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**THE MANY MEANINGS OF MONEY –  
EXPLORING  
HEALTH CARE PROFESSIONALS’  
EXPERIENCE OF  
ECONOMIC GOVERNANCE**

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The many meanings of money –  
Exploring health care professionals' experience  
of economic governance

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*Till min pappa*

*Till minnet av min mamma*



## ABSTRACT

**Introduction:** Ensuring health care to the public is fundamental to the welfare state and consumes a substantial part of national expenditures. Health care systems across developed countries face challenges of increasing demand and limited resources, and efforts are made to push provider organizations to increase efficiency and still maintain quality of care. The use of increased competition and reimbursement models to stimulate specific provider behaviors has gained increased attention in health care governance. However, the literature evaluating the impact of economic governance strategies is complex and appears inconclusive. Surprisingly few studies take the perspective of health care professionals, although their response to economic governance requirements is essential for change to occur at the organizational level.

Insights from management research may enrich studies exploring professionals' perspectives of economic governance by highlighting the important role of managers, who serve as a link between organizational demands and staff. In health care contexts, managers' abilities to adapt the external demands to the care delivery process and to professional values have shown to be a key factor for organizational output. The literature on motivation also contributes by proposing that the influence of external rewards depends on its interplay with intrinsic motivation, based on individuals' beliefs and preferences. Motivational research in the public sector proposes that the intrinsic reward from meeting patient needs is a particularly strong motivator for health care professionals.

This thesis intends to bridge the macro-, meso- and micro-levels of health care systems by exploring how economic governance models are experienced by health care professionals when filtered through organizational layers (rather than the governance model itself), using insights from management and motivational literature to guide the studies.

**Aim:** The overall aim of the thesis is to explore health care professionals' experience of economic governance, at the manager and staff level. The thesis studies specifically aim to explore the consequences of a particular economic governance model including patient choice, from the perspective of professionals (Study I), the strategies managers use as intermediaries between the economic governance model and staff (Study II), and staff experiences of economic efficiency requirements in health care (Study IV). The thesis also includes a method study (Study III) aiming at developing a self-assessment scale, capturing staff experiences of governance of economic efficiency and quality, and assessing its psychometric properties.

**Methods:** The thesis explores two empirical settings. Case 1 includes a regional patient choice model in elective orthopedics, including governance strategies of increased patient choice, increased provider competition, specialization of providers, and financial incentives. Case 2 includes the use of annual budgets in a public university hospital setting facing substantial economic constraints. In this case there is a specific focus on the Department of

Rehabilitation Medicine. The thesis comprises multiple study designs and methods. Studies I and II apply an exploratory qualitative design, based on interview data from professionals in key positions, who hold managerial responsibilities. Study III applies methods for scale development and focuses on professionals at the staff level. Although the psychometric assessment is based on quantitative (survey) data and methods, the development process also includes qualitative methods. Study IV focuses on professionals at the staff level and applies a sequential mixed method design, using qualitative interview data to enrich the understanding of the survey data collected in Study III.

**Findings:** Study I showed that the patient choice model had implications for the organization of care, for patients, for professionals' work environments and for education and research activities, as perceived by professionals. Further, their analysis identified consequences at the provider level and for the health care system as a whole. Study II showed that professional managers applied strategies to function as intermediaries between the patient choice model and their staff, aligning external requirements with professional values. Study III describes the development and pilot study of the GOV-EQ scale. The scale showed promising psychometric qualities and captured health care staffs' experiences of governance, including economic efficiency requirements (Subscale A) and quality requirements (Subscale B). Study IV showed that staff was knowledgeable and motivated to consider economic efficiency requirements in clinical work, conditioned that patients were not put at risk. Nevertheless, staff members experienced little influence over resource allocation and identified limitations to the overall system's abilities to meet patient needs. Study IV further revealed that staff experiences of economic efficiency requirements included a system-level perspective, caring for the entire patient journey across stakeholders, and that they assessed the fairness of the system as a whole.

**Conclusions:** The thesis concludes that professionals at the staff and manager level are well aware of economic efficiency requirements and intrinsically motivated to manage resources carefully. Their engagement does not seem limited to organizational roles, but is guided by a common concern that the overall health care system fairly provides value for patients and supports a sustainable work environment and knowledge development for the professional community. The thesis confirms the priority of the professional ethos and concludes that economic governance models should be aligned with patient needs and health care quality. The thesis also confirms the importance of managerial strategies that take professional values and motivation into account. The thesis concludes that professionals may be a valuable source of knowledge when evaluating economic governance strategies, having system-level awareness and a concern for the entire patient journey across stakeholders. The thesis highlights the need for increased collaboration and dialogue that brings professionals and policy makers together, to attain economic governance models that efficiently support (and balance) the multiple aims of health care and that are perceived as valid, in the sense that professionals find the requirements imposed on them as reasonable.

## LIST OF SCIENTIFIC PAPERS

- I. **Korlén, S.**, Amer-Wåhlin, I., Lindgren, P., & von Thiele Schwarz, U. (2017). Professionals' perspectives on a market-inspired policy reform: A guiding light to the blind spots of measurement. *Health Services Management Research*, 0(0), 1-8.
- II. **Korlén, S.**, Essén, A., Lindgren, P., Amer-Wåhlin, I., & von Thiele Schwarz, U. (2017). Managerial strategies to make incentives meaningful and motivating. *Journal of Health Organization and Management*, 31(2), 126-141.
- III. **Korlén, S.**, Richter, A., Amer-Wåhlin, I., Lindgren, P., & von Thiele Schwarz, U. (2018). The development and validation of a scale to explore staff experience of governance of economic efficiency and quality (GOV-EQ) of health care. *BMC Health Services Research*, 18:963, 1-13
- IV. **Korlén, S.**, Amer-Wåhlin, I., Lindgren, P., & von Thiele Schwarz, U. Exploring staff experience of economic efficiency requirements in health care - a mixed method study. *In manuscript; submitted.*

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## LIST OF ABBREVIATIONS

ASA	American Society of Anesthesiologists
BTS	Bartlett's Test of Sphericity
DRG	Diagnose Related Groups
EFA	Exploratory Factor Analysis
GOV-EQ	The staff experience of governance of economic efficiency and quality (GOV-EQ) scale
KMO	Kaiser-Meyer-Olkin measure of sampling adequacy
NPM	New Public Management
PAF	Principal Axis Factoring
P4P	Pay for Performance
PSM	Public Service Motivation
SDT	Self-Determination Theory
SD	Standard Deviation



# 1 PREFACE

Having a background as a clinical psychologist working in the field of occupational health, the mystery of what drives human behavior has always been of interest to me. Based on my experiences from working with leadership development in various occupational settings I have become increasingly intrigued by the complex interplay between organizational demands (and rewards) and individuals' intrinsic motivation, as well as how these can be aligned. This riddle has also remained a central part of my thesis project.

When I was given the opportunity to become a PhD student at the Medical Management Center, new fields of research opened up to me and exploring the interdisciplinary literature on health care governance was indeed new ground. I think the thesis is best understood by knowing about my background as a psychologist and by reading it as an attempt to give voice to the (subjective) experiences of health care professionals, who are important micro-level actors in a vast and highly complex health care system.

I believe that health care professionals' experience of the conditions for care delivery is very important for them to be willing (and happy) to come to work and to care for their patients. I hope my work in some way contributes to improving health care governance, to support a more efficient resource use in a manner that involves and engages health care professionals.



## 2 INTRODUCTION

The health care system forms one of the cornerstones in the welfare state by ensuring health care services to its citizens. The importance of a well-functioning health care system becomes obvious to all of us when we find ourselves in the vulnerable position of being a patient or a relative of a patient, putting our hope in health care professionals' abilities to help and to meet us with empathy. Health care provision requires substantial financial resources and health care systems across developed countries share the challenge of rising demand (and costs) in relation to limited financial resources (OECD, 2017). This has been explained by a combination of factors, such as an aging population resulting in a declining tax base, longer life expectancy influencing health care demand, and medical and technical innovations enabling new forms of care (McGrail et al., 2000; Mossialos, Dixon, Figueras, & Kutzin, 2002). Across health care systems, improving economic efficiency is a critical factor to ensure that available resources will be sufficient to meet the demand of citizens in the future.

Although the models for funding and provision of health care vary extensively across health care systems, governing bodies share the endeavor of designing economic governance models that push provider organizations to increase economic efficiency without putting patients at risk (Wendt, Frisina, & Rothgang, 2009). In most countries this includes the reliance on public and private provider organizations, and the opportunity to influence provider behavior through reimbursement models (i.e., provider payment) has gained increased attention (Cashin, Chi, Smith, Borowitz, & Thomson, 2014). Historically, fixed annual budgets have been extensively used in exchange for public health care provision, ensuring cost control for health care payers but being criticized for providing weak incentives for productivity and quality of care (Jegers, Kesteloot, De Graeve, & Gilles, 2002). In recent decades, publically funded health care systems have been inspired by mechanisms operating in the private markets and applications of increased competition and financial incentive models to stimulate certain provider behaviors have been increasingly applied (Klijn, 2008).

Still, there seems to be no easy answer for how best to influence health care providers to increase efficiency. The literature evaluating the impact of economic governance strategies is complex (Flodgren et al., 2011), and the extensive variation in how reimbursement models are designed and the influence of contextual factors brings limitations to the generalizability of findings of specific studies. In addition, the evidence appears inconclusive. Individual studies show that reimbursement models may be effective in stimulating specific provider behaviors whereas additional studies point at the risk of unintended consequences to aspects of care that are not defined in the model (Flodgren et al., 2011; Glasziou et al., 2012; Scott et al., 2011). Although this is an area of intense debate, researchers from various fields seem to agree that all provider payment models come with limitations (Roland & Dudley, 2015).

The fact that a majority of evaluation studies focus on provider-level outputs, such as costs, productivity, and (more rarely) quality indicators (Flodgren et al., 2011; Mandavia, Mehta, Schilder, & Mossialos, 2017; Scott et al., 2011), suggests that perspectives from within the organizations might be useful, in particular since the use of provider reimbursement relies on

the assumption that this will change the behaviors of those working on the ground. Although there is growing attention to the relevance of organizational and individual factors (Frolich, Talavera, Broadhead, & Dudley, 2007), surprisingly few studies take the perspective of professionals, although their engagement in economic governance requirements is essential for change to happen. Thus, studies of governance taking a professional perspective can make a contribution by providing insights about the conditions for behavior change in clinical practice, unveiling the underlying processes of organizational change.

Insights from management research and from the motivational literature may enrich studies on economic governance. The literature on management emphasizes the important role of managers for organizational performance. Managers are described as serving as a link between organizational demands and individual staff members, by defining, organizing and coordinating relevant tasks, but also by delegating tasks in an engaging and motivating manner (Hales, 1999). Studies in health care settings suggest that professional managers have an important “hybrid” function in integrating organizational demands with the care delivery process (McGivern, Currie, Ferlie, Fitzgerald, & Waring, 2015), guided by professional expertise but also by their understanding of professional culture. Clinically experienced managers have shown to be a key factor for positive organizational outputs in regard to quality outcomes and financial performance at the provider level (Goodall, 2011; Jones et al., 2017). However, more research is needed to explore the specific managerial strategies that are used to balance multiple governance requirements and how these are integrated to current care practices (Kuhlmann & von Knorring, 2014).

The vast literature on motivation also provides helpful perspectives on how governance applications may be experienced at the professional level, by highlighting the important interplay between external demands and internal motivational processes related to an individual’s feelings, preferences and values. Motivational theory suggests that internal reward from doing good or from acting autonomously may have just as strong, or stronger, influence on behavior as external rewards (Gneezy, Meier, & Rey-Biel, 2011; Ryan & Deci, 2000). The motivational impact from safeguarding patient needs has shown to be particularly important to staff in the public sector (Perry, Hondeghem, & Wise, 2010), and the autonomy to meet patient needs has been described as a fundamental factor for job satisfaction among health care professionals (Swick, 2000). Thus, based on the motivational literature in several academic disciplines, health care professionals’ experience of how economic governance models influence the conditions for care delivery seems to be an important factor influencing their behavioral response.

This thesis intends to provide knowledge about how health care professionals at the manager and staff level experience the economic governance of provider organizations, referring to the general demands of economic efficiency in health care provision. The thesis tries to bridge the macro-, meso- and micro-levels of health care systems by focusing on how governance models are perceived by professionals when filtered through organizational layers, rather than the governance model itself.

## **2.1 POSITIONING OF THE THESIS AND CENTRAL DEFINITIONS**

The thesis project is positioned in a highly interdisciplinary field of research and the thesis combines literature from several academic disciplines. Although literature on health care systems and governance is used to describe the complex strategies underlying health care provision, the thesis primarily applies a psychological perspective of economic governance by focusing specifically on professionals' subjective experiences. This is partly explained by the scientific experience of the thesis author at the start of the thesis project. Literature on management, motivation, and behavior change has been used to guide the focus of the studies and to interpret the findings. In addition, related scientific fields such as the literature on policy implementation, the sociological literature on professionalism, and research on public service motivation have been increasingly explored.

### **2.1.1 Definitions of central concepts**

The thesis applies a number of central concepts, of which the inherent definitions and meanings will be clarified below.

#### *2.1.1.1 Governance*

The concept of health care governance holds multiple definitions, but generally refers to how health care systems are governed to pursue multiple objectives, including for example how targets and priorities are set, how access to care and cost control is determined, and how the relationship between providers, professionals and patients are regulated (Klijn, 2008). Governance more broadly refers to "how things are done" in contrast to the specific focus on "what should be done" in health policy (Greer, Wismar, & Figueras, 2016). Governance includes government-led political processes and the reliance on market mechanisms and self-regulation of nonpublic actors (Wendt et al., 2009). Governance applications range from forced regulation imposed on public service providers to soft governance initiatives using information and advisory guidelines to influence provider behavior through their engagement (Brandsen, Boogers, & Tops, 2006).

In the thesis context, the concept of economic governance is applied, referring to the actions taken by governing bodies to influence the overall economic efficiency of health care provision (Wendt et al., 2009). In the thesis context, this includes the model for provider reimbursement, how health care provision is organized, and how the assignments for care delivery are defined at the provider level. The specific economic governance models applied in the thesis studies will be described in detail in the method section.

In the thesis context, health care quality is distinguished from economic efficiency by applying the concept of quality governance, referring to activities undertaken by governing bodies to influence the quality of care. Acknowledging that health care quality holds multiple definitions and commonly include criteria for efficient resource use (Wiig et al., 2014), these concepts are distinguished in the thesis based on the general understanding of these concepts

as separate phenomena. In the context of the thesis, health care quality refers broadly to the attainment of desirable patient outcomes and experience of care.

#### *2.1.1.2 Policy*

The term policy is occasionally used in the thesis to refer to specific policy initiatives having specific intentions for specific actors (such as a patient choice model). The concepts of policy maker and policy level are used to broadly refer to politicians, decision makers and civil servants representing national or regional governing bodies (Schofield & Sausman, 2004).

#### *2.1.1.3 Economic efficiency*

The concept of economic efficiency of health care is central to the thesis. Acknowledging the complexity of the concept and its multiple applications at the system and provider level, a general definition is applied in the thesis context, referring to the extent to which resources (inputs) are used in the best of ways to produce valuable outputs (Eurohealth, 2017). This implies that the experience of economic efficiency requirements at the professional level refers to their general experience of using available resources in the best of ways in relation to their mission, which may include a variety of resource-consuming activities or equipment.

#### *2.1.1.4 Provider organizations*

The concept of health care providers (or providers) is applied in the thesis, with reference to health care provider organizations (i.e. the organizational entity), rather than individuals involved in health care delivery.

#### *2.1.1.5 Health care professionals*

The concept of health care professionals is applied in the thesis, with reference to all employees working close to patients in care delivery, regardless of managerial position or responsibilities. Acknowledging that the concept of professionals in specific academic contexts postulates high levels of education and expertise (Evetts, 2003), the application of professionals in the thesis context includes staff members of varying competences and responsibilities, who are recognized as members of the overall health care workforce (Kickert, 1997).

#### *2.1.1.6 Managers and staff*

The thesis relies on the concept of managers (rather than leaders), referring to professionals in managerial roles holding responsibilities for managing care provision, which do not necessarily require a formal managerial position (Hales, 2002). The concept of managerial strategies will be used to refer to the actions managers take to influence staff members (and thereby care delivery), acknowledging that some of these strategies balance on the verge of what could also be classified as leadership behaviors (Yukl, 2012). The concept of staff will be used in the thesis with reference to professionals holding no managerial responsibilities.

### 3 OVERVIEW OF STUDIES

The thesis studies (illustrated in Figure 1) explore professionals' experiences of two empirical settings, representing different applications of economic governance but also sharing similarities by including health care providers in specialized care, operating in two large urban areas in Sweden.

Case 1 (represented in Studies I and II) illustrates the more recent trend of introducing patient choice in specialized care. This manifests in a regional patient choice model for elective orthopedics that includes increased provider competition, specialization of providers and a reimbursement model designed to provide incentives for quality and economic efficiency.

Case 2 (represented in Studies III and IV) illustrates a more traditional approach to economic governance, by the use of annual budgets in a university hospital setting experiencing substantial economic pressure. This case specifically focuses on the Department of Rehabilitation Medicine.

