Management Control in Swedish healthcare -

A study of how cost control affects physicians' performance and their ability to maintain patient safety

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Doresa Abazi
Daniella Vasilevski

Supervisor: Jan Lindvall

Abstract

The purpose of this study is to gain insight into how cost control affects physicians' performance in terms of motivation and dysfunctional behaviour, and their ability to maintain patient safety. In the study, a qualitative method was used and four participants from Danderyd hospital were interviewed with semi-structured questions to gain material to answer the research question. In order to analyse the data, transcriptions of the interviews were made, and a thematic analysis method was used. Based on the analysis, four main themes emerged; Cost control, Motivation, Change in Behaviour and Patient safety.

Among the physicians, results showed that physicians' performance is negatively affected by cost control, resulting in decreased patient safety. Motivation was found to be indirectly affected and dysfunctional behaviours were found to be negatively affected by cost control. Resulting of cost control, physicians cannot fulfil their ethical obligations and perform more poorly because resources are decreased, primarily due to lack of care beds. Furthermore, the findings indicate that patient safety is negatively affected by the influence of cost control on dysfunctional behaviour. There is no adverse effect of cost control on patient safety when it comes to motivation.

Keywords: Cost control, physician, performance, motivation, dysfunctional behaviour, healthcare, patient safety

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1. Introduction

1.1 Background

Swedish healthcare has undergone extensive reforms and changes since the 1980s, where accountingisation has had a crucial role. During this time, health and medical care expenditures were emphasised in areas that needed tighter cost control (Anell, 2020). Accountingisation introduced management control to Swedish healthcare and it led to changes primarily expressed in new requirements for control and follow-up of results through systems (Broadbent & Laughlin, 2009). The objective was to implement the necessary savings with as little negative effect as possible on the business. Consequently, this development meant an increased use of firstly bureaucratic and later market-based forms of governance (Anell, 2020).

Swedish healthcare began to focus on their costs, how to lower them and become more cost-effective which led to the use of cost accounting and hospital payment systems (Åhgren, 2010). Today it is one of the countries in Europe that spends most of its GDP on healthcare and the comprehensive development of healthcare opportunities also means resource challenges and increased costs (Anell, 2020). Despite major investments, Sweden today has the lowest number of care beds compared to European countries (OECD, 2018).

At the same time, professionals such as physicians have experienced a loss of autonomy as a result of the development of market control which has come to symbolise increased detailed management, perceived demands to play tricks with the payment systems in order to raise enough money for the business as well as financial monitoring of their work (Anell, 2020). They have thus now become more inclined to consider financial restrictions and costs have a clear place in the direct patient work.

1.2 Problem statement

With an increased influx of new medical technology and a changing demographic, it is indicated that costs will continue to rise at a steady pace in the Swedish county councils. (Anell, 2010). As such, increased emphasis has been placed on cost-focused measures to slow this trend which is achieved by using cost control (Anell, 2020). This means that hospital

administration can lower costs by deciding to prioritise resources that are less costly over resources that are more costly, but possess higher quality and can result in better healthcare. As a result, they hold the authority to remove resources that may be advantageous to patients to instead benefit the hospital's financial objectives (Borgquist & Carlsson, 2015).

Cost control proposals often restrict the scope of practice and complicate workflow and performance (Shah, 2013), and not infrequently physicians find themselves in a conflict when they experience limitations in the possibilities of helping patients (Brorström et al. 1999: 115). Additionally, clinical performance is affected by organisational factors and when the clinical performance of medical staff is poor, it may impact the quality of care given to patients (Mitchell, 2010). As a result of the research conducted by Mirfat et al. (2018), it was found that organisational factors such as resources had a positive effect on physician performance, but at times they were lacking resources, resulting in decreased performance. Thus, a consequence of the resource limitations due to cost control is that it can lead to dysfunctional behaviour among physicians, harm their motivation and therefore jeopardise patient safety (Andreen Sachs et al. 2015).

A large part of the research that exists has taken an interest in the utilisation of cost control in the healthcare sector and the role of physicians in healthcare spending (Tsugawa et al. 2017; Wong et al. 2018). In the public sector, only a few studies have examined the impact of cost control on employee performance (Mashau and Makhunga, 2018). This means that there appears to be a gap in research on the impact cost control has on physician performance and how it affects their ability to maintain patient safety.

1.3 Statement of purpose and research question

The purpose of this study is to investigate how cost control affects physicians' performance by observing dysfunctional behaviour and motivation. Additionally, it aims to investigate how these affect physicians' ability to maintain patient safety. Recognition of the issue can increase awareness of how physicians respond to being governed by cost control and what impact their performance in turn has on the quality of care provided to patients. Furthermore, this study can bring awareness of possible consequences when resources are reduced due to cost control which is crucial for physicians’ performance and highlight the importance of providing an

environment in which physicians can thrive. This thesis aims to answer the following research question:

How does cost control affect the physicians' performance in terms of motivation and dysfunctional behaviour, and their ability to maintain patient safety?

1.4 Delimitations

With regards to the time aspect and the magnitude of the healthcare in Region Stockholm, this study will be delimited to one hospital: Danderyd hospital, which is a publicly owned hospital. The study will also focus on two hospital disciplines; internal medicine and surgery, to increase relevance and make the study more representative. These were the only departments that had willing respondents available during the time frame which further explains the choice to limit the study to these two.

1.5 Disposition

The second chapter presents relevant theories and previous studies. The third chapter presents the methodology used to perform the research, data collection and how data has been coded and analysed. The fourth chapter presents the results based on the interviews followed by an analysis of the results that have been carried out using the theoretical framework and previous studies in chapter five. Lastly, a conclusion, theoretical- and practical implications and suggestions for future research are presented in the sixth chapter.

2. Theoretical framework and literature review

2.1 Cost accounting and cost control

Cost accounting is a form of a managerial accounting system designed to evaluate company costs for the purpose of determining the cost structure associated with a company's operations and reducing and eliminating them in a business. The use of cost accounting systems can assist managers in collecting, analysing, and controlling the most relevant information regarding the allocation of resources and reimbursement for hospital services (Finkler et al. 2007: 34). In a comprehensive cost accounting system, costs are identified based on some unit of analysis (Tan et al. 2011: 59), and it provides data that is relevant to current conditions when it comes to measuring how effectively the company uses its resources and serves as a foundation for decision-making (Finkler et al. 2007: 4). Essentially, cost accounting tools enable the planning and control of company management and the preparation of the information that makes it possible to evaluate performance and thereby take the necessary measures to control and contain costs as well as other activities (Finkler et al. 2007: 4-5).

By analysing precise cost information, hospital managers can identify sources of resource consumption so that they can redesign treatment processes in a more efficient manner. However, an imprecise cost-accounting system can result in hospitals being overpaid or underpaid. Cost accounting data that lead to an underestimated payment demotivates hospitals from providing high-quality care because it may lead to costs above the payment level. In order to reduce costs, these hospitals may start compromising on quality (Tan et al. 2011: 70). Diagnostic-related groups and Cost per patient are examples of hospital payment systems that are driving cost accounting with the aim of allocating resources, improving the efficiency of hospital care and containing costs (Tan et al. 2011: 72).

2.1.1 Cost control

The term cost control refers to a variety of strategies and methods that help manage costs with the greatest degree of efficiency possible (National Library of Medicine, 2022). It is one of the important functions of cost accounting and involves a combination of methods that include containment, regulation, or restraint of costs (Karolinska Institutet, nd). As such, a healthcare cost control strategy combines efforts to contain an organisation's existing costs while controlling future costs.

The need for stricter cost control of public expenditures, including health and medical care, has been raised since the 1970s. Control systems were developed with the aim of increasing decentralisation in districts, administrations, and clinics. As a parallel measure, framework budgets and internal prices were introduced to emphasise each business's cost responsibility. For the overall management, cost control became the most important thing. The objective was to implement the necessary savings with as little negative effect as possible on the business (Anell, 2020). The extremely high costs of healthcare in Sweden in comparison with other countries (OECD, 2021) remain a significant financial and emotional strain, and hospitals and healthcare systems are focused on managing their costs. Moreover, the balance between cost and delivering positive patient experiences is fragile. It is vital that cost reduction strategies prioritise the health of patients while examining opportunities to reduce costs (Anell, 2020).

