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uni Rokkan Centre
Stein Rokkan Centre for Social Studies

Working paper
10-2012

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ISSN 1503-0946

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Gaming the system and accountability relations: Negative side-effects of activity-based funding in the Norwegian hospital system[1]

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OCTOBER 2012

Working paper 9 – 2012

1 This paper is written as part of the research project «Reforming the Welfare State. Democracy, accountability and management» funded by the VAM program under the Research Council of Norway. The paper was presented at the 2012 IPMN conference on Innovations in Public Management for Combating Corruption, 27–29 June, 2012, Honolulu, Hawaii. An earlier version was presented at the Scancor Alumni Grants Seminar, Stanford University April 13th 2012.

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Summary

Performance management systems are introduced to enhance efficiency and effectiveness in public sectors across the world. We examine four «scandals» cases related to coding practice in Norwegian hospitals followed by performance audits by the Auditor General and a national revision of the system of coding practices. The experience with activity-based financing schemes in combination with the DRG system from Norwegian healthcare, is that such systems create loopholes or opportunities for behavior that undermine both the very ambitions of performance management systems and trust-based management logics. A multiplicity of accountability mechanisms are employed to redeem the problem, but have yet to be successful: The organizational fragmentation and the institutional complexity that challenges the success of performance management also seem to challenge to merits of accountability as a means to resolve negative side-effects.

Sammendrag

I offentlig sektor verden rundt introduseres mål- og resultatstyringsverktøy gjerne for å bedre måloppnåelse og kostnadseffektivitet. Vi undersøker fire «skandalesaker» relatert kodepraksis og aktivitetsbasert finansiering i norske sykehus, i tillegg til en revisjon foretatt av Riksrevisjonen og en nasjonal gjennomgang av kodepraksis i norske sykehus. Erfaringen med aktivitetsbasert finansiering og DRG-systemet i norsk helsevesenet er at disse systemene bidrar til å skape smutthull eller mulighet for adferd som undergraver både målsettingene med resultatstyringsverktøy og den tillitsbaserte styringslogikken som dels har preget norsk offentlig sektor. En rekke sammensatte ansvarsmekanismer settes i gang for å bøte på disse problemene, men disse har ikke vært særlig effektive: Den organisatoriske fragmenteringen og institusjonelle kompleksiteten som utfordrer resultatstyringens egenskaper bidrar også til å utfordre nytten av ansvarsmekanismene som ideelt sett skal løse problemer med negative sideeffekter.

Introduction

With the New Public Management reforms implemented in various countries, performance management systems intended to enhance public sector efficiency and effectiveness were introduced. The idea was to improve public sector performance, while hopefully avoiding undesirable side effects. In this article, we investigate the track record of a particular performance management system in a specific setting; the activity-based financing schemes for the Norwegian hospital sector. We are interested in two particular aspects: The first is whether this particular performance management system has created loopholes or increased the likelihood of negative side-effects, and the second is how accountability arrangements deal with undesired behavior in conjunction with potential negative side effects. We argue that some negative side-effects, bordering general ideas of corruption, are indeed present, and that the accompanying cases of accountability measures being set in motion illustrate how performance management systems of this kind are influenced by conflicting pressures concerning self-interested behavior, normative components of institutional culture and the role of trust in the system.

We approach the selected cases as examples of larger pathologies of public sector management associated with the New Public Management. The thesis is that modern, performance-based management systems of this kind are more complex than the original ideas reflect, and that they are discretionary structures embedded in a political context. Our concern is, firstly, to address the problems arising from this particular reform innovation by focusing on cases that illustrate negative side effects which are well known from analyses of activity based funding systems in hospitals (Ellis 1998). In conjunction with this, we also explore how one can understand the role of managers and professionals involved in these dysfunctions, discussing various concepts of corruption. Secondly, we ask how accountability mechanisms deal with such malfunctions; who is accountable for what, and to whom, when something goes wrong? We address political, managerial, professional, legal and social forms of accountability, and explore instrumental and institutional approaches in searching for explanations. The possibility of dysfunctions, variants of corruption and exercises of accountability all relate to the role of self-interest and trust towards and within the healthcare system, hence the instrumental and institutional explanatory frameworks.

The Norwegian hospital system is state-owned and publically financed, characterized as a system of the NHS or Beveridge type. Around the millennial turn, Norwegian hospitals were subject to a series of NPM-style reforms, of which the activity-based funding schemes (ABF) were among the more important. The funding scheme builds on the Diagnosis Related Groups system (DRG), commonly used in a large number of healthcare systems around the world (Kimberly et al. 2008). The DRG system is used to classify diagnoses and treatment and to standardize descriptions of hospital activities (Byrkjeflot and Torjesen 2010). In activity-based funding schemes, the money follows the patient in order to ease patient mobility and to create incentives to increase productivity, cost efficiency, quality and transparency (Busse et al. 2011).

Reimbursements are connected to the DRG classification system whereby each patient's case is coded according to DRG typologies, each of which carries a pre-calculated cost. Coding, classification and calculating reimbursements thus rely on a combination of two principles: That medical information is adequately available and possible to process, and that the activity-reimbursement calculation actually reflects hospital expenditure. The hospitals are paid on the number and type of cases treated, simulating a private-market purchaser/provider relationship. Highly relevant to this market simulation, is the 2002 hospital reform, which created a system of state-owned corporate-like entities organized as regional trusts and local enterprises, in place of a county-based system with single hospitals being governed through regional government.

After the 2002 hospital reform, Norwegian hospital governance has been plagued by a series of scandals, however, and some of these scandals render a taste of corruption. The cases of malpractice seem to have been used to increase the revenues of the hospitals themselves, however, rather than to benefit individual employees or managers. In this article, we examine four individual 'scandals' with high media coverage related to coding practice in Norwegian hospitals that occurred during the period 2003–2011. These four cases are the total universe of such cases with high media coverage in the period, although two other cases have reached the media during 2012. We also investigate the following performance audits by the Auditor General in 2003 and 2009 and a national revision of the system of coding practices carried out by the Directorate of Health and the regional health trusts in 2011. The individual cases concern hospital officials accused of engaging in various illegal or unethical practices related to charges of gaming practices. Some of the cases are direct examples of fraud, whereas others have more generally been portrayed as systemic weaknesses. The inclusion of the two performance audits and the revision of coding practices as cases for the present study is motivated by the need to understand the relative scale and scope of such problems, and have this is dealt with in a more systematic manner.

Analytically, an instrumental and a cultural perspective is applied to display how this particular performance management measure is in reality a mixed and complex system that encompasses different logics and thus creates possibilities for the negative side-effects that we observe. The two perspectives include instrumental elements from ad hoc preventive efforts by the political leadership, negotiation processes, the influence of cultural path-dependency, and elements of rather inappropriate self-interested action.

The data base for the paper is public documents from the government and the Auditor General; press releases issued by the parliament (Storting), the Ministry of Health and the health enterprises; information from their web sites; and extensive and broad media coverage by national and regional newspapers and TV channels. There is also a body of secondary literature that has studied DRG and ABF systems, as well as performance management systems and reforms within the NPM paradigm.

Firstly, we will introduce the Norwegian context by outlining the hospital reform and the activity-based funding system. Secondly, we present our conceptual and theoretical approach. Thirdly, we examine negative side-effects by focusing on individual cases of mismanagement and on the wider implications for professional practice in hospitals and accountability issues. Finally, we will discuss our findings with reference to our theoretical approach and revisit our initial research questions: Whether the DRG/ABF

system creates loopholes or increases the likelihood of negative side-effects, and how accountability arrangements deal with undesired behavior in conjunction with such negative side effects.

