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From book-keeping to strategic tools – Some aspects on the role of accounting in the Scandinavian Health care Sector

by

Inger Johanne Pettersen

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# From book-keeping to strategic tools -

Some aspects on the role of accounting in the Scandinavian Health care

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Inger Johanne Pettersen

Bodö Graduate School of Business , Bodö & The Foundation for Research in Economics and Business Administration, Bergen

8049 Bodö Norway

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#### **Abstract**

This paper presents some aspects of the introduction of more accountable management control in the Scandinavian hospital sector. A contingency model is used to understand the complexity of public sector government. Contextual and behavioural variables are discussed to explain the reform processes in the Scandinavian countries. Several field studies in the hospital settings show that there are similarities and differences in the implementation of the management reforms. The most striking difference is the level of central state versus local government participation in the reform processes. The reform initiative is centrally driven, but there are differences as to the use of national standard prices or pricing of services made by the hospitals themselves. Commerciallike management logic like accrual accounting is gradually introduced in all the countries, although the motives and directions of the changes are different between the countries. The is also a great variation in the interpretation of accounting information made by clinical leaders and clinical staff. The interpretation and use of accounting information should be studied more closely in the years to come, because at this level of the individual clinical actor the decisions are made about how resources hospital patient treatments. are spent

# Introduction

The aim of this paper is to discuss some aspects of the introduction of more accountable management control in the Scandinavian hospital sector and the role of accounting as one element in these reforms. The focus is on the commonalities and differences in the interpretation and implementation of accounting information. This comparative view is discussed against the international trend to impose the new public financial management (NPFM) in public sector.

This trend which also includes the Scandinavian countries, has been initiated by the national government bodies, which have imposed fiscal restraints and funding cutbacks in the public health care sector during the last decades. Hospitals have been put under heavy pressure to reduce the costs and improve the quality of medical services. Consequently, hospital administrators and government agencies have responded by becoming more aware of the need for administrative tools to cope with these pressures. Management accounting and control systems are important elements in this trend.

Accounting systems were earlier used mainly as planning allocation tool and for annual reports to boards of directors while physicians paid little attention to them. Now management accounting and control systems are also being used for monitoring, performance evaluation, motivation as well as for strategic purposes. There have recently been published international research studies which investigate the consequences of this interest in management accounting systems by hospital personnel and funding bodies. This research includes a variety of approaches such as more ethnographic field studies, cross sectional surveys at hospital and departmental levels and institutional investigations at the national level. In this paper Scandinavian field studies in hospitals will be discussed to enlighten the different contexts for changes in public sector management.

The diversity of research approaches reflects the observation that administrative reforms are transformed by a complex mixture of environmental pressure, polity features and historical and institutional contexts. This transformation implies

substantial divergence and organisational variety and heterogeneity which necessitate a differentiated view on the problems of governing the public sector.

The paper is organised as follows: First some general comments are made on the trends to impose new management systems in hospitals. Then a theoretical framework is developed. The common structures and differences in the implementation of NPFM in the Scandinavian hospital sectors are then briefly discussed. The focus is put on Scandinavian research that has presented empirical data on the interpretation and use of accounting information and accounting tools in hospitals. The paper ends with a brief discussion.

## Theoretical framework

Because of the interplay between politics and administration, reform processes such as those associated with NPFM are not characterised by simple adjustments to current international administrative doctrines. The reform concepts are filtered, interpreted and modified on their journey from political decisions to administrative implementation. To understand such change processes, which are generated on a political level and implemented locally, it is necessary to study both the central, governmental activities and the local initiatives.

# Reforms as political processes

Behind the reform processes cited above there may also be widespread tension between the demands of the management process itself and those of the political processes (Bromwich & Lapsley, 1997). The challenge for management accounting may be even more complex in the public sector than it is in the business world. This highlights the need for a deeper understanding of the complexity and variety of public sector reform efforts.

Consequently, the theoretical platform for discussing the management reforms in public sector is based on an assumption that accounting practices should not be studied as an organisational practice isolated from the wider social and institutional context in which it exists (Hopwood & Miller,1994; Roberts & Scapens, 1985) A framework is

used which identifies a set of contextual and behavioural variables to help us to understand the reform processes.

According to Levitt & March (1988) change, defined as organisational learning, is routine-based, history-dependent and goal-orientated. But in the public sector the procedures generated by the reforms can also be a reflection of what is considered suitable and legitimate rather than a result of rational calculations and choices (Brunsson & Olsen, 1993). In political settings ambiguity and uncertainty will thus mean that the construction of meaning and the legitimisation of behaviour and events are an even more important part of the public sector reform process than they are in business settings (Olsen & Peters, 1996).

# Governmental management innovations

In order to understand the complexity of implementing governmental management innovations such as new payment systems which impose new accounting practices, we need to specify a set of contextual and behavioural variables that could help to explain the outcome of the innovation process on the government and institutional levels. Changes in the public sector are generally associated with national reforms, which means that certain national context variables should be included if we are to understand implementation at the various organisational levels (Haas, 1992; Lüder, 1992).