2.1 Management Control

2.1.2 The healthcare sector in Sweden

Healthcare is a central activity in modern society and it is characterised by three different controls. Politicians have the overall responsibility for the management of healthcare (Axelsson, 2000: 13) and political control of healthcare takes place at national, regional and local levels, where the instruments at the national level include legislation, control, follow-up and financial contributions. The regional level decides on the direction and scope of healthcare and structural changes in production. At the local level, it is a matter of steering and controlling so that established financial results and achievements are achieved. The administrative control affects the distribution of resources and thus has an influence over the business, but when it comes to the care processes, the influence is limited (Hallin & Siverbo 2003: 25). The goal of administrative management is to provide "good quality healthcare at low cost" (Hallin & Siverbo, 2003: 64-65). Last is a professional management and the field of profession refers to services performed based on specialised knowledge acquired through formal education, for example physicians (Jacobsen & Thorsvik, 2002: 42). In practice, the allocation of resources is accomplished through the business's core processes, the care processes, which are controlled by physicians and other groups in the healthcare sector. It is primarily a knowledge authority and through this, both political and administrative control is affected, which entails a large influence over the results and content of the business (ibid: 116).

Sweden's healthcare system has developed significantly over the past 50 years, both in terms of content, the scope of operations and cost control is assumed to have increased at the same time as the public welfare system has shrunk with cuts and privatisations as a result (Karlsson, 2017: 211-220). In healthcare, as in other activities, the costs must be compared to the results the hospital achieves (Sveriges kommuner och Landsting, 2020). Despite hospitals not having profitability targets, they can in many respects be compared to market-linked companies that do have a profitability interest. For instance, the need to keep a budget, cost control, performance monitoring between departments and efficiency (Dahlgren, 2018: 5). The organisation and distribution of taxpayer-financed healthcare are also increasingly driven by profit opportunities and profitability rather than the need for care (Dahlgren, 2018: 80-87). However, the ageing population together with the continued development of medical technology speaks in favour of a continued increase in costs (Svensson, 2022), and in the coming years, the scope for cost increases is much more limited. Measures that have been introduced include an increased focus on in-depth follow-up and cost control (Region Stockholm, 2020). Additionally, several of the Region Stockholm hospitals, including Danderyd Hospital, have reported multi-million losses (Danderyd sjukhus, 2020) and significant cost control measures are taken to achieve a balanced economy (Region Stockholm, 2020).

As part of the healthcare system's adaptation to changing financial conditions, new forms of organisation and governance have been introduced; however, medical professionals are concerned that the new forms have led to an increase in administration. As a result of increased requirements for them to register their activities and increases in administrative systems, these transactions cost more and take resources away from patient care (Hallin & Siverbo, 2002: 166; Ryd & Eldh, 2015). Additionally, today there is a lack of capacity in healthcare that is evident in increased queues, reduced production, and decreased productivity (Socialstyrelsen, 2018). The number of care beds at hospitals has also decreased for a long time while the number of patients has increased (ibid.). Gralen et al. (2019) write that fewer care beds on the one hand entail lower costs, but that the reduction in costs is not proportional to the reduction in the number of care beds because the cost per care opportunity increases over time. There is considerable concern among healthcare professionals and patients about patient safety due to very high occupancy rates, as small margins of safety are present and working conditions are stressful (OECD, 2017). Moreover, lack of capacity in the form of staff and care beds is likely to jeopardise patient safety (Socialstyrelsen, 2018).

2.1.3 Cost control in the healthcare sector

Cost control and efficient resource utilisation are constantly in focus in healthcare. Johnson (2021) highlights the challenges that healthcare has faced and still faces due to rising care needs and limited resources. As a result, it is necessary to determine control and priorities on the basis of value. In order to be able to more easily control and regulate healthcare's resource consumption, several reforms (e.g. purchaser/provider model, performance financing) were introduced in an effort to gain more control over how healthcare is conducted and how much resources it requires (Dahlgren, 2018: 38-41). Among the introduced reasons were the high costs and inefficiency of the healthcare sector (Dahlgren, 2018: 239-24). Following their introduction, healthcare services needed to show how much they cost and for them to receive their share of payments, they had to increase prices and sell their services to politicians. The hospitals were thus paid based on how well they could sell their services. As a result of this, the reforms enabled translating healthcare services, such as diagnoses and treatments, into figures (Dahlgren, 2018: 30; Damm, 2014: 46). Care providers still needed to minimise expenses in order to afford to treat as many people as possible, which was possible now that new opportunities for cost control had emerged due to the reforms (Hallin & Siverbo, 2003: 167). Consequently, health management is nowadays oriented toward results and rules. The organisation and distribution of taxpayer-financed healthcare are also increasingly driven by profit opportunities and profitability rather than the need for care (Dahlgren, 2018: 80-87).

2.2 The physician’s profession and cost control

Physicians are part of a profession whose main duties involve diagnosing, curing and treating diseases, making treatment decisions, and prescribing or discontinuing medications (Sveriges läkarförbund, 2017). The physician's ethical rules describe how physicians should work to ensure the patient's best interests, seek information themselves, make their knowledge available, and use medical resources in accordance with ethical rules (ibid).

As Hallin & Siverbo (2003) point out, business management and development heavily rely on the stakeholder groups that are based in healthcare organisations, such as politicians, administrative managers, and the medical profession. The implementation of remorms aim to provide equal healthcare but at a cheaper prices. However, it is important to be aware that the organisation’s financial space is limited, and they therefore want to reduce costs (ibid.). Physicians' attitudes toward finances and their previous reluctance to consider financial

restrictions have changed over time (Hallin & Siverbo, 2003: 166-167). In the past, they have not had any real financial responsibility, but through their patient responsibility and their responsibility for diagnoses and prescriptions, they have a very great significance for the use of resources and the economy (Grossman, 1983). Nilsson (1999) describes a certain aversion to changes in physicians, which she calls the "economisation of healthcare". At the same time, they realise that certain changes are necessary and reasonable (for example, to overcome the excessive use of diagnostic tests and expensive drugs). However, according to the physicians, there is less time for patient contact, among other factors, and the amount of savings that can be achieved without compromising quality is close to its limit (ibid.).

At the same time, Broyle and Reilly (cited in Cardinaels et al. 2004) explain that physicians recognise that the relationships between providers and patients are unique and would not give up the freedom to deploy resources as needed for the individual patient. Due to their autonomy and control over work, physicians are governed more by their professional role (Abernethy, 1996). However, it has become more and more difficult for the medical profession to maintain its autonomy, primarily due to the increasing importance of the economy and the close monitoring of business affairs (Hallin & Siverbo, 2003: 49-50). Broadbent et al. (2001) investigate resistance to undesirable changes in financial management in the healthcare environment. In the opinion of the healthcare staff, financial issues will adversely affect the physician-patient relationship much more so than allowing the healthcare system to dictate treatment. Tying health to money is always particularly sensitive and what meets resistance is precisely changes of an economic nature.

2.3 Patient safety

The Healthcare Act (SFS 2017: 30) stipulates that healthcare must be conducted in a way that ensures quality care. According to the Patient Safety Act (SFS 2014: 821), care providers are obliged to carry out and establish measures to prevent care injuries. A care injury is defined as suffering, mental or physical injury/illness or death that could have been avoided with adequate efforts from the health service. Patient safety work is conducted to prevent healthcare injuries, and reduce patients' suffering, but also avoid unnecessary healthcare costs (Socialstyrelsen, 2020). Thus, the concept of patient safety is closely linked to the concept of good care, which in turn means that care must be easy to achieve, maintain high quality, satisfy the patient's integrity, respect, self-determination and safety (Socialstyrelsen, 2022).

The lack of available care beds is one of many factors which poses a major risk to patient safety. As a result of overcrowding and relocations, the risk of medical injuries increases (IVO, 2022). According to the Swedish Medical Association (2022) as well as IVO (2022), Swedish healthcare suffers from a growing lack of care beds, forcing them to resort to emergency measures. These include premature discharges or moving to other units where a lack of specific competence can lead to medical complications. As a result of a shortage of care beds, only the most seriously ill patients can be admitted, patients are sent home without being fully treated and planned treatments are often postponed.

Socialstyrelsen (2020) was commissioned to produce a national action plan and to coordinate and support patient safety work in which they emphasise, among other things, that the meeting between the patient and the individual employee, is central to creating safety (Yarollahi, 2013: 6). Furthermore, according to Ford and Savage (2008), high patient safety is a fundamental requirement in healthcare. As a result, each activity must be driven by an active concern for patient safety, just as each employee must be provided with the conditions needed to perform their duties in a way that facilitates safe care and that staff do not suffer physical or psychological harm as a result of their work (Engström, 2018).

