

Innovation in public management and gaming the system: The case of activity-based funding in Norwegian hospitals.

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This paper examines if innovations in public management produces negative side effects and enhances legal corruption. The focus is on the practicing of the activity based funding system in Norwegian hospitals linked up to the DRG (Diagnosis Related Groups) classification system. A special focus is on how such reform measures are affecting accountability relations. 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. These cases and investigations addressed hospital officials accused of engaging in various illegal or unethical practices related to charges of gaming where the hospitals have received higher funding than they were supposed to, by manipulating the formal system for activity based funding. Theoretically we use an instrumental and a cultural perspective to show that this management measure is in reality a mixed and complex system that encompasses different kinds of logics. One main finding is that it seems to be difficult to change the corrupt-like practicing of the activity based system by changing tie incentives, sophisticating the DRG system and apply multiple accountability mechanisms.

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Introduction

A central element of the New Public Management (NPM) reforms implemented in various countries was the introduction of new performance management systems. Such reforms in financial management are intended to enhance public-sector efficiency and effectiveness without having negative side-effects on other public-sector values, but is this really the case? We will address this question by focusing on reforms in the Norwegian hospital system and ask whether recent financial reforms have created opportunities or whether they contain loopholes that make negative side-effects likely. The intention is not first of all about improving hospital management systems but to use the selected cases as examples of larger pathologies of public sector governance under New Public Management.

We focus on a particular reform of the hospital financing system in Norway known as activity-based funding (ABF). This funding scheme is based on the Diagnosis Related Groups (DRG) system used to classify diagnoses and hospital treatment (Byrkjeflot and Torjesen 2010). The introduction of DRG's have been adopted in a large number of countries across the world (Kimberly et al. 2008). In performance-based funding of this kind, the money follows the patient in order to ease patient mobility and to create incentives to increase 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, in turn, carries a pre-calculated cost. The hospitals are paid on the number and type of cases treated.

Our thesis is that modern management systems of this kind are rather complex and discretionary structures embedded in a political-institutional context. Accordingly, the accountability measures applied to these systems have also become complex, multidimensional and dependent on the larger context. Our particular concern is to address the problems of accountability arising from this reform innovation by focusing on cases that illustrate dysfunctions or negative side-effects, such as "DRG-creep", "upcoding" of diagnoses, and "creative coding" practices (Kastberg and Siverbo 2007). A special focus will be on how reform measures have affected accountability relations, and who is accountable for what and to whom when something goes wrong. We will address political, managerial, professional, legal and social accountability.

Norwegian hospital governance has been plagued by a series of scandals in recent years that smack of corruption. Interestingly, these cases of malpractice in hospitals seem to have been used to increase the revenues of the hospitals themselves rather than those of individual employees and managers. We will examine four 'scandals' or cases with high media coverage¹ 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 this period. They were followed by 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. These cases and investigations concerned hospital officials accused of engaging in various illegal, corrupt or unethical practices related to charges of gaming where, by manipulating the formal system of activity-based funding, the hospitals received higher funding than they were supposed to. Some of the cases are examples of fraud whereas others have more generally been portrayed as systemic weaknesses.

As a theoretical basis we will use an instrumental and a cultural perspective to show that this management measure in Norway is in reality a mixed and complex system that encompasses different kinds of logic. These include instrumental elements from ad hoc

¹ The most severe cases return more hits in media archive searches, but all cases have been covered in newspapers, broadcasting, and on internet news services.

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 relatively broad media coverage by national and regional newspapers and TV channels. There is also a body of secondary literature that has studied DRG and activity-based financing and other similar systems.

Firstly, we will introduce the Norwegian context by outlining the hospital reform and the activity-based funding system. Secondly, we will present our conceptual and theoretical approach. Thirdly, we will examine how the activity-based funding system works in practice by focusing on some 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.

The Norwegian Context

By standard measures, corruption in Norway is among the lowest in the world. The level of trust in public institutions is generally higher than in most other countries (Norris 1999). It has relatively strong collectivist and egalitarian values, is consensus-oriented, and has a low level of internal conflict. The principle of ministerial responsibility is strong, implying that the minister is accountable for all activity in subordinate bodies and agencies. 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 here. The advent of NPM-based reforms challenged the trust-based control regime by introducing more formal, external, and distrust-based steering tools as well as managerial accountability to supplement political accountability.