This framework is based on dimensions such as the source of the reform initiative (politically led or institutional), the responsibility for implementing the reform (central government level or decentralised to the local level), the context in which the reforms are introduced, and the content of the reform in terms of rules, prescriptions, implications and so on (Pettersen, 2001). The behavioural aspects of the implementation process itself are also included. In other words, the outcome of the innovation process can be seen as contingent on several external and internal institutional factors as shown in figure 1.

Variables	Dimensions	
Initiative	Political	Institutional
Level	Central	Decentralised
Context	Structural	Situational
Content	National	Local
Process	Colonialisation	Evolution

Figure 1: Accountable management reforms in the public sector. Typologies describing the implementation process

This approach was adopted by Lüder (1992) in developing a contingency model of governmental accounting innovation. The model was based on a series of nine country studies between the mid- 1980s and the early 1990s, and its aim was to specify the socio-political-administrative environments prevailing in the countries and the impact of these on governmental accounting innovations. In analysing the outcome of the reform process as to the interpretation and use of accounting information, some elements from Lüder's contingency approach will be used.

## • Source of initiative

Studies of the development of NPFM ideas internationally reveal a wide variety of change situations. Most national reforms in governmental accounting are driven by directions issued centrally. But there are also examples of a mixture of central encouragement and local initiatives in settings characterised by weak, central state control (Laughlin & Pallot, 1998).

Studies in this field show that reforms in the public sector are usually politically led by government decisions that are to be implemented locally. If the state has a strong legitimate power base, it is more likely that reforms are initiated at the centre in this way. On the other hand, if the decision-making power of the state is relatively weaker, then the initiative for change may well be more locally driven and more dependent on local situational factors. The NPFM reform is typically an externally generated reform concept that is transferred to the national political-administrative systems in the individual countries. Its transformation within each country then depends heavily on

the relative strength of the central state and government relative to the local administrative and institutional autonomy.

If the reform is centrally driven one can expect the costing procedures to be standardised on a national level and implemented/copied to the institutional level.

# • Level of implementation

The main features of the NPFM are: explicit standards of performance, a greater emphasis on output control, increased competition, contracts and private-sector management techniques. All these techniques are aimed at improving the efficiency of the service production. The target for the reforms is the institutional level, because the agencies which produce public services such as education, welfare and hospital services are responsible for implementing the prescriptions of the reform.

The basic ideas underlying the NPFM reforms tend to reinforce the tendencies towards structural devolution, such as the structural separation of administrative functions that have traditionally been organised together (Christensen & Lægreid, 1999). This means a sharper division between political and administrative functions, which implies in turn that public bodies are organised according to provider and purchaser roles, and there will be a tendency towards creating the "commercial-like" principles for state companies. This fragmentation creates a need for more co-ordination, which according to the NPFM logic has to be solved by way of contracts to regulate relations between the state agencies and the providers, like for example the hospitals.

If such market oriented models of organising service production are introduced on the local/institutional level, the use of accounting information for contracting between the provider system and the purchaser system will become more dominating. These mechanisms of coordination are very different from those experienced earlier in more traditional bureaucratic organisations where rules and routines are the most vital mechanisms of coordination.

## Context

Contextual variables on national level comprise motives and opportunities for reforms (Lüder, 1994, 1998; Laughlin & Pallot, 1998; Monsen & Näsi, 1998). These are called situational factors as opposed to structural factors such as social, environmental, political and administrative characteristics of a country. One of the most important motives or stimuli is the perception of some sort of "financial crisis" existing in governing public bureaucracy and/or service production (Olsen & Peters, 1994). Crisis may be real, but also the product of a social and political process which defines the political situation. Although real or perceived, financial crises are usually perceived as a motive to reform. But an opposite relationship may also exist. Reforms may be even more likely when there is a perception that slack resources exist somewhere in the administrative bureaucracy or in the service producing agencies.

The realisation of the motives does not only include such matters as financial crises or slack resources, but also what Lüder refers to as "dominating doctrines" (Lüder, 1994). A dominating doctrine can be "the superiority of commercial accounting" as suitable for public sector management (Laughlin & Pallot, 1998: 384).

Situational factors such as the perception of a "crisis" or "slack resources" and powerful experts and actors can help to understand the timing and specific occurrences during a political process, and the existence of these factors can trigger a reform effort. These situational and structural drivers behind reform initiatives which are identified on national level, affect the strength and direction of the reform content which is introduced to the local, institutional level.

Consequently, if there is a general idea that organisational slack resources exist in hospitals and/or there is a doctrine that public sector management is "old-fashioned", internal resource management techniques based on accounting tools to provide performance measurements and budget information will be more widespread at the institutional level.

## Content

The NPFM reforms have, generally spoken, replaced systems of global budgeting and fixed grants with the prospective payment system - PPS - logic, where each hospital is paid according to the volume of health care services it provides multiplied by the standard price for each service. These cost models for service prices will be diverse in details and scope depending on a national or local level of implementation.