There are many factors that affect the conditions. This can be, for example, internal factors such as the staffing situation or the patients' needs (Socialstyrelsen, 2020). There may also be external factors, such as the availability of resources (Morello et al. 2013) or political decisions (Vicente, 2002). Stress and understaffing are also examples of factors that affect the ability to perform work safely (Garcia et al. 2019). Among the factors cited by Morello et al. (2013) harming patient safety are lack of resources, unfavourable work conditions focusing on high patient admission and discharge levels, and insufficient leadership effectiveness.

2.4 Job Performance

Performance can be defined as behaviour, which implies what people do and what actions they take that are relevant and contribute to the organisational goals. However, while performance does not always refer to observable behaviour, it can also refer to cognitive actions, such as making decisions and seeking solutions (Jex & Britt, 2014: 135).
Performance can be conceptualised by two aspects – behaviour actions and the outcome of performance (Sonnetag & Frese, 2005). The outcome aspect refers to the results or

consequences of the employees' behaviours such as a successful or unsuccessful operation at a hospital. The behavioural aspect refers to what an individual does in a work situation and behaviours that are relevant to the organisational goals. This aspect can also be defined as job performance, which is goal relevant, meaning that the performance must be aimed to accomplish organisational goals (Campbell & Wiernik, 2015).

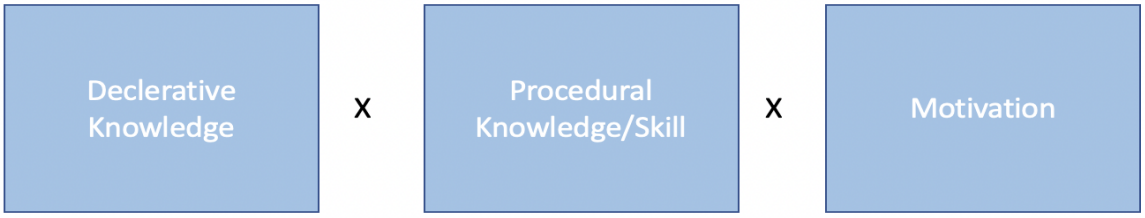
2.4.1 Murphy's (1994) Model of Job Performance

Murphy (1994) introduced a model which explains performance in four dimensions. The first dimension is ***task-oriented behaviours*** which refer to behaviours and actions that contribute to the organisational goals. Moreover, this is related to performing certain tasks associated with the job. The second dimension, ***interpersonal-oriented behaviour,*** refers to the interaction between employees, which can be both task-relevant and not. This dimension represents all interpersonal transactions that occur at the workplace, for example, a healthcare employee consulting a physician regarding patients' medical treatment or how employees maintain positive interpersonal relations with colleagues. The third dimension is ***down-time behaviours*** which imply behaviours, most often counterproductive behaviours, and actions that can lead employees to be absent from their work. Thus, this dimension refers to behaviours leading to the employee not performing well. This consequently leads to the fourth dimension, ***destructive behaviours*****,** which refers to behaviours that lead to accidents, violations, lack of effort, insultments and non-willing to cooperation among others (Jex & Britt, 2014: 140-142).

2.4.2 Campbell's (1990, 1994) Model of Job Performance Determinants

Campbell (1990, 1994) introduced a model that distinguished individual differences in performance by differentiating performance components and their three determinants: ***declarative knowledge, procedural knowledge/skill and motivation.*** Differences in performance are caused by the interaction of motivation, ability and situational factors that affect performance, both positively and negatively. Relevant abilities in a workplace are crucial for individuals to perform well. One factor or condition cannot work alone for individuals to perform well unless there is a high level of one of these factors. Thus, it is necessary for factors to incorporate one condition or all three together to reach the highest possible performance (Jex & Britt, 2014: 150).

Figure 1: Cambell's (1990, 1994) Model of the Determinants of Job Performance (Jex, 2002)



The first determinant, declarative knowledge, implies an individual's general knowledge about things and facts. A high level of declarative knowledge implies that the individual has a good understanding of tasks. Declarative knowledge can differ between individuals due to factors such as education, personality experience and academic training among others. For example, medical school requires memorisation of information about human autonomy which is not manageable by all individuals.

The second determinant, procedural knowledge/skill refers to cognitive and psychomotor skills, self-management skills and interpersonal skills among others. This determinant is acquired when the individual has achieved a high level of declarative knowledge which implies that the individual understands not only what needs to be done but also how to perform and master a task. For example, a surgeon with high declarative knowledge knows how to perform surgery and thus has reached a high procedural knowledge/skill. As a result, the individual is capable of high levels of job performance, which depends on motivation. This leads to the third determinant – motivation, which refers to an individual's choice to perform a task, the level of effort to expend and whether to persist the chosen level of effort. This means that even if a high level of procedural knowledge/skill is achieved, low motivation may prevent the individual from achieving a high level of performance. For example, an individual with high potential may decide not to put in any effort, may not put in enough effort or lacks the willingness to sustain the effort over time. On the contrary, a high level of motivation can compensate for a low level of procedural knowledge/skill (Jex & Britt, 2014: 150-151).

2.4.3 Motivation

Governance is about encouraging, motivating, and directing people to act towards organisational goals (Andersson, 2013: 41-43). Motivation can also be defined as factors within an individual that leads and preserve a certain behaviour toward a given goal (Hedegaard Hein, 2012: 13). To be motivated means to be moved to do something (Ryan &

Deci, 2000). Similar definitions of motivation are used by other motivational theorists (Kanfer & Chen, 2015). Individuals who feel no drive or inspiration to act are defined as unmotivated, while individuals who are energised and inspired to act towards a certain goal are considered to be motivated (Ryan & Deci, 2000). It is vital that organisations understand what motivates their employees and their driving forces, because the employees are the ones that enable the organisation to achieve its goals. Furthermore, it is significant that the organisation liberates resources to provide opportunities and tools for employees to increase and maintain motivation (Locke & Latham, 2002).

There is a relationship between motivation, behaviour and needs whereas motivation is composed of many behavioural needs (Pinder, 2008: 70-76). In Self-Determination Theory (SDT), Ryan and Deci (2000) distinguish between different types of motivations based on different reasons or goals that lead to an action whereas two common types are intrinsic motivation and extrinsic motivation. Intrinsic motivation refers to doing something because it is inherently interesting or enjoyable for the individual. Extrinsic motivation refers to doing something for some separable consequence because it leads to a desirable outcome. Ryan and Deci (2000) explain that the quality of performance can be very different whether one is behaving for intrinsic motivation or extrinsic reasons. Locke and Latham (2002) argue that goal setting increases extrinsic motivation because it gives employees something to strive for which creates value and makes their job more meaningful. Thus, it is important that leaders clarify the purpose of the goals and their relevance. Ordoñez et al. (2009) question the argument of Locke and Latham (2002) and claim that goal setting can cause a perception that the employees must perform their jobs and certain tasks because they have to, not because they want to. Thus, goal setting can have a “crowding out” effect on motivation (Ordoñez et al, 2009).

2.4.4 Dysfunctional behaviour

Dysfunctional behaviour can be defined as behaviour that to any extent, of intentional or indirectly intentional act has the potential to affect and harm the organisation and its individuals. Thus, the appearance of dysfunctional behaviour at a workplace is preferred to be avoided (Bruch et al, 2008). Dysfunctional behaviour can arise due to work-related stress and fear of failure. An example of dysfunctional behaviours can be unjustified anger, inappropriate language, threats, insults and disrespectful behaviour, harassment, and

condescending jokes (Leape et al. 2012). Passive-aggressive- and disrespectful behaviour is of common occurrence and can imply a lack of communication, willingness to cooperate, and excessive criticism (Andreen Sachs et al. 2015). An example of disrespectful organisational behaviour can be when the employee's needs are ignored which can lead to psychological issues and stress (Andreen Sachs et al. 2013). A person who is exposed to disrespectful or dysfunctional behaviour at work can suffer from stress, frustration, and concentration difficulties (Flin, 2010). An intensive work environment in healthcare can lead to high physical, cognitive and emotional demands on healthcare employees which can result in incidence caused by work-related stress (Larsson et al. 2022). Work-related stress is caused by ethical, moral, and mental stress, lack of communication between healthcare employees, poor supervision, and a poor work environment (Moss et al. 2016). This can lead to an increased probability of missed care, involving inadequate observations and surveillance of patients. Furthermore, work-related stress increases the risk of conflicts with other employees and lack of communication which can result in deficient care prescriptions for patients or inadequate planning and information about patients.