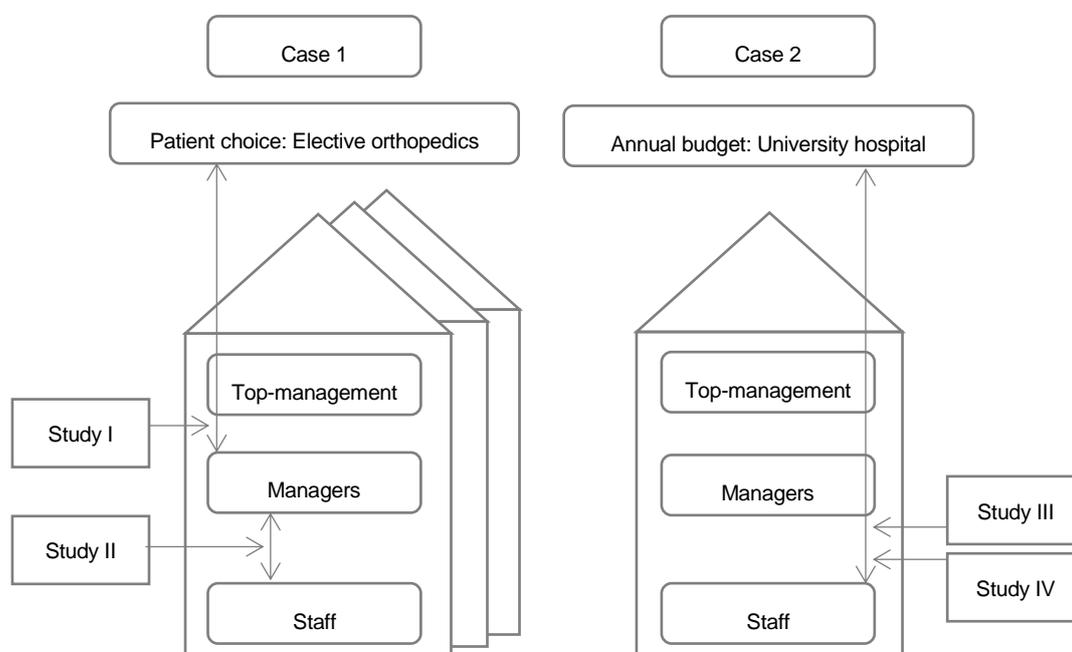


Figure 1. Illustrative overview of the thesis studies.

The thesis studies represent different perspectives in regard to the target group. In Studies I and II, the study participants primarily include professionals in formal managerial positions or in managerial roles, who hold responsibilities of managing care and leading others. In Studies III and IV, the study participants include professionals who have no managerial duties. The study participants in all studies are clinically active or have a clinical background. In Studies I and II, the study participants mainly represent physicians and nurses. Studies III and IV target a multi-professional population, including for example physiotherapists, work therapists, psychologists, and nurses.

## 4 AIM

The overall aim of the thesis is to explore health care professionals' experience of economic governance.

The thesis includes four empirical studies with the following specific aims:

- Study I: To explore what consequences professional managers identify as relevant, and why, in the context of a policy reform introducing patient choice in specialized care.
- Study II: To explore the strategies professional managers use as intermediaries between a policy reform, introducing patient choice in specialized care, and the motivation of staff.
- Study III: To develop a self-assessment scale capturing staff experiences of governance, defined as economic efficiency and quality requirements of health care, and to assess its psychometric properties.
- Study IV: To increase the understanding of staff members' experiences of economic efficiency requirements in health care and explore how these experiences are shaped.

## 5 BACKGROUND

The background literature holding relevance for the thesis project addresses the macro-, meso-, and micro-levels of health care systems, illustrated in Figure 2. First, key characteristics of health care systems will be described from a macro level perspective, introducing the concept of economic governance (section 5.1). The Swedish health care system will be described separately, in section 5.1.4. Thereafter, literature targeting the meso-level and provider organizations will be presented (section 5.2), addressing important characteristics of health care management and the role of managers. Last, literature targeting the micro-level of individual motivation and behavior will be introduced (section 5.3), including theoretical perspectives from multiple scientific disciplines that provide insights to how economic governance may influence professional behaviors in clinical practice.

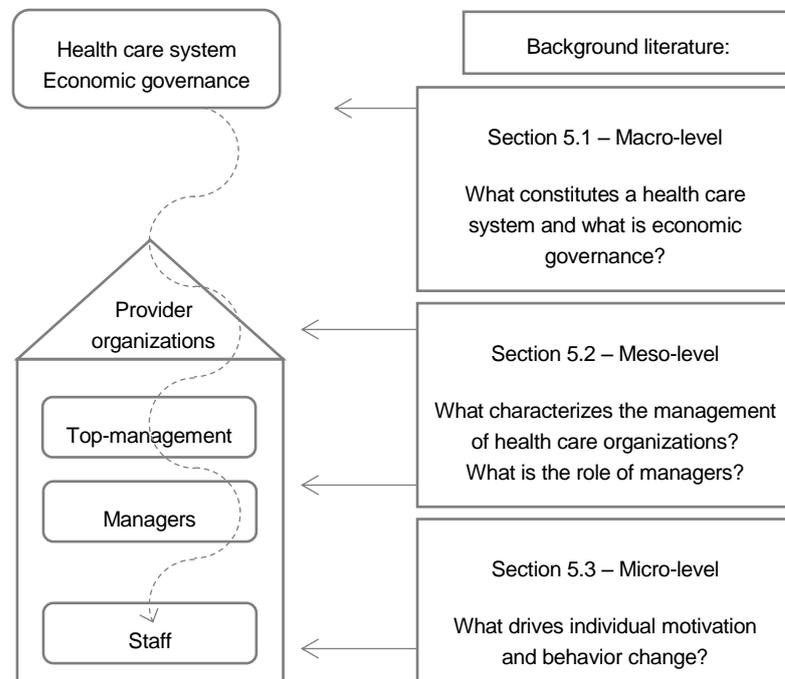


Figure 2. An illustrative guide to the reading of the background literature.

### 5.1 WHAT CONSTITUTES A HEALTH CARE SYSTEM?

The health care sector encompasses a substantial part of national expenditures, on average 9% of GDP in OECD countries. Health care also influences society substantially by being one of the largest employers, representing 10-20% of the total workforce (OECD, 2017). Different countries, having different historical, political, and cultural experiences, have chosen varying strategies for ensuring funding and provision of health care services. Although this makes comparisons and generalizations across countries difficult, the principles for funding, provision, and governance have been distinguished as key components of health care systems (Wendt et al., 2009). These will be further described below. Although health

care commonly is a responsibility of the public sector, both funding and provision of health care services may include a combination of public and private actors.

Although diminishing economic resources has been acknowledged as one of the greatest challenges for health care systems, money is not everything. Health care systems hold multiple purposes, and economic efficiency of care delivery needs to be balanced to the quality of care and its ability to improve peoples' health, when assessing to what extent a health care system meets its objectives. The triple aim framework has been proposed to support a holistic view of the purpose of health care, balancing the simultaneous pursuit of "improved experience of care, improved population health and reduction of the per capita cost of health care" (Berwick, Nolan, & Whittington, 2008). In specific countries, certain principles may also be emphasized, such as the central role of equity in the Swedish health care system (Anell, Glenngard, & Merkur, 2012). The expanded quadruple aim has also been proposed to explicitly acknowledge the critical role of the health care workforce for a well-functioning health care system, and include the aim of improving the experience of care provision (Sikka, Morath, & Leape, 2015).

### **5.1.1 Models for health care funding**

Health care delivery consumes substantial financial resources and since health care is potentially very costly, health care systems are generally organized to reduce the financial risk for individuals. By relying on a third-party system, in which funding is collected from the citizens by a (public or private) funding body, the resources are redistributed to health care providers, which in turn provide health care to the citizens (Mossialos et al., 2002). The levels of public and private funding vary across countries, but most systems apply a mix of funding sources. Public funding is primarily carried out through national or regional taxes, or through public social health insurance programs. Private funding mainly consists of health care insurance programs funded by employers and/or by individuals, as well as out-of-pocket-payments (Mossialos et al., 2002). Public funding is the predominant strategy in European countries and in countries such as the United Kingdom, Denmark and Sweden public funding constitutes as much as 80% (or more) of the total health care spending. At the opposite side of the spectrum countries such as the United States and Switzerland can be found, relying more heavily on private funding that constitutes around 50 % of the total health care expenditures (OECD, 2017).

### **5.1.2 Strategies for organizing health care provision**

To redistribute the funding collected for health care, different strategies are used to organize health care provision to the citizens, which include how different assignments for care delivery are defined for different provider organizations, but also to what extent public and private providers (or both) are responsible for care delivery.

### *5.1.2.1 Structural reorganization of health care providers*

By tradition, health care providers have been organized in the domains of primary, secondary, and tertiary care. Primary care providers should respond to common health problems and posit a referral function (and in some countries act as gate keepers) for transferring patients to secondary care. Secondary care consists of specialized types of care provided by hospitals or by specialized outpatient providers, ranging from low-risk elective procedures to the treatment of complex and chronic conditions. Tertiary care refers to highly specialized care, commonly centralized to regional or national hospitals. University hospitals have a central role in integrating care delivery with professional education and clinical research conducted at medical universities. Social care is in most countries separated from health care and funded and delivered by municipalities (Walshe & Smith, 2011). In practice, however, the assignments and boundaries between different providers are not crystal clear and the patient journey commonly requires the involvement of multiple health care providers.

In line with the economic challenges of health care systems, there is a general concern for the dependency on costly hospitals and efforts are made to transfer specialized care that does not require hospital resources to community clinics (Walshe & Smith, 2011). The shifting of specialist services out of hospitals has been found effective in improving access to care, however at risk of reducing quality and increasing overall costs (Sibbald, McDonald, & Roland, 2007). As many European health care systems move toward decentralization of specialized care and increased autonomy for hospital providers, concerns have been raised that some of the benefits of the centrally managed hospitals for knowledge development and high level expertise might be lost (Rechel, Duran, & Saltman, 2018).

### *5.1.2.2 Increased provider competition through patient choice*

The regulations for how private providers are allowed to operate in health care markets have changed considerably during the past decades. Historically, hierarchical state-led control of providers has been a fundamental component of publically funded health care systems, such as the English NHS. In contrast, the American health care system has for a long time relied on market forces and competition of private providers (Walshe & Smith, 2011). Over time, publically funded health care systems have, however, moved toward a mix of public and private actors (Joumard, André, & Nicq, 2010).

With the main purpose of increasing economic efficiency, the application of market logics became increasingly influential in public policy during the early 1990s. The marketization of health care is commonly attributed to the New Public Management (NPM) public administration strategy (Hood, 1995). The definition of NPM is debated (Osborne, 2006), but it is commonly described as including increased provider competition through increased patient choice and the establishment of private actors in the market, a strengthened control of health care providers through performance evaluation, and the application of financial incentives by linking provider payment to performance targets (Klijn, 2008).

According to market-based theory, the best providers will be rewarded by increased demand when letting patients choose, and in a system where money follows the patients this provides incentives for improved quality of services and increased efficiency (Le Grand, 2009).

Increased patient choice has been broadly implemented in the Northern European countries, for both hospital- and primary care providers. The discourse of argumentation behind the reforms has varied across countries, ranging from arguments emphasizing the strengthening of patients' voice to the need for increased efficiency (Vrangbaek, Robertson, Winblad, Van de Bovenkamp, & Dixon, 2012). The prevalence of private providers is higher in the primary care sector than among hospitals in most countries, although this varies extensively across different health care systems (Journard et al., 2010).

The empirical evidence of the consequences of increased patient choice is debated and the complexity of reforms brings challenges when designing evaluation studies. Although there are studies identifying positive effects on costs and patient outcomes as a result of patient choice and provider competition (Gaynor, Moreno-Serra, & Propper, 2013), the overall literature provides limited evidence that choice reforms will improve efficiency and quality of care. Concerns have been raised that choice reforms undermine equity of care (Fotaki, 2014; Fotaki et al., 2008), and critiques have been posed of the broad implementation of patient choice models despite the lack of knowledge of whether patients prefer to choose (Appleby & Dixon, 2004), have equal abilities to choose (Fotaki, 2014), and to what extent choices are based on quality indicators (Magee, Davis, & Coulter, 2003).

### **5.1.3 Health care governance**

As previously defined, health care governance refers to how health care systems are governed to pursue their multiple objectives (Klijn, 2008), which include a variety of actions taken to steer public service providers to behave accordingly. Health care governance varies across systems with the degree of national control (centralization) and local autonomy (decentralization) (Saltman, 2008). The level of forced regulation in governance varies and is distinguished using the concept of hard and soft governance. Hard governance refers to hierarchically imposed regulations, such as laws and formal requirements that control provider behavior by determining for example patient rights and resource distribution. In contrast, soft governance applications aim at influencing provider behavior through information and advisory guidelines, relying on their engagement rather than formal accountability (Brandsen et al., 2006). This includes the implementation of clinical guidelines to support evidence-based practice and the monitoring of quality indicators and patient outcomes at the provider level to inform quality improvement initiatives. Soft governance has been proposed as more appealing to professionals as it enables their involvement in identifying how to improve care delivery, leaving room for innovation (Brandsen et al., 2006). In the policy implementation literature, the key role of engaging professionals working at the ground level is also emphasized (Schofield & Sausman, 2004), arguing that their interpretation and discretion in putting governance and policy into practice substantially

influence the attainment of intended policy outcomes. However, the role of professional discretion is also debated, argued to be both a risk factor and a resource in policy implementation (Tummers & Bekkers, 2014). In summary, multiple governance mechanisms that imply varying degrees of freedom of action operate in parallel to influence different aspects of provider behavior, to pursue the multiple aims of health care.

#### *5.1.3.1 Using reimbursement models to influence provider behavior*

Provider payment (also referred to as reimbursement models) is used as a means for resource distribution to (public and private) providers in exchange for care delivery. It can also be regarded as a form of (economic) governance that influences the use of economic resources, based on the underlying assumption that payment will influence provider behaviors in accordance with the logics of how reimbursement is determined. Health care providers are assumed to strive for maximizing financial revenues and thereby to intensify certain activities if reimbursement is linked to specific targets, and to increase the overall economic efficiency within fixed (and limited) economic boundaries (Jegers et al., 2002). Although the concept of financial incentive models is commonly used when there is a clear association between reimbursement and performance targets, all reimbursement models can be said to provide incentives for specific provider behaviors depending on their characteristics. The empirical cases included in the thesis represent two types of reimbursement: bundle payments and annual budgets. However, these specific models are best understood in context of the great variation of reimbursement models (and their underlying assumptions) and the diversity and complexity of studies evaluating their effects.

Reimbursement models can broadly be defined based on when they are distributed (prospective vs. retrospective), what object the reimbursement is based on and to what degree the level of reimbursement can vary (fixed vs variable). Variable reimbursement, that is based on what the provider actually did, provides stronger incentives for specific provider behaviors than fixed reimbursement that will remain the same regardless of provider activity (Jegers et al., 2002). Historically, fixed reimbursement models such as annual budgeting have been extensively applied in publically controlled health care systems, in particular for hospital payment. Annual budgets are estimated beforehand, commonly based on historical data, and provide opportunities for health care payers to control costs and put general pressure on providers to manage resources efficiently. However, annual budgets have been criticized for providing weak incentives for productivity, increasing patient access and quality of care (Jegers et al., 2002). Annual budgeting is still extensively applied, but commonly in combination with performance- or activity-based reimbursement (Rechel, Duran, et al., 2018). In primary care capitation payment has been more common, which consists of a lump sum based on the patient population that is under the responsibility of the provider. Capitation generally provides incentives for increasing the overall economic efficiency, but may create a risk of limiting access to care for vulnerable (and costly) patients (Gosden et al., 2000).

With a growing focus on incentivizing provider performance a broad variety of reimbursement models linking payment to specific objects or targets have been developed

(Jegers et al., 2002). In activity-based models (also referred to as Fee For Service), payment is provided for specific care activities and these models have been extensively applied in primary care (Gosden et al., 2000). This provides strong incentives for increasing access to care and for productivity, however, it is at the risk of inducing demand for unnecessary care (Jegers et al., 2002). In case-based models, such as Diagnose Related Groups (DRG), the reimbursement is determined by the types of patients who are treated. The reimbursement levels are estimated beforehand for different diagnostic groups, based on typical activities and the average cost of treatment for typical patients. The DRG system was originally developed as a monitoring tool for hospital management but was later used to also govern reimbursement. The DRG system is assumed to provide incentives for increased efficiency, but has been criticized for providing incentives for strategic selection of profitable patients, putting vulnerable patients at risk (Jegers et al., 2002). To increase provider responsibility for the entire care cycle, a more universal form of case-based reimbursement, the bundle payment model, has been developed. Reimbursement is based on the overall cost for an entire care episode (for a specific patient group) and is not linked to specific provider activities. The bundle occasionally expands the providers' responsibilities to include the handling of complications post-discharge to create incentives for increasing the quality of care during the initial care episode (Steele & Reilly, 2010).

