dalen, Grytten and Sørensen 2002). We will now illustrate the problems of introducing the DRG system and activity- and performance-based funding in Norway by focusing on a coding case in a specific health enterprise, on a performance audit by the Audit Office and on the reform of the funding system.

The coding case: creative coding and DRG-creeping.

In March 2003, a leading newspaper uncovered what was later labelled a coding scandal in a regional health enterprise (Aftenposten 12.3 03). The newspaper revealed that one clinic in a local health enterprise had registered more than 50 per cent of all patients in Norway as having undergone/needing tonsillectomies and as suffering from snoring/needing snoring operations. In this pilot project, a subordinate doctor proposed to the health enterprise a new «creative» way of coding, primarily by adding a secondary diagnosis to the primary. He posed as an external «consultant» and asked for a 10 per cent commission of the extra funding yielded by this practice. The managing director of the regional health enterprise and some local enterprises agreed to this idea, which brought each hospital extra funding to the tune of several million Norwegian kroner.

When this scam was revealed, the minister mounted an investigation and the board of the regional health enterprise was instructed by the minister to react and report back. He also used an external auditing firm to investigate the case. Forty-eight per cent of the investigated coding was found to be false. The manager of the local health enterprise and the clinic manager involved resigned, and «supplementary» grants that the hospital had received illegally over the previous two to three years had to be paid back. The director of the regional health enterprise was severely criticized and stripped of many of his board chairmanships, and some months later he too resigned from the position,

partly because of the legitimacy problems arising from this case.[4] The minister also replaced the executive board of the regional health enterprise.

The coding case was investigated by the Audit Office, which criticized the Norwegian Board of Health for passivity and questioned its autonomy from the Ministry of Health as a regulatory agency. Generally it criticized both the government and the health enterprises for lacking sufficient control systems and routines. The standing committee on scrutiny in the Storting also handled the coding case and took a very critical view of the «creative» coding practice, which was seen as undermining trust both in the funding system and in public health care generally. The scrutiny committee asked for a comprehensive evaluation of the activity-based funding system and the Audit Office is now to do a performance audit of the DRG system, focusing on the coding of patient diagnoses. As a consequence of the coding case, the Ministry of Health is conducting a thorough evaluation of the activity-based funding system for Norwegian hospitals. The Board of Health has also opened a formal supervisory case against the local health enterprise that introduced the illegal coding practice.

This case does not seem to be unique. The investigation by the Ministry of Health has indicated that upgrading of treatment is a widespread practice and brings hospitals higher reimbursements than a correct DRG coding would warrant. The report reveals discrepancies between the case record information and the reported DRG data in more than 40 per cent of the cases studied (Midttun et al. 2003). Three out of five hospitals practise some kind of «creative» coding to increase funding, such as adding secondary diagnoses or claiming reimbursement for treatment twice – both from the local hospital and from a specialist (Aftenposten 17.6 2003, Eilertsen 2003). Fourteen local health enterprises were suspected of «creative» coding and a total of 19 local health enterprises had to account for a significant bias towards diagnosis and treatment that yielded greater resources (Torjesen 2004). Partly as a result of this practice there was a significant increase in hospital expenditure between 2001 and 2002 but this might also to some extent be explained by the general hospital reform (Midttun et al. 2003). In contrast to a report from the Audit Office (Dokument 3:6 (2001–2002)), which indicated that until 2000 «under-coding» was a greater problem than «over-coding», the new investigation indicated the opposite pattern for 2001 (Midttun et al. 2003). In 2004 a new report from the Audit Office examining 14 hospitals revealed that 27 per cent of the coded diagnoses were wrong resulting in increased funding for 13 of the 14 hospitals. On average they had received 6 per cent more in such supplementary grants. If these hospitals are representative for all hospitals, the central government could have over-funded the hospitals with 1.1 billions NOK due to this miscoding (Nettavisen 19.10 2004). The Secretary General of the Norwegian Medical Association explained the miscoding by lack of control from the Directorate of Health and Social affairs and pressure from the hospital management on the medical doctors to set DRG codes with higher reimbursement. Some hospitals have their own controllers to overrule the medical doctors` coding practice (Dagsavisen 12.8 2004).