2.5 Empirical studies

2.5.1 Motivation

Berdud et al. (2016) explain that it is established in the literature that employees within public organisations, such as healthcare, are intrinsically motivated. The major explanation is that physicians enjoy medical practices, their professions and helping others. The intrinsic motivation increases since medicine challenge their intellectual curiosity, and that medicine is a field where physicians can improve their scientific aspirations. However, the authors also found that physicians' motivation can result in crowding out the effects of economic incentives and control policies. An explanation for this is that physicians begin to see the provision of health services as market interactions governed by market rules and are ordered to behave to maximise the hospitals' earnings, instead of focusing on helping people. As a result, economic incentives harm intrinsic motivation because it neither recognises their effort nor the quality of their work. Likewise, control policies harm intrinsic motivation by making physicians feel that their autonomy is constrained by controlling decision-making.

2.5.2 Dysfunctional behaviour

In 2014, a Swedish study of "*Medicinska riksstämman*" investigated discrimination and dysfunctional behaviour among house officers and senior house officers at Swedish hospitals. The study found that three of ten physicians perceived discrimination or dysfunctional behaviour at work (Hont, 2014). A consequence of such behaviour is that it can affect the patients negatively and lead to disrespectful behaviour towards the patients. An example of such behaviour can be rejection, humiliation, or hurting the patient's or the patient's relatives' feelings. (Ibid.) Moreover, disrespectful behaviour towards patients can be the physician's promise to call back but breaking the promise or not showing interest in patients' questions regarding their care. Not ensuring that the patient is fully understood and informed about what to expect, not involving the patient in the decision-making about their care, and not taking responsibility for clear communication are serious expressions of disrespectful behaviour. The relationship between physicians and patients is vital and should be of high quality because it affects the patient's healthcare (Andreen Sachs et al. 2015). It is of high importance that physicians ensure the high quality of the relationship between the physicians and patient's adherence to recommended treatments and treatment results (Mautsitz & Spear, 2014; Black et al. 2014). Another common behavioural occurrence in healthcare is disrespectful organisational behaviour which implies malfunctioning care centres, unjustified waiting time, and normalisation of inadequate staffing or inadequate competence. As a result, lack of communication between employees, failures, and death among patients increase while the quality of care and patient satisfaction decreases (Flin, 2010).

2.6 Summary

This study aims to apply relevant theories to empirical findings, evaluate and identify how cost control affects physician performance regarding motivation and dysfunctional behaviour, and their ability to maintain patient safety. Cost control in the Swedish healthcare sector as well as patient safety, physicians' and cost control comprise these theories. Additionally, in order to assess motivation and dysfunctional behaviour factors, Murphy's (1994) Model and Campbell's (1990, 1994) model of Job Performance Determinants are applied.

3. Method

3.1 Research design

The study is of qualitative nature as the aim was not to quantify and measure to get answers to the authors' questions but rather to focus on words and interpretations to be able to answer them. According to Alvehus (2019: 20), this approach, focusing on words instead of quantification, is a qualitative research strategy. In this case, a qualitative method was chosen with interviews to be able to find out the impact of cost control on physicians' performance, with a special focus on motivation and dysfunctional behaviour, and their ability to maintain patient safety.

3.2 Empirical Sources

3.2.1 Interviews

Interviews can be an effective tool if the purpose is to find out how people feel, act, and think when faced with different situations, according to Alvehus (2019: 84), as the researcher can interact and ask the interviewee how he or she thinks and feels. The purpose of a qualitative interview is to understand everyday events from the interviewee's point of view (Alvehus, 2019: 84-85). As the purpose of this research is to understand the influence of cost control on the employee's performance and ability to maintain patient safety, interviews are an appropriate method to gain a deeper picture and understanding of this.

3.2.2 About the interviews

A template was designed for the interviews with the intention of obtaining answers to the thesis purpose and question. Since the purpose of this study was to gain a better understanding of the respondents' perceptions, the authors attempted to use open-ended questions where respondents could describe their own perspectives. Thus this study worked with semi-structured interviews, i.e. the questions were drafted in advance, but there was room for discussion (Alvehus, 2019: 87; Bryman, 2011: 563). Alvehus (2019: 88) notes that in semi-structured interviews, a tendency exists for the interviewer to ask follow-up questions regarding answers deemed important. Therefore, respondents are given great freedom to form their own opinions, allowing them to express their own perceptions and perspectives (ibid.). Denscombe (2016: 266) also believes that the interviewer should be flexible and that the

emphasis should be on the views of the interviewee. Because of these reasons, the choice fell to semi-structured interviews. Additionally, the research questions may have to do with meaning, feelings, thoughts, experiences, etc. and the interview then becomes a practical method to use to open up for deep conversations and discussions and access the subjective perceptions of each interviewee. In comparison, a survey would have been unable to incorporate the respondents' own thoughts or reflections into this thesis. Interviews were also chosen for the reason that there was an opportunity to go into depth about the respondents' experiences (Alvehus, 2019: 84).

3.2.3 About the respondents

The sample consists of a total of four respondents who were selected with the aim to increase an understanding of physicians' perceptions in relation to the research question. There were two criteria for the respondents, one that they should be senior house officers at Danderyd hospital, due to that they are more experienced than physicians with a lower educational level and work closer to the patients than managers. The other criteria were that they should work within one of the two different hospital disciplines that the study focuses on - internal medicine and surgery. Three of the respondents work in internal medicine and one in surgery. The respondents were anonymous and assigned a code letter as seen in table 1 below, in order to maintain them unidentifiable and clarify what every respondent perceived.

Table 1: Respondent sample details

Letter	Discipline	Interview date	Interview length (m:s)
Respondent A	Internal medicine	2022-05-03	27:11
Respondent B	Surgery	2022-05-04	37:48
Respondent C	Internal medicine	2022-05-10	24:27
Respondent D	Internal medicine	2022-05-13	36:13

With regard to the sample selection, the empirical collection is based on a snowball selection and a convenience selection. The convenience selection that was used for three of the respondents that were interviewed are respondents that were recommended by people in the authors' vicinity. These consists of people who currently happen to be available to the

researcher (Alvehus, 2019: 72). The disadvantage of this technique is that it is impossible to generalise the results and it will not be representative of the entire medical profession or even different units. As a result, it risks reflecting a specific group rather than a broader phenomenon (ibid.). Therefore, it would have been preferable to include a greater number of physicians from different units, since the majority of participants are from internal medicine. The difficult process of getting in touch with respondents, the long response time, and the deadline forced the authors to select the respondents who agreed first. To reach out to the fourth respondent, the authors contacted several department managers within the two disciplines who in turn forwarded the information about this study to senior house officers. This resulted in physicians reaching out to the authors with the aim to participate in the study. The fact that the authors first emailed the request to the managers at the workplace means that the sample that was used was a snowball sample, where a person was contacted who then spread the information about the study to the organisation's employees (Alvehus, 2019: 72).

Internal medicine focuses on systemic diseases and diseases of internal organs. These are most often treated with non-invasive or invasive methods such as drugs. The diagnosis within internal medicine is mainly based on an analysis of medical history and physical examination that are supported by other examination results such as functional medical, clinical-physiological, endoscopic and clinical-chemical results. (Svenska läkaresällskapet, n.d) Surgery on the other hand is a method where the physician cures or treats diseases by performing surgeries (Svenska läkaresällskapet, 2009). As opposed to internal medicine, surgery involves technical procedures and requires technical competencies to perform surgeries (Umeå University, n.d). In surgery, it is possible to increase effectiveness by treating patients for a shorter period of time, such as operating on a patient one day and discharging the patient the other day. Even though surgeries go well, the patient is left with concern. The procedure is similar to internal medicine, where instead of keeping patients in the hospital for another day to monitor their progress, the patient is released as soon as possible. This increases the likelihood that they will return to the emergency room with pain issues after the surgery (Lis Frykler Abazi - senior house officer at Norrtälje hospital, 2022-05-27)[1]. Therefore, the results of this study may not differ much due to the different disciplines. Within these two disciplines, there is a difference in the use of resources and decision-making.

[1] Lis Frykler Abazi - Senior house officer at Norrtälje Hospital, 2022-05-27)

Although the disciplinary effects are expressed differently due to the differences in operations, in practice they are both affected similarly.

The authors have chosen to anonymise the respondents to the extent that their names will not be published in the study. The reason for this is that it is important for respondents to feel comfortable that their answers will remain completely anonymous in order to answer honestly. Furthermore, it is necessary for the respondents to be able to share their views without fear of suffering any negative consequences. As a result, the requirement of confidentiality has also been met (Vetenskapsrådet, 2002).