To increase focus on the outcomes of care, rather than on care activities, pay-for-performance (P4P) models of reimbursement have been developed, linking payment to performance targets. Although the intention to incentivize provider performance makes perfect sense, the complexity of defining valid performance targets has proved to be a challenge, as performance in a health care system includes many aspects, such as economic efficiency, quality, and accessibility (Cashin et al., 2014). The application of P4P is widespread in the United States and increasingly applied in European health care systems (Eijkenaar, Emmert, Scheppach, & Schöffski, 2013), most extensively in primary care but also in the hospital sector (Eijkenaar et al., 2013; Van Herck et al., 2010). The empirical evidence of the impact of P4P-models is inconclusive (Eijkenaar et al., 2013), and there is a general concern for unintended consequences for care quality and for vulnerable patients, if performance targets are too narrowly defined and predominantly address financial performance (Glasziou et al., 2012). However, substantial efforts have been made to identify relevant patient outcomes and quality indicators to be used as targets for so-called quality-based (Conrad & Perry, 2009) and value-based reimbursement (Conrad, 2015).

In summary, influencing provider behavior through reimbursement models provides challenges in defining valid targets for desirable provider behavior. In addition, evaluation studies highlight the risks that efficiency gains in one end may come with negative consequences to other aspects of care delivery. Due to the complexity of the wide range of applications and provider contexts, the findings of evaluation studies are not easily summarized. Available reviews primarily consist of empirical studies conducted in primary care settings, including a wide variety of reimbursement models (Flodgren et al., 2011; Scott et al., 2011). In addition, review studies include research studies from health care systems that

are very different in many aspects (Eijkenaar et al., 2013; Van Herck et al., 2010), and the differences across contextual settings is argued to limit the overall generalizability of findings (Eijkenaar et al., 2013).

In addition, the validity of findings in evaluation studies have also been questioned based on methodological challenges and weaknesses in study designs, such as short follow-up times and great variation in methodology for assessing impact (Chaix-Couturier, Durand-Zaleski, Jolly, & Durieux, 2000). Evaluation studies have also been criticized for including a narrow scope of outcome measures (Eijkenaar et al., 2013), rarely including patient outcomes (Flodgren et al., 2011), which provide a limited perspective on overall success. Based on the complexity of assessing to what extent provider payment is a successful governance strategy, researchers in the field have highlighted the need for studies exploring underlying contextual factors, such as market composition and the type of care provided (Chaix-Couturier et al., 2000), parallel steering mechanisms such as quality reporting (Roland & Dudley, 2015), and organization characteristics such as culture (Frolich et al., 2007) and leadership (Van Herck et al., 2010), which may influence the impact of provider payment.

#### *5.1.3.2 The influence of provider payment on professionals*

Although the use of provider reimbursement as a mode of economic governance relies on the assumption that it will change care delivery, its direct (or indirect) impact on the professional level has been questioned (Robinson, 2001). In publically owned provider organizations the majority of staff members are salaried employees, whose payment levels are not influenced by how providers are reimbursed (Walshe & Smith, 2011). However, private health care providers can be staffed by professionals who are clinically active and also have a provider ownership, which implies a stronger link between provider payment and a potential financial benefit at the individual level. This particularly applies to primary care, in which the penetration of self-employed primary care facilities are also common in publically funded health care systems such as the United Kingdom (Gosden et al., 2000). Although empirical studies show that reimbursement at the provider level may influence clinical behaviors of physicians accordingly (Gosden et al., 2001; Melichar, 2009), experimental studies show that health care professionals are also motivated by factors beyond personal financial gains, such as providing high quality care (Kolstad, 2013) and safeguarding patient needs (Godager & Wiesen, 2013). Similarly, qualitative case-studies exploring the application of financial incentives in UK primary care settings show that professionals are concerned about being governed by financial incentives rather than patient needs, which appears to be at risk of undermining motivation (McDonald, Harrison, Checkland, Campbell, & Roland, 2007), reducing professional autonomy (Hackett et al., 2014), and negatively influencing the patient-doctor relationship (Campbell, McDonald, & Lester, 2008). Overall, the implications of provider payment mechanisms at the professional level have not been given sufficient attention and the need for empirical research and conceptual models including aspects of the organizational and professional context in which certain reimbursement models are applied has been emphasized (Frolich et al., 2007).

## 5.1.4 The Swedish case

### 5.1.4.1 *Aim and funding strategy*

The Swedish health care system can be described as a socially responsible system ensuring universal access to health care for residents regardless of nationality. The Swedish health care system has one of the highest proportions (84%) of public funding in international comparisons (OECD, 2017) and is primarily funded through local income taxes. The Swedish health care system is guided by three core principles of equal rights to care, solidarity and need-based access to care, and cost-effectiveness (Anell et al., 2012). Sweden has a highly decentralized health care system giving considerable freedom to the 21 regions that are responsible for funding and organizing health care to the regional population. Other welfare services, such as social care and elder care are funded and organized at the local level by municipalities (Rechel, Maresso, et al., 2018). The Ministry of Health and Social Affairs is responsible for health policy at the national level, focusing on improving national coordination of care and reducing regional differences (Anell et al., 2012).

### 5.1.4.2 *Structural change of health care provision and the influence of NPM*

Like other developed countries, Sweden faces the challenges of increasing demand and limited resources in the health care sector. On a structural level, Swedish health care has moved from relying extensively on hospital inpatient care toward transferring patients to hospital outpatient care and to primary care facilities. The (costly) intensive care has been concentrated to acute-care hospitals and highly specialized care is provided at the seven public university hospitals, also having a key role in the education of health care professionals and in clinical research (Anell et al., 2012).

Since the 1980s, there has been growing attention to cost control which has paved the way for the growing influence of NPM. The Swedish health care system has undergone major reforms during the past decades to increase efficiency and responsiveness, such as increased corporatization of public providers, splitting purchasing and provision of public services into separate organizational entities, increasing patient choice, and the establishment of private providers in the health care market (Saltman, 2015). However, the local implementation of reforms differs substantially across regions. Giving patients the right to choose providers was accepted and implemented by all regions in 1991 (Vrangbaek et al., 2012). Choice was initially not linked to the freedom of establishment of private providers, but after this was made mandatory in primary care in 2010 the emergence of private providers has increased substantially, in particular in large urban areas (Anell, 2015; Anell et al., 2012). In specialized care patient choice reforms and the establishment of private providers has also increased, mainly targeting elective care. 80% of patient choice models in specialized care are concentrated in Stockholm, Uppsala, and Skåne. Although private specialized providers have been established and a few privately owned hospitals exist in Sweden, public providers still dominate specialized care (Anell, 2013).

The impact of choice reforms in Sweden is debated. In primary care, the choice reform seems to have increased access to care (Glenngård, 2015), although studies also indicate that privileged subgroups may have benefited more from the reform, putting citizens with low incomes and serious diseases at risk (Anell, 2015; Burström, 2009). Generally, there is a lack of knowledge on how increased choice has influenced quality outcomes, cost-efficiency, and equity (Anell, 2015; Glenngård, 2015). In specialized care, evaluations show that the introduction of patient choice has increased the establishment of private providers and increased the productivity of care but more knowledge is needed to assess the general effects of choice in specialized care (Myndigheten för Vårdanalys, 2014). Local evaluations show that patient characteristics differs across private and public providers in regard to income and education (Wohlin et al., 2016), which may explain some of the observed variation in quality indicators across providers (Myndigheten för Vårdanalys, 2014). In general, uncertainties also remain in regard to patients' awareness of their opportunity to choose (Vrangbaek et al., 2012).

#### *5.1.4.3 Governance characteristics*

The Swedish health care system is highly decentralized, and governance is primarily conducted at a regional level, through the interaction between the regional governing bodies and provider organizations (Fredriksson, Blomqvist, & Winblad, 2012). However, national governance strategies are occasionally applied to reduce regional differences or to support specific challenges (Anell et al., 2012), such as the national waiting-time guarantee introduced in 2005 to improve access to care (Winblad & Andersson, 2010).

The Swedish system uses multiple soft governance applications to support health care quality, for example, by the use of national guidelines for health care provision based on best available evidence (Myndigheten för Vårdanalys, 2015), and by making provider performance of quality indicators available through regional comparisons (“Öppna jämförelser”) (SKL, 2018b). In addition, substantial financial support from the regional and national government has been provided to the national quality registers, collecting extensive data on patient outcomes, which are used to inform local and regional work on quality improvement (Rosen, 2010). Although NPM has increased the focus on economic efficiency in care provision, the current mode of governance represents a comprehensive performance paradigm also paying attention to quality indicators and patient outcomes (Anell et al., 2012).

#### *5.1.4.4 Reimbursement models in the Swedish context*

Public funding is distributed to public and private providers through provider reimbursement, and private providers' access to public funding is controlled by local regulations for accreditation (Anell et al., 2012). The issue of how financial resources are transferred to providers has received growing attention in Sweden. Historically, the use of fixed annual budgets was criticized for providing insufficient incentives for productivity and efficiency, and as part of the NPM agenda these were replaced by performance- and activity-based reimbursement. Today most regions apply a mix of reimbursement models. In primary care,

capitation predominates, and it is commonly combined with a lower degree of performance-related reimbursement linked to specific targets. For hospitals, annual budgets still represent the fundamental principle for reimbursement in all regions, although they are being combined with variable reimbursement models, such as DRG. In regions that apply patient choice in specialized care, the bundle payment model has been applied, including efforts to link payment to patient outcomes (Lindgren, 2014).

The risk of unintended consequences when applying activity- or performance-based reimbursement has been increasingly discussed in Sweden, in particular in regard to negative impact on quality and increased administrative burden for health care professionals. A recent governmental investigation concluded that the complexity of reimbursement models should be carefully considered and that all models come with the risk of adverse consequences. Further, it is proposed that reimbursement models should not be the primary focus in health care governance and that other steering mechanisms to improve the quality of public services should be developed and applied (SOU 2017:56, 2017). In specific regions annual budgeting has been reintroduced in the public hospital sector to replace DRG, in an attempt to increase the mandate at the provider level to decide upon how resources are used optimally (Ellegård & Glenngård, 2018).

#### *5.1.4.5 The influence of economic governance on health care professionals*

The vast majority of Swedish health care professionals are salaried staff, employed by public and private health care providers, and professionals are to a low degree influenced by provider reimbursement. However, the strategies of economic governance are still a matter of concern within the professional community. Empirical studies exploring the implications of NPM reforms have shown quite heterogeneous reactions among subgroups of professionals, ranging from resistance to welcoming, dependent on the responsibilities embedded in different professional roles (Blomgren, 2003). Research on local applications of NPM-inspired control models show that the awareness of productivity and resource restrictions increases among clinical staff, not necessarily being in conflict with professional autonomy (Liff & Andersson, 2011). However, studies of control models including performance-based payment have shown that the logics of linking reimbursement to specific care activities may be misaligned with the needs of specific patients, forcing professionals to outwit the systems and find creative ways to sufficiently meet individual needs (Brorström, Hallin, & Kastberg, 2004).

Media reports about the growing frustration among health care professionals have also influenced the debate on health care governance in Sweden, highlighting for example the increased administrative burden and unintended consequences for patients as a result of DRG-based payment (*Dagens Nyheter* 2013, *Artikelserie: Den olönsamma patienten, Zaremba, M*) and the concern over reimbursement logics overshadowing patient needs, negatively influencing professionals' job-satisfaction (*Dagens Medicin* 2018, *Artikel: Diagnoskoder sprutar ur öronen på mig, Isacson, M*). The need for increased trust and involvement of professionals in the governance of public services has been emphasized by

the recent governmental investigation The delegation of trust (Tillitsdelegationen), which proposes that increased professional autonomy to provide high quality services should characterize future modes of governance of the welfare sector to better utilize professional competence and skills (SOU 2018:47, 2018).

## **5.2 HEALTH CARE MANAGEMENT**

The idea of using national and regional governance to steer health care systems relies on the assumption that provider organizations will respond to the external demands imposed on them. Thus, the management of provider organizations plays a key role in incorporating governance objectives to the objectives of the organization, transforming system-level requirements into local guidelines and practices that will ultimately influence care delivery. Nevertheless, the program logics illustrating how governance applications should be turned into practice are rarely articulated. Insights from the organizational- and management literature provide useful perspectives unpacking the black box of organizations, exploring the process of how external demands are integrated in internal structures and processes of an organization. Within the realms of this thesis, two aspects of management are particularly relevant. First is the organizational logics that characterize how work generally is organized and managed in health care organizations. Second, the role of managers acting as a link between top-management decisions and clinical staff is key to defining and coordinating tasks that are perceived as relevant but also spark engagement at the staff level.

### **5.2.1 Organizational logics**

In the organizational literature, various descriptions of the ideal type of organization can be found, describing how internal processes and structures can be designed to optimize efficiency and goal attainment. The improvement of work processes has historically relied heavily on standardization and coordination of tasks, in response to stable and predictable problems. Although modern organizational theory recognizes goal complexity and the importance of flexibility and adaption, the image of organizations as predictable, machine-like creatures remains (Shafritz, Ott, & Jang, 2015). This also applies to health care governance that in many respects assumes that provider organizations will respond to external governance requirements in a predictable manner. Still, health care organizations have historically been regarded as unsusceptible of external demands, based on the high degree of professional involvement in management. Management structures have been based on professional hierarchy (Walshe & Smith, 2011), and performance evaluation has relied on professional peer-review rather than government control (Bauchner, Fontanarosa, & Thompson, 2015).

### *5.2.1.1 The influence of (hybrid) professionalism in health care management*

The strong influence and power of professionals in health care organizations has been extensively explored in the sociological literature. Professionals are defined as occupational groups characterized by having (scientific) expert knowledge that mandates them to conduct their professional duties with a high degree of autonomy (Evetts, 2003; Freidson, 2001). Professionalism has also been positioned as “the third logic”, contrasting the logics of managerialism and that of the market, assuming countervailing powers and conflict (Freidson, 2001). Professional autonomy is described as fundamental to the professional role; however, the underlying reason for this is debated. The two predominating (and partly opposing) interpretations of professional autonomy describe it as an altruistic value system (which will be further explored in section 5.3) or as a means for power, securing professionals’ elite position when under threat of political or managerial dominance (Evetts, 2003).

Professional autonomy has been increasingly challenged by health care reforms derived from the NPM paradigm, which in practice has resulted in more management control functions to govern professional behaviors in health care organizations. This includes systems for audit and knowledge management, clinical guidelines and financial incentives (Walshe & Smith, 2011), and the overall number of managerial positions has increased (Numerato, Salvatore, & Fattore, 2012). Although arguments about NPM undermining the core principles of health care has strongly influenced the debate (Le Grand, 2003), a substantial body of empirical studies show transformative capacities of professionals being able to integrate quality and cost-efficiency requirements (Kirkpatrick, Jespersen, Dent, & Neogy, 2009; Kuhlmann & Burau, 2008). New forms of so-called “hybrid” professionalism have been proposed, to help overcome the managerialism-professionalism dichotomy to better fit contemporary health care requirements (Noordegraaf, 2007, 2011). To sum up, the role of management has become more prominent in health care, balancing external demands and internal structures and processes for health care provision. Despite the increased use of economic governance strategies to influence provider behaviors, there is a lack of theoretical models clarifying how such incentives should work in practice and what factors at the organizational and managerial levels that could facilitate or mitigate their impact (Frolich et al., 2007).

### **5.2.2 The role of managers**

Managerial behavior has been found highly important for organizational goal attainment, and is generally described as the planning, organization and coordination of tasks (Hales, 1999). Contemporary conceptualizations of managerial roles emphasize the importance of reciprocity and trust (rather than hierarchical power) between managers and staff (Hales, 2002), and in that sense managerial behavior shares many similarities with that of leadership. Leadership is generally defined as behaviors to influence and motivate others, emphasizing the relational quality of the interaction, which does not require a formal managerial position.

Thus, one can act like a leader without being a manager, and managers can conduct leadership to positively influence staff motivation and performance (Yukl, 2012). In health care organizations there is a vast variety of managerial roles, ranging from top level management to professionals who are responsible for managing care delivery (Arman, Delleve, Wikström, & Törnström, 2009). Although the rise of managerialism has been described as part of recent policy trends, professionals still hold a substantial proportion of managerial positions in health care organizations (Kuhlmann et al., 2013).

#### *5.2.2.1 The influence of (hybrid) managers on health care provision*

Like in other organizational contexts, health care managers have shown to have a key role for organizational outcomes, going as far as influencing mortality rates (West et al., 2002). Empirical studies suggest that the integration of managerial and professional considerations is essential to managerial work in health care organizations. This includes the coordination of tasks that arise from the care process, but more importantly the balancing of multiple stakeholder perspectives, such as the patients', the professionals' and that of the organization (Corbin & Strauss, 1993; Strauss, 1988). The presence of professional experience among managers has proved to be particularly important for desirable provider performance (Goodall, 2011; Lega, Prenestini, & Spurgeon, 2013). Professional experience is argued to positively influence the management of care as such, but also that it includes the ability to adapt the leadership style to the professional culture (Postma, Oldenhof, & Putters, 2015).

The presence of professional expertise in management has shown to positively influence provider quality, at the level of boards (Jones et al., 2017), at the level of top-management (Goodall, 2011) and at the level of clinical departments and units (Lega et al., 2013). In addition, the involvement of professional managers in budgetary work has been shown to contribute to more positive attitudes among professionals toward economic efficiency requirements (Macinati, 2010) and to improved financial performance at the provider level (Macinati & Rizzo, 2016). Similarly, studies of professional managers' mental models show their abilities to positively integrate cost constraints and quality, in a way in which efforts to work more efficiently are seen as something that potentially could improve quality, by reducing unnecessary care activities (Storkholm, Mazzocato, Savage, & Savage, 2017). Although substantial empirical research suggests advantages of integrating multiple perspectives in health care management, such "hybridity" is mainly studied from the perspective of managers and more knowledge is needed on how staff integrates multiple demands on health care delivery.