The Norwegian Context

The level of trust in public institutions is generally higher in Norway than in most other countries (Norris 1999). Collectivist and egalitarian values, consensus-orientation, and low levels of internal conflict characterize the country's public sector. Relations between political and managerial executives have traditionally been trust-based, with few external or formal steering devices (Christensen and Peters 1999). Trust also informs the relationship between the political and administrative leadership and various professional groups like the medical profession, relevant to our analysis.

Traditionally, the Norwegian health care system has been characterized as a single-payer decentralized model with frame-based reimbursement schemes (Kokko et al. 1998, Byrkjeflot 2004, Jakobsen 2009), and almost all hospitals are under public ownership. This model produced constant budget overruns and repeated negotiations on additional funding between different levels of the hospital system. To remedy this, a large-scale reform in 2002 transferred ownership of hospitals from the counties to the state. Ownership was centralized to the Ministry of Health and removed from the regional democratic influence of the county assemblies. An ownership department was established to perform this function. The reform also set up new performance management principles for the hospitals based on a decentralized enterprise model. The hospitals' structural affinity with the public sector thus changed from being part of public administration, as a new organizational affinity was introduced – the health enterprises. Five regional health trusts (RHT) with separate executive boards were established under the Ministry of Health, and these, in turn, organized approximately 250 single institutions into 33 local health enterprises (LHE) under regional jurisdiction with their own executive boards. The reform thus implied centralization, decentralization, and commercialization at the same time (Lægreid, Opedal and Stigen 2005, Byrkjeflot and Neby 2008). A key challenge has been to find the right balance between local autonomy and central government control – to fulfill the government goal of centralization of policy and decentralization of delivery responsibility.

Among the main goals of the hospital reform were to enhance coordination and efficient utilization of resources and to gain more control over hospital expenditure. To reduce these problems, a performance- and activity-based reimbursement system that is integrated into the hospitals' financial management systems was introduced (Neby 2009). 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). Although a single payer, the central state, principally finances Norwegian health enterprises, ABF schemes comprise a significant part of hospital funding. Resource allocation based on this system was introduced as a partial experiment in selected hospitals from 1991, and extended in 1997 (Magnussen and Solstad 1994). Despite considerable implementation problems and no clear efficiency

gains (Pettersen 1999), a standardized scheme for nationwide mandatory activity-based funding of hospitals based on the DRG system was introduced in 2001.

The DRG system is a medical performance classification system that connects hospital activity and patient information by sorting diagnosis, treatment and other features into standardized and structured data sets aggregated into homogenous groups. DRGs are coupled with pre-calculated costs for each type of treatment, creating a system for making medical performance financially transparent and refundable. In the Norwegian tax-funded health care system, where financing and ownership of hospitals are public, the aim of DRG-based financing is to improve financial performance and control hospital costs (Magnussen 1995), but also to stimulate and maintain productivity (Helsedirektoratet 2011). In Norway, the DRG system's main use is resource allocation, integrated into the activity-based, per case funding system. The system works as a management tool embedded in contracts between both the state and the regional health trusts, and between the regional trusts and the local enterprises. In spite of the stated principle of not involving central level politicians in detailed matters, the shares of block grant versus ABF-based financing has been up for debate in parliament on a yearly basis, in budget discussions. Consequently, the activity based share of hospital funding has varied considerably – from about 15% to 60%. Generally the ABF system has increased activity and reduced waiting lists in the hospitals (Kjerstad 2003, Kjerstad and Kristiansen 2005), but is also thought to have increased costs (Byrkjeflot and Torjesen 2010). The promised efficiency gain is contested (Jakobsen 2009).

Our concern, however, is not whether main aims concerning efficiency, effectiveness, or even health policy implementation, has been adequately achieved. Rather, we are interested in the side effects of introducing such a performance-based management tool to this complex setting. Patient mobility and financial challenges have been high on the agenda, and the organizational system of trusts and enterprises and the DRG/ABF systems complement each other – notably as an example of NPM-style reform measures.

Conceptual and theoretical approaches

Corruption, gaming, rule-bending

Recent scandals and media coverage encouraged us to ask the question of whether such performance management systems create 'blind spots' or loopholes where undesired action takes place, and how accountability relations accompanying the NPM development connects to such action. A claim is that most health care systems face problems of incomplete and asymmetrical information, which implies that it is vulnerable to market failure and also prone to legal and illegal abuse (Barr 2004, Rothstein 2011). Quasi market reform elements, such as activity- based funding, typically establish rules for decision-making, information sharing and transaction. These rules leave room for interpretation and have a necessary vagueness and flexibility, which is legitimate because the activities and actions within the system have an ambiguous nature. However, this leeway also gives creative actors opportunities for gaming the

system (Morreim 1991). Thus, there is an inherent tension: Universalistic norms are necessary, but there is an obligation to particularism; or in other words, both 'doing your job and helping your friend' (Heimer 1992). Taken to extremes, the rule bending that cheating and gaming involves, can eventually become outright fraud and corruption, violating principles of impartiality and justice.

Standard definitions of corruption include abuse of public office for private gain (World Bank 1997), but others argue that corruption also encompasses organizational gain (Rothstein 2011). Often illegal, corruption includes undermining impartiality and enhancing favoritism even when formal rule breaking is not present (Rothstein 2011). Impartial norms of fairness imply that like cases should be treated alike. Such impartiality is essential to both medical research and clinical practice, suggesting that doctors should not have a financial interest in the treatments they are evaluating (Angell 2009). Rule bending that is not formally illegal, but that nevertheless challenge norms of impartiality or due process, has been labeled «legal corruption». By this we mean that agents may act to unduly or inappropriately influence the rules of the game and to shape institutions, policies and regulations for their own benefit (Kaufmann and Vicente 2011; Rothstein 2011, 60). With such breaches of the public ethos, public policy is «captured» by various illegitimate interests instead of serving the public. Such conduct within the healthcare system challenges the public's trust in medical institutions (Savedoff and Hussman 2006) in terms of medicine as much as politics, as medical professionals are normally given broad discretion and are assumed (and trusted) to be acting in patients' best interests.

In this paper we focus on cases that portray exercises of influence by public actors – practitioners, officials or organizations – that conflict with the actors' assigned public role. The actors in question have been entrusted to provide services to the population, based on a framework that consists of both legislation and expectation. Within this framework, decisions about allocation of resources are made. Resources that are allocated in an inappropriate manner – whether in legal or ethical terms – can thus be perceived as corruption although direct private benefit might not be the case (Kaufmann ancd Vincente 2011). This approach covers both individual corruption (where hospital officials act as quasi-private actors using influence and public resources to obtain unofficial benefits), and hospital organizations that operate in a coordinated way to exploit their position (Ensor and Duran-Moreno 2002, 106). A timely question is why the specific concept of corruption should be applied to such cases as those we are investigating, and whether our cases actually meet the criteria for falling within the corruption or legal corruption classifications. Our argument is that the common denominator of standard corruption cases and the cases investigated here, rests with the unmistakable breach of trust that both instances entail: Whether for public or private, individual or organizational gain, the actions undertaken challenge normative standards for action motivated by self-interest, such as increasing revenue or securing particular benefits on another actor's expense.