3.2.4 Procedure

Before the respondents were contacted, the authors identified necessary questions to be able to answer the research question. The interviews revolved around themes and a series of questions within each theme, with the aim to get a deeper understanding of the correlation between cost control and performance. However, during the interviews, follow-up questions were allowed to clarify and develop what the respondent said (Alvehus, 2019: 87-88). Thus, the questions were categorised in cost control, motivation and change in behaviour, and patient safety was applied in all categories.

The research question mainly focuses on cost control and its impact on physicians' performance. Thus, the first part of the questions was regarding cost control and the effects physicians perceive that cost control may have on their ability to perform their work, their performance and their ability to maintain patient safety. The second part of the interview was regarding motivation and dysfunctional behaviour. Motivation can have a crucial impact on performance which is why some of the questions focused on gaining a better understanding of how cost control affects the respondents' motivation and how their motivation is affecting their performance as well as the ability to maintain patient safety. This was followed by questions regarding dysfunctional behaviour to gain a better understanding of how cost control can change behaviours leading to for example stress and how these behaviours can affect the ability to maintain patient safety.

The authors contacted the respondents via email and scheduled a time and date for the interviews that worked for both parties. The respondents were offered the opportunity to choose how and where to perform the interviews, and which software they were the most

comfortable to use in order to increase validity. Digital interviews simplified scheduling the interviews and enabled the respondents to be interviewed in environments where they feel comfortable and undisturbed. All four respondents chose to have them through digital media. Three of the interviews were hosted using Zoom and the fourth was hosted via telephone. In the initial contact with the respondent, the purpose of the study was explained and that the interview would last 30-60 minutes. These were personal interviews and the purpose was to gain an insight into the respondents' worlds, to get a sense of their perspectives on cost controls impact on their work performance and patient safety. The purpose of the study was explained once more before the interview and that their answers would remain confidential since these could not be linked to them as individuals and that they will be referred to as respondents A - D only. The respondents were also asked if they accepted to record the interview and everyone agreed (Bryman, 2011: 2012-2014). The interviews were rounded off with a question in which the interviewer summarised what the respondent said and asked if there was anything that should be changed. The respondent was then given the opportunity to clarify or change what had been said, so-called respondent validation (Bryman, 2011: 355). After the interview, the authors discussed together what emerged during the conversation and if anything particularly interesting had been noticed.

3.3 Process and analyses

Hermeneutic spiral analysis was applied to the analysis of this material. This has meant that the questions asked during the interviews were founded on the authors' pre-understanding of the subject of cost control. Prior to analysing qualitative data, Denscombe (2016: 394) suggests organising them. The material was compiled using the audio recordings made at the interviews. The choice to record the interviews was made to raise the quality, validate the data and not forget what the respondent has said to ensure that the data is correctly elaborated. The transcription was carried out by re-listening to the recordings and noting what was said and with the help of the computer program Microsoft which handled the recording files with an end result on several text pages which were then processed in the analysis part. Transcribing and recording interviews is intended to make interpreting what others say easier, which in turn facilitates data analysis (Bryman, 2018: 577). The results of the interviews were reproduced in a coherent text where quotes that are interesting for the purpose of the study were picked out. After each completed and transcribed interview, the interview material was further coded.

According to Bryman (2011: 511), there are few established and generally accepted methods for analysing qualitative data. Thematic analysis implies creating themes and subthemes through coding to seek patterns in the data. Coding is the process of labelling and structuring the data to identify different themes and subthemes. In thematic analysis, the researcher focuses on what the respondents express and feel during the interview. By creating themes and a matrix of the data, a clear structure of the data will be created which simplifies the analysis and discussion. The choice of thematic analysis is based on the fact that this research primarily aims to investigate how physicians experience their performance and their ability to maintain patient safety is affected by the implementation of cost control. Thus, thematic analysis is the most suitable method for this study. Bryman (2018: 703-708) explains that there are principles of thematic analysis that should be followed when analysing the data that this study has followed.

The first step involves transcribing and understanding the data. After the interviews that were recorded, the authors transcribed the data by re-listening to the records and writing down what was said during the interview. This was done to gain an overview of what was said during the interviews and to simplify the process of understanding the data. The authors then read the transcribed material in the second step in order to understand the collected data. In the third and fourth steps, the material based on the coding formed themes which have become headings in the study's analysis chapter. The themes of the analysis have been linked to the study's purpose and research question and issues to create clarity in the text for the reader. The themes that are used in this study are; cost control, motivation, change in behaviour and patient safety.

3.5 Reliability and validity

Some researchers believe it is difficult to apply the concepts of validity and reliability to qualitative research (Bryman, 2011: 357). The reason is that qualitative studies do not place a great deal of emphasis on measurement. An alternative to validity and reliability is to replace them with authenticity and trustworthiness. Credibility, transferability, reliability, and confirmability are the four sub-criteria used to measure trustworthiness (Bryman, 2011: 354). In order to create credibility in the results, it is necessary to conduct the research according to existing rules and report the results to the participants (Bryman, 2011: 354-355). Despite not

wanting to be consulted before the study was published, all respondents requested a copy of the final report. Additionally, the study was done according to existing rules, taking into account both method literature and the Swedish Research Council's research ethics principles. As qualitative research focuses on depth and not on breadth, the authors cannot guarantee a result that can be transferred to other contexts. However, the study is designed in such a way that it can be performed in the same way in other workplaces and contexts within client-centred social work (Bryman, 2011: 355).

The reliability of the study indicates that it has been reviewed during the study process. Reliability would refer to how easily the results of a study or study could be repeated if it was conducted again. It also refers to whether random factors affect the results. Since the goal was to examine the experiences of a small group of employees, the intention was not to measure a social phenomenon. The study involved qualitative interviews and the authors had an interactive relationship with the respondents. As all interactions are unique, this can be difficult to achieve again in a future study. It is also possible that people's opinions and feelings change over time, negatively affecting their reliability. Given the above, it is difficult to determine whether the same results would be obtained if a similar study was conducted again. Nevertheless, an attempt was made in order to provide as much detail as possible about how the data was collected in order to facilitate replication of the study. Using this method, the reader is able to gain a better understanding of how the study was conducted (Bryman, 2011: 355).

Research confirmability is concerned with how personal experiences and frames of reference influence the results (Bryman, 2011: 255). The authors constantly reflected on their own positions throughout the writing process to avoid subjective assessments.

One of the criteria of authenticity relates to whether the study provides a fair representation of the various perceptions and opinions among the participants (Bryman, 2011: 357). There are a variety of perspectives taken into account in this study as well as a multifaceted analysis. Because all the information has been relevant, all respondents and studies have been included in the study.

4. Results

4.2 Transcripts of interviews

This part is based on four interviews that were conducted with physicians at Danderyd hospital to better understand how physicians' performance, in terms of motivation and dysfunctional behaviour, and their ability to maintain patient safety are affected by cost control. The physicians' are senior house officers where respondents A, C and D work in internal medicine and respondent B works in surgery.

Based on the interviews, four different themes emerged; Cost control, Dysfunctional Behaviour, Motivation and Patient safety.

4.2.1 Cost Control

Cost control was experienced similarly by all respondents. Two respondents (B and D) were familiar with cost control but perceive that they are poorly informed about its use of it. There is a cost-consciousness in the organisation and general guidelines to adhere to reduce costs, even if the employees are not fully aware of the exact methods of getting cost reductions, respondent D explains. The respondents (A, B, C and D) do not perceive that they are governed by costs, but do perceive that they are indirectly governed. Three respondents (A, C and D) perceive that they are encouraged to avoid taking too many tests. Moreover, Respondents C and D explained that they sometimes are informed about the exact costs of a test or a treatment and that one should think carefully before performing certain expensive tests or treatments. In case of uncertainty, respondent A explains that it is not uncommon to take too many tests. It does not harm the patient but at the same time, it is not always necessary. For instance, an analysis has revealed that the staff prescribe too expensive medications. Following that, staff have been encouraged to prescribe cheaper medicines first. Additionally, it is not uncommon for supervisors to recommend reducing the number of blood tests taken at certain times that are not beneficial for the patient but expensive for the hospital. In such situations, there is potential for improvement and an understanding from the staff that the management raises the issue of costs. Furthermore, all four respondents mentioned the shortage of care beds as one example of indirect governance caused by cost control. Three respondents (A, C and D) perceive that the clearest example of cost control is that they are encouraged to meet as many patients as possible within a day and that they should avoid hospitalising patients if possible. Moreover, Respondent A describes that they know that

Sweden has had an objective to move care from hospitals to health centres and outpatient care and that this has led to a reduction in care beds as a result of the cost controls that exist. If patients are hospitalised, they are encouraged to discharge the patients as soon as possible even though it would be better to hospitalise the patients for a longer time. All respondents perceive that they are able to perform their jobs from a cost control perspective, and choose the best treatments for the patients regardless of the costs. In addition, you don't give much thought to certain costs that the staff does not control at a detailed level. Despite that, they all state they are unable to fully assist the patients since there aren't enough care beds.