### **5.3 INDIVIDUAL MOTIVATION AND BEHAVIOR**

As previously stated, the idea of using economic governance strategies to influence health care providers relies on the idea that this will change the behaviors of professionals involved in care delivery. In the literature taking an individual perspective on behavior change processes, individual motivation is described as a key factor, defined as the energy and

intention behind behaviors (Ryan & Deci, 2000). In addition, motivational theories from several academic disciplines acknowledge the importance of intrinsic sources of motivation, suggesting that the motivational impact of external demands (and rewards) depends on its alignment with individual preferences. From the perspective of the thesis, the motivational literature suggests that professionals' experiences of how economic governance models influence them as individuals, as well as the conditions for them to fulfil their professional duties, are important factors that might influence their behavioral response.

### **5.3.1 Self-determination theory**

Self-determination theory (SDT) originates from the field of psychology and is increasingly applied in organizational research and in studies on occupational health (Gagné & Deci, 2005). SDT acknowledges multiple sources of motivation behind actions and emphasize the role of intrinsic reward for increasing motivation, which occurs from activities that are inherently interesting, meaningful, or enjoyable. According to SDT, all individuals strive toward self-development by satisfying the needs of acting autonomously, developing new competences and experiencing relatedness to others (Deci & Ryan, 2000). SDT also recognizes external sources of motivation to drive behavior, referring to valued consequences in the external environment such as material rewards or praise from others. However, SDT emphasizes the interplay between external and internal reward processes and assumes that the motivational effect of external reward is dependent on its coherence with an individual's values (so-called internalization). Based on the level of internalization, external reward can range from having no effect on motivation to evoking active personal commitment (Deci & Ryan, 2000). By stating that external reward is not necessarily motivating, SDT challenges other motivational theories assuming intrinsic and external rewards to be additive (Van den Broeck, Vansteenkiste, & De Witte, 2008).

A large body of studies and meta-analyses suggest that intrinsic motivation has a higher and more sustainable impact on behavior over time, compared with external reward (Deci, Koestner, & Ryan, 1999). External reward also risks undermining intrinsic motivation, depending on its relationship to individual preferences (Ryan & Deci, 2000). This so-called "crowding out effect" has been observed in multiple experimental studies, but is still questioned and heavily debated (Cameron, Banko, & Pierce, 2001). Studies of SDT in organizational settings show that managerial support of intrinsic motivation is related to high performance and well-being (Baard, Deci, & Ryan, 2004) and potentially a motivational factor superior to monetary reward (Olafsen, Halvari, Forest, & Deci, 2015).

### **5.3.2 Behavioral change theories**

Theories on behavior change contribute further to the thesis project by identifying knowledge, skills, and the environmental context as important determinants for behavior

change in addition to motivation (Michie et al., 2005). According to Operant conditioning theory motivation is regarded as something that arises from the consequences of individuals' interactions with their environments, rather than something that is intrinsically derived. Behavior is explained to be a function of antecedents, that trigger behaviors and the consequences of behaviors that could have both a reinforcing (when perceived as positive) or inhibitory effect (when perceived as negative) on future behavior (Skinner, 1963). Antecedents may provide important information about what to do, although consequences are assumed to represent the main motivational force. Empirical studies applying operant models of leadership have shown that performance can be improved by designing work settings to systematically provide positive consequences, such as managerial feedback, contingent with desired behaviors (Komaki, Minnich, Grotto, Weinshank, & Kern, 2011; Stajkovic & Luthans, 2003).

As numerous theories identifying determinants of behavior change exist, efforts have been made to synthesize overlapping theories (Michie et al., 2005). In the field of implementation science, the COM-B model proposes capability, opportunity, and motivation as main determinants for behavior. Capability includes an individual's physical and psychological capacity, such as knowledge and skills, to engage in the desired behavior. The concept of motivation includes all cognitive and emotional processes that direct and energize behavior. Opportunity includes aspects of the physical and social environment that make desired behaviors possible. The COM-B model is described as an interactive system, which means that capability, opportunity, and motivation are assumed to influence behavior. However, enacting a behavior may also influence capability, opportunity, and motivation in reversed order, which implies that behavior change may change the determinants for future behaviors (Michie, Van Stralen, & West, 2011).

### **5.3.3 Motivation in behavioral economics**

The expanding field of behavioral economics share similarities with SDT by proposing that internal and external reward has relevance for motivation in organizational settings (Ellingsen & Johannesson, 2007). A central assumption in classic economic theory is the linear relationship between monetary reward (incentives) and increased motivation and effort (Benabou & Tirole, 2003), which finds substantial support in empirical studies on the provision of economic incentives in firms (Prendergast, 1999). However, empirical studies also show that economic incentives may backfire on intrinsic motivation (Frey & Jegen, 2001; Gneezy et al., 2011), and the debate of a potential crowding out effect links the fields of behavioral economics and psychology together (Ryan & Deci, 2000).

Similar to SDT, intrinsic motivation is described as being derived from activities "worth doing for the sake of it" (Frey, 1997). In the field of behavior economics, intrinsic motivation from prosocial (altruistic) behavior has gained much attention, and been used to explain engagement in activities such as charity and non-profit organizations that are costly for the

individual (Ellingsen & Johannesson, 2007). The loss of the positive experience of engaging in altruistic behavior also serves as a plausible explanation for the crowding out effect (Gneezy et al., 2011). The experience of doing good is assumed to be spoiled by accepting “selfish” monetary compensation (reducing the overall motivation) (Benabou & Tirole, 2003), and the altruistic preference of staff has been argued to make financial incentives function differently in public versus private organizations (Dixit, 1997).

According to empirical studies, intrinsic motivation can also be derived from activities that generate self-esteem and pride through the interaction with a social environment (Ellingsen & Johannesson, 2008). Social recognition and respect from others have been proposed as a potentially preferred motivator explaining why symbolic rewards may have stronger motivational effects than monetary rewards (Ellingsen & Johannesson, 2007).

#### **5.3.4 Professionalism and professional values**

As previously noted, the sociological literature on professionalism identifies professional values to meet patient needs as a fundamental motivational factor characterizing professionals (Freidson, 2001; Swick, 2000). By emphasizing altruistic motives this literature shares many similarities with the field of behavioral economics. The professional value system (ethos) includes a commitment to protecting individual patients but also to protecting social justice and fairness for all patients (Sox et al., 2002). The motivational profile of professionals has been argued to have major implications for organizational and managerial strategies in the health care context (Le Grand, 2003), emphasizing the importance of alignment between organizational level demands and professional values (Madara & Burkhart, 2015).

#### **5.3.5 Public service motivation**

The research on public service motivation (PSM) shares similarities with the professional literature by emphasizing the specific motivational preference of staff in the public sector. This includes health care professional, but also other occupational groups employed in public services. PSM is defined as an altruistic motivational profile characterizing public servants, which includes a concern for the interest of the larger community of citizens, going beyond organizational and personal gains (Perry et al., 2010; Vandenabeele, 2007). PSM has been distinguished from other theories of intrinsic motivation in that it emphasizes the experience of purpose and meaning as main motivators, rather than satisfaction of personal needs (Grant, 2008). Although continuously debated, there is empirical evidence to support the existence of PSM (Bright, 2008); for example studies observing high levels of PSM among employees in the public sector, such as nurses, teachers, social workers and fire fighters (Vandenabeele, Brewer, & Ritz, 2014). Strong engagement in altruistic behaviors (Rainey, 1982) and lower ranking of external rewards has also been observed among public servants, when compared to employees in the private sector (Crewson, 1997; Georgellis, Iossa, & Tabvuma, 2011).

## 6 METHODS

The method section is introduced by a general description of the underlying assumptions of the research strategies and methods used in the thesis. Thereafter the empirical settings and the specific study designs and methods will be described in detail.

### 6.1 RESEARCH STRATEGIES

Scientific research can be described in simple terms as activities that aim to describe and explain complex phenomena. However, different types of scientific research are guided by a set of underlying assumptions, often called paradigms, shared by communities of scientists. A research paradigm includes assumptions about the “reality” that is investigated (ontology), the relationship between that reality and the scientist (epistemology), and shared views of what techniques (methodology) that are appropriate to obtain valid knowledge (Healy & Perry, 2000). The thesis studies apply qualitative and quantitative methods representing different research paradigms, and although this thesis will not do justice to the extensive scientific debate of ontology and epistemology, a brief introduction to the underlying assumptions of the methods used is necessitated.

Post-positivism is commonly positioned as the dominant paradigm, in particular in natural sciences, assuming there is a reality that can be objectively observed and described. Quantitative methods are commonly used for data collection and analysis. Research studies commonly use randomly selected representative samples and findings are thereby assumed to be generalizable to larger populations. Studies are typically based on testing hypotheses derived from theory, using experimental designs to gain knowledge about causal effects, although explorative approaches may also be applied (Healy & Perry, 2000). Constructivism represents a contrasting paradigm, emphasizing subjectivity and that multiple legitimate interpretations exist in parallel in the minds of different observers. This also implies that researchers will influence reality when studying it. Methodologically the constructivist paradigm relies heavily on qualitative methods (Healy & Perry, 2000), which generally seek to explore and understand complex subjective phenomena (Bradley, Curry, & Devers, 2007). This is done through systematic collection and interpretation of textual data, derived from interviews, real-life observations, and documents (Malterud, 2001a). In the qualitative field, studies do not primarily aim to identify generalizable findings, and participant selection strategies focus on identifying participants who serve the study purpose rather than being representative of a larger population (Mays & Pope, 1995). A combination of objectivity and subjectivity has been termed the realism paradigm, arguing that there is an objective reality although it cannot be perfectly objectively studied. A realism standpoint encourages both quantitative and qualitative methods and to a larger extent considers qualitative findings to be generalizable to other realities, compared to constructivist approaches to qualitative research (Healy & Perry, 2000). Thus, the theoretical and epistemological assumptions guiding qualitative studies vary, and qualitative methods should not be regarded as a uniform method.

In addition, the role of theory in qualitative studies should not be underestimated and deductive approaches in which theory is used to guide the analysis may just as well be appropriate (Bradley et al., 2007).

Historically, there has been a sharp distinction between quantitative and qualitative research. However, the disadvantages of methodological rigidity are increasingly acknowledged and the field of mixed method research, combining quantitative and qualitative methods, is increasingly recognized. Mixed method research is commonly attributed to the paradigm of pragmatism, emphasizing the usefulness of multiple perspectives and theories (Johnson & Onwuegbuzie, 2004). Although pragmatism shares many similarities with realism, their unique features have been debated (Montague, 1909).

This thesis combines quantitative and qualitative methods to explore subjective phenomena and thereby takes a pragmatic position, acknowledging the usefulness of multiple methods and perspectives. The studies are primarily explorative and great attention has been paid to how qualitative and quantitative data are interpreted. Although the studies do not serve the purpose of hypothesis testing, theory has partially been used to guide the analysis and interpretation of data. The qualitative studies included in the thesis are best understood as reflecting the assumptions of realism, rather than constructionism, in the sense that the qualitative findings have been regarded as knowledge that can also be valid in other settings, although on a conceptual or a theoretical level.

## **6.2 OVERVIEW OF STUDY DESIGNS AND METHODS**

This thesis combines several study designs and methods (presented in Table 1). Studies I and II apply an explorative qualitative design, based on interview data. The studies are conducted in the same empirical setting (Case 1) including different provider types (although comparing them is not the primary purpose). Studies III and IV are conducted in one empirical setting (Case 2), including multiple organizational units and professional groups. The studies are cross-sectional in the sense that data were collected during a focused period of time with no longitudinal follow up. Study III is a method study designed to develop and assess a self-assessment scale and to assess its psychometric properties. Although the psychometric assessment is based on quantitative (survey) data and statistical methods, the development process also includes qualitative methods. Study IV mixes methods, using qualitative interviews to enrich the interpretation of quantitative survey data.

Table 1. Study characteristics.

	<b>Study 1</b>	<b>Study II</b>	<b>Study III</b>	<b>Study IV</b>
<i>Empirical setting</i>	Patient choice in specialized care (Case 1)	Patient choice in specialized care (Case 1)	Annual budgets in a public university hospital (Case 2)	Annual budgets in a public university hospital (Case 2)
<i>Design</i>	Explorative qualitative interview study	Explorative qualitative interview study	Development and psychometric assessment of a self-assessment scale	Sequential explanatory mixed method study
<i>Sampling strategy</i>	Purposeful sampling	Purposeful sampling	Purposeful sampling (interviews), total sampling (survey)	Total sampling (survey), purposeful sampling (focus group interviews)
<i>Study participants</i>	Health care professionals in key positions	Health care professionals in key positions with managerial roles	Multi-professional staff	Multi-professional staff
<i>Data sources</i>	Individual interviews	Individual interviews	Literature searches, interviews , cognitive interviews, survey data	Survey data, focus group interviews
<i>Data analysis</i>	Deductive and inductive (hybrid) thematic analysis	Deductive and inductive (hybrid) thematic analysis	Deductive thematic analysis, Exploratory Factor Analysis, reliability analysis, correlations, multiple regression models	Descriptive statistics, deductive and inductive thematic analysis

### 6.3 EMPIRICAL CASE 1 – PATIENT CHOICE IN SPECIALIZED CARE

Studies I and II were conducted in collaboration with provider organizations accredited for a local patient choice model for elective hip- and knee-replacements, which was introduced in the Stockholm region in 2009. Historically, all hip- and knee-replacements had been handled by regional hospitals, but the reform gave patients with a low-risk profile freedom to choose their provider. Private specialized providers were invited to the market, moving parts of the elective surgery out of hospitals. At the time of the reform, waiting times for elective surgery were long and the reform was, apart from introducing choice, a way of increasing regional capacity for care provision. No production limits were put on providers (Wohlin et al., 2016). The regional hospitals, however, remained responsible for elective surgery for high-risk patients, on a separate contract. At the time of Studies I and II (2016), eleven providers were accredited and 44 % of elective hip- and knee-replacements were conducted in hospitals. The remaining 56 % were performed at private specialized providers.

The patient choice model covered a well-defined care episode, including diagnosis, surgery for hip- and knee-replacement, post-operative care and follow up. However, the assessment of suitability for surgery and (if applicable) referral to the patient choice providers were supposed to be handled within primary care. In addition, post-operative rehabilitation was not included in the care episode. The risk assessment of patients was based on American Society of Anesthesiologists (ASA) guidelines, and ASA 1 & 2 was required for inclusion. A bundle payment model was used for reimbursement, including a lump sum payment to cover all provider costs. A small percentage of the bundle payments were conditioned by a number of

performance-targets, mainly represented by process-indicators. The overall reimbursement level was lowered at the introduction of the patient choice model, which put pressure on providers to increase efficiency of resource use. Additional financial pressure was put on providers by a complication guarantee, which made providers financially responsible for all complications occurring up to two years after surgery. Major complications, such as infections, were to be handled only in hospitals, and if patients were affected while in care of a specialized provider, that provider was obliged to cover the cost of hospital care. Quality of care at the provider level was monitored at the regional level, using data from the local patient administrative system and the national quality registry. Local evaluations have shown that the choice reform was associated with increased productivity, substantial cost reduction and reduced risks of post-operative infections. However uncertainties remain whether or not this represents a general (national) trend or is a consequence of the reform (Wohlin et al., 2016).

The case holds relevance for the thesis by illustrating a form of economic governance that includes patient choice in specialized care, increased provider competition and the use of financial incentives. The case also represents the trend of structural transformation in moving elective care out of hospitals to specialized providers, and the general pressure put on providers to increase economic efficiency. With reference to the thesis aim, the economic governance model of Case 1 can be assumed to create requirements for providers (and thereby for professionals) to increase economic efficiency of services while maintaining (or increasing) quality, particularly regarding post-operative infections.

## 6.4 DESCRIPTION OF METHODS – STUDIES I & II

### 6.4.1 Study design

Studies I and II were exploratory qualitative studies based on interview-data, taking the perspectives of health care professionals who hold managerial responsibilities. Studies I and II were conducted in an integrated manner within one empirical setting (Case 1), exploring two different issues through simultaneous data collection involving the same study participants. This implies that questions that addressed the aims of Studies I and II were combined into one interview guide, used in one interview session for each participant.

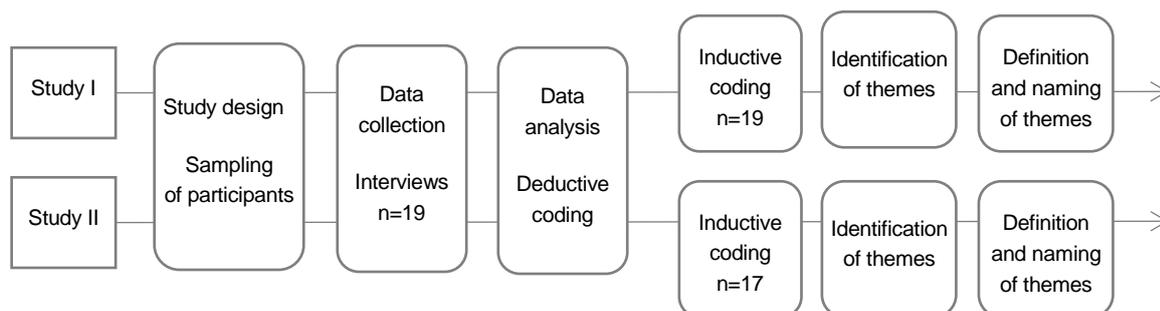


Figure 3. An overview of the data collection and analysis for Studies I and II.