In terms of the DRG/ABF system, there are several well-known ways to game the system. Labels such as «DRG-creep», patient selection, «upcoding» patient diagnostics, «creaming» and «skimping» are well known in both the international and Norwegian literature (see e.g. Donaldson and Magnusson 1992, Ellis 1998, Mikkola et al. 2002,

Morriem 1991, Silverman and Skinner 2003, Hafsteinsdottir and Siciliani 2009, Martinussen and Hagen 2009, Cots et al. 2011). DRG-creep means patients are placed in higher-priced DRGs than their actual state of health would warrant, or, in other words: The hospital receives more money per treatment than suggested by the pre-calculated cost (Modell 2004). Illegal DRG creep occurs when physicians intentionally register false diagnoses so that their hospital or clinic will receive more money (Kastberg and Siverbo 2007). This «upcoding» is a practice of improper and manipulated registration whereby patients are reclassified into more lucrative categories (Culyer and Posnett 1990). Active cheating can in principle of be of three different types (Hsia et al. 1988); mis-specification (the wrong diagnosis is applied), miscoding (reporting treatment that has not been conducted), and re-sequencing (changing the sequence of diagnoses or reporting a secondary diagnosis as the main diagnosis in cases when this would result in higher reimbursement). Such «creative coding» are practices favorable to providers, by altering coding sequence or manipulating diagnosis or treatment coding are well known within healthcare institutions (Kastberg and Siverbo 2007).

Another kind of mismanagement is «DRG dumping» (avoidance of high severity patients) on a more aggregated level which implies that clinics prefer easier cases and avoid certain costly patient groups that are unprofitable under the activity- based funding system(Ellis 1998). Other variants are «creaming» (over-provision of services to low severity patients), «skimping», (under-provision of services to high severity patients) and «skimming» whereby profitable and low cost patients will be selected over patient groups yielding a lower profit per treatment. 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, as well as «soft services» (e.g. research, chronically ill patients, habilitation, rehabilitation and psychiatry) losing out in the competition for resources. «DRG-gaming» or under-treating of patients is also known from the literature as a dysfunction of the activity-based funding system. This refers to situations where patients are undertreated because the clinic wants to save on certain tests or treatments that are normally done in relation to a certain diagnosis (Kastberg and Siverbo 2007). All these mechanisms could serve as instances of legal corruption, where the breach is towards the public ethos, the general expectation towards the hospital, or due process. In many instances, pinpointing illegal behavior would be difficult in such cases.

Public accountability: Resolving the problems of many eyes, many hands

In dealing with the potential for illegitimate behavior, the main purposes of accountability are to, firstly, prevent corruption and abuse of power, and, secondly, to ensure the practical specification and resolving of tensions arising from inappropriate behavior that has already taken place. Public accountability suggests that executives must exercise public authority as matters of public interest (Bovens 2007a). Our focus is on the means by which illegitimate or corrupt behavior can be assessed. We apply a rather narrow concept of accountability, defined as «…a relationship between an actor and a forum, in which the actor has an obligation to explain and to justify his or her

conduct, the forum can pose questions and pass judgments, and the actor may face consequences' (Bovens 2007b:450) that may be formal or informal». Bovens (2007b) claims that accountability is by nature retrospective – i.e. a form of ex post scrutiny, but by illustrating normative pressures towards actors, setting standards and displaying potential consequences there is an ex ante dimension as well.

In our cases, accountability relationships revolve these two dimensions (Bovens et al. 2010); firstly, to deal with cases where public officials acting within the ABF/DRG system exceed the limitations and constraints that that have been set by regulatory bodies or superior units. Secondly, accountability should contribute to keeping the practitioners' behavior in check, to *prevent* the abuse of authority. Thus, key questions are whether the accountability arrangements in place have the power to reveal corruption and mismanagement, and whether the available sanctions are strong enough to have a preventive effect. In dealing with these two purposes, accountability relations embrace several different aspects. Public organizations face *«the problem of many eyes»* meaning they are accountable to a number of different forums that apply different sets of criteria. Building on Romzek and Dubnick's research (1987), Bovens (2007b) elaborates on five types of accountability based on different types of forums an actor must report to (see also Byrkjeflot, Christensen and Lægreid 2012). He sees *political accountability* as external control of an agency by different actors or institutions such as voters, members of parliament, ministers and cabinet (Mulgan 2003). The voters delegate their sovereignty to popular representatives in elected bodies, who further delegate authority to the cabinet and the health enterprises. Their obligation to account then moves in the opposite direction. This is traditionally mainly seen as a vertical accountability relationship, where the forum formally has power over the actor due to hierarchical organizational solutions.

Administrative accountability is typically also related to an actor's location within a hierarchy in which a superior calls a subordinate to account for the performance of delegated duties, but it occurs in different variants (Sinclair 1995). A range of scrutiny bodies that perform supervision and control can exercise it. These may be inspectors, controllers, regulatory agencies, ombudsmen, independent supervisory offices, auditing offices, etc. Contemporary reforms have put strong emphasis on managerial accountability, which means that managers on the one hand have been granted extended autonomy – but on the other hand they are held more directly accountable for their ability to produce measurable results and to run their organizations efficiently, presupposing a system of clear separation of policy making and policy implementation (Wallis and Gregory 2009). Managerial accountability is about monitoring output and results and making those with delegated authority answerable for carrying out agreed tasks according to agreed performance criteria (Day and Klein 1987).

Legal accountability denotes strong control by and accountability towards an external actor, for example a judicial authority. With increasing formalization of social relations and because of greater trust in courts than government, legal accountability is becoming more important in public institutions. Legal accountability is seen as the most unambiguous type of accountability, since it is based on specific, formalized definitions of responsibility, accountability and procedure.

Professional accountability revolves around professional standards and expertise. It addresses mechanisms of professional peers or peer review. Particularly in typical professional public organizations different professions are constrained by professional codes of conduct – i.e. catalogues of conduct deemed appropriate – and scrutinized by professional organizations or disciplinary bodies. It is a system marked by deference to expertise where one relies on the technical knowledge of experts (Romzek and Dubnick 1987). This type of accountability is particularly relevant for public managers who work in public organizations concerned with professional service delivery, such as hospitals.

Social accountability arises out of a lack of trust in government and the existence of several potential social stakeholders in the government or public apparatus. This produces pressure on public organizations (whereby they feel obliged) to account for their activities vis-à-vis the public at large, the media, stakeholders, or (civil) interest groups, users' organizations and patients' organizations, via public reporting, public panels or information on the internet (Malena et al. 2004). Giving account to various stakeholders in society normally occurs on a voluntary basis and has been labeled horizontal accountability (Schillemans 2008).

This means that actors within a public hospital system face a range of different accountability types, creating crossing tensions and complex patterns of expectations to the roles that the actors inhabit. On the other hand, accountability forums face a similar challenge – «the problem of many hands». In practice, a forum may substantial difficulties when deciding which actors to hold to account (Thompson 1980). It is often difficult to find out who has contributed in what way to implementation of the DRG system in specific hospitals and units and who can be held to account for the established practice. An actor can be an individual or an organization, and accountability can be hierarchically or collectively oriented.

