



UNIVERSITY OF GOTHENBURG
SCHOOL OF BUSINESS, ECONOMICS AND LAW

The new payment mechanism

And its effects on the management control systems of health care centers

Bachelor Programme in Business and Economics
FEG313 Accounting, Bachelor Thesis
Spring term 2010

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Acknowledgments

Writing this thesis has been an intriguing and knowledge rewarding journey full of ups and downs. We would like to thank all of those who have contributed to our final results.

Thank you to our respondents, for your cooperation, time, and energy. You inspire us.

A huge thank you to our advisor, Mikael Cäker, who has always been supporting us when the help has been needed.

Thanks to Annika Cederblad for your supporting reflections on the texts.

Finally, special thanks to our families, who have supported us through the downs, and cheered us forward through the ups.

Thank you.

“An investment in knowledge always pays the best interest” (Benjamin Franklin)



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ABSTRACT

Bachelor thesis in Accounting

University of Gothenburg, School of Business, Economics and Law, Spring Term 2010

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Title: The new payment mechanism and its effects on the management control systems of health care centers

Keywords: payment mechanism, health care, hospital managerial accounting.

Background and problem discussion: The cost of health care in Sweden has increased and is projected to continue doing so, while at the same time the financial resources are limited. As studies show that different management control systems (MCS) can decrease the cost within the health care sector, it is interesting to see how MCS can solve the financial problem that has arisen. Combined with a new payment reform installed in October 2009, a deregulation of the market has been enacted and brought new health care providers to the Västra Götaland region. The new legal setting in combination with studies showing MCS differences between public and private health care providers make it relevant and interesting to analyze the effect on the MCS.

Purpose: The purpose of the thesis is to study the MCS in health care centers, located in the region of Västra Götaland, after the introduction of a new payment mechanism. We will also study possible differences in the MCS for the private versus the public health care centers after deregulation as well as how the differences can be explained. Reviewing and analysis of payment mechanism will also be carried out to increase the knowledge of the effect on the MCS.

Methodology: Three case studies have been conducted in the form of personal interviews from each organization. The interviewees are management staff with good knowledge of the MCS in the organization. Literature for the theoretical framework, such as articles and textbooks, has been obtained through searches in large business databases and library catalogues.

Scope of the study: The study is executed and restricted to three health care providers within the region of Västra Götaland: Health care center of Olskroken, Kvarterskliniken and Capio. This affects the scope of the study in the way that we will only consider the health care system in the region of Västra Götaland in Sweden.

Analysis and conclusion: The new payment mechanism has direct effects on several parts of the MCS of the health care centers. Great changes have been seen in both objectives and control systems at the public health care center of Olskroken with the inspiration of New Public Management. At Kvarterskliniken, the impression is that many MCSs for for-profit organizations are implemented in its MCS, while Capio appears to have a well-structured MSC that was not affected by the new payment mechanism. The controls of the new payment mechanism may create negative side effects. Despite the dysfunctional effects of the new payment mechanism, the changes experienced to be positive.

Proposition for further research: Suggestions for further research are to investigate this matter through quantitative methods or comparison of the data with other regions with similar conditions.

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1. Introduction

1.1 Background information

In 2009, Swedish health care expenditures amounted to a staggering 30.4 billion dollars¹, making up 9.1 percent of the country's GDP. A typical day in Sweden consists of 83,500 visits to the doctor, 60 million Swedish Kronor (SEK) spent on prescription medicine, and 9 million SEK used for inpatient care. While Swedes may be slightly above average in their massive health care expenditures, they are not alone. Other OECD countries (Organization for Economic Co-operation and Development) were close behind, spending 8.9 percent of their GDP on health care. (Socialstyrelsen 2002, p. 30; OECD 2009) In the region of Västra Götaland 36 billion SEK was spent in health care in 2009 and its health care system concerns its 1.6 million residents in region as they are both the user and financier of the system. (Västra Götaland Region 2010)

1.2 Problem discussion

The cost for health care has increased in Sweden during the last 50 years. The change was especially drastic between 1960 and 1980, when health care expenditure as a percentage of GDP increased from 4.7 percent to 9.4 percent. Despite the increase in cost of health care, the demand for better health care continues for three reasons. (Hallin & Siverbo 2003, pp. 28-29)

First, the average life expectancy in Sweden has been increasing over the last 30 years. Thanks to higher standards of living and improved medical care, Sweden now has one of the world's oldest populations with more than 17 percent of the population over 65 years old, and 5.2 percent of the population over 85 years old. The aging of the Swedish society is expected to continue, and it is estimated that more than 23 percent of the population is going to be over 65 years old in 2050. The aging population puts pressure on the social system, as older people typically have greater need of health care. (Glenngård 2005, pp. 3-5, Hallin & Siverbo 2003, pp. 21-22)

The second reason for the increased demand for better health care is the development of medical technology. Medical technology includes medicine, equipment, medical and surgical methods, and organizational and support systems. Some inventions, such as the polio vaccine, have reduced the health care expenditure, but most innovations bring about higher cost. This is because new technologies may reduce the cost for individual patients, but they create a new group of patients who is in need the new technologies at the same time. One example of this is arthroscopy which enables operations that were not possible before. Sometimes new technologies work more as a complement to previous methods. This would certainly lead to increased cost. (Hallin & Siverbo 2003, pp. 22-24)

The third reason for an increased demand for better health care is a variance in different generations' attitudes towards health care. The older generations view health care as a privilege, and they are thankful for what they receive. Many middle-aged and young people received a better education, have greater knowledge of medicine, and consider health care to be a right as opposed to a privilege. The consequence is a shift from patients to customers. The older generations (patients) accept the medical advice and procedures they are given, while younger

¹ 334.1 billion dollars (in PPP terms) * 9.1% = 30.4 billion dollars (OECD 2008a, 2009)

generations (customers) want better quality and the latest technologies. The result is a demand for higher health care expenditures. (Hallin & Siverbo 2003, pp. 24-26, 30)

The problem with the continuing demand for better health care is that financial resources are limited. In 1980s the GDP growth rate of Sweden declined to an average of two percent per year, leading to difficulties continuing the financial expansion of the health care sector. The problem became even more severe in the 1990s when Sweden experienced its worst financial crisis since the Great Depression of the 1930s. The aging population today means that proportionately fewer people are working and providing financial support for the increasing health care demand. Therefore, the need for better efficiency and management control has arisen within the health care sector. (Hallin & Siverbo 2003, pp. 28-33; Glenngård 2005, p. 3)

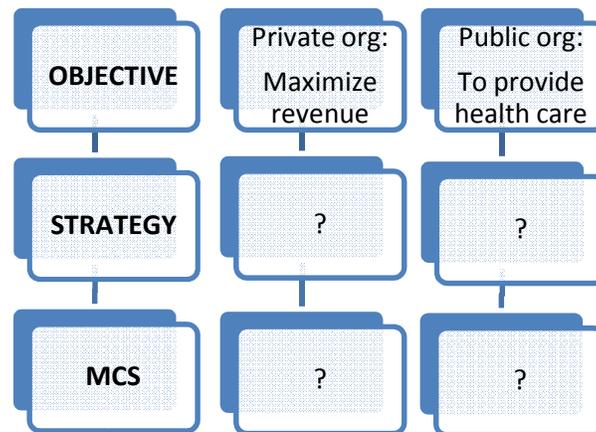
An article by Charpentier and Samuelson (1996) described the effects of introducing a new management control system to Swedish health care sector. The research showed that after the introduction of the Stockholm Model (SM), a system which was implemented in several county councils in Sweden, the number of patients treated increased while total costs decreased slightly. These statistics contradicted the argument that a shorter average treatment time affects the quality of health care. As a result, the new system increased cost awareness, and personnel in health care organizations began to think in financial terms. Cost calculations were carried out frequently, and the patients were treated as customers. This led to relatively large savings.

A study conducted by Aidemark (2004) came to a similar conclusion. Aidemark followed the privatization process of two hospitals in Sweden – Helsingborg hospital and Ängelholm hospital. He found that the management control system utilized at the two hospitals has a great effect on cost awareness within the organization. The above-mentioned relationship between the management control system (MCS) and its effects shows that MCS plays an important role in improving the efficiency of health care organizations.

These two studies shows that both control system to the health care sector and management control systems at health care providers are important for resolving efficiency problems. In October 2009, the county council of the Västra Götaland region started a new system of organizing primary health care providers called VG Primärvård. The new control system for the primary health care in the Västra Götaland region means a transition from the traditional budgetary system to a system according to which health care providers get paid for the number of registered patients. This transition resulted in a new payment mechanism for health care providers. Furthermore, a deregulation of the primary health care sector in the region of Västra Götaland took place. As a result many new private health care centers have started up. (VGR 2010a)

Since the start of the new system, there are now 206 health care centers included in the VG Primärvården, of which 118 are public and 88 are private. Totally 64 health care centers are newly started. (Västra Götaland Region 2010) With these changes took place in the primary health care sector it is essential for the existing actors, especially the public health care centers, to adapt their MCS since the new control system has changed both the revenue and expense structure of the health care organizations. At the same time, the newly formed private health care

centers need to form their MCS to make the organizations cost effective so that they are attractive to patients and can provide returns for investors.



According to Merchant and Van der Stede (2007), having objectives is a necessary prerequisite for the design of any MCS. Due to the difference in objectives of private and public health care center, the MCS should differ. It's been more than half a year since the introduction of the new system, VG Primärvården. It is therefore interesting to see how the public and private health care centers in the Västra Götaland region have formed their MCS.

1.3 Research questions

In this thesis we would like to study

1. How has the new payment mechanism influenced the MCS of the health care centers?
2. How could the possible differences in the MCS between private and public health care centers be explained?

1.4 Purpose of the thesis

The purpose of the thesis is to study the MCS of health care centers located in the region of Västra Götaland after the introduction of a new payment mechanism. A review and analysis of payment mechanism will also be carried out to increase the knowledge of the effect on the MCS. Additionally, we will study possible differences in the MCS for the private versus public health care centers after deregulation, as well as how the differences can be explained.

1.5 Scope and limitations of the study

In the thesis the management control systems of three health care providers in the Gothenburg region will be analyzed. The organizations analyzed are the health care center of Olskroken, Kvartersskliniken and Capio. This affects the scope of the study in the way that we will only consider health care system in the region of Västra Götaland in Sweden, since the payment mechanism can be different in other regions.

2. Methodology

The purpose of the study is to analyze the MCS of health care centers located in the region of Västra Götaland after the introduction of a new payment mechanism and possible differences in the MCS for the private versus public health care centers. In order to carry out the study, a qualitative approach is chosen. The qualitative method originates from studies exercised under the interpretive paradigm. Interpretivism is characterized by the assumption that social reality is in our minds, subjective and multiple. Research within interpretive studies is set to interpret and understand social phenomenon within its context. (Collis & Hussey 2009, p. 57)

In an effort to understand the context of the problem, a literature research is first done to obtain the necessary knowledge about the current regional health care system and the MCSs. The first part of the theory, chapter 3, deals with basic structure of the management control system. The second part of the theory, chapter 4, deals with MCS at health care sector and the outline for the new payment mechanism. The theory followed by an analysis of the payment mechanism in chapter 5. This is done to ease the understanding of variables in the payment mechanism and enhance the overall insight. This disposition will help the reader understand the changes and the MCS in the health sector, which will be presented in the empirical studies and analysis in chapter 6 and 7.

Interviews are conducted after the literature research. Three organizations are chosen for this purpose. More about the organizations and interviewees are explained later in 2.3.

2.1 Data collection

The thesis uses both primary data and secondary data. Primary data consist of mainly interviews while secondary data are mostly published articles and books.

2.1.1 Primary data

Primary data is data that is generated straight from its original source. (Collis & Hussey 2009, p.73) As case studies are the main part of the thesis, the primary data was gathered from meetings and interviews with staff from the different health care centers.

The interviews that were conducted were semistructured interviews. The features of semistructured interviews are loose structure, open-ended questions that define certain areas are used and interviewer may diverge to find out more about an idea or response. The interviewees are encouraged to talk freely. (Pope 2007, p.13)

Before attending the interviews, an interview guide was written. The interview guide utilized can be found in the appendix. The purpose of the interview guide is to define the areas that are concerned, based on the objectives of the study.

Since the aim of the interviews were to get a good, broad analysis of the organizations' MCS after the introduction of the new payment mechanism from the interviewees' perspective, we tried not to impose the authors' assumptions on the interviewees by asking open-ended questions

so the interviewees can talk freely. Pope (2007) highlights that good qualitative interview questions should be open-ended, neutral, sensitive and clear to the interviewee. In order to do that, each interview started with questions that can be answered easily and later proceeds to more sensitive questions. The agenda of the interview is kept flexible; questions that are asked vary as the interviews are intended to explore the interviewees' meanings. The interviewers tried to use the interviewees' vocabulary as much as possible. Further questions are introduced when the researchers get more familiar with the topic. The interviews were aimed to deal with all the relevant issues about the new payment system and MCS. Each interview took approximately two hours in length.

2.1.1.1 Risks of primary data

When generating the primary data, the aim has always been obtaining data for answering the research questions. As neither of the authors are experts within the field of interviewing, complete objective questioning and answering are however uncertain. The potential problem with conducting an interview as a source of data is, among others, the risk of combining personal opinions and actual facts from the interviewee. (Collis & Hussey 2009, p.147)

Further risks with interviews as a source of data are biased answers, made in an effort to "look better" on paper than in reality. In efforts to dodge this behavior follow-up questions were given to the interviewee to develop their answers and unfold possible refinements.

Other risks with collecting data through interviews are cooperation and access. Correspondents can be more or less positive against thesis participation, which can result in poor answering. A lack of valid answers from the correspondents can have great influence of the result of the study. A lack of engagement could be noticed at the interview with Capio's Petter Bogenholm, where the interviewee tried to sway away from the questions. Reasons for this may be due to corporate secrecy. In an effort to overcome the possibility of lack of engagement, open-ended and less sensitive questions have been utilized at the beginning and an adaptive agenda was used when interviewing.