A feature of the public sector changes has been the focus on introducing commercial business management. The official rhetoric underlying the change has been that traditional public administration has had a narrow focus on compliance with spending limits and accountability for cash flows and balances. The accounting systems were used to effectively contain costs and balance budgets, but they gave limited information to management's effective use of resources (Lapsley, 1994). There is now a trend towards more sophisticated costing techniques within hospitals as they change their focus from financial control to providing information on the cost of procedures for negotiations and contracting (Lapsley, 2001).

In the Scandinavian countries the redefined public sector now includes "outputs", "efficiency" and "results" of activities. Managers are held accountable for the cost of operations and the overall financial position. There is a joint tendency that accrual information is seen as an accurate assessment of a cost of service provision and an indicator of the efficiency of program performance. Traditionally the Scandinavian government have operated on an annual cash basis. This has reflected the fundamental principle that no public monies will be spent in ways and in amounts not specified in the annual budgets made by the parliament (Guthrie, 1998). The cash accounting statements have traditionally shown the sources of cash receipts, the allocation of cash expenditures and provided a comparison of actual against budgeted amounts.

When introducing accrual accounting there is a shifting of the timing of the recording of transactions, and expenses are recognised in the period in which they are incurred rather than paid. Now governments introduce accrual accounting in Finland and Norway, whereas the initiative to change accounting systems is more fragmented and locally led by the hospitals in Sweden and Denmark. The proponents of accrual accounting have claimed that it gives the advantage of focusing on resource flows

accounting to the period in which they were generated or consumed, and that it helps obtain more accurate pictures of the cost of services. These accrual accounting reforms introduce accounting techniques and commercial views of accounting reports and standards, and as the time passes on these changes will contribute to more convergence between the objectives of private and public sectors.

### • Evolution or colonialization?

The NPFM reforms have been introduced to produce internal changes in service-production and management in hospitals. A study of the implementation process should therefore include a focus on the interpretation and use of accounting information in hospital settings. These perspectives introduce the less abstract elements of the organisations as important fields for studying the practice of accountable management systems.

Accounting information as a part of the accountable management systems in organisations form an important part of the organisations' design archetypes (Laughlin, 1991, Broadbent, 1992). They give visibilities to less tangible elements of the interpretive schemes. Due to the complexity of the notion of the interpretive schemes, in particular the different levels of abstraction at which they may exist, it is difficult to recognise any extent of changes. Interpretive schemes are formed discursively over time and comprise the beliefs and experiences that guide behaviour and action (Broadbent & Laughlin, 1997). Different elements within the interpretive schemes exist at different levels of abstraction. At the highest level of abstraction are meta rules, forming the organisational paradigm which underlies and shapes perceptions.

Normative theories have not recognised the complexity of these less tangible organisational elements. Changes in organisations can occur at the levels of design archetypes and sub-systems, and possibly at the more tangible levels of interpretive schemes, without affecting the fundamental value systems of the individual organisational members. If changes are driven by the needs of the norms and value-systems by discursively agreed changes in the interpretive schemes, the process can be characterised as an *evolution*. If instead changes to the design archetype force through changes to the interpretive schemes, the change process is referred to as a

*colonialization* (Broadbent & Laughlin, 1997). Evolution and colonialization correspond (to some degree) to the more well known processes in management called bottom-up and top-down.

One may expect that buttom-up models for developing local accounting systems will be more tailor made (according to local context and developed as a discursive process) than standardized top-down processes.

By studying the diverse interpretations of the accountable management systems made by different actors on different organizational levels, some insight into the reform process and an understanding of the extent of any change could be obtained. The same design archetype can be interpreted in different ways. Consequently, studies of implementing accountable management innovation will be incomplete if they do not move beyond a study of the tangible elements in the organisations, such as budget documents, written reports an formal structures.

# Some comparative empirical aspects

In this section a broad discussion will be made on the management reforms which are implemented in the Scandinavian hospital sectors. This presentation is based on data from the WHO Regional office for Europe (1998 and 2000) and empirical research on these reforms which has appeared in relevant journals and papers. The discussion will be organised according to the contingency approach presented in the section above. A summary of the discussion is made in figure 2.

The Scandinavian countries are all well developed welfare states where hospitals have been owned by the state or counties and financed on global budget schemes. Traditionally the political dominance has been based on strong social democratic ideologies. During the last decades Finland has gradually adapted to the Western political ideologies, and it has now become a full member of the EU. Although Norway as the only Scandinavian country has decided not to join the EU, the country's associated membership enforces external political pressures on the country, and these contextual factors imply that all the Scandinavian countries face common external

challenges. Altogether these countries have strong common platforms geographically, in politics and in culture. As shown below there are not the great differences in the structures of the hospital system. Consequently, differences will be illuminated in the implementation processes of the reforms.

#### The structure

In *Finland* the administrative system is subdivided into hospital regions run by inter municipal associations. The state subsidy system for health care was reformed in 1993 to reduce central government control and to increase freedom in providing services. A purchaser-provider split is introduced to increase the competition between providers. The state subsidies are now paid directly to the municipalities. National strategic planning is limited to the setting of national priorities and to allocation of major investments resources. Large hospitals are organised into kinds of profit centres. The accrual accounting model has replaced the cash accounting in the Finnish state government sector. The model was introduced in 1998 where all state agencies including hospitals apply the same financial and reporting model based on accrual accounting principles (Näsi & Kohvakka, 2001).