In Norway almost all hospitals are public-sector organizations. In 2002, responsibility for Norwegian hospitals was transferred from the counties to the central government. Ownership was thereby centralized to the Ministry of Health and removed from the regional democratic influence of the counties. 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 changed their organizational form from public administration entities to 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 institutions (mostly hospitals) 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).

The main goals of the hospital reform were to enhance coordination and efficient utilization of resources and to gain more control over hospital expenditure. The hospital reform was seen as a significant step forward in 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 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 (Lægreid, Opedal and Stigen 2005).

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). This model produced constant budget overruns and repeated

negotiations on additional funding between different levels of the hospital system. To reduce these problems this model was supplemented by a performance- and activity-based reimbursement system that is integrated into the hospitals' financial management systems (Neby 2009). Although a single payer, the central state, principally finances Norwegian health enterprises, a portion of the funding allocation is activity-based. Resource allocation based on DRGs 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. Importantly, the introduction of the DRG/ABF system basically coincided with the hospital reform.

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. The DRG are coupled with pre-calculated costs for each type of treatment, creating a system for making medical performance financially transparent and refundable. The main focus of DRG use has been on resource allocation and pricing. In the Norwegian tax-funded health care system, where financing and ownership of hospitals are public, the aim of DRG 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 has mainly been used for resource allocation and is integrated into the activity-based per case funding system. The system works as a management tool used in contracts between both the state and the regional health trusts, and between the regional trusts and the local enterprises, as well as an incentive for increased productivity. The DRG/ABF system has opened the way for performance-based competition for resources between and within health enterprises. There is a close connection between the resources the health enterprises use for treating patients, and the reimbursement they get from the government. It should also be noted that despite 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 share of hospital funding to be allocated by the ABF/DRG system has varied considerably – from about 15% to 60%. Generally the DRG system has increased activity and reduced waiting lists in the hospitals, but is also an incentive to increase costs (Byrkjeflot and Torjesen 2010). The promised efficiency gain is also contested (Jakobsen 2009).

Thus, the Norwegian context is one where patient mobility and financial challenges have been high on the agenda, and where the creation of the organizational system of trusts and enterprises and the introduction of the DRG/ABF system complement each other – notably as an example of NPM-style reform measures.

Conceptual and theoretical approaches

Corruption.

The health care system faces 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, allow room for manipulation of the system by bending and bypassing the rules to secure resources that were not intended for the patient in question. These rules normally leave room for interpretation and have an unavoidable vagueness and necessary flexibility, which is legitimate since this kind of coding is not unambiguous, but it also give creative physicians numerous ways to game the system (Morreim 1991). Universalistic norms are necessary but

there is also an obligation to particularism, or ‘doing your job *and* helping your friend’ to quote Carol Heimer (1992). Taken to extremes, however, the stretching of the rules that cheating and gaming involve can eventually become outright fraud and corruption and violate principles of impartiality and justice.

A standard definition of corruption is abuse of public office for private gain (World Bank 1997), but it can go beyond individual and private gain to include organizational gain (Rothstein 2011). Normally corruption is seen as illegal behavior, but it can also include undermining impartiality and enhancing favoritism (Rothstein 2011). Impartial norms of fairness imply that like cases should be treated alike. Impartiality is essential to both medical research and clinical practice, implying that doctors should not have a financial interest in treatments they are evaluating (Angell 2009). This has been labeled ‘legal corruption’, meaning agents acting to unduly influence the rules of the game and to shape institutions, policies and regulations for their own private benefit (Kaufmann and Vicente 2011; Rothstein 2011, 60). It involves situations when public policy is ‘captured’ by various private interests instead of serving the public interest. This form of corruption might be especially prevalent in hospitals which might act dishonestly to enrich themselves instead of putting the patients’ medical needs or macro-societal considerations first, without actually doing anything formally illegal. Such conduct nevertheless challenges the public’s trust in medical institutions (Savedoff and Hussman 2006) in terms of medicine as much as politics, since the medical profession normally is given broad discretion and assumed to act in patients’ best interests.