2.1.2 Secondary Data

Secondary data is data that is regenerated from an already existing source, such as publications and textbooks (Collis & Hussey 2009, p.73). The literature used for our secondary data was found by searching in larger databases such as Business Source Premium, Science Direct, and Emerald. The objective of the search has been to locate articles and dissertations that include empirical case studies that investigate the effects of health care control system and hospital management accounting. Keywords used in searches were therefore combinations with words such as "health care system in Sweden", "management control system at hospital", "public health care reforms", "management accounting", "hospital management," and "public management." In some cases, due to the large amounts of relevant articles found and the financial and control management perspective we choose to narrow our search by the subject of "managerial accounting."

Additional literature was found on the official website of some organizations, such as the county council of Västra Götaland region, WHO and OECD.

A lot of literature searches were also carried out using the Gothenburg University Library Catalogue (GUNDA), which yielded good, basic literature about the current and historical structure of the Swedish health care system and the basic methods to control and manage health care organizations.

2.2 Data processing

Both literature and interviews are studied from the research questions' perspectives. For interviews, the procedure will be to categorize the interviewees' answers into the different management control tools and control alternatives: results control, action control, and people control. The results are later compared to see if there are differences between MCS for the three health care providers. For literature research, literature about different management control tools and health care systems are studied. Literature is chosen if it answers the research questions. The results of literature research and case studies are presented in chapters 3, 4 and 6. Analysis compares the study results with the literature.

2.3 Case studies

A case study is used to explore an occurrence or phenomenon in its normal setting. Methods of obtaining the occurrences vary, but need to include the possibility to obtain in-depth knowledge. (Collis & Hussey 2009, p.82) In this case the phenomenon is the MCS in the organizations and the method of obtaining the knowledge is through in-depth interviews.

2.3.1 Selection of health care organizations

The selection of health care centers was determined by the history of health care providers in the region of Västra Götaland. Before the new payment system was implemented, the main providers of primary health care were the public Primary health care of Gothenburg plus some private health care centers with subcontracts from the county council. Numerous private health care centers have penetrated the market since the payment reform, which then creates three categories of health care providers: one public, one private with activity before the reform, and one private with activity only after the payment reform.

The three elected health care providers studied are:

1. Health care center Olskroken, a public health care center which belongs to the East regional division of the business group Primary health care of Gothenburg (Primärvård Göteborg).
2. Kungssportsläkargruppen or Kvarterskliniken, a private business group started after the payment reform.
3. Capio Närsjukvård, an established private business group with activity before the payment reform.

All the three organizations are large health care providers in Gothenburg. The authors think that large health care organizations would have more complex MCSs where all the control alternatives are utilized compared to small clinics where controls are more likely to involve only people control. Health care organizations in Gothenburg were chosen mainly because of ease of access. Besides that, the authors think that the health care organizations would be representative for the whole Västra Götaland region since they all work under the same payment mechanism.

The health care center of Olskroken is a rather large health care center within the group Primary health care of Gothenburg and has about 19000 registered patients. This health care center did not lose as much patients to the others as other health care centers in the group. It appears to be well-adapted to the new system and therefore the authors think that it is a good example for the other public health care center to learn from.

Kungssportsläkargruppen is a well-known new health care provider with several health care centers in Gothenburg. The company started by among others Carl-Peter Anderberg who is a doctor as well as the CEO of the company. The authors think that Kungssportsläkargruppen can be representative for the newly started health care centers.

There are not many actors before the payment reform; however Capio is one of them. Capio is well-established international health care company with business in several countries in Europe. Besides the reason that it was an established actor before the reform, it is also chosen because as a large international actor in the health care sector, Capio can have a different MCS compares to the other two. The company is owned by three private equity funds, which makes it even more interesting to see the difference between the MCS at private and public health care centers.

2.3.2 Selection of interviewees

The interviewees selected are staff at management positions and are therefore knowledgeable about the organizations' management control system. The interviewees' positions are as follows:

Health care center Olskroken	Kungssportsläkargruppen	Capio Närsjukvård
Director of the health care center	Chief Financial Officer	Chief Financial Officer
Controller at the East regional division		

These positions were chosen because the authors think that an overview of the structure of the organizations' MCSs can be sketched as management staff should have a better insight over the MCSs in the organizations. Besides that it is easier to speak in business and economic jargons with people in management.

Due to this reason, the MCS at operative level may be distorted, since the functions of MCS are what functions the management thought the MCS would have. Interview with staff at operative level would give a non-biased and more reasonable picture of the MCS. However, due to access problems to doctors and nurses, interviews at this level were not possible.

Due to greater changes of the MCS at the organization of Olskroken, two interviews with two management staff have been conducted at this organization.

2.4 The credibility of the thesis

The credibility of a research depends on two variables: reliability and validity. A paper's validity can be defined as how accurately the research reflects the phenomenon studied. In general qualitative studies have higher degree of validity than reliability. (Collis & Hussey 2009, p. 143) In a way of ensuring the validity of the thesis, proper procedures prior to the collection of data was done, such as literature review with consideration to the research questions, study interview techniques and generating proper interviewing guides. At every interview both authors were present, in effort to interpret the correspondent's answers correctly and avoid subjectivity. All the interviews were recorded, later on summarized and repeated, to ensure correct interpretation. To further on enforce the validity in the thesis, the purpose and research questions were always kept in mind during the development of the empirical part. Both authors review the empirical study later to make sure the phenomenon is correctly interpreted.

A paper's reliability refers to its ability of producing the same result if the study would be repeated. (Collis & Hussey 2009, p. 143) As a part of the efforts to increase the reliability of the data, control-questions were included in the interviews. The control-questions were both implemented as repeated questions after the respondents answer and also brought up later during the interviews. This is done in a way to assure a correct answer. Which questions that were elected to be further repeated decided by the importance of the questions, and thus could suffer from subjectivity. Other aspect that affects the reliability of the paper is the amount of interviewees. A way of increasing the reliability of the data results would have been to increase the amount of respondents, as their questions can be compared and project uneven answers, and a more correct image of reality. Due to problem of access and time limitations, this wasn't possible. This needs however to be kept in mind when discussing the reliability.

An aspect that affects this area is the source of data. All the data is collected from respondents and subjectivity can not be excluded during the retrieving of the data.

3. Literature review - Management control systems

This chapter focuses on management control systems. The theoretical framework includes different control alternatives, side effects of control systems, different management control tools and finally difference between profit and nonprofit organizations.

3.1 Control alternatives

Control systems are designed to prevent problems like personal limitations and thereby increase the goal congruence between the individual goals and the organizational goals. Good control is future-oriented, multi-dimensional, does not always bring positive economic effects and in addition characterizes of difficult and subjective assessment of good performance. Good control can be achieved by avoidance or by the three categories of control tactics. The control alternatives are results control, action control and people control. (Merchant 1982, pp. 43-45)

3.1.1 Results control

Results control is control which focus on results and one common form of results control is results accountability. Results accountability means that employees are held responsible for their own results. In this way, results control affects actions of employees since they are held accountable for their own actions. The goal setting only communicates the consequences of the actions, not what action that should be taken. Instead, the staff is forced to find the best action possible. Results control is therefore an indirect form of control since it doesn't focus on specific actions. (Merchant 1982, pp. 45-46; Merchant & Van der Stede 2007, pp. 25-26, 35)

Merchant and Van der Stede (2007) claim that the use of results control involves four steps: defining performance dimensions, measuring performance, setting performance targets and providing rewards.

Results control has several advantages. The effectiveness of results control is noticed when it is not clear what actions are desirable. It gives the employees high autonomy which encourages innovation. However, failure to resolve conditions such as knowledge of desired results, ability to influence desired results, ability to measure controllable results effectively will cause failure of results accountability control systems. (Merchant & Van der Stede 2007, pp. 32-35)

3.1.2 Action control

Action control involves controlling the employees through their direct actions, and ensuring that the workforce perform or not perform certain actions. It is the most direct form of control. Action control has three main forms²: behavioral constraints, action accountability and preaction review. (Merchant & Van der Stede 2007, pp. 76-92)

Behavioral constraints are forms of action control which restrain the staff from unwanted actions and behaviors. Such controls can be exercised by physical devices, such as locks and password,

² There is a fourth form which is according to Merchant & Van der Stede (2007) redundancy.

or by administrative constraints, such as segregation of duty. (Merchant 1982, p. 45; Merchant & Van der Stede 2007, pp. 76-77)

Action accountability is a second type of action control. This type of action control involves holding employees responsible for their actions. Merchant (1982) points out that even though action accountability includes tracking and reviewing of actual actions, it is aimed be future-oriented by motivating the employees to take the right actions. Failure to inform the employees what is required of them as well as to notice and reward or punish their actions would lead to ineffectiveness.

The third type of action control is preaction review. It is a way of observing the work of the employees before the action is complete. The control effects of preaction review are: preventing harmful effects before the full effects take place; correcting behaviors by acting as a threat so that extra attention would be paid. (Merchant 1982, p. 45)

3.1.3 People control

People control is often referred as soft control and includes personnel control and cultural control. Personnel control and cultural control have become popular recently because organizations have become flatter and leaner. (Merchant & Van der Stede 2007, p. 92)

3.1.3.1 Personnel control

Personnel control involves steering the organization towards their objective by using an engaged staff. Personnel control aims to achieve a sense of trust, high ethics and morals, loyalty, and self-control within the organization. The functions of personnel control are to explain the expectations from the employees, ensure that they are able to do a good job, and engage the personnel in self-monitoring. (Ibid, pp. 83-85)

The three main approaches to achieve this are by developing and working with the employees' selection and placement, proper training, clear job design and provision of required resources. (Ibid)

3.1.3.2 Cultural control

Cultural control involves building and creating a beneficial organizational culture. Indications of a beneficial culture is existing group pressure against behaviors that deviate from norms and values which support the overall objective. Instead of the self-monitoring ability achieved in the personnel control, cultural control encourages mutual monitoring among staff. The cultural control takes form in both written and unwritten rules that controls the behavior of employees. Codes of conduct and group rewards are two examples of culture-shaping tools. (Ibid, p. 85)

3.2 Side effects of control systems

The purpose of the MCS is to bring together the employees so they strive to serve the organization's interest. However, besides the out-of-pocket costs, the controls can create

negative side effects that are greater than the benefit of MCS. There are several possible side effects:

The first side effect is behavioral displacement. Behavioral displacement is when the controls create behaviors that are inconsistent with the organization's objective. This is most frequently a consequence of results controls or action controls, but even people controls can cause behavioral displacement at times. (Merchant & Van der Stede 2007, pp. 179-191)

The second side effect is gamesmanship, which refers to actions that employees take to improve performance indicators but which create no positive economic effect for the organization. One form of gamesmanship is slack, that is when employees consume more organizational resources than necessary. An example of slack is budget slack which means the targets are deliberately set lower. Another form of gamesmanship is data manipulation. Two forms of data manipulation are falsification, reporting wrong data, and data management, change the reported results. The gamesmanship problem is common within accountability forms of control, i.e. results control and action control. (Ibid)

The third side effect of control systems is operating delays. Operating delays are delays caused by action control. Examples of operating delays could be limited access to a place or requirement of a superior's approval. (Ibid)

The last side effect is negative attitudes. The possibility of negative attitudes is almost unavoidable; even a well designed MCS can bring about this side effect. Negative attitudes can be produced by both action controls and results controls. (Ibid)

3.3 Different management control tools

Different management control tools will be explained in this section.

3.3.1 Budgeting

Budgeting concerns the process of planning the financial goals of the organization, how it is intended to fulfill the goals, and is essential for the management control system. (Merchant & Van der Stede, 2007, p. 329)

A budget is usually structured into three main categories: a budget for the balance sheet, income statement, and liquidity. The budgets' goals, strategies, and expected results are usually stated in financial terms. For large organizations, sub-budgets are usually generated to increase the understandability for units on operational levels and can be stated in nonfinancial forms. (Ax, Christian, et al. 2009, pp. 331-332)

In the next sections the budget process and its different part will be presented.

3.3.1.1 Budgeting cycles

The size and length of a budget varies depending on the size of the organization and where the budget is implemented in the organization. Three basic categories of budgets are *strategic*, *capital*, and *operational budgeting*. Strategic budgeting involves planning the organization's missions, objectives, and means by which they can be fulfilled. Strategic budgeting usually only involves the management staff of an organization. Capital budgeting implies planning ahead with a time horizon of one to five years. It usually involves planning for necessary projects, actions, programs, and funding. Operational budgeting plans the organizations revenues, expenses, assets and liabilities for the next fiscal year. (Merchant & Van der Stede 2007, pp. 330-332) It is the operational budget that this thesis will focus on.

3.3.1.2 The purpose of the budget

Generating a budget has many different purposes. The budget itself is essentially a written plan that illustrates the goals, strategies, and results expected from the organization. (Ibid, p. 329) In what form these goals, strategies, and results are presented varies greatly depending on the organization and level on which the budget is implemented.