In *Sweden* general hospitals are divided into three categories. Regional and teaching hospitals are administered by their local county councils, but their activities are regulated by agreements between the county councils making up the region. Central and local hospitals are owned by the local councils. There is a trend towards reorganisation of hospitals into trusts where several hospitals merge. Research reports about tension in the internal processes of creating these large regional hospitals and in creating new organisational structures (Hallin, 2000). State subsidies are allocated to the counties, and there are no centrally imposed initiative to introduce accrual accounting in the hospital sector. However, as hospitals are organised as trusts like Sweden's largest hospital, the Karolinska hospital, they gradually introduce accrual accounting in order to generate price-lists to cover total costs and to produce more diverse performance measurements (Sundin, 2001). Several counties are now introducing purchaser-provider structures in order to generate competition between hospitals.

In *Denmark* most hospitals are owned by the counties, and the county councils are responsible for organising the services. Hospital services are financed directly from taxes partly through government grants and partly through taxes levied by the county authorities on a global budget basis. Also in Denmark there is a trend towards mergers of hospitals, as hospitals in Copenhagen were merged into the Joint Metropolitan Hospital service. Also here new organisation forms like centres are introduced into the hospitals (Borum & Bentsen, 1999).

In Norway most hospitals are still owned by the counties, but the government has proposed a change which implies that the ownership is transferred to the state. Patients (by their doctors) are now free to choose hospitals irrespective of their where they live. The hospitals are paid according to a list of national standard prices based on the DRG-system (Fetter et al. 1980), but this transfer is paid to the counties. In a proposal to the Norwegian Parliament the government has introduced accrual accounting in the hospital. According to the Minister of Health this will improve the information about resources and performance (Proposed Law on hospital trusts, Ot.prp no 66 (2000-2001).

As can be seen from the brief overview above, there is a general tendency in Scandinavia to introduce provider-purchaser systems, the hospitals are allowed to organise in trusts which are administered by "commercial-like" principles for state companies. The need for co-ordination will be solved by introducing contracting to regulate the relations between the hospitals and the owners.

### Initiative

In all the Scandinavian countries the initiative to introduce NPFM has come from the government, and the processes have been politically led by government decisions. But the mix of central initiatives and local implementations are different.

In *Norway* the reforms are based on prospective payment systems (PPS) using the patient-group concept. The government has developed a set of national standard prices (in 2001 there are 530 DRG-categories) according to which all hospitals are paid. This

very centralised payment system is not introduced in any of the other Scandinavian countries.

### Level

As mentioned above, the financing of hospitals in Norway is extremely centralised. However, there is not yet introduced purchaser-provider splits as it is in Finland. Finland seems to have introduced the most market oriented system in Scandinavia when looking at the institutional levels. In Sweden and Denmark there are not introduced nation wide reforms which are as market oriented as the Finnish<sup>2</sup>.

### Context

Literature on the Scandinavian reforms has pointed at the perception of a existing financial crisis and the belief that there is some kind of old-fashioned public sector management as the motives for introducing NFPM. The most striking difference here seems to be between Norway and the other countries as the Norwegian government has not focused primarily on the need for competition between hospitals as motive for reform, but concentrated on obtaining more accurate cost- and output-data, and linking these data with the financing of hospitals. This may be due to the country's growing wealth based on national oil-income. Consequently, one can say that the context for the reform is more structural in Norway than the other Scandinavian countries.

### Content

The Scandinavian reforms are different according to the level of details, marketorientation and degree of national or local initiatives. Also here the most striking difference seems to be between Norway and the other countries. Finland has introduced the most market oriented systems in governing the hospital sector.

<sup>&</sup>lt;sup>2</sup> However, the Norwegian government has proposed large changes in the hospital sector which open for more market like mechanisms as provider-purchased splits, hospital trusts and there are plans to introduce accrual accounting .

The new payment system (from 1997) in Norway is based on standard reimbursement prices which are calculated for each patient-groups based on historical average costs.

The hospital sector in this country is controlled by several detailed state regulations, and the legal system is standardised for all hospitals (Governmental Note No 24 (1996-97)). The payment system is uniform for all the counties, irrespective of where and what kind of hospitals these counties own. The central state regulations directly affect each county's autonomy and level of activity. Approximately 60% of the hospital budgets are dependent on per case payments (for in-patient and out-patient activities). The standard reimbursement rates are set by the Ministry of Health for every budget year. Consequently, these funding rates regulate both the total level of expenses in the Norwegian hospital sector and the level of activity on the local level. This is the case although the counties are the formal owners of the hospitals.

#### Evolution-colonialisation?

This element of the reform processes can most adequately be studied by field research on hospital sites in order to understand more about the interpretation of accounting information and the use of such information in clinical decisions. Several field studies in the Scandinavian countries have pictured different aspects of these implementation processes.