In assessing the questions of who is accountable and to whom, there are three steps or phases in accountability processes that need to be investigated (Bovens 2007b). Firstly, there is information gathering. Who gathers information, how is it done, and to what extent does it connect to accountability relationships in the formal sense? Secondly, there is a discussion phase, in which the information gathered is assessed. A range of different forums and actor constellations may be involved, and such processes may be open or more closed and take place in different contexts. Lastly, there is judgment, where consequences become apparent. In this phase, forums pass judgment on the basis of the information at hand and the discussions undertaken. Consequences can be formal and include sanctions, but can also be more informal and «soft».

In assessing accountability in the cases for this paper, we are first and foremost interested in establishing a connection between breaches of public trust (or corruption-like behavior) and side effects of the activity based financing system on the one hand, and creating an understanding and tentative explanation of how this connection is dealt with through accountability arrangements on the other. We do not attempt to conclude on the question of whether such cases – or negative side effects of DRG/ABF – are becoming more or less common in the Norwegian hospital system. Our aim is to a) explore what possible negative side effects of DRG/ABF may be, and b) suggest a possible explanation for such effects and their coupling with accountability.

Instrumental and cultural explanations; the problem of trust

A potential problem with modern performance-oriented management systems is that trust may be difficult to maintain. Traditional public systems with informal trust-based responsibility are challenged by more formal accountability systems, which many perceive as reflecting distrust (Christensen and Lægreid 2001). Some researchers presuppose that performance-management systems are based on an assumption that subordinate units cannot be trusted because their main concern is to fulfill their own self-interest (Boston et al. 1996, Self 2000). Others argue that a certain level of mutual trust is necessary to put a performance management system into practice, due to the greater leeway and discretion given to the subordinate units (Christensen, Lægreid and Stigen 2006). These tensions indicate that performance management systems could be double-edged swords or hybrids that assume both autonomy and control (Lægreid, Roness and Rubecksen 2006). On the one hand, public sector organizations are assumed to be self-interested bodies that cannot be trusted and need to be controlled through specified performance contracts and assessments. On the other hand, subordinate units and superior bodies have common interests based on mutual trust, 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. This inbuilt tension in performance management between models of flexibility, trust and managerial autonomy on the one hand, and principal-agent models of distrust and central control on the other hand (Christensen and Lægreid 2001), reflects the starting point for our explanatory framework.

Analytically, we contrast two management models – one institutional model and one instrumental model. The first is a trust-based model, informed by traditional cultural elements, based on a high level of mutual trust and understanding between the local, regional, and central levels in the hospital sector. With regard to cultural factors actors operate according to a logic of appropriateness (March and Olsen 1989). Organizational members are transformed through a process of norm-formation and internalization of common goals, values and mission. Institutional routines are followed even if they are not obviously in the narrow self-interest of the person or organization responsible. This model envisages a high degree of decentralization and local autonomy. The intention is to let the managers manage and the argument is that this will enhance cost-efficiency by giving them discretion in using allocated recourses. There is a well-developed system of dialogue, cooperation, and informal networks. Mutual trust is a central feature of the system and a precondition of autonomy. This model is in line with the traditional Norwegian model of mutual cooperation and consensus (Christensen 2005), and from such a perspective we expect informal and internal professional accountability and social accountability relations to dominate.

In the second model, performance management models are to a greater extent seen as based on distrust, technical-instrumental features and tight performance monitoring. In this version of a performance-management model, health enterprises pursue their own interests based on local rationality and institution-specific goals, which are not

necessarily consistent with the overall goals of central government (Cyert and March 1963). The idea is to make the managers manage. They need to be controlled via formal contracts and management systems, monitoring, formal accountability mechanisms and assessment arrangements. Actors with this perspective act in accordance with a logic of consequentiality and in cases of misbehavior they will face negative consequences. In such a low-trust scenario performance management is based on discipline and punishment (Pollitt 2006). From this approach, the expectation is that more formal managerial accountability relations but also political accountability relations will dominate.

The DRG system may be seen as a technical instrument based on objective evidence. But the system nevertheless exists within political-administrative systems with various levels of mutual trust, which makes the application of the system a more complex matter (Aucoin and Jervis 2004). Mutual trust relations affect both goal acceptance and performance reporting between organizational units (Light 2006): The degree of goal acceptance by subunits or individual members of an organization is likely to increase when there is a high level of mutual trust between political and managerial executives on the one hand, and subunit members on the other.

In the present study, we use processes of accountability arising from the application of DRG/ABF in Norway to explore what may happen when traditional trust-based professional norms and values are confronted with a technical-economic local logic. The question is whether trust is easily maintained in new performance-management systems, or if performance management systems promote instrumental, self-interested strategies. Mutual trust may thus be seen as a major precondition for delegation and institutional-professional autonomy, but an undermining of trust may potentially lead to undesirable behavior and more centralization and control. At lower management levels one may expect less loyalty to the system, creating higher vulnerability to cheating and undermining of trust.

The DRG system builds partly on professional discretion, as it presupposes that professionals follow the intentions of the system as a collective endeavour and that professional norms are appropriate for guiding their practice. The system also presupposes that actors are prepared to take action if administrators or professionals use intricate strategies unfairly. It is a system that combines trust in the professions with procedures to avoid negative side effects, such as methods for controlling «DRG-creep» or cheating on the system (Hood 2002). In other words, there is an inbuilt tension between relying on trust and establishing controls based on distrust.

One reason for this potential loose coupling of ideals and practice in the ABF and DRG systems is that it is rather difficult to create a fair system in which resources used and reimbursed are exactly proportionate. The standardization of reimbursements creates possible inaccuracies that 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 on diagnosis – one with higher, medium or lower rewards. Thirdly, patients often have multiple problems, and it is then left to doctors' professional judgment to rank main and secondary diagnoses. This could also potentially result in various strategies to obtain greater rewards. Fourthly, the DRG system differentiates according to a patient's treatment phase. This may lead to hospitals

or hospital units competing for patients. Although there are professional norms that constrain constant abuses of such a system, it still offers considerable leeway, particularly when traditional trust-based professional norms and values are confronted with technical-economic local logic that potentially may not care much whether the hospital system as a whole functions (Christensen, Lægreid and Stigen 2006).

Empirical findings: «Gamers» held accountable

In the following sections, we attempt to illustrate both how the Norwegian ABF/DRG system can contribute to negative side effects and how such effects are dealt with in terms of accountability. We do so by focusing on a series of cases that revolve around coding and manipulation of patients' records that in turn influence the financial situation of the hospitals in question. All these cases in one way or another revolve around the DRG and/or ABF system, coding practices and economic benefit.

Two cases are about formal investigations of coding practices in general, whereas the other four are single cases uncovered through different processes. The two general cases can be interpreted as both being part of a long-lasting sequence, but in order to illustrate the timeline and importance of the continuous development and use of the DRG/ABF system, we have opted to separate them. The DRG-based funding system implied that the economic risk of hospital treatment is largely devolved to providers (Bode 2012). One main finding from the literature is that performance management increases risk taking (Shapiro 1994, Greve 2003), including gaming and cheating. Processes and structures based on different forms of accountability are used to display how this gaming goes on, but also to assess to the role of trust in understanding the side-effects of the ABF/DRG system. We argue that three distinct phases in processes of accountability (information gathering, discussion/debate, passing of judgment/ consequences) need to be assessed in order to grasp the essence of our cases. We follow these three phases in our presentation of the cases.