In this paper we focus on cases that portray uses of influence by public actors – practitioners, officials or organizations – that conflict with the actors’ assigned public role. The public officials have been entrusted to use their positions for allocating goods to the population. If a good allocated by a public officials does not go to the population, it can be seen as corruption (Kaufmann and Vicente 2011). One example of this is if a hospital manager or doctor make use of his or her position to allocate resources in an impartial manner that is not in line with the law and regulations. This approach covers both individual corruption, where hospital officials act in a quasi-private role to use their 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 special focus is on the relationship between hospital units and their superior administrative bodies. Here we look at cases of bureaucratic corruption, misinformation and misleading activity data.

Public Accountability: The problems of many eyes and of many hands

One important mechanism to prevent corruption is to have appropriate and effective accountability relations. In this paper we focus on public accountability, which implies that executives exercise public authority in matters of public interest (Bovens 2007a). We will use 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) which might be formal or informal. Bovens (2007b) claims that accountability is by nature retrospective – i.e. a form of ex post scrutiny.

A main purpose of accountability is to prevent corruption and abuse of power. Accountability mechanisms are supposed to ensure that the practitioners of the DRG system do not exceed the limitations and constraints that have been set by regulatory bodies or superior units, and to keep the practitioners’ behavior in check (Bovens et al. 2010). A core concern is whether accountability relations are strong enough to *prevent* abuse of authority. This requires that the accountability forums are visible and tangible and key questions are whether they have the power to reveal corruption and mismanagement, and whether their available sanctions are strong enough to have a preventive effect.

Accountability embraces several different aspects. In this paper we will mainly focus on to whom an individual or organization is accountable and who is held to account. Public organizations face the problem of many eyes. 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 Læg Reid 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 accountability 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 relationships.

Administrative accountability is traditionally related to a person'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). It can be exercised by a range of scrutiny bodies that perform supervision and control. 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 are made more directly accountable for their ability to produce measurable results and to run their organizations efficiently, within 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 lawmaker. With increasing formalization of social relations and because of greater trust in courts than government, legal accountability is becoming increasingly important in public institutions. Legal accountability is seen as the most unambiguous type of accountability, since it is based on specific formal or legal responsibilities.

Professional accountability deals with professional standards and expertise. It addresses the mechanism 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).

Accountability forums often have problems deciding which actors to hold to account. 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. This is the problem of many hands (Thompson 1980). 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'.

Explanatory theory: Instrumental and cultural approaches

Practices within the ABF/DRG system will be examined and interpreted in terms of an institutional, trust-related context. A potential problem with modern performance-oriented management systems is that it may be difficult to maintain trust, because 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).

The dynamics and tensions indicated reflect that performance management systems specifically are 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.

There is an inbuilt tension in performance management between managerial 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). In our empirical analysis, 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 resources. 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 more in line with the traditional Norwegian model of mutual cooperation and consensus (Christensen 2005). From this model we will expect informal and internal professional accountability relations to dominate.

The other model is a version of a performance management model based to a greater extent 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 model we will expect more formal managerial accountability relations to dominate.

DRG systems may be seen as technical instrumental systems based on objective evidence. But they also exist within political-administrative systems with various levels of mutual trust, making them potentially more complex (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 will 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.

We will use the DRG/ABF cases to analyze what may happen when traditional trust-based professional norms and values are confronted with 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 also lead to undesirable behavior and more centralization and control. At lower management levels there may also be less loyalty to the system and it may be more vulnerable to cheating and undermining of trust.

The DRG system builds partly on professional discretion. It has to trust professionals to follow the intentions of the system as a collective endeavor and to use their professional norms in an appropriate way in their practice, but also be prepared to take action if administrative or professional actors use intricate strategies unfairly to get money from the government. 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).

One reason for this potential loose coupling of ideals and practice in activity-based financing and the DRG system is that it is rather difficult to create a fair system in which resources used and reimbursed are exactly proportionate. The standardization of reimbursements based on DRG groups creates possible inaccuracies in the financing of hospitals. 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 which diagnosis – one with higher, medium or lower rewards – to make. Thirdly, patients may 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, Læg Reid and Stigen 2006).

In our empirical analysis, we investigate a series of cases that illustrate how a performance-oriented management system may influence the practices of medical professionals and managers. Cheating will potentially result in tighter superior control and

change in the system, while decent behavior will potentially increase autonomy and discretion.