A major part of generating a budget lies within *how* it is generated. This is because in many cases, the budget creation process itself is the main reason for having a budget, not the finished product. According to Merchant and Van der Stede (2007), the process of budgeting has four main purposes, one of which is *planning*. Planning ahead of time for orders, staff recruitment, investments, etc. The planning is executed with the organization's strategy in mind and is carried out in all levels of the organization. The planning also forces managers and staff to engage in a long term-thinking, which create commitment towards the organization. (Ibid, p. 329)

The second purpose of the budget process involves *coordination* between different units within the organization. As different units are dependent on each other, the budgeting forces communication between units and correlation of objectives can be synchronized. The third purpose is to ease *top management oversight*, which occurs when the budgets are reviewed and examined before approval between managers. *Motivation* is the fourth and last purpose that the budget process fulfills. As the budget is made, managers and staff are engaged in what is expected from them and how this is evaluated. (Ibid, pp. 329-330)

Other purposes the budget process fulfills are *resource allocation* within the organization, *dimensioning* of production and purchases, *allocation of responsibility*, *follow up*, improved *communication and awareness*, *target setting* and *system of incentive*. The reasons for implementing a budget can be, as seen, many. The purposes vary a lot between corporations and even within the units of a corporation the budget process is utilized in different ways. (Ax, Christian, et al 2009, pp. 322-326; Marginson & Ogden 2005, pp. 438- 441)

3.3.1.3 Budget forms

The most common way of producing an operational budget is to make it from the month of January and plan one year ahead, and at the end of the budget cycle do a follow-up to analyze

budget variations. The praxis for an operational budget is that it is *fixed*, which means the forecasted figures in the operational budget cannot be modified for events occurred that could affect the planned figures. The opposite of a fixed budget is a *dynamic budget* or a *flexible budget*, both of which can modify their forecasts through different sets of dependent variables, such as production. The difference between flexible and dynamic budgeting is that the later exercises modifications more frequently than the former. Another way of implementing a budget is by doing a *rolling budget*, which refers to “rolling” the budget ahead of time in smaller sections, such as months or quarters. This makes the budget more responsive and prevents the risk of major budget variations in the follow-up. A *revised budget* is the fifth option, and it operates in a similar manner to the rolling budget. The difference between them is that revised budgets alter the figures for the whole period continuously throughout the period. (Ax, Christian, et al 2009, pp. 403-414)

Throughout the last decade there has been a lot of debating about the cons of especially fixed budgeting. Debaters have been promoting an abolishment of the budget process, and calling for going *beyond budgeting*. Criticism against budgeting is mostly aimed towards its labor intensiveness, obsolete projections, and conservative affect on the organization. (Merchant & Van der Stede 2007 pp. 345-346)

3.3.1.4 Top-down, bottom-up approach model

There are two main strategies in generating the budget: working *top-down* versus *bottom-up*. The strategies mainly categorize different approaches in setting the budget targets for different departments. In the top-down approach, targets are primarily set from higher authorities and managers are always the party with the most influence on the estimated data. Working bottom-up means that the budget originated from the operational levels in the organization and that managers are more adaptive than in the case of top-down approach. (Ibid, pp. 340-341)

3.3.1.5 Follow-up

A big part in the budget process is the follow-up. The follow-up is made after the budget period and can be used as a means of control. In the follow-up, the projected values are compared to the actual values, such as sales numbers or production speed, and possible deviations can then be analyzed. (Ax, Christian, et al 2009, pp. 394-395) Deviation is the difference between projected outcome and the actual outcome.

The intervals for a follow-up vary depending on the organization, but it is common to have follow-ups done for accumulated periods of times as well, such as one year.

Purposes for the follow-up can, however, be different depending on the organization. Objectives may include developing the foundation for the next budget, developing an appropriate course of action, analyzing where the organization needs support, or determining the basis for an incentive compensation program. (Ax, Christian, et al. 2009, pp. 395-396)

3.3.2 Financial responsibility centers

Financial responsibility centers are responsibility centers where the responsibilities are defined at least partially in financial terms. When the responsibilities are defined in accounting terms, it is called responsibility accounting. There are four fundamental financial responsibility centers: investment centers, profit centers, cost centers, and revenue centers. (Merchant & Van der Stede 2007, pp. 269-274)

Profit centers have become popular among hospitals in the recent years. Originating in the early 1900s, the idea of a profit center is to manage clinical care departments at hospitals like small businesses. Young (2008) argues that if the profit centers are to be used successfully, several philosophical, organizational, and accounting matters need to be resolved. A profit center manager in health care would worry about income factors such as price, patient mix, case mix, volume, variable cost per case, and fixed costs in addition to the cost factors. Since the manager cannot control several income factors, like price, patient mix, case mix and volume, it would be better off to convert profit centers to cost centers. By doing so the dysfunctional effects of profit centers are avoided and the managers can focus on whether physicians are treating patients according to clinical protocol. As Merchant and Van der stede (2007) suggest, the critical question to whether there is truly a profit center responsibility is if the manager has significant influence over both revenues and costs.

When a profit center supplies products or services to another profit center in the same company, the transfer prices need to be determined. The transfer prices can affect both the cost of the buying profit center and the revenue of the selling profit center. Failure to determine the right transfer price would bring about many negative effects. (Merchant & Van der Stede 2007, pp. 277-280)

3.3.3 Incentive compensation system

An incentive compensation system is a system to provide performance-dependent rewards in an organization. With the help of incentives, this system is designed to align the employees' interests with the organization's goals. The system provides several control benefits:

1. It informs and reminds the employees what is expected from them.
2. It motivates the employees to perform their tasks well.
3. It helps to attract and retain personnel.

Incentives also provide non-control benefits. For example, performance-dependent rewards cause compensation for the company as a whole to vary. In situations where the company performs poorly, the incentives would be small and thereby less financial pressure for the company. (Merchant & Van der Stede 2007, pp. 393-395)

The most important thing when it comes to designing an incentives compensation system is performance definition. Performance definition includes defining targeted performance and assigning responsibility for reaching the goal. Once performance is defined, measurements should be considered. Rewards are the last thing to be concerned about. (Merchant & Van der

Stede 2007, p. 393) The inclusion of goals and responsibility in the performance definition makes budgeting and assigning financial responsibility an important step before the design of incentive compensation system.

3.3.3.1 Types of rewards

There are mainly two different types of rewards: monetary and nonmonetary. In the health care sector, both kinds of rewards are needed. Doctors need respect, autonomy, recognition and financial compensation (LeTourneau, 2004), as providing rewards for these aspects would align doctors' interest with the organization's goals.

3.3.3.2 Monetary incentives

Monetary rewards are a common form of incentive and often linked to performance. There are surveys that show the use of variable pay has increased in recent years. The purpose of variable pay is to differentiate pay so that the better performer gets higher pay. There are three categories of monetary incentives:

Salary increase consists of two parts: a cost-of-living adjustment and a merit-based increase. Salary increases are usually stable over time; even a small increase is important since it is not paid only once. Nevertheless, salary increases are often considered to be an entitlement. (Merchant & Van der Stede 2007, pp. 395-396)

Short-term incentives are cash rewards given for the performance measured within a year or shorter. It recognizes the employees' efforts better than salary increases and provides a risk-sharing advantage for the company as the compensation is variable with the performance. The performance measures for the short-term incentives could be financial or nonfinancial. Financial measures are for example a share of EBITDA³, while nonfinancial measures include customer satisfaction scores. (Merchant & Van der Stede 2007, pp. 396-397)

Long-term incentives provide rewards for performance measured over a year. The aim of the incentives is to attract and retain important personnel, usually at higher levels of management. The incentives make the compensation larger, make the receivers a part of the company, and tie the employees to the company for a period of time. Most of the long-term incentive plans are based on equity-based measures such as the value of the stock while there are other incentive plans that are based on accounting measures like earnings per share or return on equity. (Merchant & Van der Stede 2007, pp. 397-400)

3.3.3.2.1 Gainsharing

Gainsharing is an attempt to align the financial incentives of physicians and goals of hospitals to achieve more effective and efficient utilization of hospital resources without affecting the clinical quality adversely. (Reynolds & Roble, 2006, p. 50) The term gainsharing is, according to McGinnity (2005), interpreted as "a legal arrangement under which hospitals can financially

³ EBITDA = Earnings before Interest, Taxes, Depreciation and Amortization.

reward a physician for helping to control costs by sharing some of the cost savings with the physician.” Quality safeguards are usually built into the system to prevent abuse of gainsharing.

The general idea of gainsharing is that a hospital and its physicians meet and identify the possibilities to reduce the cost per case of a targeted DRG⁴ while maintaining or improving the clinical results. After reaching an agreement, the physicians bear in mind the required changes in the case process and follow the agreed procedures. Targets are set so that they are lower than the current level of cost per case but still significantly higher than the targeted level so the incentive would have an impact. If clinical performance goals are met, the physicians share the cost savings. (Reynolds & Roble, 2006, pp. 50-52)

There is a report showing that widely accepted care processes are not usually conducted by doctors. If doctors follow the processes, large savings could be attained. Furthermore, studies show that cost efficiency could be achieved by eliminating medical waste and implementing evidence-based care practices. (Ibid, p. 50) Apparently, evidence shows that there is a lack of action control in the health care sector. The problem is difficult to overcome due to the different interests of stakeholders. However, combining gainsharing with pay for performance, i.e., incentives provided by the providers for clinical improvement would, according to Reynolds and Roble (2006), create a win-win-win situation for patients, purchasers and providers. The combination helps to align the financial interest of the stakeholders and deals with problems concerning health care quality, affordability, and profitability at the same time.

3.3.3.3 Nonmonetary incentives

Cash incentives are very helpful but may not be necessary. In fact, nonmonetary incentives are greatly appreciated by the employees, and they place a less financial burden on the company. According to a survey made at retail chain stores, managers think that money is an important part of the employees’ expectation. The employees, on the other hand, value monetary incentives less when already receiving a satisfactory salary. “People are often just as happy with minor awards as they are with money” says Judy Veazie, President of Forum Health Care in Portland, Oregon. She likes to give rewards that encourage growth, like a workshop. Other forms of nonmonetary incentives include autonomy, power, praise, recognition, job security, gift cards, and vacation trips. (Merchant & Van der Stede 2007, p. 394; The receivables report 2008, p. 10)

3.3.3.4 Individual or group

According to Judy Veazie, rewarding individuals instead of a team can cause negative competition. Merchant and Van der Stede think, however, that group rewards provide a diluted motivational effect and can create a free rider effect. Group rewards avoid some dysfunctional effects of individual rewards, but they cause others. In spite of these effects, group rewards bring about a form of cultural control in the sense that teammates monitor each other’s actions, also known as mutual monitoring. (Merchant & Van der Stede 2007, pp. 405-406; The receivables report 2008, pp. 9-10)

⁴ DRG = Diagnosis Related Group

3.3.4 Performance measures

Performance measures are used to assess the changes in firm value. They are divided into three categories: market measures of performance, accounting measures, and combinations of measures. (Merchant & Van der Stede 2007, pp. 435-445)

Market measures are based on changes in the market value of a firm. They work as results control in the way that they hold employees responsible for what they contributed or destroyed. Accounting-based measures are defined both in residual terms (or accounting profit measures) and ratio terms (or accounting return measures). Both categories are summary financial measures which reflect the bottom-line or aggregate change in firm value. There are both advantages and disadvantages with both of the financial measures. The use of the financial performance measures can lead to control problems. Accounting measures, for example, can lead to myopia and suboptimization problems. (Ibid)

Combination of measures is the third category. Nonfinancial measures can provide information about the future performance and thereby work as better leading indicators of future performance. One commonly used measurement combination is the combination of market and accounting measures. The second commonly used one is the combination of summary accounting measures or specific financial elements or both with some nonfinancial measurements. Well designed combinations of measures can resolve myopia problems. (Ibid, pp. 470-479)

Combinations of measures can have several advantages in theory. By including both financial and nonfinancial performance measures, short-term performance pressures are provided while myopia problems are prevented by the future-oriented and value-driven nonfinancial performance measures. By balancing the long-term and short-term pressures, the indicators become more timely. In addition, combinations of measures are more complete and thus more congruent. They are also more flexible by being able to include any performance measures and give different weightings to different indicators. Lastly, the combinations of performance measures are linked to the organization's overall objectives and strategies, hence improving understandability and possibly controllability. (Ibid, pp. 472-479)

However, very little is known about how to design an effective combination-of-measures system. There is a lack of empirical evidence to prove the assumptions built into the systems. Problems such as how many measures should be used, how performance qualities should be measured, how the measure should be weighted still require further research to puzzle out. Cost is another concern when it comes to designing and implementing a combination-of-measures system. (Ibid)

Performance measures can moreover be used to compare the organization's performance with others' performance, known as benchmarking. In this way, the organization's performance can be evaluated. (Ibid, p. 335)

3.3.5 Balanced Scorecard

One of the newly developed well-known combinations of measures is the balanced scorecard. Balanced Scorecard (BSC) is a management control system developed by Robert Kaplan and

David Norton in the 1990s to overcome myopia problems. Kaplan and Norton divided the company's focus into four perspectives: customer perspective, internal operation perspective, innovation and learning perspective, and financial perspective. The first step to develop BSC is to figure out strategies. A strategy map is used to describe strategies and it is the basic component in designing BSC. Performance measures should be identified and they should have a strong cause-and-effect relationship between the performance goal and the process used to deliver the outcome. This helps to align the individuals in the organization to achieve strategic goals. (Kocakülâh & Austill 2007)

BSC have been wide-spread and been used in many large organizations. The development in the health care sector has though been slow. This is mainly because of the conflicting stakeholders and the nature of health care sector. However, studies show that BSC has been proven to be successful in cost saving, efficiency improvement and strategic planning and management. BSC has some negative effects too. Things that are not measured are not given any importance and measurements can lead to gaming. BSC can be time-consuming and it can be implemented of political reasons rather than for efficiency improvement. (Kocakülâh & Austill 2007; Aidemark & Funck 2009)

3.4 Profit vs. nonprofit organizations

The essential difference between profit and nonprofit organizations are their missions and goals. An essential prerequisite to creating a management control system is the objective. The objective makes the management control system function in the sense that it clearly defines its purpose and points out what way the MCS should navigate the organization. A common way of stating the objective is to quantify it, but the options are many. (Merchant & Van der Stede 2007, pp. 6-7)

A nonprofit organization has an objective which is anything but to maximize wealth for the shareholders. Another difference between the two types of organizations is the interest for outside equity. Generally, nonprofit organizations do not pay dividends and the profit earned in the process is used to further the organizations' overriding purposes. The objective and the interest of owner are therefore what make a nonprofit organization different from a for-profit organization. (Merchant & Van der Stede 2007, pp.781-782) This is further verified by Hofstede (1981) in his article, where he structured core problems that can arise and cause management control errors. The presence of objective ambiguousness later on is the largest problem according to Hofstede.