The 2003 Arendal Hospital coding scandal:

In 2003, a leading newspaper reported what was later labeled a coding scandal in a regional health enterprise (Aftenposten 12.3.03). A clinic had registered more than 50 per cent of all patients having undergone/needing tonsillectomies as needing snoring operations. A physician had 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, which brought each hospital extra funding to the tune of several million Norwegian kroner. When the scam was revealed, the minister mounted an investigation and the board of the regional health trust was instructed by the minister to report back. An external auditing firm was hired to investigate the case, who found that 48 per cent of the investigated coding was false. Interestingly, the scandal was initially revealed by a newspaper, but as soon as the case gathered momentum a more formal investigation was instigated and accountability mechanisms

were set in motion. In gathering information about the conduct, the minister relied on two separate mechanisms: the hierarchical instruction of the regional trust's board within the governance chain, but also the engagement of an external accounting business (Christensen, Lægreid and Stigen 2006).

The case attracted national attention and was seen as undermining trust both in the funding system and in public health care generally. A thorough administrative and political debate on the matter arose, indicating that central actors took the potential undermining of the delegation of authority through the ABF system seriously. The standing committee on scrutiny and control in the Storting asked for an evaluation of the activity-based funding system, and the Auditor General conducted a performance audit of the DRG/ABF system, focusing on the coding of patient diagnoses.

The manager of the local health enterprise and the clinic manager involved resigned, and illegal surplus grants given to the hospital had to be paid back. The director of the regional health enterprise was at first severely criticized and stripped of many of his board chairmanships, later he resigned from his position. The minister eventually also replaced the executive board of the regional health enterprise. Thus, we see that the consequences were formal and followed the hierarchical chain from minister to regional board to local director and hospital manager.

Another consequence of the coding case was that the Ministry of Health for the first time conducted a thorough evaluation of the activity-based funding system for Norwegian hospitals. Upgrading of treatment was revealed to be a widespread practice; three out of five hospitals practiced some kind of creative coding to increase funding. By example, the number of snoring surgeries more than doubled between 1999 and 2003. 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.

This case illustrates that the incentives created by the DRG/ABF system can increase risk taking and challenge mutual trust relations. The physicians and administrative actions undermine the trust on which the balance between central control and professional autonomy is based (Christensen, Lægreid and Stigen 2006). The case also reveals that when individuals act in accordance with ideas that benefit organizational actors (hospital management), such systems may yield room for the enrichment of individuals – as in classic corruption cases. In terms of accountability, information gathering was a formal reaction to media attention, the discussion became a national political issue, and directly involved actors were formally held accountable – and second order accountability relations caused large-scale investigations and changes in the national activity-based financing system.

The 2010 Asker and Bærum Hospital manipulating of patients' records:[2]

In late 2009 and early 2010, the national newspaper VG ran a series on the problem with long waiting lists in the Norwegian hospital system.[3] The newspaper revealed that Asker and Bærum hospital in the local health enterprise Vestre Viken, had not followed up on patients as it was supposed to, because of a semi-systematic alteration of patients' records. Patients had not received proper information about waiting times for hospital treatment, about opportunities to complain about hospital decisions, about their right to treatment, nor about the possibility to choose between providers. Patient records were accessed and changed, particularly information relevant for making follow-up appointments and records of examinations performed before discharge.

This caused more manageable and favorable-looking waiting lists for the hospital, as fewer patients were added to them. Length of waiting lists and time spent waiting by patients are among the parameters for measurement of hospital performance. The problem persisted for six years before being uncovered, and as a consequence several lives were lost. This taps into the DRG/ABF system by short-circuiting the administrative requirement for hospital activity to be made public. Possible gains for the hospital included a lesser likelihood for becoming a subject to cost containment measures and an improvement in its reputation, but also an alteration of the financial basis for the hospital as a result of actual diagnoses not being recorded, reported and coded appropriately.

Several forums were involved in the information phase of this case. Chronologically, the first forum was the media. The investigations by the newspaper VG triggered a direct scrutiny of the journal practices in Asker and Bærum hospital, effectively raising the issue and pointing a finger at a serious systemic problem. The Board of Health Supervision, in its formal role as an administrative forum for holding the hospital accountable for its practices, immediately became involved in the case. Moreover, because the case involved illegal conduct, the Board of Health Supervision reported the health enterprise to the police, who made their own investigation of the case. The board of the Vestre Viken enterprise also acted as a forum towards the hospital management, a

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[2] This case differs from the other three single cases in the sense that it is not directly about activity based financing. It does revolve around the registration of medical practice, however, and connects to the foundation for the ABF system: By manipulating performance data (journals, treatment records, etc), the hospital may influence or short-circuit the potential for patients to exercise free choice of provider and actually create available treatment capacity by not following up on discharged, previous patients, which both are connected to ABF component of hospital revenue.

[3] In early 2012, the broadcasting corporation TV2 uncovered a resembling case, taking place in Norway's largest hospital – Oslo University Hospital. Also in this case, it appears that managers were partially aware of, partially endorsing creative waiting list practices based on financial incentives: Patients were placed in inappropriate categories in order to circumcise waiting list problems that have economic consequences for the hospital. Source: http://www.tv2.no/nyheter/innenriks/helse/ulovlig-triksing-med-ventelister-paa-oslosykehus-3721969.html . This has later been verified in an internal report (NRK 7.5 2012).
A similar case was revealed by TV2 in September 2012. The patient ombud in Hedmark and Oppland claimed that there was a culture of cheating on waiting lists for psychiatric patients to save money in Hospital Innland which resulted in breaking the law on patients' rights. This practice was characterized as «gambling, corruption and cheating» by Leif Roar Falkum, an experienced psychiatrist (TV2 News 26.9 2012, 27.9 2012)

particular issue being that the hospital had initially denied its own board access to internal reports on the matter – even after the scandal had become a fact.

The case triggered a prolonged public debate establishing a picture of a hospital system in crisis. With the national attention one could perhaps expect the involvement of central actors, but in this particular case the problem was considered local and confined; leading public officials were only marginally affected. The discussion pointed at specific practices in particular organizational locations and the case was considered a direct violation of regulations more than a systemic flaw. The focus was on malpractice rather than system failure.

In terms of sanctions, all board members (except one) of the Vestre Viken health enterprise were replaced, and at least three managers were removed from their positions. The police investigation ended with the health enterprise being fined 5 million NOK. Sanctions were severe and formally issued as a consequence of a direct breach of standard codes of conduct and regulations for hospitals. The role of the police also signals that a hospital administration is not exempt from legal investigation, reflecting the severity of loss of life. The sanctions issued by the police were directed towards the hospital and not towards individual managers or medical professionals.

The case shows how systematic malpractice can cross formal institutional boundaries when it comes to accountability. The revelation of severe irregularities with respect to patients' records seems to have drawn attention to almost all possible accountability relations: internally within the enterprise board and the hospital management, between the board and the enterprise owner, between the Board of Health Supervision and both organizational and individual actors, between the police and the enterprise, and not least between the media and all involved parties. In effect, the case displays the realities of accountability in multi-level governance systems, where different accountability mechanisms are combined in extended processes. The media, the enterprise and trust boards, health audit agencies and the police were involved in all three phases of the case, although the formal forums gradually came to play a more prominent role as the case moved from the information phase to debate and judgment.

The 2011 cheating on coding in Lillehammer Hospital:

In June 2011, a standing committee acting as advisor to the Ministry of Health on issues of activity-based financing, uncovered a systematic wrongful coding practice at the relatively small Lillehammer hospital, which is part of the enterprise Sykehuset Innlandet. In this case, minor injuries had been coded as multiple traumas. The committee stated that the code manipulation could not have been motivated by anything other than a desire to increase the enterprise's revenues (VG June 24, 2011).