"What they wanted to achieve by reducing resources will instead lead to a situation where one consumes more resources because if the patient is discharged prematurely, the patient will return a few days later with the same issues." (Respondent B, 2022-05-04).

"It is clear that I understand that they are trying to control, but it is just very difficult." (Respondent A, 2022-05-03).

4.2.2 Dysfunctional behaviours

Two respondents (A and D) perceive that dysfunctional behaviours appear in situations where it becomes difficult to perform their jobs, which they explain may be an indirect effect of cost control. Respondents B and C do not perceive any dysfunctional behaviours appearing due to cost control. However, respondent B explained that it most likely appears but has not been noticed. Respondent A explained that the dysfunctional behaviours can imply different significations such as inappropriate refutation towards patients and colleagues, decreased ability to cooperate and that conflicts may arise between colleagues and other hospital clinics/units. Respondent A confirms that conflicts sometimes arise due to a shortage of care beds and further explained that one becomes less empathic towards patients and colleagues as a result of stress. Additionally, two respondents, A and B, expressed experiencing a negative impact on their stress levels as part of the result of the cost control that exists at the hospital. According to respondents A and D, their empathy decreases with stress, and there are numerous examples of situations where patients do not receive the care they need or may even receive unpleasing treatment as a result.

"Yes, dysfunctional behaviour appears in situations where the patients are not provided safe care or where healthcare employees are disrespectful towards patients who already are in a vulnerable situation. An example of patient safety is when several units are having a shortage of care beds *and conflicts arise regarding who should hospitalise the patient. Conflict takes time and it is not always the unit who will provide the best care for the patient who wins the conflict, it can be the one who acts most aggressively." (Respondent A, 2022-05-03).*

4.2.3 Motivation

Three respondents (A, C and D) perceive that helping others, saving lives and cooperating with colleagues motivates them in their profession. Respondent B perceives that motivation increases when physicians are provided courses for developing deeper knowledge in medicine. The four respondents claim that their motivation is indirectly harmed by cost control for different reasons. Respondent A explained that not being able to do what is best for the patient due to a lack of care beds, which is perceived as an indirect effect of cost control, harms motivation. A lot of time and energy is spent on creating solutions to problems that would be simple measures if there were care beds and staff. Respondent A has experienced many instances where they have been assigned the role of coordinator instead of utilising their skills to their full potential to help patients. Respondents B and C do not perceive that cost control has a strong effect on harming motivation, but respondent B explained that cost reductions often lead to a reduction in developing courses organised for the employees, which harms their motivation. Respondent D perceives that being encouraged to choose treatments and diagnoses that imply increased compensation and administrative tasks that are not directly related to patients and healthcare are things that harm motivation when there are other more important priorities.

"Yes, I perceive that my motivation is harmed by not being able to help patients. To increase motivation, more care beds *are required, a more equal workload and private care centres cannot freely select their patients so that the hospital does not have to deal with the very sickest when there is a lack of care* beds*." (Respondent A, 2022-05-03).*

4.2.3 Patient safety

All respondents state that the lack of resources and the need to reduce expenses has led to a situation where there is a lack of care beds, endangering patient safety. They express that the

prioritised focus on costs and control over significant resources leads to a care situation that forces them to prematurely discharge patients or forces them to relocate their patients to other units that might lack the specific competence that the patient needs. This means that they are not allowed to work with what they are trained to, which is to care for patients. They explain that this is a risk to patient safety as they experience an inability to perform their work in a good way as a result of the lack of care beds. The respondents state that the reduced availability of care beds means that patients who are actually in need of observation are sent home daily. According to respondent B, if costs and resources had not been controlled in the same manner, they might have let the patient stay. Not infrequently, this leads to re-emissions and returns of patients, something that is noticeable among all respondents.

"Most often, it is not possible to hospitalise patients when they should and need to be hospitalised due to lack of care beds, meaning that patients remain at the emergency which leads to a dangerous situation where patient safety cannot be ensured."- (Respondent A, 2022-05-03).

Lack of care beds at the emergency leads to sending patients home, when they instead should be hospitalised. – (Respondent C, 2022-05-10).

The goal is to examine patients coming to the emergency room within four hours, and that is perhaps possible half the time. – (Respondent D, 2022-05-13).

5. Analysis

5.1 The general effects of cost control on physicians' performance

One of the financial goals at hospitals in Region Stockholm, including Danderyd hospital, is to reduce costs and increase revenue (Region Stockholm, 2022). Moreover, the goal of the administrative management is to provide good quality healthcare at low costs (Hallin & Siverbo, 2003: 64-65). To achieve this goal, the hospital has taken actions in line with Murphy's (1994) model of job performance and Campbell's (1990, 1994) model of job performance determinants with the aim to contribute to the organisational goals. These actions imply reducing costs which have led to resource retrenchments. A consequence of this is that resources, such as care beds and employees, that are necessary for physicians to achieve a high level of performance and maintain patient safety are reduced.

The Healthcare Act (SFS 2017:30) stipulates that healthcare must be conducted in a way that ensures quality care, and care providers are obligated to carry out and establish measures to prevent injuries (SFS 2014:821). According to the physician's ethical rules, physicians should work to ensure the patient's best interests and use medical resources in accordance with ethical rules (Sveriges läkarförbund, 2017). However, this does not correspond to the reality of the respondents since political decision-making regarding cost control has resulted in a retrenchment of resources that are necessary to ensure good quality of healthcare and maintain patient safety. Thus, as the physicians must accommodate to the financial goals, a consequence is that they, in some cases, must compromise patient safety in order to achieve the goals. For example, three respondents perceive that they are encouraged to avoid taking too many tests and, as respondents C and D explained, they sometimes are informed about the costs of tests and treatments and are encouraged to carefully consider their decisions before performing certain treatments. This may not have a direct negative impact on patient safety, but it implies that patients to some extent may perhaps not receive medical care in accordance with the patient's best interests according to the Healthcare Act (SFS 2017:30).

An example of indirect governance caused by cost control, that all respondents mentioned, is the retrenchment of resources such as care beds and, as respondent D explained, healthcare employees. The clearest example of cost control is that they are encouraged to meet as many patients as possible within a day and they should avoid hospitalising patients if possible

(respondents A, C and D). Lack of available care beds is one of many factors which poses a major risk to patient safety. As a result of overcrowding and relocations, the risk of medical injuries increases which harms patient safety (IVO, 2022). Respondent B explained that there is not a lack of physical care beds, but that there is a lack of employees per care bed, meaning that it is not possible to treat as many patients as the number of existing care beds. The constant flow of patients in emergency rooms forces physicians to discharge patients at a very high pace, and only the most seriously ill patients can be admitted (IVO, 2022). This leads to situations where the physicians cannot perform their duties in accordance with the patient's best interest since there are not enough care beds and employees per patient (Socialstyrelsen, 2018). As respondent C explained, patients that should be hospitalised are many times sent home due to lack of care beds meaning that they are not provided with the best care. Therefore, the physicians are not able to perform their jobs according to the ethical rules which implies that their performance level decreases, as a consequence due to resource retrenchments caused by cost control. Another issue caused by resource retrenchments is that it leads to increased consumption of resources due to physicians having to discharge patients prematurely. As a result, patients return a few days later with the same health issues because they were never fully recovered and treated. Furthermore, a consequence of the retrenchment of care beds is that physicians experience that there is less time for patient contact and the amount of savings that can be achieved without compromising quality and patient safety is close to its limits (Nilsson, 1999). Thus, physicians cannot perform their best and provide the best care to maintain patient safety in accordance with the ethical rules.

The results show that another consequence of reduced care beds and employees is that there are not enough resources for developing courses, work training and profound knowledge in medicine. Respondent B explained that due to the retrenchment of care beds and employees, there are not enough experienced employees that can share their knowledge and further educate less experienced physicians, and provide support in inexperienced situations. According to Campbell’s (1990, 1994) model of job performance determinants, declarative knowledge implies individuals' general knowledge, in this case about healthcare and medical treatments. Declarative knowledge can differ between individuals due to factors such as education, experience, and academic training. To achieve procedural knowledge/skill, physicians must first achieve high declarative knowledge. The issue of this is that less experienced physicians become less likely to achieve high declarative knowledge since there are not enough experienced physicians who can provide them with more profound knowledge

and experiences. This means that the less experienced physicians risk missing out on valuable experience that hinders them from achieving procedural knowledge/skill that is necessary to provide high quality healthcare and achieve high performance levels. Furthermore, more experienced physicians who already have achieved declarative knowledge may instead not be able to achieve a high level of procedural knowledge/skill in the long run.