Charpentier & Samuelson (1996) interviewed managers and doctors in a Swedish field study of the introduction of a Diagnostic Related Group (DRG) costing system in hospitals as a basis for funding. On one hand it was found that the productivity improved and most patients were treated with less resources. However, they uncovered some dysfunctional effects such as increased administration costs; a tendency to neglect quality in treating patients; a general distrust of DRG-data and scepticism regarding the data's information for funding purposes; "gaming" the system by shifting patients into higher payoff treatments; deliberately over treating some patients and even "fudging" the DRG reports.

In a Finnish field study Kurunmäki (1999) documented the radical shift from the traditional central government planned system with funding based on actual cost to a

quasi-market-based and economically rational system that funded hospitals on a per capita basis. As participants throughout the hospital sector system became "cost-conscious", the reform did not "result in a radical redistribution of resources between existing health providers ", nor did it "reveal unambiguous differences in health service provider's cost efficiency or quality (1999:122).

In a time-series study of the Norwegian hospital sector Pettersen (1995) found that the budgetary process can serve as an important means of integration and communication process which indicate that physicians are getting more involved in budgetary matters and considerations than in past decades, when they had little to do with accounting data and budget reports. Consequently, the role conflict caused by the medical orientation of the physicians versus the administrative orientation of the hospital bureaucracy may be diminishing because of changes in reward systems like bonuses and the introduction of budget performance criteria.

In a case study undertaken in the surgical clinic at a University Hospital in Norway during 1997-1999 (Pettersen, 2001), several documents were collected which were related to the hospital's budgets, annual reports and strategic planning. Neither in the annual reports for 1996 and 1997 nor in any other strategic documents anything about PPS or the classification system for patient diagnoses (the DRG-system) was found. However, during autumn 1997 and spring 1998 the hospital participated in a project which was designed to reorganise accounting data according to the PPS prescriptions. The aim was to couple these data with activity data on in-patient activities. The report states that:

The amount of data is large. We have thus had to reduce the information. We were forced to do some "qualified considerations" in some areas of activity. All together we believe the results to give a good starting point for the further work ... We hope this work have given an interesting picture of the hospitals' activity". (Report on the DRG-project, the University Hospital of Middle Norway, 23<sup>rd</sup> Mach 1998. Author's translation)

This hospital was financed as all Norwegian hospitals according to the new funding system, and the budgets (for in-patient activity) were made on basis of a calculation of 50% per case income and 50% frame budget (Budget formulae decided by the Government for the budget year 1998). In the annual report for 1998 the PPS system is commented in several paragraphs. The citations below are among the most important comments on the PPS system:

"We have lost almost 12 mill Kroner in "creep", that is to say the reduction the Ministry makes due to an unaccepted increase in patient-mix ". (Annual report 1998, page 4).

"PPS income has increased during this year, amounting to 20 million Kroner more than budgeted. This is due to higher activity and better coding of diagnoses. There is money to get if the coding of diagnoses is getting better". (Annual report 1998, page 8.)

In the Surgical Clinic the budgets were discussed at a meeting and comments on the situation were written in an internal memo:

"The clinic's income is based on per case calculation according to the Ministry's regulation. But we get only a certain part of this money. The internal budget for the hospital is based on other decisions. It is therefore difficult to make real prognoses of the economic result of the clinic's activity this year". (Internal memo, Surgical clinic, the University Hospital, 26<sup>th</sup> November, 1998)

These citations show that the language of the several documents include the PPS logic: Work had begun to restructure the accounting system. The PPS is mentioned as reason for "loosing money", and better coding practises are mentioned as means of getting more money (Annual report 1998). However, there is no connection between the per case income and activity on clinical level (Internal memo, 1998). As a head of a clinic in this hospital said:

"We change to day-surgery because of the new payment rates which are introduced. We believe there is money in this, but we do not know neither the rates nor our own costs in this activity. We hope income will cover expenses". (Budget meeting, august 1998).

There was no separate cost information neither for day surgery activity nor for outpatient treatments. Consequently, it was difficult- not to say impossible- to calculate the effect of changing activity from in-patients to day- and out-patients. In 1999 the clinic reports a decrease in number of in-patients:

"We have 200 less in-patients which indicates a reduction in estimated income to about NOK 3 million. The day-surgery activity has not been increased, due to shortage of doctor-capacity." (Internal budget notes, 21st May 1999).

The quotations sited above indicate that the new payment system was experienced at the clinical level as increased expenditures and decreased productivity measured as wages expenditures per in-patient treated. Furthermore, the clinical leaders experienced more uncertainty concerning the contextual frames for the hospital's activity.

Similar stories are told from the other Scandinavian countries. In a longitudinal case study in two profit centres at Helsinki University Central Hospital (HUCH) Lehtonen (2000) documented the use of DRG-based accounting systems. In an interview a clinical leader said:

"Now when they have been cutting down the use of HUCH, we have been forced to give up some types of patients because we have to take care of the acute and difficult cases, no matter what, and therefore easier patients are given up. However, our prices are set based on the old patient population and as a result prices are too low because now we treat only difficult cases... Then when we raise our DRG-prices, people may say that we have become more expensive, but this is because we have given up the easiest cases".( Lehtonen, 2000:31).