[4] He also got into trouble for trying to «steal» patients from another regional health enterprise, using a former parliamentary representative to lobby against his own minister of health, and for creating legitimacy problems by paying himself (and his fellow leaders) high salaries and pensions.

An example of dysfunction in the DRG system is that the number of cases of surgery for snoring increased by more than 100 per cent between 1999 and 2003, mainly as a consequence of the very profitable reimbursements for this operation. For one local hospital, in particular, specializing in snoring operations became a very profitable business. The problem is that this kind of activity can reduce capacity for the treatment of other, more serious illnesses, such as cancer surgery or advanced ear surgery. Treatments that are complex, demanding and long-term may thus be given less priority (Gilman 2000), while treatment may be biased towards procedures with marginal costs that are lower than real treatment costs. This situation represents a major challenge to health care priorities (Kværnes 2004). As a consequence of the scam, the Ministry of Health in 2004 reduced the reimbursement for snoring operations to one third of the 2003 tariff.

The performance audit: are hospitals giving preference to the most profitable patients?

In 2003 the Audit Office submitted a performance audit report to the parliament on efficiency in hospitals (Dokument no. 3:3 (2003–2004)). This took the form of a comparative study of the organization of hip surgery in 28 hospitals. This audit is so far the most systematic attempt to address causal relationships in a performance audit by the Audit Office (Stene and Karterud 2003). The report reveals significant differences in efficiency between the hospitals investigated and also a shift from less profitable to more profitable surgery. The hospitals tend to give preference to the most profitable patients and put economic criteria before medical criteria. This practice is seen as an unintended effect of the performance-based funding system. Moreover, its negative effect on the prioritizing of patients implies longer waiting times for some patients. When the performance-based funding system was introduced in 1997, the government launched it as a funding system, not as a prioritization system, although it was aware of the risk bias towards more remunerative patient groups. The minister even admitted when modifying the system that he had not believed the warnings at the time but had later realized that the system was potentially dysfunctional. The report from the Audit Office documented this trend for a particular group of patients, and the Storting asked the government to systematically evaluate whether the performance-based funding system affected hospitals' patient priorities.

The funding system: a retreat to more block grants

Since 1997 the Norwegian funding system for hospitals has been a mixed system of block grants from the state and activity-based funding. The proportion of DRG-based performance funding has increased from 30 per cent of total subsidies in 1997 to 60 per cent in 2003. In 2004 it was, however, decreased again, to 40 per cent, partly as a consequence of the negative impact of the DRG system (Innst. S. nr 82 (2003–2004). This was done in spite of a recommendation by a public commission that the use of

activity-based funding should be increased (NOU 2003:1). The government's argument was that performance-based funding tended to stimulate productivity, while at the same time reducing control over health service priorities and over total health service spending. Performance-based funding tends to lead to the greatest expansion in areas where the hospital can get most income and not necessarily in the areas where the medical needs are greatest. The new system reduced waiting times but also produced overcapacity in some areas and a bias towards diseases that are easy to quantify and involve predictable costs at the expense of more serious, unpredictable and complex illnesses.

One lesson is that even in public health care systems such as the Norwegian, DRG creep and a gradual deterioration in the validity of classification systems are potential problems that may arise when the DRG system is used as a basis for financing (Mikkola et al. 2002). In such a system appropriate professional conduct is important, since DRG decisions are made by individual doctors or small groups of them, and as such it is a rather autonomous system. The coding scandal could be taken as an illustration of how new management models might challenge the trust and legitimacy that traditionally have been vested in the medical profession (Torjesen and Gammelsæter 2004). When the system fails, as shown above, it becomes much more structured and controlled, restricting professional autonomy and making the funding system more technical and economic. For this reason many doctors prefer a block grant system based on objective criteria, which may increase their autonomy, or else a system based on real costs, but this is often seen as potentially rather bureaucratic.