Merchants (2007) argues that nonprofit organizations, which include the public health care providers, has have had an history of utilizing outdated management control methods thus making them less effective.(Merchant & Van der Stede 2007, pp.789)

4. Primary health care in Västra Götaland – VG Primärvård

The primary health care in Sweden provides the ambulatory health care services that do not require hospital specialization, consists of mainly health care centers. A resolution was passed by the Swedish parliament that it shall be free for citizens to choose primary health care providers from January 1, 2010. The consequence of this reform is that all health care organizations which satisfy the requirements made by the county council will be able to receive financing from the county council, regardless of whether the organization is publicly or privately owned. The patients are allowed to choose whichever health care center they want to go to. (VGR 2009a, pp. 3-4)

On October 1, 2009, the county council of Västra Götaland region launched a new way of organizing primary health care called VG Primärvård in accordance to the resolution passed by the Swedish parliament. The citizens are given more influence over the health care system while the health care providers are given more freedom as well as responsibility. The aim of the system is to improve the quality of health care offered by creating competition in the market. (Ibid)

4.1 Management control in health care sector

This section will describe the management control of health care sector in Sweden and different controlling forces in the health care sector.

4.1.1 New Public Management

New Public Management (NPM) is a way of organizing and controlling public sectors with business-inspired methods and ideas. The aim of NPM is to achieve better efficiency in the public sector. Fragmentation, competition, hands-on management, and performance appraisal are some characteristics of the NPM. However, NPM is not a complete switch from a planned economy to a market economy, but rather to a managed market economy. Even though NPM is a commonly seen phenomenon, it is not perfect. There have been many criticisms of NPM, stating that it has brought about coordination and implementation difficulties. (Siverbo 2004, pp. 401-402)

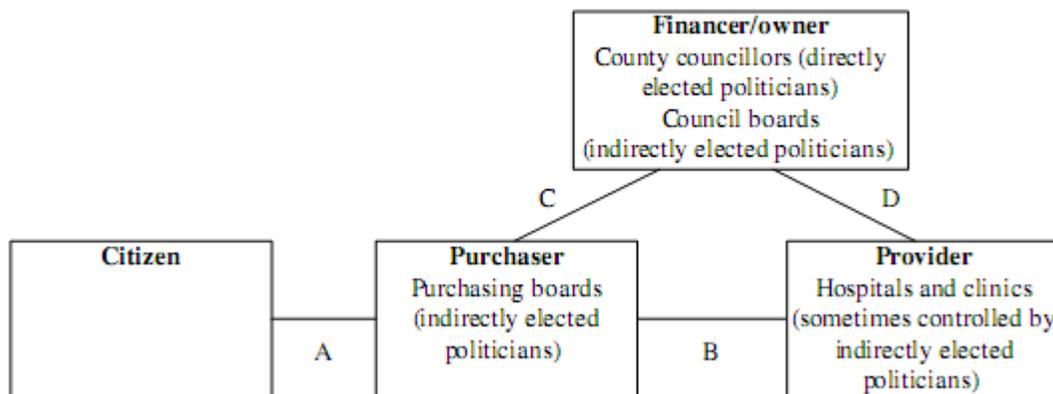
4.1.2 The purchaser-provider split

Within Swedish health care, a system has been implemented during the last two decades. The system controls the selection of health care providers. The model is called the purchaser – provider split and can be seen as a management control system at a social and political level. (Rama 2009, p.13)

The model separates and distinguishes different roles within the process of selecting the health care provider. There are three different roles: these are financiers or owners, purchasers, and providers. The financiers or owners are both directly elected politicians at the county council and indirectly elected politicians at council boards. The purchasers consist of a political committee elected by the county councilor. Finally, the providers are hospitals and health care centers. (Siverbo 2004, p. 405)

The purchaser-provider split serves many purposes. One is to downplay the politicians' role as providers of health care, and instead become the purchasers of health care. There are four relationships in the model. The first relationship (A) is between the citizen and purchaser while the second relationship (B) is between the purchaser and provider. Purchasers choose providers to provide health care service for citizens. The third relationship (C) is between financier and purchaser. The financiers are responsible for distribution of resources to the purchasers. Lastly, the fourth relationship (D) is between the owner and the provider. The owners are responsible for their own providers. (Siverbo 2004, pp. 405-406)

Purchaser-provider Split



(source: Siverbo 2004)

As the politicians in the model act only as purchasers, a market of health care providers will arise and efficient health care providers will gain market share, which is a part of the objective, i.e., to create efficiency in the health care sector. The need for the model can be understood as politicians have historically been viewed as the providers of health care, and thereby hindered the task to create an efficient health care market. (Hallin & Siverbo 2003, pp.96-98)

4.1.3 Political, administrative and professional controlling

Within the health care system there are a lot of forces that want to obtain control and influence the management control system. According to Hallin and Siverbo (2003) there are three kinds of controls that influence the management control system within the health care sector: political, administrative, and professional.

The political control consists of all the laws, regulations, superior objectives, and resource allocations that derive from different governmental institutions and politicians. Their influence can originate both from local and governmental platforms. The political control is usually exercised at a distance from the operational area. Some distinctive administrative control methods are budgeting, financial goals, and allocation of staff. These control methods are usually exercised by the different operating managers in the organizations. Within the health care system,

the professional control is an essential part of the organization. The professional control corresponds to the work done by doctors, surgeons, and physicians, who also are in charge of the organization's core process. Their control methods depend on their knowledge in the form of university degrees and experiences obtained. Unlike the political control, the professionals control on a very close level to where the core operation is located. The forces mentioned above may or may not correlate with each other. The core task of a management control system is to balance the forces and generate an effective combination. (Hallin & Siverbo 2003, pp. 62-65)

4.2 Payment mechanism

All actors within the VG Primärvård are able to receive reimbursement from the county council of Västra Götaland region regardless whether they are driven privately or publicly. The payment model comprises of four parts.

- Funds for primary health care (primärvårdspeng)
- Objective-related payments
- Special payments for social economy, geography, and interpreter
- Payment for special undertakings (VGR 2009b, p. 26)

The payments to a health care center are meant to cover all the costs that the patients registered at the health care center accrued. These payments cover costs for operating the health care center, such as premises, cooperation with the other health care organizations and government agencies, medicine, medical service, IT function. The payments also cover the costs when the patients that are registered at a health care center choose other health care providers. (VGR 2009b, p. 27)

4.2.1 Funds for primary health care

The funding for primary health care corresponds to about 84 percent of the total reimbursement available. The funding has three dependent factors: age, gender, and the morbidity burden of a population. 50 percent of the fund depends on age and gender and the rest of the 50 percent depend on the morbidity burden of a population. (Ibid)

4.2.1.1 Age and gender

The total population of Västra Götaland generates about 505 000 points. Every point represents a payment of 350 SEK per month in 2009. Every registered patient at a health care center represents a certain number of points depending on his/her age and gender. (Ibid)

4.2.1.2 Morbidity burden and ACG

ACG or Adjusted Clinical Groups is a system which describes the population's health care cost in the past and forecasts health care utilization the future. It works by categorizing individual patients' illnesses. Every patient develops a morbidity profile or case-mix over time and based on the illness pattern the patient is clustered to an ACG group. Since the ACG groups are mutually exclusive, every patient in a group has a similar pattern of illness and thus similar expected resource consumption.

The ACG system was previously named Ambulatory Care Groups, brought to Sweden by the consulting company Implementum AB. The ACG system explains the resource consumption much better than age and gender. Reports show that ACG can explain 30-40 percent of the resource consumption in primary health care while age and gender can explain only 10 percent. (VGR 2010b)

The ACG point is calculated every month. Calculations are based on the diagnosis made in the primary health care organizations from all county councils in Sweden that use Cost Per Patient (KPP) measurement in the last 15 months. The average ACG point in Västra Götaland is 1.00. It is related to the payment system by multiplying the ACG point with the total points based on age and gender, i.e., $1 \times 505000 = 505000$ points. In this case every point represents a payment of 350 SEK per month. (VGR 2009b, p. 27)

4.2.2 Objective-related payments

The objective-related payments are divided into two parts. The first part is the payment to degree of utilization, i.e., to what degree is the health care organization utilized. The other part is the payment to quality objectives. (VGR 2009b, pp. 28-29)

4.2.2.1 Payment for degree of utilization

The aim of the payment for degree of utilization is to stimulate health care providers to be more responsible for the registered patients' need of health care. The degree of utilization is calculated by the registered patients' visits to facilities that the health care center has cost responsibility for divided by the registered patients' visits to all public health care providers in Sweden. For every percent that the health care center's degree of utilization surpasses 50 percent, an extra payment would be given, with a maximum of 80 percent. The payment is based on the average degree of utilization in the last four months. From May to August 2009, the degrees of utilization at the existing health care centers varied between 37.5 percent and 79.8 percent. (VGR 2009b, p. 28; VGR 2010a)

4.2.2.2 Payment for quality objectives

The payment for fulfilling the quality objectives is initially 3 percent of the total payments for VG Primärvård. There are initially six quality objectives. The payment is expected to increase together with increased number of indicators. The aim is that it will increase to 5 percent in 2011. The quality objectives are as following until 2010:

- Telephone availability
- Participation in the projects of councils of public health (folkhälsövård) or similar works
- Accredited laboratories at health care center
- Share of patients of 75+ years old whose medicine has reconciled

- Percentage of quinolones⁵ in total UVI antibiotics for females that are 18 years old or older
- Connecting to the national quality register (NDR) (VGR 2009b, pp. 28-29; VGR 2010a)

4.2.3 Special payments for social economy, geography and interpreter

The fourth kind of payment is an extra payment for different social economy, geography and the need of interpreter.

4.2.3.1 Payment for social economy

Socioeconomic factors can affect the health status of an individual. These factors should be considered because first, they are not considered in the ACG system, and second, to give the health care centers which have a weaker socioeconomic population an incentive to work more actively.

In order to take these factors into account in the payment system, the Care Need Index (CNI) is developed. Several variables are considered in CNI, such as the share of single elderly, the share of unemployed, the share of low educated, the share of children under 5, and the share of immigrants. A total of 100 million SEK is divided up into payments based on CNI. (VGR 2009b, p. 30; VGR 2010a)

4.2.3.2 Payment for geography

There is a special payment for the location of the health care center, which is based on the distance to the nearest hospital with an emergency care unit and the distance to nearest densely populated location. (VGR 2009b, p. 30)

4.2.3.3 Payment for interpreter

The aim of the payment for an interpreter is to compensate the health care center for hiring an interpreter and the extra time that is required for interpretation. For visits where authorized interpreters are hired, 1000 SEK will be paid to the health care center. For visits where interpretation is carried out without the health care center paying for interpretation, a payment of 250 SEK will be made. (VGR 2009b, p. 30)

4.2.4 Payment for special undertakings

Health care organizations can sign special contracts for the special undertakings in the local area. These undertakings include family centers, i.e., a place where a nursery, mother health care center, children health care center, and social services are available. They also include the coordination responsibility and support for the municipality residential units. Extra

⁵ Any of a class of synthetic antibacterial drugs that are derivatives of hydroxylated quinolones and inhibit the replication of bacterial DNA

responsibility means extra payment will be given to health care organizations with contracts for the special undertakings. (VGR 2009b, pp. 30-31; VGR 2010a)

4.3 The cost responsibility of health care providers

The health care providers have full cost responsibility for the registered patients' basic health care expenses. The cost responsibility includes not only the health care center's operating costs, but also visits at other health care providers, medicine and medical service, etc. The payment from the payment mechanism which was described earlier is used to finance the cost responsibility. (VGR 2009b, pp. 32-34)

4.3.1 Visits at other health care providers

The health care providers are responsible for financing the visits that are made at other health care organizations by the registered patients. There is a standard price list from the county council of Västra Götaland region for different kinds of visits. (VGR 2009b, p.32; VGR 2010a)

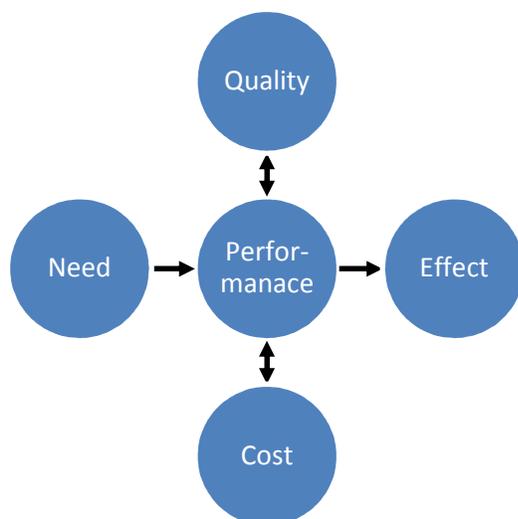
4.3.2 Medicine

The health care providers are even responsible for the medicine that is prescribed. This means the prescribers pay for the medicine they have prescribed. In addition, they have cost responsibility for the medicine that is used at the health care organization as well as the cost for dispensing doses. The health care providers need to follow the medicine recommendation and medical guidelines from the county council of the Västra Götaland region and the STRAMA⁶ recommendations when they prescribe medicine. (VGR 2009b, p.32; VGR 2010a)

4.4 Follow-ups

The follow-up is aimed to check if the health care providers satisfy the requirements, reach the goals and develop the primary health care in Västra Götaland. The follow-up model in the county council of Västra Götaland region is divided into five perspectives as the following diagram shows. The five perspectives are performance, need, effect, quality and cost.

⁶ The Swedish strategic programme against antibiotic resistance.