This shows that the language and logics of the accounting "world" have become vital in the arguments and thoughts of the clinicians. Also the Swedish head-nurses are very well aware of the changes in the administrative systems (Blomgren, 1999):

"I am stuck in papers. It is a lot of administrative work. I am just sitting at my desk or attending meetings. This is hard for me. I have a very bad conscience

because I have no time to work on patient-related matters. If I do so the paperpile just grows" (Blomgren, 1999:145 In Olson et al 2000).

A similar story is found in a Danish study of management changes in hospitals (Melander, 1999). A main problem is focused here, namely the one of decoupling between clinical action and accounting information. This kind of fragmentation between action, talk and plans are a well-known phenomenon discussed elsewhere in institutional theory.

"My department gets every year a budget which consists of a number of calculated expenditures to which it is expected we adhere to. I myself as a clinical leader have not participated in making the budget, because it seems to be a more or less historical division based on some random calculations of the hospital's historical costs. I have really no possibility to affect the sum of expenditures, because of acute admissions, fixed wage payments and number of employees and so on....(Clinical manager) (Melander 1999:271).

This decoupling between accounting information and clinical action can be understood as a kind of organisational hypocrisy (Brunsson, 1985) in the hospitals, because reforms are seemingly implemented without any changes in decisions and actions. As noted by observations in the Danish hospital sector (Kragh Jespersen, 1999:162) the only way to implement these reforms is to actively engage doctors and nurses in the processes. Otherwise, the reforms will keep on being only symbols which do not travel into the daily life of the professional work in the hospitals.

However, there are signs that indicate coupling between the reforms in the accounting system and clinical actions in the hospitals. A Norwegian study shows that when choosing drugs the hospital doctors also consider the cost of these drugs as they appear in the accounts of the clinics (Aftenposten, 2001). The medicament Enbrel, which helps to cure severely hurting joints, costs 180.000 Norwegian Kroner per treatment, and the patient must herself take care of the treatment at home. Alternatively the patient can be given another drug called Remicade, which is estimated to approximately 100000 Norwegian Kroner per treatment. These drugs have equivalent effects. Because of the payment system the hospitals have to cover the cost of

Remicade, but not the cost of Enbrel. The reason is that the costs of Enbrel are covered by the patients' insurance schemes. It has turned out that the doctors tend to choose Enbrel. Each year some 1100 patients are given the most expensive drugs, which indicates increased costs amounting to about 80-90 Millions Norwegian Kroner each year. This story shows that the accounting practices may indirectly affect clinical decisions.

# **Discussion and implications**

Studies of the accountable management reforms in the Scandinavian hospital sectors have given evidences of changes in internal accounting language and rethorics, and accounting terminology has gradually become a part of the clinical managers vocabulary. This trend is mainly due to the reports and statistics which appear at the clinical levels and to which the clinical leaders have to respond and act upon. Although there are some signs of coupling between accounting practices and clinical decisions, much information is still hidden as to how the changes in accounting practices and payment systems have travelled into the clinical decision making processes.

#### General conclusions

The reform processes in the Scandinavian countries has shown both differences and similarities in content and in the implementation processes. Generally, in the changes in payment systems were introduced by the central governments to be implemented at the hospital level. The implementation processes are mainly top-down organised, and the professionals had not participated actively in the processes. These situations resemble the processes which are characterized as colonialization (Broadbent & Laughlin, 1997), where changes in the organisation's archetype are externally imposed into the hospital level.

The data presented here support the conclusion that clinical leaders do respond to the new systems of incentives as the rhetorics in budget documents and plans have been changed towards using more technical accounting words and expressions. These are elements of the organisations' communication processes.

The increased use of accounting logics in hospital plans and reports at the clinical level also indicate that the hospitals need to conform with the externally imposed management reforms. In all the Scandinavian countries these reforms are introduced from the government and state bodies. The introduction of and adherence to new management accounting systems in public sector institutions may thus "reflect as much the need to conform to societal expectations of acceptable practice as the technical imperative of fostering rationality" (Covaleski, 1993:65). This aspect was found by Pettersen (1995:216) that one of the most "important output of the budgets is the external legitimation of the hospital's existence; a symbol of adherence to the governmental rules... management control through budgets in hospitals to a large extent act as rationalised myths".

The strategic actions to adhere to governmental rules may have implications on performance, although these reforms also serve symbolic purposes. Consequently, the introduction of new management accounting and control systems has a potential to penetrate into the operating processes of hospitals. The accounting techniques may not only have control functions, as they can also become important elements in the professional decision making and performance. Management accounting systems can give rise for motivating actions that lead to effects on clinical performance. These effects may be both functional and dysfunctional.

As the hospitals adapted to the reform in the payment system, they experienced (as shown in the Norwegian study) an increase in external uncertainty. This situation was caused by greater demands on their abilities to adjust to these changes by some kind of internal organisational learning. The new funding model led to more perceived uncertainty at the hospital level, because the formulae for calculating prices and hospital revenue was more complex. Furthermore, relevant cost information was generally not available at the clinical level, and it became difficult to make budget prognoses and to calculate resources disposable.