We see the instrumental and cultural models as complementary. Norms, culture and values can both enable and constrain an instrumental application of the DRG system and various accountability forms. The challenge is to describe and provide a better understanding of the dynamic balance between the institutional and instrumental features in applying the activity-based DRG system in the hospitals.

Empirical findings

Several negative effects of the DRG system, such as “DRG-creep,” patient selection, ‘upcoding’ patient diagnostics, ‘cream skimming’, and early discharge from the hospital are well known in the international literature (Donaldson and Magnusson 1992, Mikkola et al. 2002, Morriem 1991, Silverman and Skinner 2003, Hafsteinsdottir and Siciliani 2009, Cots et al. 2011). Also Norwegian studies have revealed that cream-skimming occurred after DRG-based hospital payment was introduced (Martinussen and Hagen 2009).

DRG-creep means patients are placed in higher-priced DRGs than their actual state of health would warrant (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 is a practice of improper and manipulated registration whereby patients are reclassified into more lucrative categories (Culyer and Posnett 1990). DRG creep can 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).

Another kind of mismanagement is ‘DRG dumping’ which implies that clinics prefer easier cases and avoid certain costly patient groups that are unprofitable under the activity-based funding system. A variant of this practice is ‘cream skimming’, implying that profitable and low cost patients will be selected primarily. 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 when 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).

In the following sections, we discuss the problems with the Norwegian ABF/DRG system 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. A common feature of these cases is the relationship between performance management and risk taking in high trust systems under pressure. The DRG-based funding system implied that the economic risks of hospital treatment largely devolved upon the providers (Bode 2012). One main finding from the literature is that performance management increases risk taking (Shapiro 1994, Greve 2003), including “gaming” and “cheating.” A consequential question stemming from such practices is how accountability mechanisms play out.

In particular, 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 expectation is that the increased subordinate autonomy that such reform measures introduce into a system generally scoring high on trust relations builds on a set of incentives that may stimulate behavior that counters the intention of policymakers.

Case descriptions

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. We will first deal with the four individual cases, before assessing the two general audit/revision cases.

The 2003 coding scandal at Arendal Hospital: In 2003, a leading newspaper reported what was later labeled a coding scandal in a regional health enterprise (Aftenposten 12.3.03). One clinic had registered more than 50 per cent of all patients having undergone/needing tonsillectomies as needing snoring operations. The newspaper revealed that a doctor 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 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 trust was instructed by the minister to 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. 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, Læg Reid and Stigen 2006).

Moreover, the case attracted national attention and was seen as undermining trust both in the funding system and in public health care generally. The standing committee on scrutiny and control in the Storting asked for a comprehensive 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. In practice, this means that 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 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 severely criticized and stripped of many of his board chairmanships, and some months later he too 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. The investigation revealed that upgrading of treatment is a widespread practice, finding that three out of five hospitals practiced some kind of creative coding to increase funding. The number of cases of snoring surgery, for example, increased by more than 100 per cent 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 may illustrate that this system tends to increase risk taking and challenges mutual trust relations, thus making the management system more vulnerable. When medical

doctors, in collaboration with hospital managers, behave in inappropriate ways, they undermine the trust on which the balance between central control and professional autonomy is based (Christensen, Læg Reid and Stigen 2006). The case also reveals that such systems may actually give room for the enrichment of individuals – as in “classic” corruption – when individuals act in accordance with ideas that benefit organizational actors (hospital management). In terms of accountability, the case reveals a process where information gathering was a formal reaction to media attention, where the discussion became a national political issue, and where directly involved actors were formally held accountable – but where second order accountability relations caused large-scale investigations and changes in the national activity-based financing system.

Manipulating patients’ records. Asker and Bærum Hospital 2010: 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.² During the fall, the newspaper revealed that one of the hospitals in the local health enterprise Vestre Viken, Asker and Bærum hospital, had not followed up on patients as it was supposed to, because of a semi-systemic alteration of patients’ records. The problem was that 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 a different service provider. Patient records were accessed and changed, particularly information relevant for making follow-up appointments and records of examinations performed before being discharged from hospital.