Every perspective incorporates several indicators or key ratios. The focus of the follow-up model is need and quality. The quality indicators are used as a basis for the objective related payment and even how citizens choose health care providers. The quality indicators and key ratios are reviewed every year. (VGR 2009b, p. 25)

The follow-up data will be available on a web-based system. This enables health care providers to check their own follow-up data and compare with other providers. It also enables patients to compare the quality of health care providers, which can affect their choice of health care provider. (VGR 2009b, p. 25)

The county council of the Västra Götaland region initiates meeting with health care providers at least once a year to discuss the outcome of follow-ups. The aim is to create a dialog between the county council of the Västra Götaland region and the health care providers. In addition to outcome, other important factors not covered in the key ratios will also be followed up. These factors include, for example, the competence of personnel. (VGR 2009b, p. 25)

4.5 Reporting

The health care providers are required to provide the necessary data to the county council of the Västra Götaland region for the reimbursement payment. Furthermore, data from follow-ups should also be sent. The data are sent in electronic form via data files. (VGR 2010a)

5. Analysis of the new payment system

In this chapter, we will analyze the functions of the new system of organization, VG Primärvård, as well as the possible dysfunctional effects of the system with the help of the literature research.

5.1 The functions of VG Primärvård

The new system of organizing primary health care, VG Primärvård, is a revolutionary system with the inspiration of NPM. The system gives the private health care providers the same right as the public health care providers. The deregulation of the market brought about competition among the market actors. It is believed that the competition will lead to more efficiency in the primary health care sector and better care for the patients. The market is not completely free but can be described as managed.

The majority of the funding for primary health care is based on the characteristics of the facility's patients: a patient's age and gender together with his or her morbidity profile are used to calculate how much funding the health care center receives for that patient. The idea is that taking patient characteristics into account will lead to a fair distribution of financial resources. A consequence of the system is that in order to balance the risk for health care providers, it is important to get a mix of patients.

The object-related payments give a kind of guideline showing what is required from the health care providers. This payment shows that the purchaser would like the provider to cover the needs the patients and improve the levels of the six quality indicators. These payments act as forms of action control. The payment for quality objectives is currently a small portion of the total payment receivable, but it is planned to increase later as more quality objectives are coming. In this way, the health care providers would work harder to achieve the goals.

The special payments for social economy, geography, and interpreter provide incentives for health care providers to start health care centers in areas where it is difficult to run and provide care for patients that have difficulties with communication.

The payment of special undertakings encourages health care providers to pursue a more complete health care solution, including care for children and elderly.

Cost responsibility is a new concept introduced by the system. It makes the health care providers more aware of the cost for medicine and encourages the providers to satisfy their customers or patients. Medicine is a substantial cost of health care; paying a little extra attention and prescribing medicine effectively will result in large savings. The cost responsibility of health care providers to pay for registered patients' visits at other health care centers pushes health care providers to provide better availability and service. However, the fixed price internal payment system may lead to dysfunctional effects since the payment may not be able to cover the cost of the patient.

The upcoming web-based reporting system will provide a source for benchmarking, as health care providers will be able to compare each other's performances. Patients will be able to see

these rankings as well. As a result, the poorly performing providers will need to improve or else the managed market economy may put them out of business due to lack of patients. In addition, the web-based reporting system acts as a form of cultural control from the purchaser because of the competition the system creates.

With regards to the different forces present in the health care sector, the payment mechanism has decreased the political influence on the health care. Previously the politicians subcontracted elected providers, while now companies can enter the market as long as they fulfill the quality requirements. Thus, at the expense of the political force, administrative control has increased.

In further analysis the payment mechanism can be described as both a result and an action control set from the county council. The quality requirements can be viewed as guidelines for action and the payments as a results control.

5.2 Possible dysfunctional effects

Merchant and Van der Stede (2007) point out that the negative side effects of MCS can produce costs several times greater than the direct costs. The new payment system, which functions as both results control and action control, can bring about negative side effects of controlling. The new system of payment reimburses according to the ACG system, which is a case-mix system similar to Diagnosis Related Group (DRG). It is therefore possible that it would have many similar dysfunctional effects described by Charpentier and Samuelson (1996).

Gaming or undertreatment of patients could be a problem. Patients could be discharged earlier than they should simply because the patients are too expensive to treat. Or it could be that the providers use cheap materials instead of expensive high quality products.

Creeping is to manipulate the system to achieve better profitability. Health care centers with financial problems could, for example, glide with registrations to prevent closure. Gliding means that the health care providers cheat with registrations in order to get higher compensation. An example of gliding is the overtreatment of patients. By providing unneeded care and registering the diagnosis, the provider could receive higher compensation. This could be more of a problem when there is overcapacity in the sector.

Dumping is to avoid treating expensive cases because the cost is much higher than the remuneration. The patients are referred to other health care providers instead.

6. Empirical studies

In this chapter we will present the empirical studies conducted through interviews with the management staff of the three organizations. The material from the interviews has been structured into different control alternatives and management control tools.

6.1 Case study at Olskroken health care center

This case study is conducted by interviewing Per Hellke, district doctor and the director of Olskroken health care center and Anna Anderberg, controller for the East regional division of the Primary health care of Gothenburg (Primärvård Göteborg).

The health care center of Olskroken operates under the East regional division of the business group Primary health care of Gothenburg. The health center is managed by two professionals: the director, a doctor and the assisting director how is a nurse.

The health care center of Olskroken has operated on its own since the implementation of the new payment system. This affects the health care center in that it cannot receive or distribute subsidies from other health care centers within the Primary health care of Gothenburg. The injustice that existed in the old system has been abolished through the decentralization. The health care centers are to be responsible for their own profit and deficit. This change has therefore increased the importance of achieving a break-even result and tightened the financial objective. Moreover, the decentralization also makes the health care centers within the business group of Primary health care of Gothenburg competitors of each other.

To fulfill the operational goals the health care center has subcontracted a care unit for foot diseases and their laboratory needs, but has otherwise all the necessary care units within the organization.

6.1.1 Results controls

Different forms of results control at Olskroken health care center will be described below.

6.1.1.1 Objective

The overall objective for the business group Primary health care of Gothenburg is to maintain its current market share of 65 percent. This overall objective leads to a nonfinancial objective for the local health care centers to maintain the certain amounts of registered patients, which is 20 000 today for the health care center of Olskroken. A prerequisite for managing a health care center is to fulfill the operational requirements from the county council of Västra Götaland, which is another nonfinancial objective. The only financial objective set for the health care center of Olskroken is to attain a break-even result.

6.1.1.2 Financial responsibility centers

Due to the decentralization, every health care center has become a profit center. In the case of the health care center of Olskoken, the director has an overall result responsibility towards the Primary health care of Gothenburg. The management of the group Primary health care of Gothenburg has no demands of how the results should be fulfilled. The means to achieve the results are selected by the director of each health care center. There are no other sub-units within the health care center that have a profit responsibility.

6.1.1.3 Transfer pricing

The health care center Olskroken does not have a child care unit. Instead, it outsources this unit together with several other health care centers within the East regional division. In this case, the health care center Olskroken has to pay another health care center within the East regional division to care for children. The transfer price is calculated by the time spent by the pediatrician as well as the time cost for the facilities and markups.

6.1.1.4 Budgeting

The budget system implemented in the organization is a top-down model. A budget is made for the East regional division by the management level. After that a sub-budget is submitted for the different health care centers within the division, where Olskroken is included. The sub-budget is presented in one year intervals, which makes it a standard operational budget. As the operational budget is submitted, it is also revised by the local director, regional manager, and key controller.

In this organization, the purposes of the budget and its process are target setting and increasing the awareness of costs. The budget is also used for follow-up and is then utilized to achieve a results control.

Due to the newly implemented payment system and the reorganization that has come with it, the current budget is somewhat more flexible than intended, and top management allows larger variation than usual in the results. This is only intended to occur during the reorganization period.

Minor follow-ups are done monthly at Olskrokens health care center without the assistance of a top manager or controller. These are later presented for the staff, with data such as performance measures, customer surveys, and degrees of utilization to create engagement within the organization. The minor follow-ups are in this sense acting as a means of personnel and cultural control of the organization.

6.1.1.5 Incentive compensation system

The salary increase is decided by the director who is in charge of doctors and psychologist, and the assisting director who takes care of the nurses and other administrative personnel.

Due to regulations from political force, neither financial nor nonfinancial rewarding systems had been an option at Olskroken's health care center. As a result of the new payment system, the

regulation has been abolished and the health care centers within the Primary health care of Gothenburg are allowed to keep their profits and use the profits as incentives. For the East regional division, the system is scheduled to be implemented during next fiscal year. Both monetary and nonmonetary rewards are being reviewed. Nonmonetary options vary and can be local conferences and conferences abroad or paintings. For monetary rewards, the maximum amount that will be given out is equal to the value of one month's salary. Whether the system will be implemented on individual or group level is also under review. The incentive compensation system is a way for the management to implement results control.

6.1.1.6 Performance measures and Benchmarking

Performance measures are implemented throughout the whole organization and are a part of the results control. Doctors are set to achieve at least 15 visits from patients on a daily basis. Nurses are estimated to answer 10 incoming phone calls per hour, while psychologists are expected to receive at least 5-6 patients per day. The customer satisfaction is also a measure that is used and is examined through customer surveys that are carried out on a monthly basis.

These measures are computed through the data system utilized in the organization and reported to the Primary health care of Gothenburg for a future follow-up report. The follow-up report is submitted back to the health care centers every month and reviewed together with the whole staff.

More performance measures are being investigated and are planned to be implemented in the near future. Performance measures looked at include the amount of registered patients at each health care center, medicine costs per physician, and laboratory and x-ray costs per registered patient. All the performance measures are followed up monthly.

Data for benchmarking between different public health care centers are available from the Primary health care of Gothenburg. An example of data that is benchmarked is the cost of personnel per quarter. However, benchmarking is not prioritized within the health care center of Olskroken since the variation of registered patients at health care centers may lead to different results.

6.1.1.7 Business plan

Before the new payment system, the health care center of Olskroken utilized the balanced scorecard as their system of management control. However, today it uses a business plan instead.

The business plan is similar to the old balanced scorecard in that it applies different means of control from the old balanced scorecard, such as the financial objectives and the overall strategies. The business plan is, however, not meant to balance itself out, but is instead more of an overall plan. The plan is structured into four different parts: Long term goals, objective performance measures, strategies, and key activities. The plan works as a funnel: broad long term goals narrow down to specific key activities. The long term goal is to what extent the organization would like to achieve in a specific area, in the long run. The objective performance measures are what to analyze to determine if the long term goal has been achieved. The strategy is in what ways the organization should work to achieve high performance measures, while key

activities are some hands-on operational requirements. This action plan is created for multiple areas within the organization to enforce the ability to control.

The business plan in this organization is a way of achieving both result and action control. The plan is updated every year and is generated with management staff from every level in the organization.

6.1.2 Action control

Different forms of action control at Olskroken health care center will be illustrated below.

6.1.2.1 Guidelines and policies

The influence of action control is great within the organization, due to the professional control force in the sector. The professionals, nurses, doctors etc., are expected to follow the guidelines and recommendations from the relevant authorities. One of the aims of the action control is to reduce the cost of medication and clinical tests. When the doctors prescribe the recommended medication, huge savings could be made.

Due to the new payment system, new guidelines have been developed within the organization regarding the policy for accepting patients. The internal payment for unregistered patients' visits at health care centers is based on the standard price list and may sometimes not cover the cost of the patients. As the main income from the payment system is heavily dependent on where the patients are registered, requirements for re-registration can be necessary depending on the magnitude of the treatment needed. The requirement for re-registration that shows that action control has increased in the organization.

Policies for safeguarding knowledge and working procedures have also been implemented due to the payment reform. Prior to the deregulation of the market the health care center of Olskroken shared knowledge and educated staff for other public health care centers. This possibility is now abolished.

6.1.3 People control

Different forms of people control at Olskroken health care center will be shown below.

6.1.3.1 Corporate culture

Due to the new payment system, a general awareness of cost in the organization has arisen. The transition from budgetary payment system to the new patient-based system has influenced the personnel's opinion about cost saving. The idea of saving is also communicated and synchronized within the organizations through the daily morning meetings, where possible flaws and daily schedules are presented. The daily morning meetings also work as a forum of discussion for more efficient procedures of treatment, etc.

Even with the staff's different levels of skills and positions in the health care center, the influence of cross-checking the work performed is common, especially when it comes to the medication prescription. Cheaper medication, with the same effects is often available on the market and therefore always preferred. This culture of saving acts as a form of personnel and cultural control for the organization.

6.2 Case study at Kvarterskliniken

This case study is conducted by interview with Carl Fredrik Nilsson, Chief Financial Officer at Kungssportsläkargruppen.

Kvarterskliniken or Kungssportsläkargruppen is a business group which consists of several health care centers and other medical companies. The health care centers of Kungssportsläkargruppen have recently entered the market and, like the rest of the region, been introduced to the new payment mechanism.

The business group's activity in the health care market has increased significantly since the deregulation of the market. It has also been through an overall reorganization of the business group. The parent company today is ME3+ AB. Operating sub-corporations are the Kungssportsläkarna AB, ME3+ CT AB, and Kungssportsläkarna Vaccination AB, as well as one upcoming company. The Kungssportsläkarna AB, where all the health care centers operate, is also the company which generates most of the turnover and where the most staff is located.

Even though the Kungssportsläkarna AB and Kungssportsläkarna Vaccination AB are different companies, they are situated within the same facilities, and are only separated for strategic reasons. One of the strategic reasons is to create an overview of the business. That way it would be easier to tell where the costs, incomes, and margins are made.

The Kungssportsläkarna AB today manages a full-time staff of about 60. It outsources all accounting and legal-needs to an external consulting firm in order to focus on the core business. Each health care center is managed by two professionals: one doctor, the director, and one assisting director who is a nurse. This management system is implemented in every health care center that is operated by the Kungssportsläkarna AB.