The quotas made by the hospital head masters, the physicians and the nurses showed great differences in talking about the new payment system. These statements were very

different from the prescriptions of the prospective payment system as it was formulated by the Norwegian government (Governmental Note No 41 (1987-88)). These differences show a diversity in the interpretation of accounting information. These differences are due to different professional norms, cultural orientations and experiences.

# Some implications

Although there are some very important common trends in the Scandinavian reforms, there are also important differences. The Scandinavian countries differ according to level of central state or local government participation and the degree of national standards for pricing and reporting. There are also contextual differences when it comes to the doctrines or motives for changes. These external differences may penetrate into the reform prescriptions and lead to a diversity of reform contents and behavioural consequences.

The interpretation of accounting information made by different key actors in the hospitals should be studied more closely in the years to come. The focus should be put on the clinical level, because at this level the decisions are made about how resources are spent on the treatment of patients. Another topic for further research is the complex interplay between context of reforms at the national level and the implementation processes at institutional levels.

Variables	Dimensions	
Initiative	Political	Institutional
Denmark	X	
Finland	X	
Norway	X	
Sweden	X	
Level	Central	De-central
Danmark		X
Finland		X
Norway	X	
Sweden		X
Context	Structural	Situational
Denmark		X
Finland		X
Norway	X	
Sweden		X
Content	National	Local
Denmark		X
Finland		X
Norway	X	
Sweden		X
Process	Colonialisation	Evolution
Denmark	X	
Finland	X	
Norway	X	
Sweden	X	

Figure 2:

Accountable management reforms in the hospital sector. Illustrations of the differences in implementation between the Scandinavian countries.

# References

- Blomgren, M. (1999). "Pengarna eller livet. Sjukvårdane professioner och yrkesgrupper i mötet med en ny ekonomistyrning", Doctoral Thesis, Uppsala: Uppsala Univerity. In Olson, O., Humphrey, C. And Guthrie, J. (2000). "Caught in an evalutatory trap the dilemma of public services under NPFM", Paper at the *CIMA New Public Sector Seminar*, University of Edinburgh, Edinburgh 21-22. September.
- Borum, F. & Bentsen, E.Z. (1999). "At skabe ledelse-Rigshospitalets import af centerstrukturen", In Bentsen, E.Z., Borum, F., Erlingsdöttir, G. & Sahlin-Andersson, K. (1999). Når styringsambitioner møder praksis den svære omstilling af sygehus- og sundhedsvæsenet i Danmark og Sverige, Handelshøjskolens Forlag, Danmark, 243-264.
- Broadbent, J. (1992). "Change in organisations: A case study of the use of accounting information in the NHS", *British Accounting Review*, 24, 343-367.
- Broadbent, J. & Laughlin, R. (1997). "Developing empirical research: an example informed by a Habermasian approach". *Accounting, Auditing & Accountability Journal*, Vol.10 No.5, 622-648.
- Bromwich, M. & Lapsley, I. (1997). "Decentralization and Management Accounting in Central Government: Recycling Ideas?", *Financial Accountability & Management*, 13 (2), May, 181-201.
- Brunsson, N. & Olsen, J. (1993) The Reforming Organisation, Routledge.
- Carpentier, C. & Samuelson, L.A. (1996). "Effects of new control systems in Swedish health care organisations", *Financial Accountability & Management*, 157-171.
- Cavoleski, M., Dirsmith, M. & Michelman, J. (1993). "An institutional theory perspective on the DRG framework, case-mix accounting systems and health-care organisations", *Accounting, Organizations and Society*, 65-70.
- Christensen, T. & Lægreid, P. (1999). "New Public Management the trade-off between political governance and administrative autonomy", *LOS-senter notat* 9911, Bergen.
- Guthrie, J. (1998). "Application of accrual accounting in the Australian public sector rhetoric or reality?", *Financial Accountability & Management*, 14, 1-19.

- Fetter, R.B. & Freeman, Y.S et al. (1980), "Case mix definition by Diagnosis-related-groups", *Medical Care*, 18: 1-51.
- Hallin, B. (2000). "Hela havet stormar- etablering av ledning innom ett sammanslaget universitetssjukehus". Rapport No. 5 i *Utvärderingsprogrammet Västra Götalandsregionen*, Göteborgs Universitet, Gothenburg.
- Haas, P.M. (1992). "Introduction: Epistemic Communities and International Policy Coordination", *International Organization*, Vol. 46 No.1, 1-35.
- Hood, C. (1995). "The New Public Management in the 1980's Variation on a Theme", *Accounting, Organisation and Society*, Vol 20, No 2/3, 93-100.
- Hopwood, A.G. & Miller, P. (1994). *Accounting as Social and Institutional Practice*, Cambridge Studies on Management.
- Kragh Jespersen, P. (1999). "New Public management reformers betydning for den administrative og lærefaglige profession i sygehusorganisationen". In Bentsen, E.Z., Borum, F., Erlingsdöttir, G. & Sahlin-Andersson, K. (1999). *Når styringsambitioner møder praksis den svære omstilling af sygehus- og sundhedsvæsenet i Danmark og Sverige*, Handelshøjskolens Forlag, Danmark, 141-170.
- Kurunmäki, L. (1999). "Professionals vs. Financial capital in the field of health care Struggles for the redistribution of power and control", *Accounting, Organizations ans Society*, 95-124.
- Lapsley, I. (1994). "Responsibility Accounting Revived? Market Reforms and Budgetary Control in Health Care", *Management Accounting Research*, Vol. 5(3,4), 337-352.
- Lapsley, I. (2001). "Accounting, Modernity and Health Care Policy", paper at the 24<sup>th</sup> *Annual Congress of the European Accounting Association*, Athens, 18-20 April
- Laughlin, R. (1991). "Environmental disturbances and organizational transitions and transformations: Some alternative models". *Organization Studies*, 12(2), 209-232.
- Laughlin, R.C. & Pallot, J. (1998). Trends, Patterns and Influencing Factors: Some Reflections. In Olson, O., Guthrie, J. & Huphrey, C. Global Warning! Debating International Developments in New Public Financial Management, Cappelen Akademisk Forlag, Oslo, 376-399.