In practice, this caused more manageable and favorable-looking waiting lists for the hospital, as fewer patients were added to them. The length of waiting lists and time spent waiting by patients are among the parameters for measurement of hospital performance, so having shorter lists and waiting times makes a hospital look good. It was revealed that the problem had been going on for six years before being uncovered, and it is considered likely that multiple lives were lost as a consequence of malpractice. Moreover, 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 decrease in the likelihood of cost containment measures and an improvement in its reputation after it had been allegedly demonstrated that it was able to deal with specific patient groups. In one sense, the hospital manipulated the performance-management system by falsifying data on its own performance.

Several forums were involved in the information phase of this case. Chronologically, it can be claimed that the first forum was the media. Particularly the investigations by the newspaper VG triggered a direct scrutiny of the practices involving patients’ records 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 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.

² 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 circumvent 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).

The case caused considerable media debate and directly triggered a prolonged public debate establishing a picture of a hospital system in crisis. Given that the case attracted national attention, one would have expected central actors to get involved, but in this particular case the problem was considered local and confined, and leading public officials within Norwegian health care 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. In this respect the discussions of the case differed from the so-called coding scandal, in that the focus was mainly on malpractice rather than system failure. Nevertheless, many people participated in the debating phase, ranging from media commentators to medical professionals and health care administrators.

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, perhaps reflecting the severity of a case that causes loss of life. Interestingly, however, 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.

Cheating on coding at Lillehammer hospital 2011: In spite of the sustained attention paid to coding practices over the last decade, new economically motivated scandals were uncovered in 2011. 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 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 ~~realised~~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 even in cases where the technical description of the irregular behavior is fairly similar, the size and scope of the case matters when it comes to activating accountability mechanisms.

Cheating on coding in Drammen hospital 2011: In Drammen hospital, a hospital belonging to *Vestre Viken* health enterprise, the national TV channel, NRK, in late 2011 revealed that patients with same-day appointments 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 had 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 case to the regional trust, which demanded a full investigation. The case was filed with the police, and is still under investigation. Again, the media served as the initial investigator. The reluctance of the department manager to deal with the case seems to have jeopardised the internal investigation of the case, leaving it to the police to investigate.

In terms of debate and consequences, this case has not yet been resolved. *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.

The two last cases also show 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 2002: A performance audit of the activity-based funding system in 2002 revealed that many hospitals lacked the necessary information to get the system working 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.

The hospitals tended to give preference to the most profitable patients, and in some cases put economic criteria ahead of 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 of 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 again, 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, Lægveid 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 intense since its 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.

National revision of coding practices 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. In the directorate's report, it was even 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

All six cases revolved around coding practices in one sense or another. Whereas the original idea was to link expenditure to hospital performance, the practical premise for this link turned out to be open to manipulation. The introduction of DRG systems is not risk free. 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 itself is not. In terms of

accountability then, the substance is not the management system, but rather the practices that the system allows.

In terms of corruption the cases 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 the DRG system have thus been undermined. But there is also illegal behavior, which in most cases entails organizational gain, although there are also some examples of individual gain. The most common practice, however, seems to be hospital units acting dishonestly to enrich themselves without actually doing anything formally illegal.

In terms of accountability, the individual cases show that the information phase is typically marked by a range of different forums. The mass media are obviously an important forum for curbing this kind of corruption. 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. More generally, various combinations of internal and external accounts are demanded, whether from specific managers, boards at different levels, audit agencies, or politicians. Generally we see interplay between the different types of accountability and a dynamic accountability development over time in the different cases. In some cases social accountability initiated by the media activated an administrative accountability relationship. Legal and also 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. The cases reveal that there is an interesting dynamic between internal processes within the hospital system and external, open public processes. There is also an interesting dynamic between individual scandals and the general assessment of the overall system that 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 to closed and internal behavior justification and questions being posed between managers and professionals at different levels in the hospital system. 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. We have revealed that this asymmetry of information gives rise to several unintended consequences.