Discussion

The survey data reveal that the hospital reform in Norway in practice is an integrated model, combining informal, trust-based approaches and formal performance-management measures. The two management models do not represent alternatives to government strategy but rather supplement it. First, there is a rather high level of trust, dialogue and cooperation between executive leaders, both vertically between the ministry and the regional health enterprises and at the local and regional levels. Second, there are well-developed formal steering arrangements, consisting of detailed steering documents formulated as quasi-contracts. The majority of survey respondents agree that performance accountability for the health enterprises is clarified through these documents. In addition, a number of quality performance indicators have been developed. Third, in spite of this well developed formal system, the majority of executive leaders in health enterprises do not think the contracts and enterprise meetings represent sufficient mechanisms for steering the health enterprises. They are especially dissatisfied with the detailed steering by the ministry through the steering documents. In practice it is also difficult to separate the formal steering system from the more informal pattern of contacts and networks between executives at the regional and national levels. Fourth, executives at the regional level generally report more positive effects of the reform than their colleagues at the local level. Fifth, as a consequence of this mixed integrated system, variations in the perceived external and internal effects of

the reform can be traced back to both trust relations and to the formal performance–management system. This is most obvious at the local level. At the regional level, trust seems to be more important than the performance–management system, especially when it comes to external effects. Other studies, including other independent variables, also reveal the importance of trust when the effects of the reform are evaluated. Besides these studies reveal that there are also substantial variations between different regions (Opedal and Stigen et al. 2003; Opedal and Stigen et al. 2004). Some regions lean more towards cooperation and mutual understanding anchored in the established tradition and culture, while others have been more assertive in introducing new steering techniques, such as purchaser-provider models (Hallingstad 2004). The last, more radical strategy produced a lot of conflicts and implementation problems, whereas the first more incremental approach was more easily adopted.

We argue that this balance between a formal performance–management system and an informal trust-based system can be understood from a broad institutional perspective, combining instrumental, cultural and environmental features. From an instrumental point of view, a central feature of the reform is the formal basis of the relationship between the owner (the central government) and the health enterprises as specified in the Health Enterprise Act, the articles of association, the steering documents, the performance–management system and the general enterprise meeting. In practice these documents and formal arenas of communication are combined with an informal trust-related network and contact pattern that can be traced back to the traditional culture of the Norwegian health sector and the general style of governance (Christensen and Peters 1999). If we take a cultural approach, we find a tendency towards «path dependency,» illustrated by a clear loyalty towards the owner. This loyalty may be interpreted as evidence of a traditional culture in the sector. Traditionally, there was a close relationship between health institutions as public entities and the counties as the former owners of the hospitals (Carlsen 1995, Martinussen and Paulsen 2003), and as a core element in the welfare state, the health sector has been the focus of much attention from central political executives. One might, therefore, argue that the culture favours political control more than autonomy, making it difficult for central executives to practice «hands off» management (Lægreid, Opedal and Stigen 2003). Mutual understanding, cooperation, a high level of trust and dialogue have been main features of the Norwegian political administrative culture and policy style in general, and the health care sector is no exception. The new formal steering system has not replaced this policy style but supplemented it, making governance relations more complex.

Generally the performance management system seems to work best at the local level, which supports our previous finding that such systems work better the greater the distance from the political executive (Christensen and Lægreid 2002). The weak link of the system is on the interface between politics and administration. Performance measurement and performance management is becoming more and more common, but performance steering of agencies by political executives in ministry is not a common activity (Pollitt 2004). But even at subordinate level the system is vulnerable to the local culture and in practice we see the system adjusting to the trust relations and cooperative arrangements that already exist. In some cases the local culture may supplement and reinforce the performance–management system, but it can also undermine it, resulting

in negative side-effects and dysfunctioning of the kind indicated by the DRG case. What the DRG case might indicate is a cultural change from an integrated, collectivistic culture towards a more aggregative, individualistic culture (jf. March and Olsen 1989).