In this case, it was the central administration that initially discovered the malpractice. In contrast to the first two cases, the media did not play a role in uncovering the conduct in question. The committee had been working with statistics concerning hospital activity, and Lillehammer hospital was found to have an incredible success rate in the treatment of multiple traumas; so successful, in fact, that the number of treated traumas exceeded the likely number of such injuries in the hospital's catchment area.

When the committee took a closer look at the statistics, it realized that the hospital had been employing a different coding practice to other Norwegian hospitals.

Early in the debate phase, the local health enterprise stated that it would refund the extra revenue, but also added that the guidelines and regulations concerning coding and activity-based financing were unclear, and that this might have contributed to the code cheating at Lillehammer hospital. The managing director of the unit involved resigned immediately. Interestingly, both the local medical professionals at the hospital and the enterprise board supported the department manager, notwithstanding the fact that the code cheating had been going on for several years. In the rather sparse media coverage of the case (compared to the two previous cases), the manager is sometimes described as an authority on coding questions – although by supportive actors. The individual in question remained an employee of the unit, but without any managerial responsibilities. The discussion phase seemed to revolve around whether the committee's criticism was just, around possible sanctions and around the severity of the problem. In this case, it was evident that no patients had come to harm, reducing damage to breaches of appropriate practice and unlawful economic gain.

The case shows that how severely inappropriate coding practices are perceived seems to depend on the possible consequences for patients and on whether the malpractice is seen as a systemic problem. In this case, formal sanctions were not issued – in part because the individual in question resigned from his managerial position and in part because the hospital management immediately acknowledged the wrongdoing and decided to reimburse the state. This means that the size and scope of the case matters when it comes to activating accountability mechanisms. More importantly, the hospital's statement regarding unclear regulation shows how loopholes may exist within performance measurement systems such as the DRG/ABF system.

The 2011 cheating on coding in Drammen Hospital:

In late 2011, the national broadcasting corporation NRK revealed that patients with same-day appointments in Drammen Hospital, a subdivision of the Vestre Viken enterprise, were being registered as overnight patients – even though they had not spent the night at the hospital. This time, the coding practice did not have direct medical consequences, but brought substantial financial gains to Drammen hospital. In effect, the false coding practices led to increased expenditure for the state and increased revenue for the hospital. An interesting facet to this case is that the unit manager was notified about the code cheating but did not take action for six weeks. Finally, an employee leaked information about the practice to the regional health trust, which demanded a full investigation. Again, the media served as the initial investigator. The reluctance of the department manager to deal with the case seems to have jeopardized the internal investigation of the case, leaving it for the police to investigate.

The enterprise board accepted a fine from the police: Quite openly, Vestre Viken health enterprise admitted that Drammen hospital had wrongfully coded at least 1500 patients over an extended period of time, which means that the fundamental facts of the case have been established. What the case shows, however, is that the coupling of coding responsibilities with financial incentives creates room for inappropriate

maneuvering. In terms of accountability, we again observe the combination of informal external attention with more formal action – in this case by the police. As with the 2011 Lillehammer case, this case also shows how internal, trust-based accountability mechanisms do not seem to hinder code cheating, and also that internal reactions are rather soft. This could perhaps indicate a strong loyalty among professionals, where external control and «bureaucratic excess» are seen as part of the problem rather than as a solution to malpractice.

Performance audit by the Auditor General from 2002:

A performance audit of the activity-based funding system in 2002 revealed that many hospitals lacked information necessary for the systems to work as expected (Dokument no 3:6 2001-2002). In 2003, the Auditor General submitted a performance audit report to parliament on efficiency in hospitals (Dokument no. 3:3 (2003-2004)). The report revealed a shift from less profitable to more profitable surgery, where hospitals tended to give preference to the most profitable patients and in some instances to favor economics over medical criteria. The minister was very critical of this fact, which he saw as a dysfunction of the system, as did the Storting. In terms of information, this process was a formal authoritative investigation. The accountability relationship between hospitals and the Auditor General is an indirect two-step process and operates in the shadow of the hierarchy; it has also been labeled diagonal accountability by Schillemans (2008).

The proportion of DRG-based performance funding had increased from 30 per cent of total governmental payments to hospitals in 1997 to 60 per cent in 2003. In 2004, however, it was reduced to 40 per cent, partly as a consequence of the negative impact of productivity incentives. 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. Activity-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 (Christensen, Lægreid and Stigen 2006). However, already in 2005 the share of ABF funding was raised to 60 per cent, again. Since 2007, the share has been around 40 per cent of total hospital reimbursements (Kalseth et al. 2010).

This illustrates that the political debate at the national level on activity-based financing has been rather vivid since its nationwide introduction in 2001. The functioning of the ABF system has been perceived as important to reach the overarching goal of cost containment, but also to influence productivity. On this level, sanctions are basically matters of policy formulation, such as negotiations on the portion of funds to be allocated through the ABF system.

The national revision of coding practices in 2010/2011:

In 2010 the Directorate of Health initiated a revision of coding practices in all regional health trusts in Norway. The directorate was concerned about the risk of coding practices being influenced by economic considerations, and consequently that some coding practices might not comply with the regulations. The directorate's report claimed that «…the Directorate of Health has heard repeated allegations that health personnel are being pressured to code «economically favourably» even though this violates medically correct coding» (Health Directorate report 2011, p. 1). Prior to this initiative, several reports from a variety of investigators had concluded that there was still a significant amount of faulty coding, that the health enterprises' steering and control of coding was insufficient, that there was a systematic lack of coherence between patients' records and coding practices – and consequently that there was a likelihood or significant risk that medical, economic and performance information was of poor quality. The final report, co-published by the directorate and the four regional health trusts, ambiguously concluded that although the general risk of economically motivated deliberate coding fraud was low, the internal steering and control introduced to ensure correct coding practices was, by and large, insufficient.

An interesting aspect of this case is that the information gathering was a joint effort between several central agencies and entities within the system, and that the actor under scrutiny in practice was the system as such. Moreover, the central idea seems to have been oriented towards improving a system more or less perceived as faulty – indicating that blame was not to be placed on single actors. Rather, the aim was to check the entire system for malfunctions and to suggest improvements.

The national revision of coding practices can, however, be seen as the culmination of an extended process involving a series of different constellations of actors and forums. The background to the national revision is both individual cases of malpractice and a series of reports from different scrutiny bodies, including reports from SINTEF (an independent contract research organization), the Auditor General, and the Directorate of Health. This complex picture illustrates how a certain problem can be translated into a national context, and how fairly narrow and technical coding practices can become broad political issues. In the national revision of coding practices, the approach basically focused on systemic shortcomings rather than on single cases of code cheating. The perception was that coding malpractice was widespread: The Auditor General in 2009 concluded that there had been little improvement in coding practices between 2003 and 2008 (Dokument 3:2 (2009-2010)), which confirmed the conclusion reached by several commentators that the regulation of coding was insufficient. A report made by SINTEF in 2005 suggested that one main problem was that the coding poorly reflected what patient records documented, which in turn had consequences for the activity-based funding system. A general argument in this report is that when the coherence between patient records, codes and financing is poor, the desired effects of the financial system are reduced (incentives do not work as suggested), political decisions about hospital economics are based on false premises, and hospital service production statistics are compromised (Jørgenvåg and Hope 2005). In such situations, there seems to be more leeway for strategic malpractice.