This approach was found appropriate based on the topics of Studies I and II being interrelated, but also with regard to taking the limited time of participants into account. Since Studies I and II share many similarities an integrated description of the steps for data collection and analysis will follow (illustrated in Figure 3). Specific considerations or actions taken for any of the studies will be clarified.

It is worth noting that the concepts of managers and professionals are slightly different in the thesis when compared to those in the scientific papers for Studies I and II. In the first scientific paper, the participants are referred to as professionals (not clarifying their managerial responsibilities), focusing on their professional analysis of the consequences of the patient choice model. In the second scientific paper the participants are referred to as managers, focusing on their managerial strategies. While both descriptions are true, in the thesis the concept of professionals is mainly used to refer to the wider community of professionals at both the manager and staff level.

## **6.4.2 Data collection**

### *6.4.2.1 Sampling strategies*

A purposeful sampling strategy was used for Studies I and II at both provider and individual level. The patient choice model involves multiple provider types. Therefore, a broad representation of private and public providers, as well as hospitals and specialized providers, was found appropriate to capture a broad range of experiences. First, all accredited providers (N=11) were invited to participate in the study by contacting the operations managers (at department or unit level) by an introductory email and follow-up phone-calls. Four hospitals and one specialized provider volunteered. To get a better representation of provider types efforts were made to recruit additional specialized providers. In total six providers were included in the study. This included two specialized, privately owned (for-profit) providers and four hospitals, three of which are owned and run by the region and one that is a privately owned (for-profit) provider. All hospitals participating in the study also handled hip- and knee-replacements of high risk patients (ASA 3 and 4) on a separate contract. Two specialized providers declined participation due to reorganization and limited resources. The remaining providers did not respond to the invitation.

A purposeful sampling strategy was used also at an individual level, aiming to recruit health care professionals at key positions with experience from care delivery within the patient choice model. Participants with a managing role or function, not necessarily requiring a formal managerial position, were preferred since Study II focused specifically on managerial strategies. Efforts were also made to recruit participants of different professional backgrounds. All operations managers were asked to participate in interviews. Thereafter additional participants were recruited in dialogue with the operations managers, who reached out to staff members of appropriate experience, putting them in contact with the researchers. In total, one person declined participation during the recruitment period.

#### 6.4.2.2 *Procedures*

In total, 19 interviews were conducted by the thesis author in 2016 (June-November), lasting 45-60 minutes. All interviews were held face-to-face on the site of the provider, except one over the phone, and all interviews were digitally recorded. All participants were informed about the aim of the study and that participation was voluntary, both during the interview session and in writing. All participants were given the opportunity to ask questions. Written informed consent was obtained from all participants.

A semi-structured interview guide was designed prior to the interviews that combined questions relevant for Studies I and II (see Appendix A). The interview guide addressed a number of major topics: the knowledge and understanding of the patient choice model in relation to the participant's role, the consequences of the patient choice model, strategies to manage the model in daily practice and the participants' understanding of staff motivation. The interview guide included a number of pre-defined questions, such as "What are the consequences of the model for your organization?" and "How do you adjust your leadership in relation to the patient choice model?". Substantial room was left for follow up questions. Based on the exploratory nature of the studies participants were also encouraged to expand their reasoning throughout the interviews. The interview guide was piloted in the first two interviews, and minor adjustments were made mainly by shortening the list of questions, leaving more room for the participants' reflections.

#### 6.4.3 **Study participants**

The study participants (n=19) included: operation managers (n=6), clinical managers (n=5), ward managers (responsible of post-operative care) (n=3), surgery coordinators (n=3), a quality manager (n=1) and a research manager (n=1). The clinical managers were all orthopedic surgeons in managing positions, responsible for certain aspects of the elective care flow and for leading others. However, not all of them held a formal managerial position. The participants were professionally trained as orthopedic surgeons (n=12), nurses (n=6) and an assistant nurse (n=1) and all had extensive clinical experience. All interviews (n=19) were included in Study I, exploring the consequences of the patient choice reform. Two interviews were excluded from Study II because the participants did not hold a managerial function and therefore had little experience managing other staff members through the patient choice model. Thus, Study II included 17 interviews.

#### 6.4.4 **Data analysis**

##### 6.4.4.1 *Thematic analysis*

A thematic qualitative analysis was used to analyze interview data in Studies I and II. Thematic analysis has been defined as identifying, analyzing and reporting patterns (themes)

within qualitative data and aims to provide a rich and nuanced description of the phenomena of interest. In a thematic analysis the researcher is seen as an active participant giving meaning to data by identifying themes, which makes the researchers' interpretations an essential part of the analytical process. This requires a reflexive dialogue embedded in the research process making researchers' preconceptions and assumptions as explicit as possible (Braun & Clarke, 2006). Acknowledging the latent meaning of data has been described as a central characteristic of thematic analysis, which stands in contrast to e.g. content analysis, in which the manifest meaning and formal descriptions commonly are the main focal points (Vaismoradi, Turunen, & Bondas, 2013). Thematic analysis is further described as a flexible method that allows for both inductive and deductive approaches, and different perspectives on epistemology (Braun & Clarke, 2006). A thematic approach was found appropriate in Studies I and II being a flexible method, leaving room for adaption and interpretation in relation to the exploratory nature of the studies. In addition, a thematic approach left room for interpretations of the latent meaning (rather than the manifest), when little was known prior to the studies about how participants would describe their experiences.

A hypo-deductive approach (Fereday & Muir-Cochrane, 2008) was chosen for the analysis, combining initial deductive coding followed by inductive coding of data assigned to the (broad) deductive codes. A hybrid approach has been described as useful to organize data in meaningful ways, using deductive coding anchored in theory to facilitate a subsequent data-driven analysis. The a priori definition of codes may also help to articulate underlying preconceptions that would influence the analysis anyway. A hybrid approach for data analysis was found appropriate based on the complexity of the case and the interview data. The deductive analysis was seen as helpful to organize the data and make the subsequent inductive analysis more manageable. Since the studies focused on participants' experiences of consequences and their behaviors an elemental theoretical model for behavior analysis (Skinner, 1963) was found appropriate to guide the deductive coding.

#### 6.4.4.2 *Deductive coding*

All interviews were transcribed verbatim and imported into the Nvivo 10 software that was used for analysis. In accordance with guidelines for rigorous thematic analysis (Braun & Clarke, 2006) the suggested steps of data analysis were applied, including data familiarization, initial coding of data, searching for themes, reviewing themes and defining and naming themes. Data familiarization was first obtained by the reading of the entire transcripts. Thereafter deductive coding followed, which was performed in an integrated manner for Studies I and II. Coding generally refers to the identification of data segments that appear relevant for the study purpose (Braun & Clarke, 2006). Based on theory (Skinner, 1963), three broad deductive codes were defined: *antecedents*, such as rules, regulations and beliefs, governing behavior (Code 1), *behaviors* (Code 2) and identified *consequences* of relevance for behavior (Code 3). All codes were defined to include both external events, such as consequences for care provision, and internal events, such as emotional reactions. The first step of deductive coding was conducted by the thesis author and validated by letting a

research colleague conduct separate deductive coding of three sampled transcripts. High consistency in coding (85 %) was observed when comparing the use of the predefined codes in relation to raw data. Remaining inconsistencies were discussed and coded in consensus.

#### *6.4.4.3 Inductive coding and definition of themes*

Following the deductive coding, inductive coding of data was conducted separately for Studies I and II by the thesis author, guided by the purposes of the studies. The inductive analysis for Study I included data from all predefined codes. Data assigned to Code 1 addressed different aspects of the patient choice regulations governing provider behavior, but also other demands arising from care provision. Data assigned to Code 2 included a variety of behaviors, including the participants' behaviors, but also behaviors observed in the organization. Data assigned to Code 3 addressed a broad variety of observed consequences. For Study I most relevant data were found in Code 3. Additional inductive codes were identified, which were clustered into themes based on the type of consequences and stakeholder perspective that were described. Also, data assigned to Code 1 and 2 made important contributions to the understanding of the chain of events preceding the identified consequences.

For Study II, the inductive analysis mainly focused on data assigned to Code 2 (behaviors) specifically targeting managerial behaviors. However, data assigned to Code 1 and 3 were explored, and provided important contextual information clarifying the reasons behind the use of specific strategies. Inductive codes were derived from data based on the participants' reports of what they did. Thereafter, the inductive codes were clustered into themes representing more general managerial strategies.

The inductive coding and searching for themes in Studies I and II is best described as an iterative process, in which codes and themes were developed and reviewed several times. The final themes was named and summarized in writing by the thesis author and presented to research colleagues, who had independently read selected transcripts (n=6 for Study I, n= 3 for Study II). The accuracy of coding and the identified themes were discussed in relation to raw data. Relevant refinements were made by consensus.

## **6.5 EMPIRICAL CASE 2 – ANNUAL BUDGETS AT A UNIVERSITY HOSPITAL**

Studies III and IV were conducted in a public university setting responsible for care provision in one of the largest urban areas in Sweden. The hospital is reimbursed through annual budgets, the extent to which is determined at regional level. However, the distribution of resources to departments and units within the hospital is done by the top-management team, in dialogue with division- and department managers. The hospital has historically used DRG-based reimbursement. Although DRG is still used for monitoring purposes reimbursement to departments and units is currently not linked to specific targets or objects. The financial

situations has been strained for years, and at the time of the studies the hospital faced substantial economic constraints and cost reductions were required of all departments.

Studies III and IV specifically involve the Department of Rehabilitation Medicine, responsible for treatment and rehabilitation of patients with medical conditions such as brain- and spinal injury and stroke. Care provided at the department typically succeeds the more acute phase and may include both inpatient and outpatient treatment focusing on functional assessment and rehabilitation. The patient group is characterized by having serious and complex conditions and many will have lifelong needs of both health- and social care support. Care delivery is organized in four clinical units, primarily based on patient group characteristics. One of the units is integrated in the Department of Neurology, supporting the acute care flow. The units are staffed with professionals holding a broad range of expertise, such as physiotherapists, occupational therapists, physicians, psychologists, speech therapists, social workers, nurses and assistant nurses. Staff members are organized in interdisciplinary teams to support the complex needs of their patients. The quality of services is supported by local quality evaluation and improvement activities in compliance with international standards for best practice and quality in medical rehabilitation (CARF).

The case holds relevance to the thesis by representing a common form of economic governance of specialized care applied in a hospital setting. The current economic constraints represent the general challenge of limited resources in health care, leaving top hospital management to decide how to handle a limited budget. With reference to the thesis aim, the economic governance model of Case 2 can be assumed to create a general pressure for departments (and thereby for professionals) to increase the overall economic efficiency of services.

## **6.6 DESCRIPTION OF METHODS – STUDY III**

### **6.6.1 Self-assessment scales**

Across the social sciences, the idea of using questionnaires to capture subjective experiences such as beliefs or emotions in quantitative figures is well established. However, constructing measures of subjective experiences poses many challenges in regard to how questions are formulated, how response types are defined, and what methods that are chosen for analysis (Furr, 2013). The self-assessment scale is a frequently used type of measure, in which items are formulated as statements rather than questions, and individuals are asked to assess their level of agreement using a multiple-step Likert scale. Thus, self-assessment scales capture variation in intensity of the underlying construct. Multiple items (that are summarized into a scale index) are commonly used to measure the underlying construct, to reduce the risk that misinterpretations of a specific item influence the result too much (Spector, 1992). Scales can be uni or multidimensional and include items representing one or several underlying constructs. In the literature on self-assessment scales, the underlying constructs are also referred to as “factors” (and sub-factors), a term that will be used subsequently in the thesis.

Developing reliable and valid scales requires a rigorous development process and psychometric evaluation of item response patterns, based on empirical data from real life settings (Hinkin, 1998; Spector, 1992). Reliability of a scale generally refers to the precision of scores, i.e. how accurate a certain score reflects the underlying construct of interest. Validity of a scale generally refers to the accuracy of the definition of the underlying construct. Thus, a scale can be highly reliable (i.e. an accurate indicator) of something, but still invalid if interpreted to represent something it is not (Furr, 2013).

### 6.6.2 Study design

The aim of Study III was to develop and pilot-test a self-assessment scale capturing staff experience of governance. Acknowledging the complexity of the governance concept (Lynn, Heinrich, & Hill, 2000; Saltman & Duran, 2016), general definitions of economic and quality governance were chosen within the scope of the study, referring to the experience of economic efficiency and quality requirements of health care, as perceived by professional staff. Since these definitions distinguish between two governance objectives they were handled as separate subscales (A and B) including specific experiences (sub-factors) at the individual level, such as perceptions and emotions. The scale development process (illustrated in Figure 4) was guided by the recommendations provided by Hinkin (1998). A broad perspective on governance was applied throughout the development phase and included perspectives from multiple health care settings and professional groups. Thereafter, pilot-data were collected to enable psychometric assessment.

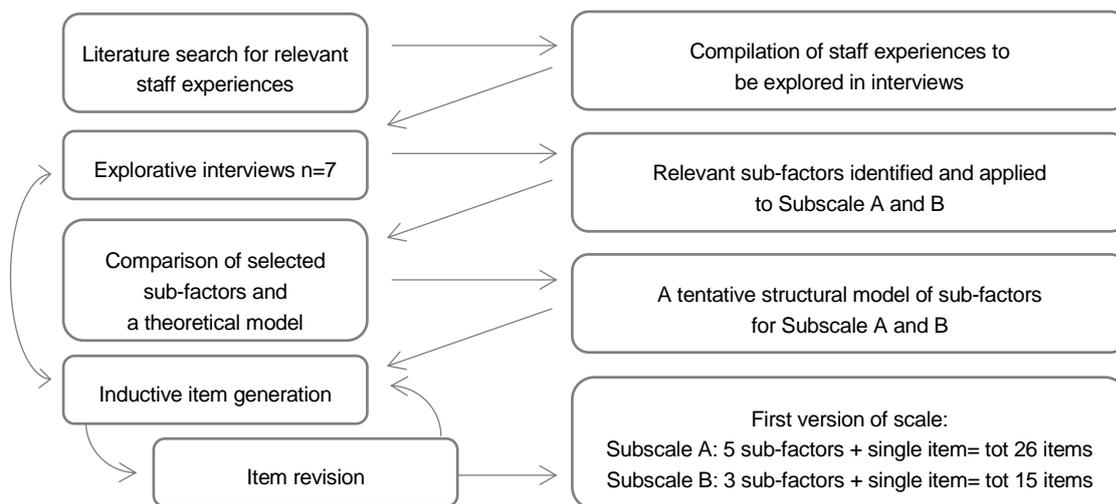


Figure 4: An illustrative overview of scale development process.

### 6.6.3 Scale development process

#### 6.6.3.1 Literature search

Literature searches were conducted to explore relevant studies using questionnaires/surveys to capture staff perspectives on economic efficiency and quality governance. Data bases such as Web of Science, Scopus and Google Scholar were used. Key words such as “self-assessment-scale”, “survey”, and “measure” were used in combination with key terms such as “economic governance”, “economic incentives”, “reimbursement model” (for subscale A) and “quality governance” and “quality evaluation” (for Subscale B). Three self-assessment scales that capture professionals’ experiences of economic incentive models in provider organizations were identified (Meterko et al., 2006; Roland, Campbell, Bailey, Whalley, & Sibbald, 2006; Young, Beckman, & Baker, 2012). Additional searches were made to identify qualitative studies exploring staff experiences of specific economic governance models (Campbell et al., 2008; Hackett et al., 2014; McDonald et al., 2007). No studies were identified that specifically addressed governance of quality. However, studies using self-assessment scales capturing staff experiences of quality improvement initiatives were found, (Berlowitz et al., 2003; Shortell et al., 1995) including relevant experiences of quality evaluation. Based on the identified studies a synthesized compilation of relevant staff experiences were assembled.

#### 6.6.3.2 Interviews to explore identified sub-factors

Interviews were conducted with health care professionals from multiple settings to explore the appropriateness of using the identified experiences as sub-factors in the scale. Participants were recruited through the national professional associations. Two physicians, one nurse and one midwife volunteered. To include a local provider perspective, one manager and one nurse from a primary care facility were recruited. In addition, two civil servants experienced in issues of health care governance were recruited at the regional level. In total, seven interviews were conducted by the thesis author in 2017 (April to June). The interviews lasted 45-60 minutes and were conducted face-to-face (n=5) or over the phone (n=2). The regional representatives were interviewed together for practical reasons. All study participants were informed about the study aim and written informed consent was obtained.

All interviews were digitally recorded and transcribed verbatim. Nvivo 10 was used to analyze data. A deductive thematic analysis was conducted, following the recommended steps by Braun and Clarke (2006), that included the initial reading of the entire transcripts. The experiences identified in the literature were used as pre-defined codes, to which relevant data were assigned. Thereafter data assigned to the predefined codes were reviewed. The experiences that participants found relevant and could easily relate to were selected to be used as sub-factors for Subscale A and B. Three sub-factors were found applicable for both subscales: *knowledge and understanding*, *opportunity to influence* and *motivation*. Two additional sub-factors, identified in studies of economic governance, were found applicable for Subscale A only: *impact on professional autonomy* and *organizational alignment*.