The institutional environment represented by the NPM movement and its ideas of autonomization sets some limits on state ownership. Devolution and the granting of more power to the executive boards raises questions about how central governmental executives should engage with issues now formally under the jurisdiction of the health enterprises. It is now more generally accepted that NPM-related reforms are appropriate and good, and the current received wisdom about good management systems naturally also influences and constrains the hospital reform. The hospital reform is thus built on the assumption that the role of the owner should be restricted to formulating principles of management, and that he should not intervene and become involved in details, as often happened under county ownership. The new and more strategic role of the central executives, however, coincides with a strong traditional norm for political action, whereby solving concrete and immediate issues is a central task (jf. Aberbach and Rockman 2000).

In Norway it has so far not been possible to draw firm conclusions about the effects of the activity-based funding system (Halsteinli et al. 2001, Kjekshus 2003). This study, however, indicates that the expectations of increased efficiency without negative side-effects envisaged by the practitioner's model will be difficult to live up to in practice. To understand what is going on in practice we have to supplement the managerial approach with contextual factors, which may help explain the dysfunctioning of the system. The analysis of the DRG system and activity-based funding reveal that performance assessment and increased output measurement in the public sector is likely to involve dysfunction. Until the end of the 1990s it was difficult to document unintended bias in prioritisation of patients (Lian 2003), but as we have illustrated in this paper the picture has changed in recent years. No matter how well intended performance management is, there are always unintended consequences (Lian 1994, van Thiel and Leeuw 2002). These include to stimulate strategic behaviour, damaging professionalism, increased monitoring costs, the emergence of a kind of «tunnel vision» brought about by emphasizing easily quantifiable aspects of performance, and sub-optimization, which implies reporting on only the most efficient parts of the organization (Smith 1995, De Bruijn 2002).

Quantitative measurement tends to drive out qualitative measurement and the new performance–management system tends to result in increased bureaucratisation. Such flaws may reduce the efficiency and effectiveness of the performance system and there may be a weak correlation between performance indicators and actual performance. In our case this has to do with «perverse learning»: once organizations or individuals have learned which aspects of performance are measured, they can use that information to manipulate their assessments (Meyer and Gupta 1994, van Thiel and Leeuw 2002). Bad performance may be hidden or misrepresented, or distorted performance indicators might be used to over-report good performance, making the hospitals to appear more successful than they actually are. There may also be a problem of «skimming off the cream» – i.e., discriminating against implementing inefficient aspects of policies by providing services to those patients who make least expensive use of them, or favouring

patients who are most profitable, whereby the thresholds for treatment of the most profitable cases are set lower than a professional assessment would indicate. One aspect of such dysfunctioning is patient-shifting, whereby hospitals tend to avoid treating patients when the cost of treatment is above the average treatment cost. It is, however, contestable how extensive such «creaming» is. In Sweden, for example, these effects seem to be rather weak (Blomqvist and Rothstein 2000).

Hood and Beaven (2004) have identified three kinds of health care managers. First, the «honest triers,» who share regulators' objectives, do their best to meet the standards set and do not «game» when they fail; second, «reactive gamers,» who also share the objectives of the regulators, but try to game the system when they fail. This can be done by creative interpretation of coding rules, but also by data falsification in order to turn failures or bad performance into reported successes. Third, «rational maniacs,» who pursue goals thoroughly, at times illegally, often running counter to the intentions of the health care system, and who game the system in order to cover their tracks. The coding case might be seen as a case of «reactive gamers», although the introduction of illegal coding practices also suggests the existence of «rational maniacs». This seems to show that the practice of combining professional autonomy and discretionary reward systems may run into trouble when professionally appropriate behaviour, based on solid informal norms and path-dependency, is replaced by self-interested rational strategies that are «context-blind». Added to this, there is the potentially problematic role of managers in such systems. They may not necessarily confine themselves to passively complying with external pressure, but instead be more proactive and use various managerial tactics to develop and use organizational performance–management systems in biased ways (Modell 2004, DiMaggio 1988, Oliver 1991).