6.2.1 Results control

Different forms of results control at Kungssportsläkarna will be illustrated below.

6.2.1.1 Objective

All the health care centers operate as sub-units under the business group of the Kungssportsläkargruppen. The vision of Kungssportsläkargruppen is to offer the best health care in Sweden. The objective of the entire business group is to acquire 10 000- 15 000 new registered patients within three years, as an addition to the current amount of 35 000 registered patients. The turnover objective for the business group for the same period of time is 250 million SEK.

6.2.1.2 Financial responsibility centers

The Kungssportsläkarna AB utilizes a profit responsibility assigned to every director of the health care centers. The purposes of the profit responsibility are many. One of them is to make eventual cost reduction issues more controllable. The profit responsibility forces the local managers to truly understand the organizations and where reductions can be made. The local director is, as mentioned, a doctor, so due to his or her knowledge and experiences, the doctor knows what actions can be taken without compromising the care of the patients.

Along with the profit responsibilities, dilemmas are created between different forces and objectives within the organization. The doctors have all taken the Hippocratic oath⁷ and are therefore responsible for treating a patient with best care possible. However, at the same time, doctors are responsible for the profitability of the health care centers. The administrative force is responsible for achieving the financial goals of the organization, while the professional force is responsible for providing the best care possible.

A similar dilemma is raised when doctors may be forced to send their registered patients to other clinics due to lack of equipment. Because of the cost responsibility of health care centers, the health care center has to pay for the cost of the patients. These conflicts, between the administrative and the professional forces, are unavoidable, and it is up to the directors to resolve them in the best and most efficient way.

6.2.1.3 Transfer pricing

The business group uses internal pricing for internal transactions between the different organizations within the group. The Kungssportsläkarna Vaccination AB is the main buying profit center as it uses the premises and time of the personnel of Kungssportsläkarna AB. The transfer price is constructed with variables such as time and number of nursing services. However, due to the recent reorganization, the transfer price is still under construction and not yet fully implemented.

6.2.1.4 Budgeting

The Kungssportsläkargruppen utilizes an operational budget with a rolling budget form, updated on a monthly basis. The budget process is initiated by the CFO and is then passed or rejected by the board of committee before the budget is forwarded to the appropriate health care centers. Because the committees can overrule the establishment, the budget process can be considered to be a top-down procedure.

The budget is utilized as a results control as the appropriate financial goals are communicated through the budget meetings where the CEO, CFO and the local directors are present. The demands are set by the CFO according to what projections he thinks are appropriate with regards to the market development and other variables.

⁷ An oath embodies a code of medical ethics that are usually taken by those about to begin medical practice.

Follow-up of the budget is held in the form of meetings of the health care center's director, the CEO and CFO. This is done at monthly intervals. The follow-up meeting also serves as an evaluation of the organization and a possible method of improvement.

The terms of credit from the payment system averages 45 days, Kungsportläkargruppen balances the lack of money during this period by planning the liquidity ahead. The availability of liquid assets made possible by the Kungsportsläkarna Vaccination AB, and is planned together with the overall budget for the organization.

Budgeting serves many purposes at the Kungsportläkargruppen. Communication is one major objective, especially for the management of the organization. The bank as well as the board of committee demands regular budget reports in order to make informed decisions. The budget is also utilized for follow-up purposes and to set performance targets for the directors in charge. The regular communication through budgetary reports gives also the directors a management oversight, which lessens the distance between the operational level and the top management level. This increases their ability to act swiftly.

6.2.1.5 Incentive compensation system

A lot of nonmonetary rewards are given in the organization as a way to emphasize performance and its benefits for the organization. Examples may be gifts such as wine or simply open gratitude. This incentive system works as a form of people control to create a culture where high performers are promoted.

The financial incentive system is a work in progress. The organization will be designating an incentives fund at each health care center, which will be partitioned between the staff. The reward size is decided by the ratio of the employee's salary and the health care center's cost of personnel. The fund will be connected to the performance of the health care center. The variables which will determine the rewards are still under discussion. This financial incentive compensation system will be part of Kungsportläkargruppen's results control and cultural control.

6.2.1.6 Performance measures and Benchmarking

The performance measures implemented are at the moment only the ones reported back through the new payment system. Other performance measures will be developed and implemented in the future, and will act as a results control mechanism in the organization. The measures received from the payment system is later on compared and benchmarked between the different units.

6.2.1.7 Cost analysis

The Kungsportsläkarna AB has a well designed cost structure which allows for swift cost cuts. As a health care provider, its core costs consist of three sections: cost of personnel, cost of prescriptions, and other costs. The well organized structure of the cost shows areas where cuts could be made. Analysis shows the cost of personnel is the cost to cut. According to the interviewee, downsizing was made in the staff sector. Another cost that is constantly being reviewed is the medical prescriptions issued to patients, and especially the iterative prescriptions.

Because the health care center has the cost responsibility for medications according to the payment system.

6.2.2 Action control

Different forms of action control at Kungssportsläkarna will be described below.

6.2.2.1 Guidelines

Updating guidelines from current authorities is done regularly and is followed by the staff at all levels. Internal forums are created as well, both between nurses and between doctors. This is both to ensure the communication of current guidelines and to enable effective methods and procedures to spread within the organization. This working procedure is a part of the organization's action control.

6.2.3 People control

Different forms of people control at Kungssportsläkarna will be shown below.

6.2.3.1 Corporate culture

The values of the organization are simplicity and straightforwardness. Simplicity in the sense that if excessive work can be avoided, efforts should be taken to avoid them. Straightforwardness in the sense that the management will be clear with what is expected and direct the actions taken. Another characteristic of the organizational culture is openness. The employees' relations are open between each other and are open for discussions, which the organization's transparent salary system confirms.

Due to the well followed and communicated profit responsibility, the awareness of cost in the organizations is very high, especially for the doctors. This awareness is supposed to encourage creativity for cost reductions and is considered a part of the cultural control.

The recruitment of staff is usually done in an informal manner. All the doctors have been recruited due to their existing relationship to the founder of the company, who was a doctor. As human capital is the company's most essential asset the company holds, the employment process is done with great attention. It is a part of the personnel control of the organization.

6.3 Case study at Capio Närsjukvård

The case study is conducted by interview with Petter Bogenholm, Chief Financial Officer at Capio Närsjukvård.

Capio Närsjukvård has today about 30 health care centers in Sweden, of which five health care centers are located in Gothenburg. The organization has expanded in the region of Västra Götaland since the deregulation reform, starting three new health care centers since then. Every health care center has about 30 employees and every health care center has a local director with a

nursing background. The organization is decentralized; each health care center operates on its own with the administrative support from the headquarters.

As the organization doesn't operate all the necessary clinical services, it employs subcontracting. Most subcontracts are acquired by the head office, as negotiations for better deals can be achieved through bulk purchases. Other deals may be chosen by the director of the health care center if it is a reasonable move. The choice of other subcontractors may be due to the lack of skills or equipment from the present subcontractors. This situation creates again dilemmas between the organization's administrative and professional forces, as other subcontractors can be more expensive than the current subcontractor.

6.3.1 Results control

Different forms of results control at Capio Närsjukvård will be shown below.

6.3.1.1 Objective

The vision for Capio is to become the best health provider within its region, not the largest provider. Quality, safety, and efficiency are the three focuses of the company. There are no official financial objectives set for each health care center other than to comply with the budget. Instead, the accounting department, which has daily contact with health care centers and supports the health care centers in different manners, revises the budget goals to be challenging enough for each budget period. The interviewee means that the objectives haven't changed since the new payment system was introduced.

6.3.1.2 Financial responsibility centers

Each health care center acts as a profit center, in which the director operates the whole care unit, with support from the central departments, such as HR, economy, marketing etc. Since Capio operates in the health care sector, there is no cost responsibility set on the individual physicians.

6.3.1.3 Budgeting

The budget process is a bottom-up procedure, where the local director together with the operating staff generates the first draft of the budget. The budget is further on presented and revised by the central accounting department. The accounting department revises the budget to make it challenging and feasible at the same time. Historical data is usually the foundation in the process of generating a new budget.

As the core business of the organization is health care, the budget is done in a flexible manner. However, when potential losses are realized, actions must be taken.

The major operational budget is done in one year cycles, with quarterly updates. The budget process takes six months to work through as it involves all the units of the organization. As updates are done every quarter, where external and internal changes are being considered, the

Capio organization can be said to use a rolling budget. While the operational budget is done by the local director, the liquidity and balance sheet budget is done by the accounting department.

The follow-up of the budget is done with monthly intervals, and is first done between the CFO and the local director who further passes down the information. It becomes a part of the organization's results control and cultural control as data is communicated to the unit as a whole.

6.3.1.4 Incentive compensation system

The former incentive compensation system was removed due to dysfunctional effects. Currently, there are two different incentive compensation systems within the organization. One of these is salary increase, which is based on how the unit works as a whole, and is also dependent on the performance of each individual. Due to every individual salary meeting there is an existing plan of progress set for the personnel's professional progress. The individual salary is then set depending on how far the personnel have come in their individual progress.

The other part of the compensation system is dependent on how much the health care center deviates from the budget plan. It is a group reward for both single health care centers and the whole Capio Närsjukvård.

Neither of the compensation systems have changed due to the new payment systems. They both work as a part of the results control and cultural control of the organization.

6.3.1.5 Performance measures and benchmarking

The Capio organization utilizes performance measures developed from higher management. Performance measures implemented include medicine, laboratory, x-ray costs per patient, amount of registered patients per doctor, and number of nurses per doctor. All the performance measures are calculated in every health care center and benchmarked between them. Each health care center's status in the organization is communicated between them. The way the performance measures and benchmarking system is utilized in the organization is a part of the results control. The payment system provides also performance measures that are utilized in the organization.

There is, however, no exact requirement for each staff, such as ten doctor's visits per day. These numbers are instead being measured and communicated back to the staff and work therefore as indirect requirement thanks to competition. The reason for not having direct requirement is mostly due to the large variety of patients treated at each health care center.

6.3.1.6 Cost analysis

The cost of personnel is considered to be the largest part of the costs in the organization and is reviewed continuously. Other costs that are being analyzed are, for example, the cost of prescription medication. This is dealt with through the "smart list"⁸.

⁸Smart list = Swedish: Kloka listan

6.3.2 Action control

Different forms of action control at Capio Närsjukvård will be described below.

6.3.2.1 Guidelines and policies

In efforts to minimize the cost of medicine and standardize care process the doctors write prescriptions according to a “smart list”, which is given from the National Board of Health and Welfare⁹ and consists of cost efficient recommendations when it comes medicine.

Due to the new payment system, Capio is working to get more patients registered at their health care centers. If patients with serious but non-emergency illnesses visit their health care centers, they are strongly recommended to re-register at their health care centers or advised to seek help at the patients’ registered health care center. These controlling mechanisms in the company works as a part of their action control.

6.3.3 People control

Different forms of people control at Capio Närsjukvård will be illustrated below.

6.3.3.1 The company culture of Capio health care centers

In order to achieve a proper corporate culture, Capio has formed some basic values for the organization: Patient and customer focus, trust, respect and empathy, creativity, and public welfare. These values state the focus of the organization and align the objective of the staff. This works as a part of the organization’s cultural control as they are supposed to be a part of their working methods.

⁹ National Board of Health and Welfare = socialstyrelsen

7. Analysis of the results

Analysis will be presented here regarding both the payment mechanism's effect on the MCS of health care providers and the differences in MCSs between the three organizations. In addition, an analysis will be carried out regarding the functional and dysfunctional effects of the payment system.

7.1 Analysis of the MCS at the health care providers

This section is separated into the three different control alternatives, results control, action control and people control. The results from the case studies are analyzed here with regard to the literature research.

7.1.1 Results control

Analysis will be carried out for the different results controls in the organizations.

7.1.1.1 Objectives

The payment reform has influenced the objectives of three health care centers in different ways. The public health care center Olskroken uses now nonfinancial objectives as target market share and a financial objective to reach a break-even result. This is very interesting because before the introduction of the payment mechanism and deregulation, the health care center had no need to think about factors such as market share. Patients were assigned to the different health care centers, which may have caused the health care centers to take the patients for granted and treat them as a burden. The new system has changed the public health care center's view of patients. As far as we can see, maintaining the market share it has today is one of the most important objectives. At the same time, we observe that the importance of the only financial goal has increased: achieve break-even or else close down applies even to the public health care centers.

The private Kungssportsläkargruppen uses quantified financial objectives and nonfinancial objectives. These objectives are set for a period of three years. The objectives are specific and show the stakeholder what the goal of the organization is.

In the case of Capio, the objectives did not change due to the new payment mechanism according to the interviewee Petter Bogenholm. This result can be caused by the reluctance of the interviewee. The company focuses on nonfinancial objectives, quality, safety and efficiency. Although there is no direct financial objective, there is a financial target set by the budget.

According to Merchant and Van der Stede (2007), objectives can be financial and nonfinancial, quantified and non-quantified. What is important however is the understanding of the employees. A better understanding provides better control and reduces the chance of having behavioral displacement problems. Specific objectives, like the ones at Olskroken and Kungssportsläkargruppen, gives better guidance as to how decisions should be made.

A difference in objectives between the private and public health care centers is observed. Both Merchant and Van der Stede (2007) and Hofstede (1981) confirmed that the objective and interest of owner are what make a nonprofit organization different from a for-profit organization. The financial objectives show clearly that the public health care center of Olskroken is a nonprofit organization as it has no other but a break-even requirement. The private health care centers do not have clear return on capital requirements. This is perhaps due to the nature of the health care sector in which ethic issues exist. Working with nonfinancial objectives, such as quality and patient safety in the case of Capio, is another way to achieve higher profitability.