The sub-factors were reviewed in relation to the COM-B model (Michie et al., 2011) to assess their theoretical relevance for behavior change. The sub-factors *knowledge and understanding*, *opportunity to influence* and *motivation* corresponded well with the theoretical model. A tentative structural model for all sub-factors was created for Subscale A and B respectively. The tentative models, including sub-factor definitions and examples from the literature search and interviews, are provided in the scientific manuscript (Korlén, Amer-Wählin, Lindgren, & von Thiele Schwarz, 2018).

#### 6.6.3.3 Item development

Items were developed for all sub-factors. An inductive item development strategy was used, as recommended when the access to similar scales is scarce (Rattray & Jones, 2007). An extensive item pool was generated, inspired by the interview data and the literature. Items were developed iteratively in collaboration with research colleagues. Items were formulated as statements and the well-established 5-point Likert scale was chosen, ranging from disagreement (1) to total agreement (5). Four to six items were developed for each sub-factor, to enable exclusion of low quality items. Aware of the observed pros' and cons' (Furr, 2013) of reversed items, at least one reversed item was developed for each sub-factor. Items were pilot-tested in collaboration with two clinical psychologists and one physician, who received a tentative survey by email and provided feedback in writing (n=1) and face to face (n=2). The finalized survey consisted of 25 items (in five sub-factors) for subscale A, and 15 items (in three sub-factors) for subscale B. To enable assessment of criterion-related validity of sub-factors, a single item measuring *impact on clinical behavior* was developed for subscale A and B respectively.

#### 6.6.4 Data collection

A pilot-testing of the scale was conducted and included all staff members employed at the department of Rehabilitation Medicine at the public university hospital described in Case 2. Two additional departments at the hospital were invited to the study but declined participation because of internal reorganization and extensive workload.

##### 6.6.4.1 Cognitive interviewing

Before the survey was distributed, cognitive interviews were conducted with unit managers (n=2) and staff members (n=2). Cognitive interviewing is a comprehensive method to explore the survey response process, to get information about how the questions are perceived and interpreted by the respondent (Drennan, 2003). Retrospective interviewing was applied and participants were asked to describe their interpretation of items after filling out the survey independently. Items and words that the researchers found particularly challenging were also explored using direct questions (Willis, 2004). Talk aloud reports were summarized all interviews. Minor revisions of the survey and the introductory text were made to increase comprehension.

#### 6.6.4.2 Procedures for survey distribution

The survey was distributed in paper format to all staff members (N=183), including an introductory text that informed about the study aim and that participation was voluntary, and anonymous. The text further stated that the return of a filled in survey implied an informed consent to participate in the study. Additional information about the study was given by the unit managers in staff meetings. In addition, the thesis author arranged a meeting on site to inform about the study, which was filmed and made available to all staff members through the intranet. Completed surveys were returned to the unit managers in sealed envelopes and stored temporarily until collected by the thesis author. The data collection period was set in November and December 2017. Two reminders were sent out by email and given orally in staff meetings by the unit managers.

#### 6.6.5 Study participants

93 staff members participated in the study, representing a response rate of 51 %. Missing data on item level were low (<2.2 %). Two participants were excluded, based on large proportions of missing data, resulting in a study sample of n=91. The study participant characteristics are presented in Table 2. All units and professional groups at the departments were fairly represented in the study sample.

Table 2. Study participant characteristics Study III (n=91).

		n=	%
<b>Gender</b>	Women	76	84
	Men	13	14
	Other	1	1
	Missing	1	1
<b>Professional role</b>	Occupational therapist	10	11
	Social worker	6	7
	Speech therapist	3	3
	Physician	4	4
	Psychologist	8	9
	Nurse	8	9
	Assistant nurse	22	24
	Physiotherapists and other	29	32
	Missing	1	1
		<b>Mean</b>	<b>SD</b>
<b>Age</b>	Years	43.7	12.4

### **6.6.6 Data analysis**

SPSS 25 was used for all data analysis and the guidelines provided by Furr (2013) and Hinkin (1998) were used for the psychometric assessment. The dimensionality of the scale was explored using exploratory factor analysis (EFA), because the sub-factors were primarily derived from empirical studies (rather than theory). In accordance with specific EFA guidelines (Costello & Osborne, 2005; Fabrigar, Wegener, MacCallum, & Strahan, 1999; Williams, Onsman, & Brown, 2010), a common factor model (Principal Axis Factoring; PAF) was used, and oblique rotation (direct oblim) was applied since the sub-factors were expected to be associated. Suitability of data was checked using inter-item correlations, Bartlett's Test of Sphericity (BTS), and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. The number of factors was determined based on The Kaiser criteria of eigenvalues  $>1$ , a visual inspection of the scree plot, the total variance explained ( $>60\%$  as criteria), the communalities (preferably  $>.6$ ) (Hinkin, 1998), as well as a qualitative judgement of factors (Costello & Osborne, 2005).

At item level, the pattern matrix was inspected and factor loadings  $>.3$  on to a factor was used as inclusion criteria, if not suffering from cross-loadings  $>.3$ . Cross-loading items were accepted if factor loadings were  $>.4$  in the assigned factor and twice as strong as factor loadings in other factors (Hinkin, 1998). Cronbachs alpha was used to assess the internal consistency (reliability) of items assigned to a factor ( $>.7$  as criteria). The inter-factor relationships of sub-factors were assessed using a correlation matrix of sub-factor indices. Criterion-related validity was assessed by calculating multiple regression models (Ordinary Least Squares Regression) for both subscales separately, using the sub-factors as predictors and the single item *impact on clinical behavior* as criterion (dependent) variable.

## **6.7 DESCRIPTION OF METHODS – STUDY IV**

### **6.7.1 Study design**

Study IV was designed to explore the survey data collected in Study III further, with a specific focus on the experiences (sub-factors) included subscale A. Although Study III provided arguments for the validity of the scale, the fact that data were collected in one setting only and the scarcity of similar studies implied uncertainties in regard to how data should be interpreted. Therefore, Study IV was designed as a mixed method study, using a sequential explanatory design (illustrated in Figure 5) with the purpose of collecting qualitative data to increase the understanding of the quantitative data (Creswell & Clark, 2007).

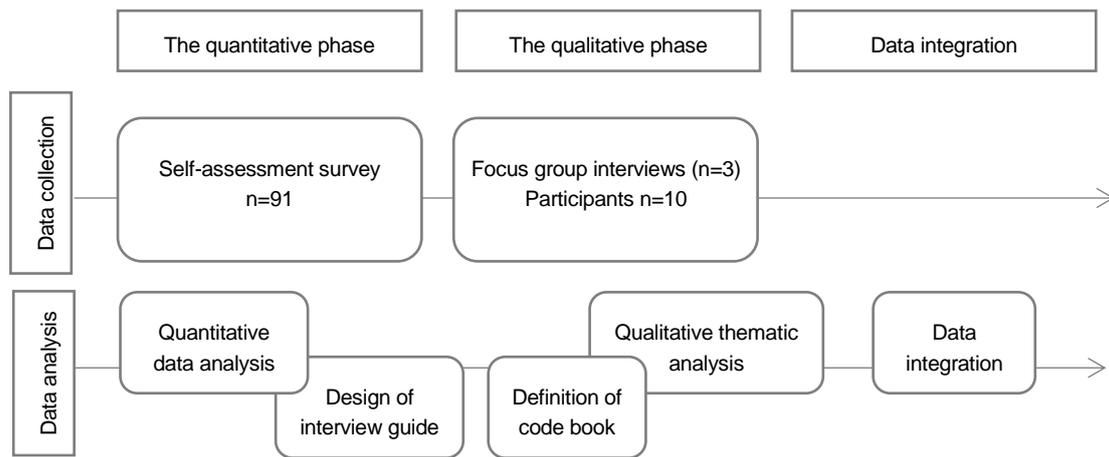


Figure 5. Illustration of the steps of the sequential explanatory design.

### 6.7.2 Quantitative data collection and analysis

The procedures for the collection of quantitative survey data have previously been described in section 6.6.4 (Study III). The study participants characteristics (n=91) have been described in section 6.6.5 (Study III).

The quantitative data analysis for Study IV included data for subscale A only, using descriptive statistics such as mean, standard deviations, and Pearson’s correlations. SPSS 25 was used for all analyses.

### 6.7.3 Qualitative data collection and analysis

#### 6.7.3.1 Focus group interviews

After the quantitative phase was completed, additional qualitative data were collected by conducting focus group interviews with staff members. A purposeful sampling strategy was applied (Teddlie & Yu, 2007), and study participants were recruited from the same population of staff members who had previously been invited to answer the survey. The sampling strategy aimed at a broad representation of units and professional groups among the participants. A focus group format (Kitzinger, 1995) was chosen for the interviews, to enable multiple perspectives to be explored. The interaction between participants was also assumed to energize and spark the discussions. Assuming that some familiarity of participants would facilitate the dialogue, focus groups were set up to include staff members working at the same unit. The unit managers supported the recruitment process by reaching out to staff members of different professional backgrounds for volunteers. The unit managers were provided with a written text to share during the recruitment process, which informed about the overall study aim, the purpose of the focus group interviews, and about participation being voluntary.

Information was also provided at the time of the interviews and participants were given the opportunity to ask questions. Written informed consent was obtained from all participants.

To focus the interviews on information that could support the interpretation of survey data, a semi-structured interview guide (provided in Appendix B) was designed to correspond with the domains (sub-factors) of Subscale A and the single item. An illustration of the survey results on group level was compiled for each sub-factor, which was shown to the participants as an introduction to the discussion of each domain. The presentation of data was followed by openly formulated questions such as “What are your thoughts on these results?”. The participants were encouraged to elaborate their reasoning on the matter by the use of follow-up questions. All interviews were conducted face-to-face by the thesis author in 2018 (April to August) on the provider site. The interviews lasted approximately 60 minutes and all interviews were digitally recorded.

### 6.7.3.2 Study participants

In total, three focus group interviews were conducted, including ten participants representing two of the clinical units and a majority of professional groups. Both men and women were represented and the participants’ experience of working at the units varied. Study participant characteristics are presented in Table 3.

Table 3. Study participant characteristics.

		Focus group 1 n = 3	Focus group 2 n = 3	Focus group 3 n = 4
<b>Unit</b>		Unit 2	Unit 3	Unit 3
<b>Gender</b>	Women	3	2	2
	Men		1	2
<b>Professional role</b>	Occupational therapist		1	1
	Physician			1
	Psychologist			1
	Nurse		1	
	Assistant nurse	2		
	Physiotherapists		1	1
	Administrative staff	1		
<b>Time of employment</b>	>5 years	2	3	1
	<5 years	1		3

### 6.7.3.3 Data analysis

The interview recordings were transcribed verbatim by the thesis author, and Nvivo 10 was used to analyze data. To familiarize with data the transcripts were read multiple times. Thereafter a deductive thematic analysis was conducted (Braun & Clarke, 2006) by the thesis

author, using the sub-factors of the scale as basis for the code-book. After the deductive coding was completed, data assigned to the predefined codes were carefully reviewed and appeared to include rich data, which covered multiple aspects of the phenomena. Therefore, an inductive analysis of the data assigned to each of the predefined codes was found necessary. Additional inductive codes were identified and clustered into themes, guided by the study aim. A tentative analysis was summarized by the thesis author, which was developed in collaboration with research colleagues. This was done in a one-day workshop format, which included the prior reading of all interview transcripts for all participants. The accuracy of the deductive coding and the relevance of the inductively derived codes and themes were discussed until consensus was reached.

#### **6.7.4 Mixing methods**

The last step of analysis consisted of mixing the qualitative and quantitative findings. This was made by the thesis author and research colleagues in a two-day-collaborative workshop format. The data integration primarily focused on how the qualitative data enhanced the understanding of the quantitative findings (Bryman, 2006), and was conducted for one sub-factor at a time. Substantial attention was also given to how the qualitative data and the inductive themes contributed to the overall understanding of staff experiences of economic efficiency requirements, beyond the specific focus of the scale items.

### **6.8 ETHICAL CONSIDERATIONS**

Principles for ethical standards and good research practice have guided the empirical studies included in the thesis. Specific ethical considerations will be presented in accordance with the principles of the Declaration of Helsinki (World Medical Association, 2019).

#### **6.8.1 Research ethics committee**

All studies included in the thesis have been reviewed and approved by the Regional Ethical Review Board at Karolinska Institutet in Stockholm (reference 2014/765–31/5).

#### **6.8.2 Risk, burdens and benefits**

Assessments of the potential risk of harm to study participants were made prior to all studies and reflected upon continuously throughout the thesis project. Although it was emphasized throughout the recruitment process that participation was voluntary, there was a risk that study participants felt obliged to take part, in particular since the recruitment was made in collaboration with their managers. To minimize this risk, the voluntary participation and the

opportunity to withdraw participation at any time was emphasized when communicating with volunteering participants. There was also a risk that participants would feel forced to share certain experiences or opinions, or to be more open than they would be comfortable with. The research topic explored in the thesis is not obviously private or personal, but could evoke discussions that might be distressful in a way that the participants could not foresee. Attention was paid to these aspects during interviews and participants were occasionally reminded of their right to refrain from discussing certain questions.

### **6.8.3 Informed consent**

Written informed consent was obtained from all study participants who volunteered for interviews. Information about the study was provided to participants prior to interviews and during the interview session. For the survey study, information about the study and conditions for participation was provided on the introductory page, and it was explicitly stated that the return of a filled out survey implied informed consent to participate.

### **6.8.4 Privacy and confidentiality**

Although the recruitment of study participants for interviews was made in dialogue with managers, efforts were made to establish individual contacts with participants and to be discrete about the booking of interviews. Although participation in the survey study was anonymous, the surveys included demographic data and were identifiable at unit level. Survey data have been handled confidentially and have been accessible for the researchers only. Safe handling and storage of data have been made in accordance with general guidelines of good research practice and in compliance with local policies of research documentation at Karolinska Institutet. Qualitative data (including citations) and the empirical setting have been carefully described not to include information that could uncover the identity of participants. Survey data have been presented at group level only

## 7 FINDINGS

### 7.1 STUDY I

In Study I professionals' perspectives on the consequences of the patient choice model were explored. Although the aim was not primarily to compare experiences across provider types, it is worth mentioning that the respondents' analyses shared many similarities across providers. Particular differences across provider types will be described.

#### 7.1.1 Multiple stakeholder perspectives

The respondents spontaneously took the perspectives of multiple system levels when reflecting upon consequences of the patient choice reform, including the perspective of the provider organization but also of the regional health care system as a whole. Further, their analysis ranged from short- to long-term consequences.

#### 7.1.2 Multiple types of consequences

The findings showed that respondents identified multiple types of consequences (illustrated in Figure 6), and observations at the provider and the system-level were described.

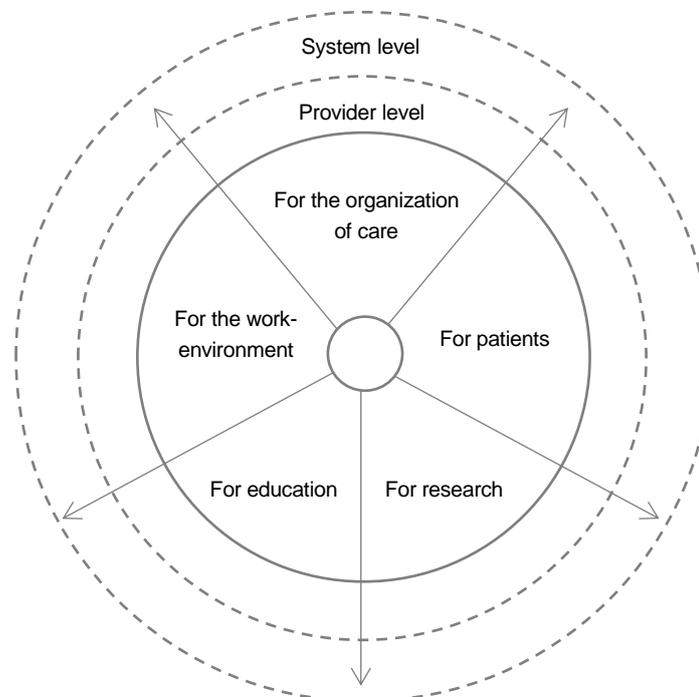


Figure 6. An overview of the consequences of the patient choice model.

### *7.1.2.1 For the organization of care*

In response to the patient choice model efforts had been made across providers to use resources more efficiently, for example by standardizing the care flow and optimizing the scheduling of operating theatres. In addition, strategies to improve the quality of care, for example by reducing the risk of infections, had been implemented. Although the general level of reimbursement was considered low, the bundle payment was perceived as a positive principle since it allowed clinical expertise (rather than reimbursement logics) to guide the design of the care flow. The infection guarantee was perceived as reasonable, although the risk of post-operative infections was regarded to be partly outside of the providers' control.

The consequences for the organization of care were also analyzed taking a broader system perspective that followed the entire patient pathway. Experiences of incomplete assessments in primary care were described as a limitation of the current model for organizing care, which contributed to inefficiency at system level when referrals had to be rejected. In addition, potential gains of integrating post-operative rehabilitation into the model were proposed.