The national revision of coding practices must be understood in connection with these previous reports and audits. The suggestion of measures based on the 2010/2011 revision indirectly builds on findings from earlier processes of accountability, in effect creating a complex combination of accountability relations. The Auditor General serves an administrative as well as a political accountability function, reporting to parliament – which in turn holds government accountable through parliamentary mechanisms but also aims to improve the efficiency and effectiveness of the administrative apparatus. The research reports by SINTEF illustrate how external horizontal relationships to the hospital system's extended environment are also possible accountability relationships, whereas the directorate's reports have a more administrative orientation based on administrative-professional governance. Moreover, the coordinated effort of the directorate and the regional health trusts shows how concern about coding practices has become an overarching theme in their work.

Whereas the early reports that formed the background to the national revision were characterized by more singular and classic accountability mechanisms, the national revision shows how accounts can provide input for policy proposals. The final revision report suggests a series of measures to resolve the coding problem, from stricter institutional arrangements and more precise guidelines to education and training measures for healthcare professionals, which could also be interpreted as sanctions: In a system where a problem has been uncovered, sanctions can just as easily be a reconfiguration of policy measures as punishment. In this sense, the debate phase more or less extends into the policymaking process.

Discussion: Exploiting blind spots, challenging trust, complex accountability

All six cases display how the link between hospital expenditure and performance turned out to be open to manipulation: The introduction of the DRG and ABF systems is not risk free, and certain loopholes or undesirable leeway is created by the introduction of the system. In terms of accountability, the individual cases we have investigated show that actors are in fact being held accountable for technical practices that cut across the intended effects of the overall system. The two general cases also reflect this. Whereas coding practices are assessed thoroughly, the idea of activity-based financial schemes, as such, is not. In terms of accountability then, the substance is not the performance management system, but the practices allowed by the system.

In terms of corruption, most of the cases investigated here revealed that so called «legal corruption» most commonly entails actors acting to unduly influence the rules of the game for their own organization's benefit, thus undermining norms of impartiality. The principles of universalism and impartiality in the implementation of activity-based financing and the DRG system have thus been undermined. There is also illegal behavior, however. Most cases involve seeking organizational gain; there are fewer examples of individual gain.

In terms of accountability, it seems a range of different forums typically marks the information phase. The media frequently act initially as forums, whereas more formal

processes of information gathering are more dependent on the issue concerned. In some cases, where either administrative law or – more seriously – patients are at stake, the police become involved. Differing combinations of internal and external accounts are demanded, whether from specific managers, boards at different levels, audit agencies, or politicians. Generally there is interplay between the different types of accountability. In some cases, social accountability initiated by the media activated an administrative accountability relationship. Legal and political accountability processes can be observed. In other cases, semi-independent external administrative bodies initiated administrative accountability processes that later activated social or political accountability. There is a dynamic between internal processes within the hospital system and external, open public processes. Moreover, an interesting dynamic between individual scandals and the general assessments of the overall system seems to indicate that sustained attention to this type of problem is not enough to prevent it from occurring.

The discussion phase varies from open public debate in the media on the one hand, to closed and internal behavior justification and questions being posed between managers and professionals at different levels on the other. One obvious problem in the DRG system is information asymmetries, which are highly prevalent and make it difficult for the principals to monitor and control actors' activity and behavior. This asymmetry of information gives rise to several unintended consequences.

The last phase in which judgment is passed and consequences may be faced also varies from general policy adjustments to public condemnation of actors' behavior and the imposition of individual or organizational sanctions on actors. The sanctions are in some cases formal and legal, involving individuals being sacked and hospitals being fined, but in other cases more informal public shaming.

Under NPM, politicians are supposed to assume a strategic role, formulating general goals and assessing results without being involved in single cases and day-to-day business and implementation (Pollitt and Bouckaert 2011). Public officials, on the other hand, are supposed to operate as managers in agencies at arm's length from politicians and to be held accountable through incentives and performance systems. Our study reveals that both politicians and public officials find it difficult to practice these roles. Politicians tend to become involved in the details of implementation and in single cases. Public officials tend to lose a sense of a unified public service, and increasing the distance between them and the political executive tends to reduce responsiveness and accountability (Lægreid, forthcoming). The ambiguity of accountability becomes especially clear when things go wrong (Gregory 1998).

Table 1 reveals «the problem of many eyes». Although new interpretations of accountability have proliferated with the new performance management schemes, older interpretations have not disappeared. Ministerial accountability remains a highly pervasive medium of accountability, but there is a complex mixture of political, administrative, legal, professional and social accountability informed by the specific context in which cases develop.

Table 1: *Accountability relations by case and by type of forum and who is accountable*

	Accountability to whom?					Who is accountable?
	Political	Legal	Administrative	Professional	Social	
Case 1: Coding scandal 2003	MinisterStortingAuditor General		Regional board and local board		Media	Director of regional enterprise Manager of local enterprise, Hospital manager Executive board of regional health enterprise Hierarchical, individual and collective
Case 2: Patient record cheating 2010		Police	Board of Health Supervision, local board, and regional board		Media	Managers at local enterprise Executive board of local enterprise Hierarchical, individual and collective
Case 3: Code cheating 2011a			Advisory committee, regional board, and local board	Peers (in debating phase)		Hospital manager Individual
Case 4: Code cheating 2011b		Police	Regional board	Whistle blowing	Media	Not decided yet, probably the hospital collective or /and individual
Case 5: Performance audit 2002	Storting, Minister		Auditor General			Organizational, collective
Case 6: National revision 2010/2011			Auditor General Directorate, regional boards and local boards	Researchers (SINTEF), peers		Organizational, collective

The cases illustrate how the introduction of activity based financing and the use of the DRG system has contributed to making accountability a more ambiguous and complex issue. Different and partly contradicting accountability relationships co-exist, producing accountability dilemmas and tensions for public officials. Administrative reforms seem to highlight the various dimensions of accountability, the complex context of public accountability, and multiple overlapping accountability relationships (Romzek 2000, Behn 2001). Introducing performance-management schemes, such as the ABF/DRG system, does not reduce complexity or ambiguity, but rather accentuate the inherent tensions between trust- and distrust-based arrangements.

Most of the premises that guide administrative behavior seldom reach the attention of political executives and citizens, however. This means that we have to go beyond the hierarchical principal-agent approach to accountability and allow more dynamic multi-dimensional and hybrid accountability relationships. There is a need for a more open

dialogue between doctors, 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.

We have also revealed there is a 'problem of many hands' (Thompson 1980) regarding accountability relations in the hospital sector. Who the accountable actor is, varies from case to case. In some cases the organization as a whole is held accountable, in other cases individual managers or officials are called to account. We also see a tendency for officials at the lower levels of organizations to be held accountable rather than executive directors of health enterprises and political leaders. Interestingly, senior and middle managers as well as executive boards are both actors and forums in a hierarchical chain of accountability. In contrast to the individual scandals the overall assessments by the Auditor General and the Directorate of Health tend to come to ambiguous conclusions regarding which actor should be held to account, more commonly addressing collective accountability for the system in general. Taken together these cases paint a varied picture of accountability as a multi-dimensional concept regarding who is accountable to whom. Horizontal, informal and voluntary accountability relations, illustrated by the role of the mass media, supplement hierarchical and formal principal-agent accountability. The puzzle is that in spite of a multi-dimensional accountability regime and an active enforcement of different accountability relations, the problem does not seem to disappear.