5.2 Impact of cost control on patient safety

Despite resource retrenchments, physicians believe they have a great deal of autonomy in decision-making and can perform examinations and treatments as they prefer. However, it has become more and more difficult to maintain their autonomy due to financial goals and cost containments they must consider in their daily work. (Abernethy, 1996). Broyle and Reilly (cited in Cardinaels et al. 2003) explain that physicians recognise that the relationships between providers and patients are unique and would not give up the freedom to deploy resources as needed for the individual patient. This is in line with the results from the interviews that showed that all respondents perceive that cost control does not have a direct effect on their ability to perform their duties and that they are able to choose the most relevant treatment for the patients regardless of their costs. However, the physicians are informed about certain cost control and believe that the hospital to a greater extent focuses on profitability (Dahlgren, 2018: 80-87) and reduces costs by being encouraged to avoid unnecessary tests and costly treatments. Thus, an awareness regarding cost control exists among the physicians meaning that the physicians to some extent are governed by cost control. The consequence of this is that their ability to perform their jobs accurately decreases even though cost control is not necessarily the direct cause of it. Thus, this can lead to situations where patient safety is jeopardised as the safety margins are too small and working conditions are stressful (OECD, 2017).

Nilsson (1999) explains that there is a limit to how much retrenchment and savings can be implemented without compromising the quality of care which in turn affects patient safety. Even though the physicians are conscious of the importance of the hospital making revenue and cost control to some extent, the results in this study show that physicians at Danderyd hospital feel that the lack of care beds gives rise to a situation where they cannot always guarantee patient safety, something which according to the Patient Safety Act (SFS 2014:821) should be seen as the primary goal of care. Thus, patient safety is jeopardised as the

physicians are not able to provide care that is in the best interest of the patients. This means that the limit has been reached and that the cost control at Danderyd hospital does not take into account those whose healthcare is jeopardised by the resource savings.

5.3 Dysfunctional behaviour's impact on physicians' performance

Based on the above, cost control has a negative impact on the general performance of physicians since achieving high performance level is antagonised. Dysfunctional behaviour and stress leads to an increased risk of conflicts, deficient care prescriptions and missed care. This then causes even higher stress among physicians as they become aware of how their change in behaviour affects their colleagues and patients negatively (Larsson et al. 2022; Moss et al. 2016 and Andreen Sachs et al. 2015). This can be associated with the third dimension of Murphy's (1994) model of job performance - down-time behaviour which refers to counterproductive behaviours that harm performance. In the worst case, these behaviours cause physicians to be absent from work which leads to a further decreased level of performance which eventually will affect the quality of patient care and patient safety.

Two respondents (A and B) expressed that they perceive that cost control causes dysfunctional behaviours among physicians in situations where it becomes difficult to perform their jobs in accordance with ethical rules and the patient's best interest. In line with the respondents experiencing cost control having a negative impact on their stress, Garcia et al. (2019) explain that stress and understaffing are examples of factors that affect the ability to perform work safely. Based on the interviews, the high intensive work environment, lack of care beds and lack of employees cause stress among the physicians. This is confirmed by respondent B who explains that conflicts sometimes arise due to the retrenchment of care beds and points out that one becomes less empathic towards patients and colleagues as a result of stress. At this point, the physicians have reached the fourth dimension, destructive behaviours, implying behaviours that lead to accidents, lack of effort and non-willing to cooperate which leads to a lower level of performance that in turn affects patient safety.

The increased stress level can primarily be explained by the lack of care beds and healthcare employees, which respondent D explained is not because there is a lack of educated healthcare employees, but due to the untenable work environment for some employees, for example, nurses. The lack of nurses implies that the number of patients per healthcare

employee has increased while the number of care beds has decreased. Thus, the burden increases which can lead to increased stress among physicians. Furthermore, the hospital does not meet the requirements they are asking for, which results in redundancies among employees, leading to a further retrenchment of care beds. This can be correlated to the example of disrespectful organisational behaviour explained by Andreen Sachs et al. (2013), which implies that the employee's needs are ignored, resulting in psychological issues and stress, among others. Cognitive impairment can mean that the physicians experience difficulties with communication and conflicts, which can affect patient safety negatively to a great extent (Larsson et al. 2022). Furthermore, this affects the performance level of the physicians as well according to the interpersonal-oriented dimension which refers to decreased ability to communicate and cooperate, increased conflicts and misunderstandings between colleagues. As a result, the physician's ability to perform their duties decreases. (Jex & Britt, 2014: 140-142)

5.4 Dysfunctional behaviours impact on patient safety

Due to cognitive reasons such as stress, around 5-10 per cent of diagnoses made at the emergency are incorrectly estimated (Sundblom and Dryver, 2013; Kachalia et al, 2007) which can have spaciously effects on patient safety. Moreover, as Moss et al. 2016 explain, stressed decision-making based on a poor decision basis increases the risk of making mistakes that can injure the patients and thus be a danger to the patient's safety (Larsson et al. 2022). Furthermore, as Morello et al. (2013) cited, lack of resources, unfavourable work conditions focusing on high patient admission and discharge levels and insufficient leadership effectiveness harms patient safety.

Disrespectful organisational behaviour occurrence in healthcare implies malfunctioning care centres, unjustified waiting time, and normalisation of inadequate staffing or inadequate competence. As a result, lack of communication between employees, failures and death among patients increase the whole quality of patient satisfaction decreases (Mautsitz & Spear, 2014; Black et al. 2014). Furthermore, patient safety is jeopardised as the physicians achieve the interpersonal-oriented dimension implying decreased communication and conflicts between colleagues (Jex & Britt, 2014: 140-142). Consequently, this adversely affects the health and well-being of physicians and their ability to perform their duties to a satisfactory standard (Hyatt, 2017; Larsson et al. 2021). Thus, when employees are not given the

conditions required to be able to perform their work so that safe care can be provided, it negatively affects both patients and physicians. This is in line with Engström (2018) who explained that the employee must be provided with the conditions needed to perform their duties that facilitate safe care and that staff do not suffer physical or psychological harm as a result of their work.

A consequence of the increased stress level is that it can result in a lack of communication which in turn can lead to conflicts between colleagues and clinics/units. Respondent A explains that a stressed colleague can hand over work to another colleague who already has a high stress level, which creates conflicts between colleagues. A conflict can also arise between clinics/units because either both clinics/units are out of care beds or they have a few beds left which they save for patients that will need the care beds the most. This leads to a conflict regarding which clinic/unit is best suitable and should take responsibility for the patient. However, the conflicts do not always result in decision-making that will provide the best care for the patients. In some situations, the most aggressive clinic/unit eludes hospitalising patients due to having a more aggressive behaviour and thus “winning” the conflict. Thus, the result of stress, change in behaviour and lack of care beds can have a negative impact and in some cases become a danger to the patient's safety.

5.5 The impact of motivation on physician's performance

Motivation affects the level of performance - the more motivated an individual is, the higher level of performance will the individual achieve (Jex & Britt: 150-151, 2014). Thus, to maximise the performance level of physicians, it is vital that the hospital understands what motivates the physicians, what the physicians driving forces are and that the hospital provides the right resources to maintain motivation (Locke and Latham, 2002). The physicians are the ones that enable the hospital to achieve its goals (ibid.) and their needs and requirements should therefore be prioritised in order to achieve the financial goals.

As Berdud et al. (2016) explain, healthcare employees are most often intrinsically motivated meaning that the physicians perform their jobs because their profession is inherently interesting and enjoyable for the physicians. When asking the respondents what motivates them in their profession, the answers were helping patients, making a difference, and further developing their knowledge within the profession. However, the goal setting of Region Stockholm and Danderyd hospital is not in line with what motivates the respondents (A, C

and D), that is, to help other people. It involves more administrative work that prevents physicians from prioritising and fully focusing on the patients. As a result of increased requirements for healthcare employees to register their activities, these transactions cost more and take resources away from patient care (Hallin & Siverbo, 2002: 166; Ryd & Eldh, 2015) which results in harmed motivation since it increases motivation to help patients. Furthermore, employees within healthcare are intrinsically motivated (Berdud et al. 2016) and the intrinsic motivation increases because medicine challenges their intellectual curiosity and is a field where physicians can improve their scientific aspirations. Resource retrenchments such as reduced intermediate courses prevent further education which implies that the motivation of physicians is lowered since intermediate courses are a motivating factor according to respondent B.