### *7.1.2.2 For patients*

Respondents also analyzed the consequences of the patient choice model from a patient perspective. Seen from a provider perspective, the waiting times had been substantially reduced for patients awaiting surgery. However, respondents identified limitations in the use of the ASA-assessment as inclusion criteria, since patients who had more extensive care needs (e.g. old aged) were occasionally classified as low-risk patients, who were required to go through the relatively fast-paced care flow.

Taking a system perspective, respondents identified the risk of fragmentation of care for patients, since the entire patient journey involved several provider types. This in turn, required patients to be resourceful enough to manage the care process and make active choices. Respondents raised concerns that the choice model put vulnerable patients at risk.

### *7.1.2.3 For the work environment*

The respondents described the structural organization of care in the patient choice model to influence their work environment, although this was described differently across provider types. For respondents in hospitals, the proportion of high-risk patients suffering from complex conditions had increased, which resulted in a more demanding work environment. At specialized providers, the homogenous (low-risk) patient population was described to provide opportunities to become highly skilled in handling specific conditions. However, the uniformity of tasks was regarded as a risk factor for reducing job satisfaction. Respondents across provider types described a mixed patient population to be desirable from a work environment perspective, and incentives to support provider collaboration were proposed.

Taking a system perspective, the respondents raised concerns regarding the dichotomized working conditions across provider types. In their view, it could contribute to dividing the professional community into sub-groups and negatively influence competence development.

#### *7.1.2.4 For educational activities*

The structural organization of care in the patient choice model was described to influence educational activities at the hospitals. By diminishing the proportion of low-risk patients, the learning opportunities for physicians undergoing specialist training had decreased. Since the reimbursement was fixed regardless of the orthopedic surgeon's competence level (and operation rate), the involvement of junior physicians was also economically costly for the hospital providers. Respondents called for revisions to better align the economic incentives to the educational system and to support increased provider collaboration.

The misalignment of the patient choice model and the structures for education was also reflected upon taking a system perspective, and concerns for the assurance of medical expertise over time were expressed.

#### *7.1.2.5 For research*

Respondents at hospital providers also expressed concerns about the diminishing population of low-risk patients, in regard that this undermined the opportunities for clinical research. Respondents at specialized providers made similar observations, pointing at the pity of not engaging their patients in research studies.

Respondents also reflected upon the implications for research activities taking a broader system perspective and concerns were expressed in regard to the development of scientific knowledge over time.

## **7.2 STUDY II**

In Study II, several managerial strategies were identified (illustrated in Figure 7), reconciling external demands to staff preferences. This confirms the role of managers as intermediaries between the patient choice model and staff. The managerial strategies appeared to be anchored in the respondents' contextual knowledge about the practical implications of the patient choice model and their understanding of staffs' motivational preferences.

### **7.2.1 Explaining the logic of the patient choice model**

The respondents tried to increase staff awareness of the requirements derived from the patient choice model, by explaining its practical implications. Efforts were also made to provide a rationale for necessary change processes. In addition, respondents tried to make staff members understand the choice model in relation to the overall assignment at provider level and in relation to the roles of other stakeholders in the regional health care system.

## 7.2.2 Translating the model

The respondents made attempts to translate the economic logics of the patient choice model into targets that were more strongly linked to patient value and quality outcomes, since this was central to staff motivation. Efforts to make the care flow more efficient were framed as improvement initiatives, and respondents experienced that they concurrently had to assure staff that quality would come first. Respondents refrained from using economic figures or talking in terms of profit when communicating with staff, to avoid the risk of being perceived as unaware of professional values. Economic figures were also considered to be too loosely linked to what staff could control, and therefore less appropriate as a motivational tool. Although respondents described that maintaining focus on patients was an important aspect of leadership, it was also emphasized that staff members were concerned with resources being sensibly and fairly used.

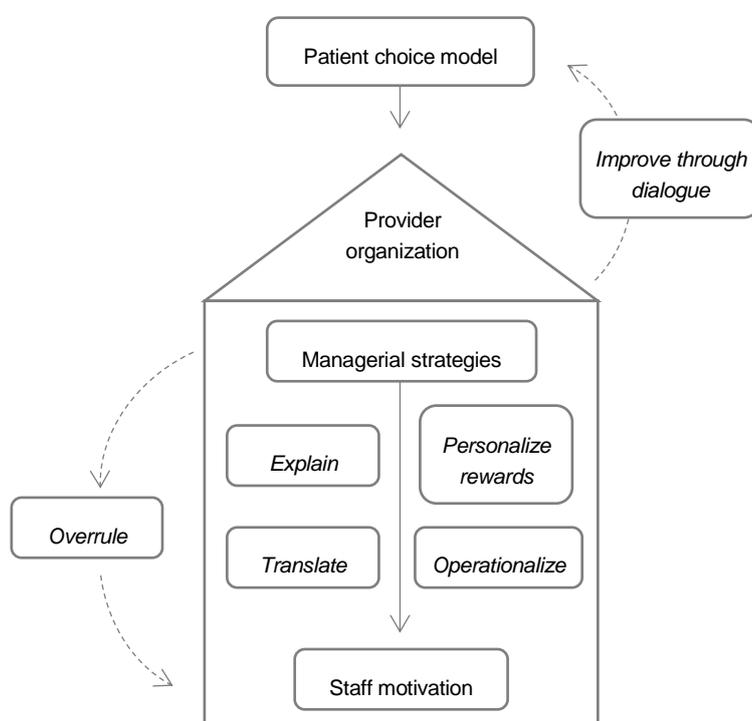


Figure 7. Illustration of managerial alignment strategies.

## 7.2.3 Operationalizing the model

The respondents described that they operationalized the patient choice model by defining concrete and feasible tasks for staff, in accordance with the imposed requirements. This clarified the expectations on staff members and created opportunities for feedback, which was considered as an important motivational tool. The respondents emphasized the importance of monitoring staff behaviors to be able to provide credible and useful feedback. Data on provider performance, such as patient satisfaction and patient outcomes, were described as important to inform the feedback process.

#### **7.2.4 Personalizing rewards**

The respondents highlighted the importance of personalizing rewards in accordance with individual preferences to increase staff motivation. Although there was no direct link between reimbursement at the provider level and individual payment for staff, one private provider had introduced a team-based bonus if complication costs were kept low. Although the respondents acknowledged that financial reward through increased salary could be motivating for some individuals, the general experience was that non-monetary rewards, such as time assigned for competence development or research engagements, were highly valued.

#### **7.2.5 Overruling the model**

At rare occasions, the respondents found themselves obliged to overrule the financial logic of the model to meet patient needs, on the expense of the provider organization. The primary reason for this was limitations in the inclusion criteria, which could include vulnerable patients in the patient choice model although they were in need of more extensive post-surgery care. Respondents described the reasons for overruling to be related to their own ethical conviction, but also to the well-being and motivation of staff sharing similar professional values.

#### **7.2.6 Improving the model**

Respondents expressed a will to engage in a closer dialogue with policy makers, to improve the patient choice model and make it more aligned with patient needs. Although there was occasional contact between the provider organizations and representatives at regional level, respondents called for a more formalized forum for feedback and dialogue to enable policy improvement. The respondents also believed that collaboration and trust between professionals and decision makers could contribute to the design of future choice models.

### **7.3 STUDY III**

#### **7.3.1 Exploring dimensionality and items**

In the initial screening, two items did not meet the inter-item correlation criteria of  $>.3$  and were excluded from the factor analysis. The general suitability of data was confirmed by a significant BTS ( $p<.001$ ) and a KMO index  $>.5$  (.67). An EFA was conducted (PAF, direct oblim rotation), which showed an initial nine factor solution. Based on a qualitative judgment, the ninth factor was not found to make a meaningful contribution. Therefore, three items that loaded strongly in the ninth factor, neither contributing substantially to any other factor, were dropped. An EFA was conducted based on the remaining items, which showed a satisfactory eight factor solution fulfilling the criteria of eigenvalues  $>1$  and explaining 71.8%

of variance in data. A visual inspection of the scree plot confirmed the factor structure and a majority of items (78 %) showed strong communalities (>.5).

All items showed factor loadings >.3 and were assigned to a factor. The majority of items did not show problematic cross-loads exceeding >.3. However, for three items cross-loads (>.3) were observed, but based on our qualitative assessment of the content, the less problematic nature of cross-loads and the expected association of factors, the items were kept. Items were assigned to the factor associated with the stronger factor loading. The items 6 and 32 loaded on to other factors than expected, but were found relevant for the designated factors. All factors met the Cronbach’s alpha criteria for internal consistency, except *impact on professional autonomy*. In consideration of this being a recently developed scale and to provide opportunities for improvement, the factor and items were retained. The single item of subscale A showed cross-loadings (>.3) in two factors, indicating its independence from other factors. The single item of Subscale B loaded in one factor only (>.3), but considering the expected relationship between factors and behavior change the single item was kept for assessment of criterion-related validity.

The final scale is presented in Table 4, including mean, SD, Cronbach’s alpha values and factor loadings in assigned factors. Single items are included in the table. The final scale contains two subscales, including five sub-factors represented by 21 items in subscale A, and three sub-factors represented by 14 items in subscale B. The scale was named “The staff experience of governance of economic efficiency and quality (GOV-EQ) scale”. A Swedish version of items included in the final scale is provided in Appendix C.

Table 4. Final scale including items, mean, SD, Cronbach’s alpha and factor loadings.

Sub-factors and items (of Subscale A & B)	Cr Alpha	Mean (SD)	F1	F2	F3	F4	F5	F6	F7	F8
<b>Knowledge and awareness (A)</b>	0.86	2.99 (.91)								
<i>1. I know how I should take the unit’s financial situation into consideration in my work.</i>		3.26 (1.19)						-.802		
<i>2. I know what I can do to make the unit’s financial situation as good as possible.</i>		3.09 (1.17)						-.809		
<i>3. I know how to deal responsibly with the unit’s financial resources.</i>		3.26 (1.18)						-.711		
<i>4. I know how to plan my work to ensure that we stay within the unit’s budget.</i>		2.58 (1.21)						-.786		
<i>5. I find it difficult to see how I can influence the unit’s financial situation (R).</i>		2.54 (1.30)						-.500		
<i>6. I am aware of the unit’s financial situation when I make decisions in my work with patients.</i>		3.22 (1.06)						-.326		

<b>Opportunity to influence (A)</b>	0.89	1.97 (.95)		
7. I get involved in discussions concerning the unit's financial situation.		2.07 (1.12)		- .795
8. I can influence how the financial resources are used in the unit.		1.77 (1.07)		- .925
9. I am able to express my opinions on how we can use the unit's resources more efficiently.		2.37 (1.09)		- .728
10. My opinions matter when budgetary decisions are made.		1.72 (1.07)		- .838
<b>Motivation (A)</b>	0.83	3.08 (1.01)		
11. It's motivating to work with issues that concern the unit's financial situation.		2.54 (1.19)		.822
12. It's fulfilling to try to improve the unit's financial situation.		3.51 (1.18)		.803
13. I am interested in the unit's financial situation.		3.22 (1.16)		.693
<b>Impact on professional autonomy (A)</b>	0.62	3.31 (.92)		
14. The unit's financial status affects my ability to do what is best for patients.		3.53 (1.19)		.499
15. The unit's financial limitations affect my ability to adhere to my own ethical values.		2.97 (1.26)		.638
16. I feel free to do what is best for the patient, regardless of the unit's financial situation (R).		3.44 (1.21)		.315
<b>Organizational alignment (A)</b>	0.87	2.29 (.84)		
17. I think the unit's financial resources are reasonable.		2.27 (.99)	.830	
18. We have the financial resources needed to meet patient needs.		2.26 (1.07)	.831	
19. I think the unit's financial situation is sustainable.		2.19 (.91)	.906	
20. The unit's financial status is sufficient to allow us to fulfill our mission.		2.30 (1.01)	.739	
21. The financial requirements placed on the unit negatively impact our patients. (R)		2.36 (1.16)	.568	
<b>Single item: Impact on clinical behavior (A)</b>				
22. I take the unit's financial situation into consideration in my clinical work.		3.32 (1.00)	.342	.389

<b>Knowledge and awareness (B)</b>	0.82	4.06 (.72)	
23. I know what leads to good quality care for our patients.		4.09 (.88)	.637
24. I know what I should do, in my role, to ensure that we maintain high levels of quality.		4.35 (.72)	.821
25. I know how I can get involved in quality improvement.		3.59 (1.14)	.454
26. I know how to plan my work to ensure that what I do is of good quality.		4.21 (.80)	.877
<b>Opportunity to influence (B)</b>	0.89	3.31 (.91)	
27. I can influence how the unit works with quality improvement.		3.10 (1.17)	-.817
28. I participate in the unit's work with quality improvement.		3.40 (1.18)	-.687
29. I can influence where we focus our improvement work.		3.01 (1.16)	-.933
30. My opinions matter when we work with quality improvement.		3.13 (1.09)	-.834
31. By the time we begin our work on quality improvement, it has already been decided how it should be carried out. (R)		3.28 (1.08)	-.622
32. I find it difficult to see how I can influence quality at the unit. (R)		3.85 (1.07)	-.377
<b>Motivation (B)</b>	0.78	4.15 (.69)	
33. Quality improvement work is motivating.		4.11 (.94)	-.762
34. I think it is part of my role to get involved with quality improvement.		4.27 (.73)	-.763
35. It's fulfilling to try to improve quality at the unit.		4.32 (.92)	-.310
36. I am interested in how we compare to other units with regard to quality.		3.89 (.96)	-.338
<b>Single item: Impact on clinical behavior (B)</b>			
37. I take quality into consideration in my clinical work.		4.24 (.85)	.561

Notes: Factor loadings (PAF, direct oblim) for items on to assigned factors. Factor loadings <.3 are omitted from the table. (R) indicates that the item is reversely scored.

### 7.3.2 Inter-factor relationships

Pearson's correlations of sub-factor indices (presented in Table 5) showed several sub-factors to be moderately positively related to each other, in accordance with the tentative model. The associations between the sub-factors *knowledge and awareness*, *opportunity to influence* and *motivation* were however stronger in subscale B, than in subscale A. The sub-factors *impact on professional autonomy* and *organizational alignment* (subscale A) were moderately negatively correlated to each other, but not associated with any other sub-factor. The *knowledge and awareness* and *motivation* domains were moderately positively correlated with their counterpart across subscale A and B, however this did not apply for the *opportunity to influence* sub-factor.

Table 5. Inter-factor correlations for subscale A and B, including mean and SD.

			M (SD)	1.	2.	3.	4.	5.	6.	7.	8.
A	1.	<b>Knowledge and awareness</b>	2.99 (.91)	1							
A	2.	<b>Opportunity to influence</b>	1.97 (.95)	.398**	1						
A	3.	<b>Motivation</b>	3.08 (1.01)	.220*	.215*	1					
A	4.	<b>Impact on prof autonomy</b>	3.31 (.92)	-.065	-.167	-.096	1				
A	5.	<b>Organizational alignment</b>	2.29 (.84)	.055	.187	.019	-.475**	1			
B	6.	<b>Knowledge and awareness</b>	4.06 (.72)	.452**	.152	.081	-.091	-.152	1		
B	7.	<b>Opportunity to influence</b>	3.31 (.91)	.094	.214*	.278**	-.256*	.114	.278**	1	
B	8.	<b>Motivation</b>	4.15 (.69)	.129	.051	.415**	.070	-.174	.450**	.474**	1

Notes: Pearson correlation, \*p< .05, \*\* p< .01 (2-tailed).

### 7.3.3 Criterion-related validity

The multiple regression model for Subscale A (df (5, 79) = F 9.24, p<.001) showed that the sub-factors *knowledge and awareness* (beta coefficient .394, p<.001) and *motivation* (beta coefficient .310, p<.001) contributed significantly to the prediction of the criterion (dependent) variable *impact on clinical behavior*, explaining 37 % of the variance.

Similarly, the multiple regression model for Subscale B (df (3, 84) =F 18.47, p<.001) showed that the sub-factors *knowledge and awareness* (beta coefficient .417, p<.001) and *motivation* (beta .318, p<.001) contributed significantly to predict the criterion (dependent) variable *impact on clinical behavior*, explaining 40 % of the variance. The remaining sub-factors did not contribute significantly to the models.

## 7.4 STUDY IV

The findings from Study IV are presented in accordance with the sub-factor structure of Subscale A in the GOV-EQ scale, along with the single item. The presentation combines the quantitative and qualitative findings. For each domain, survey data at group level (index mean, SD) are presented, followed by a summary of how the qualitative data enhance the understanding of the quantitative data. Thereafter the qualitative analysis will be presented, organized according to the inductive themes. Last, findings from the data integration phase are described.

### 7.4.1 Impact on clinical behavior

The mean rating of *impact on clinical behavior* (single item) was 3.32, with a standard deviation of 0.92. In the interviews respondents described that they regularly took the unit's financial situation into consideration, particularly in regard to resource utilization. Thus, the qualitative data support the quantitative data, suggesting that economic efficiency requirements generally have an impact on staff behavior.

#### 7.4.1.1 Multiple ways of managing resources

According to the respondents, economic considerations influenced clinical work in multiple ways, for example, when purchasing equipment, pharmaceuticals and mobility aids and when ordering supplementary lab-test and examinations. Efforts were made to find the cheapest alternatives and costs were carefully considered in relation to patient benefit. Concern for the financial situation at the unit was also reflected in staff members' efforts to avoid costly short-time recruitments and efforts were made to handle the workload with existing staff members.