The DRG case and the dysfunctioning of the funding system have revealed that it is necessary to separate rhetoric from reality. There are two main views on how to handle the problems of the DRG system (Eilertsen 2003). The first regards this as an implementation problem, attributable to lack of knowledge and experience, and it is argued that it can be solved through more education, training, control and a more sophisticated system. The second viewpoint sees creative coding as a logical consequence of the system itself. According to this viewpoint, the problem is more fundamental and associated with the underlying policy theory. The problems are inherent features of the system and thus represent an «anticipated scandal» (Fosse and Westin 2003). The DRG system has been dominated by a technocratic and mechanistic logic, but in practice it also has political implications (cf. Lonti and Gregory 2004).

The assumption that the reform would enhance efficiency in the hospital system without negative side-effects has not been fulfilled in this case. We can see indications of eroding ethical capital and an administrative culture whose focus is shifting towards individual and organizational self-interest. Thus the administrative culture is under pressure to change, partly as a result of the reform, leading internal managers to adopt a more open attitude towards performance management; this in fact represents an over-adaptation. Greater technical sophistication might not be enough to reduce dysfunction. If outcome and output are difficult to observe, which is often the case when classifying illnesses, treatment, surgery and individual health effects, then efforts to introduce more sophisticated and more precise methods of measuring output will probably be of little

help. The quest for greater specificity in output and performance measurement might be self-defeating if critical differences between tasks are not taken into account (Lonti and Gregory 2004). It is not only a question of using measurement to determine accountability; there is also a need for a more open dialogue between hospitals, managers, political executives, parliament and the general public. The accountability problem cannot be reduced to a kind of technical pathology but has to be seen in the wider context of political legitimacy and the ambiguity of mutual trust between citizens and political executives. One general lesson from introducing management by objective measures in the hospital sector is that neither an activity-based funding system nor a formal performance–management system provides a panacea for the problems of economy, efficiency and effectiveness in this policy area. The hospitals are embedded in highly complex political, administrative and professional systems, and introducing private-sector steering techniques in such a setting is liable to produce unintended side effects.

Conclusion

This paper has focused on the mismatch between a strict performance–management doctrine and how it works in practice. Instead of describing and explaining the pattern using one dominant logic, we have advocated drawing a more complex picture of how health enterprises are organized, how they work and how they are transformed. A new performance management model based on NPM ideas has in recent years challenged the traditional Norwegian governance model. In practice we are now confronted with a mixed system, in which the traditional cooperative policy style is combined with new performance–management techniques and in which the political executive reserves the right to intervene when things go wrong or in politically sensitive cases (Christensen 2003). To understand the relationship between performance management and public-sector reform in practice, we have to look beyond one-factor explanations at the complex transformation processes going on. The reform process has been dominated by ideas about how health enterprises are supposed to behave according to an official idealised model, rather than by empirical documentation of how they actually work in practice. The formal management system seems to be rather broad, accommodating a variety of actual behaviour. Thus we must look behind the formal performance–management model and examine «living» institutions.

What kind of balance exists between various public sector norms and values in a period of New Public Management reform? One position is that NPM, with its strong emphasis on efficiency, tends to undermine traditional public service values of fairness, predictability, honesty, equity, continuity, security, due process and political control (Christensen and Lægreid 2004a). Generally NPM assumes that the culture of public service honesty is given, but at the same time performance–management techniques built on assumptions of distrust and self-interest may undermine the common culture and identity and create a shift towards a more individualist and egocentric culture. It is an open question whether there will be an erosion of the traditional values of fairness and honesty (Hood 1991), but there may well be an inherent latent corruption problem.

This is particularly a problem in public administrations where public service ethical capital was already low before performance–management techniques were introduced.

Another more optimistic argument is that NPM supplements traditional values by introducing service quality and customer service and responsiveness and increased efficiency and that the tensions that occur are possible to solve. A third position is that NPM tends to increase tension between different values in certain specific contexts (Pollitt 2003). In arrangements such as DRG systems, performance–based funding of health care services, or in countries with weak ethical capital in the public sector and a low level of trust, the new mixture of values engendered by NPM reforms might be more challenging than in situations with clear boundaries between the public and private sectors, strong ethical capital in the public sector and a high level of mutual trust. It would, however, be naïve to expect NPM reforms, with their strong focus on efficiency and customer service, to be successfully adopted right across the public sector or in the public sector in all countries without any loss of other desirable values. Increased efficiency cannot be traded off against public trust.