7.1.1.2 Financial responsibility centers

All of the interviewed health care centers have been assigned profit responsibility. The profit responsibility means that the directors of health care centers are held accountable for both the revenue and the expense of the organization. In this way, the results control affects actions taken by the directors. The two private health care centers appear to have great autonomy from the higher management as the methods to achieve the results are totally up to the director of each health care center. It is even observed in the case of Olskroken that it has similar autonomy as the private health care centers after the introduction of the new payment mechanism. Autonomy encourages innovation, imply Merchant and Van der Stede (2007).

However, profit responsibility can result in negative side effects. One side effect is the example at health care center Olskroken. The health care center of Olskroken contains a vaccination unit. The other health care center in the same group of Primary health care of Gothenburg would like to learn how the vaccination unit works and start their own vaccination unit. This request was refused by the director since all health care centers are competition which can affect their profitability. Knowledge sharing should be beneficial for whole group, but due to the profit responsibility, sharing was not possible. Profit responsibility creates also dilemma between the financial and professional objective of the organization. The pressure of providing the best care possible while maintaining profitability may lead to dysfunctional effects of control, for example gamesmanship.

According to the study by Young (2008), hospital departments should switch from profit centers to cost centers. This can be applied at the health care centers. The transition to centers would let the director focus on cost savings instead of what they can't control, the revenue. The income factors like case mix, volume, number of registered patients are difficult for the director of the health care center to have control over. The transition may help to the directors to avoid the possible dysfunctional effects of profit centers and focus on whether doctors are treating patients according to clinical protocol. Neither of the health care centers have taken these changes in considerations, and been either sticking to or developing their profit centers.

7.1.1.3 Budgeting

All the organizations use the budget as a means of results control. Each health care center's director is held accountable for achieving the budget. The budgets are slightly loose at the moment due to the lack of historical data after the payment reform.

The approach to develop budget is different among the organizations regardless public or private. The public Olskroken health center and Kvartersskliniken use top-down approach which gives the top management most influence over the budget. What is worth-noting is Capio organization which deviates from the others as it uses a bottom-up procedure. This is interesting as Capio is a private organization and should have higher financial demands and therefore incentives for a top-down procedure. The organization therefore relies heavily on the center's ability to produce a demanding budget itself. None of the organizations have changed their way of generating budget due to the payment system.

All the organizations work with a one year operational budget plan and do regular follow-ups on a monthly basis. Different forms of budget could be observed between public and private health care centers. Capio and Kvartersskliniken work with a rolling budget, quarterly and monthly respectively. This would, according to Ax (2009), makes the budget more responsive and prevents the risk of big gap between the projected and actual results. However, the rolling budget gives somewhat an unclear goal for the organizations. Health care center of Olskroken uses traditional fixed budget which works well as target setting, but the budget cannot be modified for events occurred that could affect the planned figures and thereby brings about several negative effects, such as obsolete projections (Merchant & Van der Stede 2007, pp. 345-346).

The purpose of the budget is somewhat the same between the organizations: they all include communication and follow-up as objectives for the budget. Olskroken health care center and Kvartersskliniken also utilize the budget process to increase the awareness of cost and improve the target setting. The new payment system has increased the importance of these two factors in the organization of Olskroken.

7.1.1.4 Incentive compensation system

The incentive compensation system is used as a means of results control and cultural control at all the interviewed health care centers. At two of the health care providers, Kvartersskliniken and Olskroken's health care center, the incentive compensation system is still under progress. According Merchant and Van der Stede (2007), the first step to design an incentive compensation system is defining performance. Once performance is defined and measurements are considered, then comes the reward.

With the introduction of the new payment mechanism, the health care center Olskroken will be allowed to keep the positive results and use them as incentives for the operating staff. For the health care center Olskroken, this system is a completely new way of control, and its objective goes hand in hand with the literature studied as it works in motivational purposes.

Different kind of rewards possibilities are being considered, including group and individual rewards, monetary and nonmonetary options, and mostly short-term incentives. However, an aspect that should be noticed about the implementation of the new incentive system is the absence of thorough elaborated performance definitions, which is on the contrary of the literature reviewed. As some parts of the payments will be dependent on the overall performance of the unit, hands on objectives isn't set for the staff. Interesting as this is the most important issue, and

should be elaborated prior the reward setting, according to the Merchant and Van der Stede (2007), and could lead to an poor incentive compensation system.

The monetary reward is set to a maximum of one month's salary which is rather modest compared to the private health care centers. Rewards that encourage growth such as a conference or seminar are under consideration, which is a popular way to reward according to the receivables report (2008). Nonmonetary incentives are well appreciated by the employees and study shows that doctors need respect, autonomy and recognition besides the financial compensation (LeTourneau, 2004). These are areas that Olskroken health care center still need to make progress in, as most of the effort has been put on the monetary rewards.

The Kungssportsläkarna, however, plans to initiate a unique long-term incentive plan in the form of a personnel fund. Connecting the fund to the performance of the organization makes the employees more concerned about the organization since they become part of it. Long-term incentive plan helps to attract and retain personnel. This is especially important in health care organizations since the professionals are the most important asset. However, exact details of how this fund will work and what performance measures would be used are still under progress. Informal, nonmonetary rewards like praise are also used in the organization, which values high when the employees receive a satisfactory salary and lowers the financial burden of the organization.

Capio has an incentive compensation system which includes salary increment and monetary rewards. The salary increase is based on individual performance. Merchant and Van der Stede (2007) argue that salary increase is often treated as entitlement. The magnitude of the motivational effect of salary increase is almost impossible to speculate as we could get access to the detailed salary program. The monetary reward is short-term group rewards for the whole group or the health care center. Group awards work well as cultural control but could provide diluted motivational effects and create free rider effects.

In sum, the new payment system has affected the incentive compensation systems in different ways. It is observed that the public health care center and the newly started health care center have not fully developed their incentive compensation system. Since the systems are not fully developed, it is difficult to compare the private and public health centers. What we could observe was that the rewards from the public one is more modest. For Capio though, it seems the change of payment system has not affected their incentive compensation, which can be because of the reservation of the interviewee at Capio. The reason they removed the old incentive compensation system was due to the dysfunctional effects of monetary incentives. The focus on nonmonetary incentives in Olskroken and Kungssportsläkarna can be beneficial for their organizations since they put less financial burden on the company. The use of a long-term incentive plan at Kungssportsläkarna is interesting and it is the only organization that uses this kind of incentive. The long-term incentive helps the organization to attract and retain personnel. Group rewards used at Capio create a form of cultural control, but could have dysfunctional effects such as free riders.

According to Reynolds and Roble (2006) the working procedure of gainsharing is one way of expanding the idea of incentive compensation systems. By combining gainsharing with pay for

performance, it aligns the financial incentives of doctors with the health care center's objectives by sharing the savings made among the doctors. It acts both as results and people control as well as action control as the system tells the physicians detailed requirements and encourages them by giving rewards.

As further research by Reynolds and Roble (2006) shows that there is space for more cost efficient methods in the health sector and could be achieved by integrating more action control in the doctors working procedures. As they later also conclude gainsharing as a way of integration that missing hands-on action control and therefore a way of attaining efficiency. We did not see the implementation of the gainsharing system at the three health care centers we studied. This could be because it's been argued that gainsharing could affect the care provides to the patients. However, gainsharing has once again been tested at American hospitals, we think that this system could be considered in these organizations as an option for incentive compensation system.

7.1.1.5 Transfer pricing

The health care center of Olskroken uses the full cost plus a markup transfer pricing alternative. One of the advantages of full cost transfer pricing is its economical sustainability. It is also easy to implement because the data are usually readily available. However, production cost may not show the actual full cost. The internally set markup causes the transfer prices to respond less effectively to the market condition. This can lead to understatement or overstatement of the selling profit center's profit and the buying profit center's cost.

No difference was noticed at Kungssportsläkarna. The group Kungssportsläkarna AB plans to use a transfer pricing alternative that appears to be the full cost or the full cost plus a markup. It would have the same advantages and disadvantages as mentioned above.

The health care centers at Capio Närsjukvården do not have any internal transactions according to the interviewee. Each health care center has great autonomy. Therefore there is no system for transfer pricing. The results could be caused by the possibility that incorrect questions were asked or the reservation which was observed under the interview.

7.1.1.6 Performance measures

Performance measures work as results control for all the organizations. The performance measures from the new payment system are used for evaluation and analysis purposes. The payment system shows both financial and nonfinancial indicators. The indicators include number of registered patients, ACG point, degree of utilization, and other quality indicators.

At Olskrokens health care center, many nonfinancial measures are used, such as number of patient visits per day, phone calls per hour, and customer satisfaction. These nonfinancial measures work as results control for the employees. Merchant and Van der Stede (2007) highlight that tight results control can lead to many serious side effects, such as gamesmanship. Therefore the usage of these performance measures should be taken with caution. Communicating the performance measures from the follow-up report with the staff is a form of

people control. The planned performance measures are mostly accounting-based measures with consideration to the costs. The accounting-based measures combined with the nonfinancial measures can bring about positive effects such as solving the myopia problem.

The Kungssportsläkarna AB has not yet developed any extra performance measures since it is a relatively new organization in the health care sector.

Capio utilizes performance measures developed from higher management besides the performance measures from the payment system. These are mainly accounting measures and even quality indicators. The details of the performance measure system were not available for us but it appears to be more complete compared to the other two health care providers. As a result, Capio would have better control over the business.

Overall, combinations of summary accounting measures and nonfinancial measures are utilized at the health care centers. The inclusion of nonfinancial performance measures should be beneficial since there is empirical evidence that prove some nonfinancial measures are strongly associated with future financial performance, and the inclusion of nonfinancial performance measures helps to improve both nonfinancial and financial performance. (Merchant & Van der Stede 2007, p. 473) According to Merchant and Van der Stede (2007), combinations of measures can have several advantages in theory: more timely, flexible, congruent and understandable.

There are however many problems that could come up with combination-of-measures systems. If wrong indicators are chosen or performance measures are weighted improperly, congruence will not improve and can worsen. The number of measures to be chosen will also affect motivation of the management. In the case of the health care centers, since total number of performance measures and how they weight different measures are not known to us, it is difficult to speculate if any of the health care centers have problems with combination-of-measures systems.

7.1.1.7 Benchmarking

Benchmarking is used within all health care providers. Since the system for benchmarking from the county council is not yet ready, the comparison is done within the business group. However, the importance of benchmarking in the three organizations appears to be lessened by the possible variations of patient types at different health care centers. A health care center with mostly elderly would have different revenue and cost compared to a health care center with mostly young people.

7.1.1.8 Business plan

With the introduction of the new payment system, the health care center of Olskroken abolished their management control tool of balanced scorecard and replaced it with a so-called business plan. The business plan is similar to the old balanced scorecard and includes many of the same objectives. The difference is that to achieve balance is no longer the ultimate goal; the business plan is more focused on financial objectives. This shows that the new payment system has caused a shift in focus within the public health care center.

BSC was proved to be successful in cost saving, efficiency improvement and strategic planning and management. (Kocakülâh & Austill 2007; Aidemark & Funck 2009). The design of the business plan is very similar to the design of BSC, from its objectives and strategies to its key activities. The cause-and-effect relationship between the performance goals and the process used is according to our interviewee, Anna Anderberg, considered in the design. The business plan shows consideration in several perspectives, such as the financial perspective and the customer perspective, as the BSC. The effects and results of the business plan are yet to be discovered as it has not been long since the business plan was introduced. However, what we could see is that it can suffer from the side effects of BSC such as things that are not measured are not given any importance and thus lead to gaming of the measurements.

The business plan is created by the higher management in the organization. This can lead to negative attitudes from the employees. The study of Aidemark and Funck (2009) shows that the engagement of the staff in designing the BSC and flexibility is important for it to be successful. In this way, there could be problems with implementation of the business plan at operational level.

7.1.1.9 Cost analysis

The two private health care providers utilize cost analysis to identify the different kinds of costs. This enables them to cut down the cost when needed to improve the profitability. The analysis shows that cost for personnel and cost for prescription medications are the two largest costs for health care centers. Some research shows the possibility for saving if doctors follow the widely accepted or evidence-based procedures. Since cost for prescription medication is one of the largest costs, action control can be taken to make sure the employees follow the recommendations. One way of action control can be the gainsharing system which was mentioned earlier. The public Olskroken health care center does not have a cost analysis. This makes them react less readily when the downsizing is needed.

7.1.2 Action control

Different forms of action control will be analyzed here.

7.1.2.1 Guidelines

The main action control that is used is through guidelines and policies. As the most direct form of control, guidelines and policies ensure that certain actions are performed or not performed.

As the new payment system mainly regulates the health care centers' source of income, which comes from treating patients, new guidelines regarding the topic have arisen in the organizations of Olskroken and Capio. Efforts to exercise dumping can be noticed as policies for accepting non-registered patients are implemented the organizations. This change is one of the possible dysfunctional effects discussed in the analysis of the new payment system. The change is reasonable as the payment system abolishes the dependency the public health care centers have had and implements a system where the health care centers act on their own. This policy is also

noticed at the two private organizations. Other guidelines within the organization regards the ones pass forward from higher authority, and exist in all the organizations.

The existing guidelines and policies are mainly behavioral constraints and make the management control systems stricter, while the forums implemented at Kvartersskliniken work to reinforce the action control in the organization and increase its flow of communication.

Both Capio and the health care center of Olskroken apply corporate guidelines regarding their prescriptions of medicine, as it accounts for a major part of their costs. Capio works through a “smart list” while the doctors of Olskroken have formally been ordered to prescribe the most cost efficient medicine. The importance of prescription guidelines has increased since the new payment system was installed as the cost responsibility is laid on each health care center. Reports (Reynolds & Roble 2006, p. 50) show that action control is needed in the health care industry, especially when it comes to clinical procedures and practices. Large savings could be attained if widely accepted care processes are utilized by doctors. Therefore, the tightness of action control would help the organizations to keep down the costs.