The last phase in which actors pass judgment and may face consequences 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, 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?
	<i>Political</i>	<i>Legal</i>	<i>Administrative</i>	<i>Professional</i>	<i>Social</i>	
<i>Case 1: Coding scandal 2003</i>	Minister ,Storting ,Auditor 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
<i>Case 2: Patient record cheating 2010</i>		Police	Board of Health Supervision, local board, and regional board		Media	Managers at local enterprise Executive board of local enterprise Hierarchical, individual and collective
<i>Case 3: Code cheating 2011a</i>			Advisory committee, regional board, and local board	Peers (in debating phase)		Hospital manager Individual
<i>Case 4: Code cheating 2011b</i>		Police	Regional board	Whistle blowing	Media	Not decided yet, probably the hospital collective or /and individual
<i>Case 5: Performance audit 2002</i>	Storting, Minister		Auditor General			Organizational, collective
<i>Case 6: National revision 2010/2011</i>			Auditor General Directorate, regional boards and local boards	Researchers (SINTEF), peers		Organizational, collective

The emergence of these reforms thus seems to have made accountability a more ambiguous and complex issue. What we see is the co-existence of different and partly contradictory accountability relationships producing accountability dilemmas and tensions for public officials. It is thus important to recognize the various dimensions of accountability, the complex context of public accountability and the multiple overlapping accountability relationships of administrative reform (Romzek 2000, Behn 2001). Introducing performance-management schemes, such as the ABF/DRG system, does not reduce complexity or ambiguity, but seems to 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 is accountable 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. They tend to address 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. Hierarchical and formal principal-agent accountability is supplemented by more horizontal, informal and voluntary accountability relations illustrated by the role of the mass media. 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, first, that the expectations of increased efficiency without negative side-effects will be difficult to live up to in practice. The analysis of the DRG system and activity-based funding reveal 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 focusing on “local rationality” in cheating on the system, having negative collective effects, 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: first, 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 a more trust-based system. Second, the “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. Third, “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 introduction of illegal coding practices also suggests the existence of “rational maniacs” (Christensen, Lægreid and Stigen 2006) This seems to show that the practice of combining professional autonomy and discretionary reward systems may run into trouble when professionally appropriate behavior, based on informal norms and cultural traditions, 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 complying passively with externally formulated rules, but instead be more proactive and use various managerial tactics to develop and use 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).

The development of this kind of behavior might be understood using what Powell describes as an ‘anchor-tenant theory’ of economic development in his studies of the economic cultures of cities (Powell, Packalen and Whittington 2010). Just as an anchor store will define the character of a mall, anchor tenants may define the character of an economic community and mobilize others. Anchor tenants are well-connected actors who occupy positions that give them access to diverse participants and have the legitimacy to engage with and catalyze others to internalize new norms. Such anchor tenants play a powerful community role and this dynamic may also apply to other fields such as health care. Our cases have revealed that managers and physicians in some hospitals took financial growth to be a legitimate ethic and turned their hospitals into quasi-profit centers. Not all doctors accepted this but they failed to discourage those who did (Gawande 2009).

Performance management systems are vulnerable to the local culture. We have revealed that such systems in specific cases can be undermined, resulting in negative side-effects that can challenge professional integrity. What the DRG reform might indicate is a cultural change from an integrated, collectivistic culture towards a more aggregative, individualistic culture (March and Olsen 1989). Overall, this shows that the performance management system coexists in a complex relationship with cultural traditions and trust.

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). On the one hand, the low-trust instrumental model of discipline and control does not seem to be fully applied. The DRG arrangements seem to 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. There was a lot of autonomy and flexibility in practicing the system, but this discretion was not informed by a common understanding based on mutual trust relations. Rather a local culture developed that was 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.

We have revealed that it is difficult to mend the 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. It is what they believe about other actors' strategies that is important for their own practice, for example, their expectations about whether other physicians or hospitals will take part in corrupt practice. 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 is why it seems so difficult to change the corrupt 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.

Thus 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 DRG case suggests 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, DRG 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, which 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 there may well be an inherent latent corruption problem.

We have revealed a multiple accountability regime in which the different accountability mechanisms complement each other. Accountability has not decreased but multiplied (Klenk and Pieper 2012). A key challenge is how to handle hybrid accountability relations embedded in partly competing institutional logics. Multiple accountabilities may be appropriate solutions for an increasingly pluralistic governance system. 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 Fredericksson 2011), which implies a dialogue between officials and those to whom they are accountable. We must go beyond the instrumental flavor of accountability and the focus on principal-agent relations and include the logic of appropriateness and accountability mechanisms that espouse intrinsic values such as integrity, democratic legitimacy, justice, fairness and public mission.

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