As Ordoñez et al. (2009) explain, the goal setting of the hospital can cause crowding out effect and encourage extrinsic motivation rather than intrinsic motivation, meaning that physicians may perform tasks because they must and not because they inherently want to. Economic incentives may harm intrinsic motivation because it neither recognises their effort nor the quality of work. Likewise, control policies harm intrinsic motivation by making physicians feel that their autonomy is constrained by controlling decision-making. Moreover, the motivation can be harmed because physicians can perceive that they are ordered to behave to maximise the hospital earnings instead of focusing on helping patients, which is a significant driving force (Berdud et al, 2016).

Another negative impact that cost control has on motivation is that the physician's declarative knowledge and procedural knowledge/skill risk not being elaborate. Respondent B expressed that developing courses is motivation because it gives physicians the possibility to learn more about their profession and concentration. As the financial goal focuses on reducing costs and resources, such as developing courses (Region Stockholm, 2022), the physicians are less likely to increase their general knowledge and thus not achieve a high level of declarative knowledge. This in turn affects the possibility to achieve the second determinant in Campbell's (1990, 1994) model - procedural knowledge/skill, meaning that the physicians may not gain further skill within their profession and concentration. As Berdud et al. (2016) explained, intrinsic motivation increases since medicine challenges physicians' intellectual curiosity, and that medicine is a field where physicians can improve their scientific aspirations. However, the physician's motivation can be harmed if this need is not fulfilled

and if the physicians feel that they do not gain and increase knowledge and skills within their profession. This, in turn, can lead to low performance level due to that low motivation prevents physicians from achieving high levels of performance. Moreover, not achieving a high level of performance can decrease motivation if the physicians do not feel that they are performing well (Jex & Britt: 150-151, 2014). Another consequence of the negative impact that cost control may have on motivation is that low motivation may prevent the physicians from achieving high levels of performance, even though the physicians have achieved high levels of declarative knowledge and procedural knowledge/skill. This can be referred to as the expression of respondent A, who explained that not being able to do what is best for the patient due to a lack of care places, which is perceived as an indirect effect of cost control, harms motivation. Therefore, there is a risk that the performance level at Danderyd hospital decreases due to cost control.

5.6 The effects on patient safety caused by motivation

During the interviews, there were different expressions from the respondents regarding how significant the impact of cost control is on motivation. Respondents B and C expressed that their motivation is insignificantly affected by cost control and that they perceive that they have a great deal of autonomy and can perform examinations and treatments as they prefer to provide great care for the patient. This is in line with (Jex & Britt: 150-151, 2014) who explained that if physicians are sufficiently motivated and have the will to perform their very best, their high level of motivation will compensate for the potential lack of declarative knowledge and procedural knowledge/skill caused by resource retrenchments. Thus, there is a possibility that patient safety is not affected due to cost control's effects on motivation, because physicians may already have a high level of motivation. However, when asking respondents A and D if cost control affects their motivation, the answers were somewhat different. Respondent A explained that not being able to do what is best for the patient due to a lack of care places, which is perceived as an indirect effect of cost control, harms motivation. A lot of time and energy is spent on creating solutions to problems that would be simple measures if there were enough care places and employees (ibid.). Thus, economic incentives and control policies harm intrinsic motivation by making physicians feel that their autonomy is constrained. This leads to low motivation which in turn can prevent physicians from achieving the different determinants in Campbell’s (1990, 1994) model leading to lower performance which affects patient safety negatively.

6. Conclusion

The aim of this study was to investigate and answer the research question "*How does cost control affect the physicians' performance in terms of motivation and dysfunctional behaviour, and their ability to maintain patient safety?"*. To describe and analyse this, the theoretical understanding of job performance and cost control has been applied to the collected material. The results of this study show that cost control negatively affects performance which results in decreased patient safety. This is because cost control reduces resources, mainly in care beds, which means that physicians cannot fulfil their ethical duties and thus perform worse.

As a result of cost control, fewer care beds are available, which increases the burden on the physicians. When the working environment is poor, results show that dysfunctional behaviour affects performance negatively. Among the respondents, two do not experience any impact, while two do. The effect of the impact is that stress is caused, and colleagues and patients are treated poorly, thereby increasing the likelihood of mistakes being made. Thus, there can be a deterioration in patient safety as a result of this. Therefore, the findings indicate that patient safety is negatively affected, mainly due to a lack of care beds.

Motivation in terms of performance is indirectly affected. The motivation of two out of four respondents is unaffected and they do not perform worse as a result. However, reduced resources result in fewer continuing education courses, which leads to reduced motivation and in the long run result in a lower level of procedural knowledge. As for the remaining two respondents, they believe that motivation is hindered by the fact that they cannot perform their job appropriately, based on the best interest of the patient. Since physicians are intrinsically motivated, their strong motivation to help others compensates for it, so they can maintain a high-performance level regardless. Consequently, the influence of cost control on motivation does not have an adverse effect on patient safety.

6.1 Theoretical- and practical implications

The results conform with the theory of performance, dysfunctional behaviour and motivation, meaning that the theory is suitable for answering the research question. The results imply that cost control has a negative impact on the overall performance due to the fact that physicians are not provided with resources crucial for their performance and ability to maintain patient safety. In line with theoretical models, the results indicate that low motivation prevents

individuals from achieving high levels of performance even though physicians have achieved high levels of declarative knowledge and procedural knowledge/skill.

The thesis's practical contribution mainly applies to medical workers in the healthcare sector, but the results may also be applicable to employees of other publicly governed institutions. The results show that organisational factors have an impact on the performance of employees, so management should support strategies that improve performance for both employees and those around them. The awareness of the situation at Danderyd hospital opens up for change. Thanks to this study, those who work at the hospital can gain an understanding of the background of the situations that arise in the clinic and can instead enrich their motivation towards change. The results can also increase in favour of maintaining autonomy and motivation if the root causes are identified.

6.2 Limitations and future research

It seems that the topic chosen for the study is an unnavigated area, as there is very little literature written about the issue. Thus, the present study reveals a need for knowledge on the subject of cost control and the impact it has on physician performance and their ability to maintain patient safety. The implication for continued research is that more comprehensive studies are required in the area in order to understand how physicians are impacted by cost-focused governance and how it can be countered to increase performance. For future research, there is a possibility of conducting a larger survey with more respondents and other medical workers such as nurses could be included. It would also be interesting to study the effect on physicians in other hospitals and units. Additionally, it might be of interest to include the different levels that operate within the healthcare sector. That is, including hospital administration (controllers, finance managers, etc.) and politicians in the respondent group to ensure that all perspectives and domains are represented and can contribute to empiricism. A wider selection and amount of respondents can hopefully lead to a better foundation to answer the research question.

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Appendices

Appendix 1 - Interview guide: Physician

Respondent’s name and position:

Introduction: Introduce with a short brief of the thesis' purpose and question.

Inform respondent about:

- Anonymity
- Is it OK to record the interview?
- May we return if more questions arise afterwards?

Questions to the respondent

Background questions and the work in the organisation:

1. Tell us a little about yourself and your professional role
2. What are your duties and responsibilities?
3. What are the biggest benefits of working at this particular hospital?

Cost control

1. Do you know what cost control is?
2. How informed are you as a healthcare staff about cost control and how it is used at Danderyd Hospital?
3. What is your opinion about cost control and its purpose?
4. Do you feel that you are controlled in your work?
   -If so, in what way?
5. Are you encouraged to discharge patients as soon as possible?
6. What is the dialogue between the operational and administrative activities?
7. Are there any guidelines on how care staff should relate to cost control/use cost control in their daily work?
8. Do you experience a cost focus at your job?

-Is it something that is noticeable in the daily work at the hospital?

9. Do you feel that you can carry out your work based on what is best for the patient and at the same time take into account reducing costs/cost focus?
10. Do you feel that there is dissatisfaction among staff with this way of governing?

Performance: Motivation and dysfunctional behaviour

1. What motivates you at work?
2. Do you feel that motivation is affected by the cost focus?
   - If so, in what way?
3. Do you feel that your motivation is affected by not being able to do what is best for the patient?
4. What would be required to increase that motivation?
5. Do you experience undesirable behaviours among you and your colleagues as a result of cost control?
   -For example, unpleasant treatment of patients due to less patient time
   -Disrespectful treatment / passive-aggressive behaviour towards colleagues due to stress arising from the cost focus?
   -If so, do you feel it affects patient safety?
6. Do you experience that external factors prevent you from doing what you think is best for the patient?