7.1.3 People control

Different people control forms of the organizations will be analyzed here.

7.1.3.1 Corporate culture

The health care center of Olskroken is the organization which has been through the greatest changes due to the new payment mechanism. The variable that has changed the most is the awareness of cost, which influences the cautiousness the organization has for expenses. A good example is a planned crosschecking of the medical prescriptions in an effort to costs. All the organizations utilize the budget follow-ups as a tool for initiating cost awareness. The reason for Olskroken’s dramatic change in this matter can be explained by their status before the payment reform. Prior to the new payment mechanism, the public health care centers where able to subsidize each other in order to break-even. As this ability is abolished, a control movement towards self-sufficient centers is mandatory.

In an attempt to influence the staff and their working morals, key words and codes of conducts have been installed at the organizations of Capio and Kvartersskliniken. This form of cultural control would create group pressure that works against undesired behaviors. Olskroken deviates in this regard as this is absent from working procedures. Therefore, Olskroken would not be benefited from mutual monitoring.

7.2 Effects of the payment system

The new payment system works well as a form of results control and action control. The performance measures and quality indicators are used in the organizations for evaluation. The system has led to great changes at the public Olskroken health care center, which has shifted to a management control system with more market-based economic thinking.

Regarding the dysfunctional effects, the interviewees think that the occurrence of a gaming problem by undertreatment of patients would not be a problem thanks to the professionalism of doctors and nurses. However, the possibility for gliding and overtreatment exists since it is difficult to control these problems. The problem of dumping could happen since the interviewees feel the internal payment for unregistered patients is not enough and do not cover the total cost. These patients are often referred back to the health care centers where they are registered.

8. Conclusion

One of the purposes of this study was to investigate how the payment mechanism has affected the health care centers.

With regards to the payment mechanism's origin, new public management, its effects are expected and fulfilling its purpose. The essence of new public management has indeed been passed forward to the new payment mechanism, as it abolishes the injustices in the preceding system and deregulates the market. Both positive and negative effects can be seen from that. The public organizations clearly have lost some of their flexibility in their working procedures. Acceptance of patience is one area which has been affected in this way. Prior to the payment reform less effort was put on where patients are registered, while now policies for acceptance have been implemented, and are a part of the dumping dysfunctional effect. This behavior is, in extension, due to the higher priority of the financial objectives and the safeguarding of income and "know-how" instead of "just" supplying health care. Other possible dysfunctional effects in the organizations are such as undertreatment of patients to minimize the costs, which falls under the category of gaming. Overtreatment might seem odd in this situation, but could be beneficial for organizations with deficits and in the case of under-capacity. This dysfunction would be categorized as gliding. Both over- and undertreatment is due to the existing of professional and administrative forces in the organizations.

The positive effects are of course the increased awareness of cost in all the organizations, especially in the public organization. There have been more efforts to decrease inefficiency in the organizations, such as unnecessarily high medication costs. Furthermore, the incentives for spreading more efficient procedures have increased as the presence of the incentive compensation system increased and organized follow-ups. The negativity of not sharing "know-how" may also, in the long run, become positive, as it increases the incentive for generating knowledge. Thus, despite the dysfunctional effects the payment mechanism created, the overall effect is positive, and encourages effective MCS, and thus cost efficient work procedures.

Due to the payment mechanism which was implemented recently, changes to the management control system are not fully completed. Example of this can be seen in the flexible working procedures of Olskroken's financial objectives, which will be more tightly controlled in the future. In relation to this, we believe that when the organizations obtain more experience and better control of the payment system and its effects, their management control systems will change. These future changes and actions will probably be able to resolve some of the dysfunctional effects mentioned above. The county council of Västra Götaland region is going to implement more changes in the future such as new quality indicators and web-based benchmarking system. These changes in the payment mechanism will help to perfect the control system.

The other purpose of the thesis is to deduce possible MCS differences in the private and public health care centers. The differences discovered between the organizations can to some extent be linked back to the nature of a nonprofit and profit organization, such as the importance of the financial objective. Other differences can be observed in the financial compensation system at the three organizations where Olskroken has a very modest limit on the monetary reward.

The overall impression of the organizations' development is that Olskroken has been forced to make changes and implement further use of profit responsibility. Capio hasn't changed their structure in that sense, but still relies on a well tested working procedure. Kvartskliniken operates from its starting point with a strict business and profit procedure. In the case of Capio, the subtle changes could be explained by the reluctance of the interviewee to inform us about the actual situation due to corporate secrecy.

It could be observed that parts of the MCS at Olskroken health care center and Kvarterklinik are not developed yet. This could result in control problems at these organizations. We suggest the health care centers consider some of the new research while finalizing their MCS, such as gainsharing and the transition from profit centers to cost centers. The absence of a balanced scorecard at all the healthcare providers was unexpected, as the system has been popular within health care sectors and considers several nonfinancial objectives. The absence could be because of the slow assimilation of management control tools in the health care sector where there are many conflicting stakeholder, as Kocakulâh and Austill (2007) suggest. The only similar system observed was the business plan implemented at the group primary health care of Gothenburg. Combination-of-measures systems were also found in these organizations. The lack of empirical studies and lack of detailed information from the organizations made it difficult to conclude if the systems are properly designed. Further studies are needed to confirm the functionality of the systems.

9. Suggestions for further research

During the process of generating the thesis new ideas emerged on what would be interesting to look further into.

- This thesis focuses specifically on the implementation of the payment mechanism in the region of Västra Götaland. This system has, however, been installed in other regions as well and further research could be done in those regions with the objective to compare results with this thesis.
- In this thesis, a qualitative approach has been utilized when gathering data. To verify the results statistically, further research could be done with a quantitative method, such as surveys.
- Other areas of interest would be to do a deeper analysis of one single health care center, and include the operational perspective from staff such as nurses.
- Further analysis, with the same procedures could be performed in the future, as some of the MCS hasn't been fully developed yet.

10. Bibliography

- [1] Aidemark, Lars-Göran (2004). *Sjukvård i bolagsform: en studie av Helsingborgs lasarett AB och Ängelholms sjukhus AB*. Växjö: Växjö University Press
- [2] Aidemark, Lars-Göran; Funck, Elin K. (2009). *Measurement and health care management*. *Financial Accountability & Management*, May 2009, Vol. 25 Issue 2, pp. 253-276
- [3] Ax, Christian, Johansson, Christer & Kullvén, Håkan (2009). *Den nya ekonomistyrningen*. 4., omarb. uppl. Malmö: Liber
- [4] Charpentier, Claes & Samuelson, Lars A. (1996). Effects of new control systems in Swedish health care organizations. *Financial Accountability & Management*, 12(2), May 1996, pp. 157-171
- [5] Collis, Jill & Hussey, Roger (2009). *Business Research, a practical guide for undergraduate & postgraduate students*, 3:rd edition, UK: Palgrave Macmillian
- [6] G.Hofstede, "Management Control of Public and Not-for-Profit Activities," *Accounting, Organizations and Society*, 6, no 3 (1981) pp. 193-211
- [7] Glenngård, Anna H., et al. (2005) *Health system in transition: Sweden*. Copenhagen: WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies, 2005.
- [8] Hallin, Bo & Siverbo, Sven (2003). *Styrning och organisering inom hälso- och sjukvård*. Lund: Studentlitteratur
- [9] Kocakülâh, Mehmet C.; Austill, A. David (2007). *Balanced Scorecard Application in the Health Care Industry: A Case Study*. *Journal of Health Care Finance*, Fall2007, Vol. 34 Issue 1, pp. 72-99
- [10] LeTourneau, Barbara (2004). *What doctors want?* *Journal of Health care Management*, Jul/Aug2004, Vol. 49 Issue 4, pp. 218-220
- [11] Lundquist, Lennart (1992). *Förvaltning, stat och samhälle*. Lund: Studentlitteratur
- [12] Marginson, David & Ogden, Stuart (2005). *Coping with ambiguity through the budget: the positive effects of budgetary targets on managers' budgeting behaviours*. *Accounting, Organizations & Society*, Jul2005, Vol. 30 Issue 5, p435-456
- [13] McGinnity, Eileen (2005). *Fact and fiction about gainsharing*. *Health care Purchasing News*, May 2005, Vol. 29 Issue 5, p. 19
- [14] Merchant, Kenneth A. (1982) *The control function of management*. *Sloan Management Review* vol. 23 Issue:4, pp. 43-55
- [15] Merchant, Kenneth A. & Van der Stede, Wim A. (2007). *Management control systems: performance measurement, evaluation, and incentives*. 2. ed. New York: Financial Times/Prentice Hall
- [16] OECD (2008a). *OECD in figures 2008*.
<http://www.oecd.org/document/8/0,3343,en_2649_34489_43877128_1_1_1_1,00.html> (Accessed April 9, 2010)
- [17] OECD (2008b). *Privatisation: The next phase*. *OECD Economic Surveys: Sweden*, Dec 2008 Supplement 2, Vol. 2008 Issue 20, p125-138
- [18] OECD (2009). *OECD Health Data 2009: How does Sweden compare*.
<<http://www.oecd.org/dataoecd/46/6/38980334.pdf>> (Accessed April 9, 2010)
- [19] Pope, Catherine (2007). *Qualitative Research in Health Care*. Wiley-Blackwell

- [20] Rama, Mimoza (2009). En studie av beställar-utförarmodellen [Elektronisk resurs]. C-uppsats. <<http://epubl.ltu.se/1402-1773/2009/221/LTU-CUPP-09221-SE.pdf>> (Accessed April 21, 2010)
- [21] Reynolds, James & Roble, Daniel (2006). *Combining pay for performance with gainsharing*. Health care financial management, November 2006. Nov2006, Vol. 60 Issue 11, pp. 50-55
- [22] Siverbo, Sven (2004). *The Purchaser-provider Split in Principle and Practice: Experiences from Sweden*. Financial Accountability & Management, Nov2004, Vol. 20 Issue 4, pp. 401-420
- [23] Socialstyrelsen (2002). *Vårdens värde. Vad får vi för pengarna i vård och omsorg?* Stockholm: Socialstyrelsen
- [24] The receivables report (2008). *Using Incentive Plans Wisely*. Receivables Report for America's Health Care Financial Managers, Jun2008, Vol. 23 Issue 6, pp. 9-11
- [25] VGR (2009a). Bakgrundsinformation VG Primärvård. En del av det goda livet. <http://www.vgregion.se/Pages/117744/Bakgrund%20VG%20Prim%C3%A4rv%C3%A5rd_090416%20slutversion.pdf> (Accessed April 29, 2010)
- [26] VGR (2009b). *Krav- och kvalitetsbok. Förfrågningsunderlag med förutsättningar för att bedriva vårdverksamhet inom VG Primärvård*. Februari 2009. Västra Götalandsregion: Vänersborg
- [27] VGR (2010a). VG Primärvård, Västra Götalandsregion. <<http://www.vgregion.se/sv/Vastra-Gotalandsregionen/startside/Vard-och-halsa/Primarvard/VG-Primarvard1/>> (Accessed May 1, 2010)
- [28] VGR (2010b). Bilaga D. Vad är ACG? <<http://www.vgregion.se/Pages/122832/ACG-bakgrund.pdf>> (Accessed April 29, 2010)
- [29] Västra Götaland Region (2010), Årsredovisning 2009.
- [30] Young, David W. (2008). *Profit centers in clinical care departments an idea whose time has gone*. Health care Financial Management, Mar 2008, Vol. 62 Issue 3, pp. 66-71

Interviewees

- [1] Anderberg, Anna, personal nterview, Controller for the East regional division of the Primary health care of Gothenburg. 2010-05-05
- [2] Bogenholm, Petter, personal interview, CFO at Capio Närsjukvården. 2010-05-20
- [3] Hellke, Per, personal interview, district doctor and director of Olskroken health care center. 2010-04-09
- [4] Nilsson, Carl Fredrik, personal interview, CFO at Kungssportsläkargruppen. 2010-04-27

Appendix 1

Interview Guide

Introduction:

- Presentation of the thesis and its purpose.
- Questions about the interviewees: work experience, education, occupation, relations to MCS?

Objective and strategy

- What is the objective? In what form?
- What strategies implemented? Who decides the strategies?

Effects of the new payment mechanism

- Changes that has occurred since the payment reform.

Organization

- How is the health care center organized?
- Hierarchies within the organization?

Funding

- How is the health care center financed?
- What systems are utilized to calculate and receive needed funding? DRG?

Political, administrative and professional controlling

- External influences?
- Political influences?
- Laws and regulations that intervenes with the organizations.
- Conflicting relations between the three controlling forces?
- Principal-agent relationship between the health care center and its parent company/owner

Balance Score Card

- Is BSC used? Which perspectives?
- Measures included in the different perspectives? Performance targets for all measures?
- Involvement of politicians, management and medical professionals. Who decide different measures and performance targets? Top-down or bottom-up?
- How is “balance” defined?
- Who collects data for BSC and prepare the reports?

- How is the reports used? Performance? Quality improvement? Benchmarking? Incentive compensation system?

Budgeting

- Scope of the process and the budget?
- Top-down/bottom-down?
- Scope of involvement of staff?
- Aims and targets of the budget? – Model based, historical, negotiated? Fixed/Flexible? Internal/external focused?
- Strategic planning/Capital Budgeting/Operational Budgeting?
- Evaluation and follow-up of the budget

Financial responsibility center

- Internal transactions?
- How is transfer-pricing decided?
- Revenue center, cost center, profit center, investment center

Performance measures

- What performance measures are used? Key ratios?

Cost analysis

- How is the cost calculation conducted?
- How often is it calculated?

Benchmarking

- Different measures? Benchmarking objects? Compares to what?

Incentive compensation systems

- How does the reward system work?
- What is it based on?
- What kind of incentive? Monetary/nonmonetary?
- Group reward or individual reward?