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Appendix:

Table 1A. Regional health enterprises: Correlations between measures of trust and performance–management systems. N= 56 (21)

	Trust between RHE and Ministry of Health	Trust between RHE and local HE	Local coope-ration	Difficult to separate steering dialogue from staff dialogue	Too detailed steering document from the Ministry of Health	Quality per-formance indi-cators developed
Trust between RHE and Ministry of Health	-	.10	.06	-.15	.05	-.39*
Trust between RHE and LHE		-	.61***	.01	.15	-.14
Local cooperation			-	-.02	.14	-.09
Difficult to separate steering dialogue from staff dialogue				-	.41***	.03
Too detailed steering document from the Ministry of Health					-	-.30

***: significant on .01 level, **: significant on .05 level, *: significant on .10 level

Table 1B. Local health enterprises: Correlations between measures of trust and performance management systems. N= 254 (85)

	Trust between RHE and local HE	Local coope-ration	Regional management based on dialogue and cooperation	Performance accountability clari-fied in contracts/steering documents	Sufficient steering through enterprise meetings and contracts	Quality performance indicators developed
Trust between RHE and LHE	-	.25***	.70***	.31***	.31***	.29***
Local cooperation		-	.28***	.07	-.04	.12*
Regional management based on dialogue and cooperation			-	.36***	.20	.16
Performance accountability clarified in contracts/ steering documents				-	.27**	.14**
Sufficient steering through enterprise meetings and contracts					-	.21*
Quality performance indicators developed						-

***: significant on .01 level, **: significant on .05 level, *: significant on .10 level

Table 2A. Regional Health Enterprises. Bivariate correlations between trust relations/performance systems and effect variables. Pearson r. N=56 (21)

	Overall evaluation of the reform	*External effects:*			*Internal effects:*			
		Equal service quality	Shorter waiting lists	Greater user influence	More closure, merger, specialization	More efficient financial management	More efficient personnel management	More professional performance management
Trust:								
Trust RHE/Ministry of Health	.28**	-.09	-.10	-.04	-.07	-.02	.14	.21
Trust RHE/LHE	.36***	.44***	.63***	.54***	.32**	.32**	.28**	.29
Local cooperation	.51***	.42***	.45***	.29**	.31**	.33**	.30**	.57***
Performance management:								
Difficult to separate steering dialogue from staff dialogue	-.15	-.03	-.14	.02	.22	-.03	.04	-.54**
Too detailed steering document from the Ministry of Health	.03	-.03	.15	.13	.39***	-.12	.23*	.00
Quality performance indicators developed	.00	.26	-.08	-.06	-.08	.17	-.03	-.14

***: significant on .01 level, **: significant on .05 level, *: significant on .10 level

Table 2B. Local health Enterprises Bivariate correlations between trust relations/performance systems and effect variables. Pearson r. N= 257 (82)

	Overall evaluation of the reform	External effects:				Internal effects:		
		Equal service quality	Shorter waiting lists	Greater user influence	More closure, merger, specialization	More efficient financial management	More efficient personnel management	More professional performance management
Trust:								
Trust RHE/LHE	.43***	.32***	.24***	.22***	.35***	.35***	.14**	.26***
Local cooperation	.28***	.19***	.08	.23***	.20***	.12*	.16**	.15**
Regional management based on dialogue and cooperation	.36***	.32***	.22**	.32***	.29***	.19*	.14	.27**
Performance management:								
Quality performance indicators developed	.43***	.33***	.26***	.34***	.30***	.36***	.28***	.48***
Performance accountability clarified in contracts/steering documents	.23***	.15**	.15**	.13**	.10	.25***	.12*	.23***
Sufficient steering through enterprise meetings and contracts	.20*	.05	.09	.01	.19*	.19*	.13	.13

***: significant on .01 level, **: significant on .05 level, *: significant on .10 le

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