- Lehtonen, T. (2000). "In search of efficiency DRG based pricing and case-mix accounting", Paper at the *CIMA New Public Sector Seminar*, University of Edinburgh, Edinburgh 21-22. September.
- Levitt, B. & March, J.G. (1988) "Organizational Learning", *Annual Review of Sociology*, 14:319-340.
- Lüder, K. (1992). A contingency model of governmental accounting innovations in the political-administrative environment. *Research in Governmental and Non-profit Accounting*, (7), 99-127
- Lüder, K. (1994). The Contingency Model Reconsidered: Experiences from Italy, Japan and Spain. In Buschor, E., & Schedler, K. (Eds.) *Perspectives on performance Measurement and Public Sector Auditing*, Paul Haupt Publishers.
- Lüder , K. (1998). Towards a New Financial Management for Germany's Public sector: Local Government Lead the Way? In Olson, O., Guthrie, J. & Huphrey, C. Global Warning! Debating International Developments in New Public Financial Management», Cappelen Akademisk Forlag, Oslo, 114-129.
- Melander, P. (1999). "Økonomistyring og organnisatorisk skizofreni om fattige sprog, løse koblinger og onde cirkler". In Bentsen, E.Z., Borum, F., Erlingsdòttir, G. & Sahlin-Andersson, K. (1999). *Når styringsambitioner møder praksis den svære omstilling af sygehus- og sundhedsvæsenet i Danmark og Sverige*, Handelshøjskolens Forlag, Danmark, 265-290.
- Monsen, N. & Näsi, S. (1998). The Contingency Model of Governmental Accounting Innovations: a discussion. *The European Accounting Review*, Vol 7 No 2, 275-288.
- Näsi, S. & Kohvakka, J. (2001). "Perceived usefulness of accrual accounting information in the central government agencies in Finland. A survey Study", paper at the 24<sup>th</sup> Annual Congress of the European Accounting Association, Athens , 18-20 April.
- Olsen, J.P. & Peters, B.G. (1994). Lessons from Experience. Experiential Learning in Administrative Reforms in Eight Democracies. *Workingpaper*, Advanced Research on the Europeanisation of the Nation-state, (Arena), No 3, November.
- Olsen, J. and Peters, B. G. (eds), (1996) «Lessons from Experience. Experiential Learning in Administrative Reforms in Eight Democracies», Scandinavian University Press, Oslo.

- Olson, O. Guthrie, J. & Huphrey, C. (1998) *Global Warning! Debating International Developments in New Public Financial Management*, Cappelen Akademisk Forlag, Oslo.
- Olson, O., Humphrey, C. & Guthrie, J. (2000) "Caught in an evaluatory trap the dilemma of public services under NPFM", paper at the *CIMA New Public Sector Seminar*, University of Edinburgh, Edinburgh 21-22.September.
- Pettersen, I.J. (1995). "Budgetary control of hospitals: Ritual rhetorics and rationalized myths?", *Financial Accountability & Management*, 207-222.
- Pettersen, I.J. (2001) "Hesitation an rapid action. The New Public Management Reforms in the Norwegian Hospital Sector", *Scandinavian Journal of Management*, 17, 19-39.
- Roberts, J. & Scapens, R. (1985) "Accounting systems and systems for accountability: understanding accounting practices in their organisational contexts", *Accounting, Organisations & Society*, Vol 10, No. 4: 443-456.
- Sundin, M.L. (2001). "Ledelse av norske og svenske sykehus. Hva skiller"? paper at the 3<sup>rd</sup> Norwegian Conference on health economics, Solstrand, 7-8 May. 01.

# **Government Notes (Stortingsmeldinger)**

"The Waiting list guarantee – criteria and financing", Government Note No. 44, 1995-96.

"About hospital Economy and budget 2000", Government proposal to the Parliament, No. 47, 1999-2000.

### Other sources:

Aftenposten, 2001. Report 13<sup>th</sup> May.

Report on the DRG-project, the University Hospital, 23 March 1998.

Internal memo, Surgical clinic, the University Hospital, 26 November, 1998.

Annual Report, the University Hospital, 1998.

WHO- The World health report 2000: Health systems: Improving performance. WHO Geneva, Switzerland.