This study indicates, firstly, that the expectations of increased efficiency without negative side-effects are hard to fulfill. Our analysis of the DRG system and activity-based funding suggests that increased output measurement in the public sector is likely to involve dysfunctions. The problems of goal displacement and inappropriate reward systems are well known, and in spite of the novel intentions of performance management, there are unintended consequences (van Thiel and Leeuw 2002). Our analysis shows examples of several such features, including negative collective effects from focusing on «local rationality» in cheating on the system, or seeking certain valuable patient groups, resulting in goal displacement and distorting priorities among patient groups. Such flaws might be connected to «perverse learning»: Once organizations or individuals have learned which aspects of performance are measured, they can use that information to manipulate their assessments, as with «false» coding of different diseases (Meyer and Gupta 1994). This represents a shift in focus concerning accountability, from a broadly defined public interest to a more narrowly defined set of personal or organizational interests.

Hood and Beven (2006) have identified three kinds of health care managers: Firstly, there are the «honest triers», who share regulators' objectives, do their best to meet the standards set, and do not «game» when they fail. These are typical representatives of trust-based systems. Secondly, there are «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 successes on paper. Thirdly, there are «rational maniacs», who pursue goals consistently, 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 individual coding cases might be seen as a case of «reactive gamers», although the illegal coding practices also suggest the existence of ««rational maniacs» (Christensen, Lægreid and Stigen 2006). This may indicate that combining professional autonomy and discretionary reward systems is troublesome when professionally appropriate behavior, based on informal norms and cultural traditions, is replaced by self-interested rational strategies that are blind to context. Adding to this, there is the potentially problematic role of managers in such systems. They might not necessarily confine themselves to complying passively with externally formulated rules, but can be more proactive in using various managerial tactics to develop and exploit organizational performance-management systems in biased ways (DiMaggio 1988, Oliver 1991, Modell 2004). Such risk-taking behavior will potentially undermine trust in the system (see Hood, Rothstein and Baldwin 2001).

Regarding the two models of management, the high trust institutional model and the low trust instrumental model, our findings are more in line with hybrids of the two rather than either/or practices (see also Pollitt 2006). The accountability relations that are activated are both what was expected from the instrumental model (political and administrative accountability) and from the institutional model (social and professional accountability). On the one hand, the low-trust instrumental model of discipline and control does not seem to be fully applied. The DRG arrangements work within a wider framework of understandings and norms. There are examples of disciplining agencies that have failed to follow the rules, but also of discussions and negotiations between bodies at different levels of how to solve the problems of mismanagement and gaming. The actions taken seem to be both adjustments of rules and procedures and punishment of individuals and organizations. On the other hand, the institutional trust-based model was not fully applied either. Different actors had a large amount of autonomy and flexibility in practicing the system, but this discretion was not informed by a common understanding based on mutual trust relations. Rather, local cultures developed that were at odds with the general public values behind the established system.

Thus, the two models seem to supplement each other rather than being alternative or competing models of understanding how the DRG activity-based funding system in the hospital sector works in practice. The opportunities created by reforming the structural and functional arrangements through performance management schemes seem to challenge trust relations and create room for both the «reactive gamer» and the «rational maniac»: Once measures have been developed to evaluate compliance or performance, they invite manipulation. Any system of accounts is a road map to cheating on them, to cite March (1981).

Instead of describing and explaining the practice of the ABF/DRG system using *one* dominant logic, we advocate drawing a more complex picture of how the system works. In practice we are now confronted with a mixed system, in which the traditional cooperative and trust-based policy style is combined with new performance-management techniques. The DRG-based financial performance system shows the potential dysfunctions of such a system: Negative side effects that the political-administrative leadership tries to modify or stop, but which are difficult to get rid of. Serving both the «quasi-market» and the public seems to be a delicate endeavor. Both the creation of the health enterprise system and the introduction of activity-based

financing were matters of reform—i.e. new measures combined with existing normative and structural features (Byrkjeflot and Neby 2008) in which complexity became a more dominant feature than the elegance suggested in company-like structures and activity-based financing.

It is difficult to mend a system by just changing the incentives. We face what are labeled second-order collective action problems (Ostrøm 1998, Rothstein 2005): Hospital physicians may well understand that they would gain from eradicating corruption-like behavior, but because they cannot trust most other physicians to do the same, they have no reason to refrain from mismanagement. The only way to avoid this would be to establish institutions that would enable them to trust other physicians to change their practice as well (Rothstein 2011). Thus, mutual expectations and behavior based on reciprocity are important. What is important for practice is what one actor believes about the strategy of another. This might end as a 'social trap', to use Rothstein's term. The physicians in a group who have lost trust in each another cannot easily produce the level of trust that is needed to enhance collaboration to establish a common set of institutions, even if they all know they would benefit (Rothstein 2005, 2011). This could arguably be why it seems so difficult to change the ill practices of the activity-based system simply by changing the incentives and making the DRG system more sophisticated. Corrupt hospital doctors and managers may realize that they would all gain by ending corrupt behavior, but it becomes pointless for individual actors to stop the corruption if they cannot trust that most other actors would do the same.

Our empirical cases demonstrate how difficult it is to design an incentive system based on self-interest that will effectively discipline all subordinates. In public bureaucracy, the cost of using incentives is likely to be high and concentrating on incentives can crowd out trust and the very qualities in a relationship that makes the reform measure work (Miller 1992, Miller and Whitford 2002). The challenge is to inspire cooperation and to bypass the short-term interests of employees and managers.

Conclusion

The activity based financing/DRG cases suggest it is necessary to separate formal arrangements from practice. There are two main views on how to handle the problems of the DRG system. 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 is an inherent feature of the system associated with the underlying policy theory. Thus, greater technical sophistication might not be enough to reduce dysfunction. Neither does a more sophisticated accountability regime. If outcome and output are difficult to observe, which is often the case when classifying illnesses, treatment and surgery, 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).

Such reform measures with their strong emphasis on efficiency might undermine traditional public service values of trust, fairness, predictability, equity, and due process (Hood 1991). Generally, the DRG/ABF system assumes the culture of public service honesty as a given, but at the same time it builds on assumptions of distrust and self-interest. This may undermine the common culture and identity, and create a shift towards a more individualist culture. It is an open question whether there will be an erosion of the traditional values of impartiality and honesty (Hood 1991), but the loopholes and possibilities created by these systems may well indicate an inherent or latent corruption problem.

We have revealed a multiple accountability regime in which the different accountability mechanisms complement each other. Accountability has not decreased, but rather multiplied (Klenk and Pieper 2012). A key challenge is how to handle such hybrid accountability relations as they are embedded in partly competing institutional logics. Multiple accountabilities may be appropriate solutions for an increasingly pluralistic governance system, as accountability is about managing diverse and partly conflicting expectations (Romzek and Dubnick 1987). Calling officials to account means inviting them to explain and justify their actions within a context of shared beliefs and values (March and Olsen 1995, Dubnick and Frederickssson 2011), which implies a dialogue between officials and those to whom they are accountable. It seems that for performance management systems such as DRG/ABF to work, we must go beyond the instrumental flavor of accountability and the focus on principal-agent relations to include both a logic of appropriateness and accountability mechanisms that espouse intrinsic values such as integrity, democratic legitimacy, justice, fairness and public mission.

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