#### 7.4.1.2 Data integration

Although the quantitative data suggest that considerations of the unit's financial situation impact clinical work to some extent, the qualitative data indicate that a midpoint rating rather reflects a substantial impact on clinical behavior. The qualitative data further show that the financial responsibilities may be different across professional roles, leaving room for individual variation.

### 7.4.2 Knowledge and awareness

At group level, the mean rating of perceived *knowledge and awareness* of economic efficiency requirement was 2.99 (SD 0.91). In the interviews, the respondents expressed that they considered themselves as well aware of economic efficiency requirements and thereby the qualitative data are concordant with the quantitative findings. The interview data further provided a more nuanced picture of staff preferences for different types of knowledge.

#### 7.4.2.1 *Awareness of guidelines governs behavior*

The respondents described the financial situation to be regularly discussed in staff meetings and in the day-to-day-interactions at the unit. The respondents seemed well aware of guidelines for how resources should be managed, in particular the public procurement regulations, and knew when to ask for advice from their managers.

#### 7.4.2.2 *Understanding resource utilization drives engagement*

Increased knowledge of how cost and resources are distributed at the units was assumed to spark interest among staff, since that would make them better prepared to choose among alternatives. Respondents expressed that they would like to be more involved in analyses and discussions on resource utilization, preferably together with financially skilled staff.

#### 7.4.2.3 *The balancing act of awareness*

Although respondents reflected upon the potential upsides of increasing staff awareness, the importance of not allowing economic considerations to overshadow the patient perspective was emphasized. To provide information that enables action and still does not undermine the engagement of staff was described as an important balancing act for managers.

#### 7.4.2.4 *Knowledge beyond unit level loses meaning*

Respondents described that they regularly received information about the overall financial situation at the hospital. However, such information was commonly experienced as abstract and hard to understand and information going beyond unit level was perceived as less meaningful.

#### 7.4.2.5 *Data integration*

Based on the integration of data staff members seem well aware of how to manage resources carefully. However, there seems to be an optimal level of knowledge and awareness as perceived by staff, enabling informed decisions without turning them into financial officers. In addition, knowledge that specifically addresses staff members' contribution is more appreciated than information at system level, being outside of staff members' control. Still, the staff seems to posit integrated knowledge including both a unit and a system perspective, which needs to be carefully considered when interpreting survey data.

### **7.4.3 Opportunity to influence**

At group level, the mean rating of the *opportunity to influence* economic efficiency requirements was 1.97 (SD 0.95). Similarly, the interview data showed that staff experienced limited opportunities to influence the unit's financial situation.

#### 7.4.3.1 *Constrained by counterproductive guidelines*

Although respondents described that they tried to manage resources carefully, the public procurement guidelines occasionally limited their ability to do so, since contracted suppliers could be more expensive than others in the market, or provided products that did not fit to the intended purpose.

#### 7.4.3.2 *Little influence on resource allocation*

Although trying to optimize the use of resources, the respondents expressed that their opportunities to influence the overall resource allocation was very low. Also, unit managers were perceived to have little influence over the unit's budget and staff experienced themselves distanced to those making the financial decisions.

#### 7.4.3.3 *Data integration*

The integration of data reflects that staff experiences little opportunity to influence, however the interview data provide insights about the complexity of this domain. Staff members seem to distinguish their influence over resource allocation from their influence over resource utilization, and the low quantitative ratings seem to mainly reflect the former. Financial issues are generally perceived to be handled far above staff level. Although survey items clearly refer to influence over the financial situation at unit level, the qualitative data suggest that staff members integrate both the unit and the system-level perspective, which needs to be acknowledged when interpreting survey data.

### **7.4.4 Motivation**

At group level, the mean rating of *motivation* to engage in issues of economic efficiency requirements was 3.08 (SD 1.01). Interview data support the notion that staff members are motivated to engage in the financial situation at the unit by providing examples of multiple reasons for staff finding it meaningful to manage resources carefully.

#### 7.4.4.1 *Meaningful in multiple ways*

The respondents expressed multiple reasons for why an efficient use of economic resources is meaningful. Opportunities to use saved resources to improve care and invest in competence development were described, for the benefit of patients and professionals. Respondents also identified themselves as taxpayers, and expressed their concerns regarding publicly collected funds and that they should be fairly used. Thus, staff engagement in issues of economic efficiency seemed conditional insofar that savings should be made for the best of patients, staff, or the public.

#### 7.4.4.2 *Behaviors and consequences insufficiently connected*

Respondents expressed that the connection between staff behaviors to improve economic efficiency and the following consequences was perceived as unclear, and at risk of

undermining staff engagement. Respondents assumed that an increased mandate among staff to decide upon how savings could be used for improvements would boost staff engagement. The history of financial constraints, however, may have contributed to establish expectations among staff that the tough economic situation at the hospital would remain, regardless of staff members' efforts.

#### *7.4.4.3 Trust in the system*

Respondents emphasized the importance of persons at leading positions to act fairly, with a clear intention to do what is best from a public interest perspective. Selfish or inappropriate use of the system's limited resources, through e.g. unreasonable wage levels or beneficiary agreements for top managers, were perceived to have demoralizing effects among staff. Respondents' engagement seemed, in that sense, associated to their overall trust in the health care system being fair and reasonable, relying on other actors doing their part.

#### *7.4.4.4 Data integration*

The data integration reflects that staff members experience that the efficient use of resources is intrinsically motivating, for multiple reasons. Nevertheless, potential risk factors are identified at both unit and system level. This further highlights the importance of behavioral contingencies, since staff behaviors may be influenced by consequences in the local environment but also by their subjective assessment of system-level events, such as the behaviors of people in top-management positions.

### **7.4.5 Impact on professional autonomy**

At group level, the mean rating of *impact on professional autonomy* was 3.31 (SD 0.92) and similarly the qualitative data suggested that staff experiences financial considerations to influence their professional autonomy to meet patient needs. Although this was described as a potentially harmful dilemma, respondents also expressed acceptance over resources being limited.

#### *7.4.5.1 Limitations and acceptance*

Respondents provided examples of how public procurement regulations occasionally limited their freedom to individualize care and that long-term follow up and preventive care may get a lower priority when resources are limited. Still, respondents expressed acceptance for the fact that resources are, and always will be, limited in health care.

#### *7.4.5.2 Strategies to minimize harm to professional values*

Respondents described strategies to enable actions in accordance with their professional ethos, which was described as a key factor for wellbeing at work. Occasionally efforts were made to find ways around the system, to meet the needs of specific patients.

#### 7.4.5.3 *Data integration*

The integration of data brings some uncertainty on how to interpret the quantitative findings in this domain, since limitations to the professional autonomy were mostly discussed in hypothetical terms. In addition, it is unclear whether ratings reflect staff experiences with or without strategies to mitigate a negative impact. Although this should be acknowledged when interpreting data, the interviews still confirm the relevance of professional autonomy for general job satisfaction among professional staff.

### **7.4.6 Organizational alignment**

At group level, the mean rating of *organizational alignment* was 2.29 (SD 0.87), which indicates some imbalance between perceived economic resources and the unit's assignment to meet patient needs. However, the interview data suggest that staff members also take the greater system's ability to care for patients into consideration, which might be reflected in the ratings.

#### 7.4.6.1 *The unit in context of the system*

The respondents expressed that the opportunities to meet patient needs are fairly good at the unit. However, respondents expressed concern for the overall systems' ability to care for the entire patient population, including those whose referrals were rejected.

#### 7.4.6.2 *Caring for patients across system stakeholders*

Respondents shared experiences of handling patient related issues that arise at the units' interfaces, e.g. when patients are referred to primary care or to services provided by the municipality. Based on the patients' serious conditions, treatment is generally costly and respondents described how they regularly had to fight for their patients' rights to treatment and welfare services post discharge. Respondents emphasized the need for better stakeholder integration.

#### 7.4.6.3 *Data integration*

Data integration clearly shows that staff experiences of balance between financial resources and patient needs at unit level, cannot be separated from the overall system's ability to care for patients. Thus, the quantitative ratings are probably influenced by staff members' experiences of imbalance across the entire care cycle, including health- and social care integration.

## **8 DISCUSSION**

The thesis contributes to the understanding of professionals' experience of economic governance by providing insights about the complex consequences for clinical practice. The thesis further shows that professionals' experience is characterized by incorporating the perspective of their provider organizations, as well as other stakeholders in the system, caring for the entire patient journey. The thesis further suggests that professionals find economic efficiency requirements meaningful and part of their responsibility. Moreover, the thesis shows that professionals generally are aware of how they should respond to such requirements, and it provides multiple examples of how this manifests in clinical work. However, economic considerations are constantly put in relation to patient needs, which are guided by the professional ethos, and extensive discrepancy between the two is perceived as potentially harmful from a work environment perspective. Thereby the thesis supports the relevance of aligning economic governance models to the quality and equity purposes of health care. The thesis further clarifies that the impact of economic governance models is not only present at the managerial level, but also influences professional staff. Nevertheless, the balancing act of not letting economic requirements overshadow the patient perspective is perceived to be an important aspect of managerial strategies to motivate staff, as perceived by staff members and professional managers themselves.

In the following sections the thesis findings will be discussed. Thereafter, important methodological considerations and the overall validity of findings will be reflected upon. Last, implications for research and practice will be presented.

### **8.1 THE COMPLEXITY OF CONSEQUENCES**

The thesis findings show that economic governance strategies are clearly present at the professional level, and managers and staff members both experience this to have an influence on clinical practice in a complex way.

The thesis studies suggest that economic governance models are transformed at the provider level into concrete actions and guidelines for organization of care and resource use, which in turn are transferred to professionals to influence their clinical behaviors. The actions taken are of course linked to the components of specific governance models, for example, in Studies I and II specific strategies to improve the efficiency and quality of care are described. In Study IV, a more general awareness of economic constraints and resource use are reflected in survey ratings and in interviews. Thereby the thesis findings support the idea that economic governance strategies can be a means for influencing provider behavior (Barnum, Kutzin, & Saxenian, 1995), also when incentives do not target the individual level (Robinson, 2001). Although one may assume that professionals in managerial positions would be the main target group for such requirements, the thesis findings suggest the awareness and responsiveness to economic governance models goes all the way down to the staff level.

Although the thesis provides empirical examples of how economic governance puts focus on certain aspects of care delivery, the issue of whether these responses contribute to attaining the desired outcomes at the system level is far more complex. At this point it should be emphasized that the aim of this thesis is not to evaluate the outcomes of the economic governance models applied in the thesis studies. However, professionals' experiences may provide useful insights into how the models should be evaluated and understood. A central characteristic of professionals' experiences across the thesis studies is that it highlights the complexity of consequences that a specific model entails, identifying potentially positive and negative outcomes, which goes far beyond the more common focus on provider costs and productivity.

In Study I, potentially positive consequences of optimizing the care flow are observed, such as improving resource use and reducing waiting times for patients, which is consistent with local evaluations of the model (Wohlin et al., 2016). The specific focus on reducing infections may be positive when viewed from cost, quality, and patient experience perspectives. However, the role of structural change in moving low risk patients out from hospitals seems particularly important in this case, negatively influencing current structures for education and research, which corroborates with the literature highlighting the changing conditions for university hospitals as a result of transformation in specialized care (Rechel, Duran, et al., 2018). In addition, there seems to be a concern for increased fragmentation of care and unintended consequences for vulnerable patients, which resonates with studies evaluating patient choice (Fotaki et al., 2008) and the application of financial incentive models (Roland et al., 2006) in primary care. In addition, the shift toward more homogenous patient populations and monotonous tasks seems to have negative implications for job strain and work environment for professionals, although it is rational from an efficiency perspective. In Study IV, professionals' reasoning illustrates complexity in regard to how consequences evolve over time when trying to reduce resource use. The potential risks of short-sighted savings are highlighted, for example illustrated in the requirements to use cheaper materials at the risk of increasing infection rates and thereby increasing end costs. Similarly, giving lower priority to preventive interventions are described as a risk for letting problems grow bigger and more costly, as time goes by. Study IV also illustrates the complexity of resource management in big provider organizations, in which compliance with centrally defined guidelines might provide obstacles for acting flexibly and cost efficiently in the handling of individual cases.

Based on the complexity of consequences illustrated in the thesis, it seems impossible to come to a simple verdict in regard to whether a specific economic governance application is good or bad. In that sense the thesis supports the notion that evaluation of economic governance strategies is complex (Eijkenaar et al., 2013; Flodgren et al., 2011) and should be so, if paying sufficient attention to the variety of potential consequences over time. Still, the thesis provides arguments for using professionals, with ears and eyes on the ground, as a source of knowledge in evaluation studies providing insights into long-term consequences in a variety of domains. The thesis thereby supports the use of comprehensive data to represent

multiple outcome measures (linked to multiple aims) in evaluation studies. In addition, particular attention should be given to how common system-level functions, such as research and education, are influenced. The thesis further supports the relevance of improving evaluation study designs to include longer time spans for identifying short-term and long-term consequences and their interrelationships.

The empirical case of Studies I and II further shows that the structural reorganization of care and differences in responsibilities across provider types influence the conditions for providers to respond to the patient choice model. In this case, sufficient attention has not been paid to compensating hospital providers for their responsibilities for research and education and sufficient efforts have not been made to establish new structures for provider collaboration. Although this lies beyond the scope of the thesis, the findings also raise questions about whether the conditions for responding to the patient choice model are different for hospital providers that also handle acute orthopedics, compared to specialized providers handling elective care only. This implies that evaluation studies should take aspects of market composition and parallel provider assignments into consideration, to capture how certain provider characteristics interact with the logics of the economic governance model. In the context of big provider organizations, such as a university hospitals represented in Study IV, evaluation studies should carefully consider how the local implementation of economic efficiency requirements is carried out and what it means in practice at department or unit levels.

## **8.2 PROFESSIONALS' CONCERN FOR THE OVERALL HEALTH CARE SYSTEM**

The thesis provides insight to professionals' experience of economic governance being an integrated one, in the sense that they understand the requirements imposed on their provider organization (and thereby on them) in relation to the functioning of the surrounding health care system. The system-level analysis seems to be driven by a concern for the whole patient and an awareness of the entire patient journey, including all steps along the care pathway preceding and succeeding a professional's own role and responsibilities.

The system-level awareness is obvious in Study IV, in which staff members reflect upon and show concern for how their patients are treated post-discharge and to what extent other stakeholders, such as primary care and social care, will meet their patients' needs. Based on the patients' serious conditions, commonly requiring life-long support, their awareness might not come as a surprise. Nevertheless, it is important to acknowledge that their engagement also continues when their personal responsibility can be considered accomplished. This suggests that dysfunctional stakeholder integration, which has been observed in empirical studies to put patients at risk (Auschra, 2018; Leutz, 2005), also could be a risk factor for harming professionals' work environment. These findings further confirm the relevance of applying patient-centered care (Myndigheten för Vårdanalys, 2012), emphasizing the

importance of putting patients at the center of the care process, rather than how health care stakeholders are organized and structured.

The system-level analysis conducted by professionals in the thesis studies not only focuses on patient needs, but also on the economic efficiency of the overall system design. In Study IV, respondents emphasize the importance of taking patients' life-long needs (and costs) of care into consideration, suggesting that proactive "expensive" interventions may pay back multiple times. The respondents also seem to have a sophisticated understanding of how the system is designed and they observe how the separated assignments (and budgets) of different provider organizations and stakeholders may provide obstacles for doing what is most efficient from a cost perspective. In Studies I and II, limitations on how the choice model supports economic efficiency across stakeholders are also identified, for example by highlighting the potential cost of incomplete assessments in primary care preceding surgery. This is particularly interesting since elective surgery is commonly described as an "uncomplicated procedure", suitable for transferal to freestanding specialized providers (Cook et al., 2014). In summary, limitations on stakeholder integration are identified by professionals in both empirical settings, representing high and low levels of care complexity. The thesis highlights the need for system awareness when designing economic governance models, including the coordination of provider types within the health care system and the integration of health and social care. Economic governance models should support providers in making decisions that are sustainable from a long-term perspective, and from a patient and resource use perspective, uniting rather than separating stakeholders.

The system-level awareness of professionals also includes issues that are of high importance to the professional community, such as knowledge development. Further, the responsibility for research and education seems to be perceived as a shared responsibility for all professionals across provider organizations. This suggests that professionals may not primarily identify with (and be loyal to) their provider organization, but rather with the broader patient population and with the wider professional community, anchored in a concern for the functioning of the overall health care system. This is consistent with empirical findings in the field of PSM, emphasizing that the motivational orientation in public services goes beyond organizational boundaries, and is concerned with the interest of the larger public community (Perry et al., 2010). This raises questions about the effectiveness of applying competition in health care markets, relying on the assumption that professionals employed by provider organizations primarily want to do what is best for the provider. The thesis also provides reasons for questioning whether professionals want to take a competitive position toward professional colleagues at other providers, if collaboration is a more appropriate (or even necessary) strategy. To put it simply, if competition does not serve the purpose of fulfilling the overall aims of health care systems, then why should they compete? However, this does not mean that the establishment of different provider types and the freedom of choice for patients are wrong. On the contrary, there are many potential upsides of multiple actors and diversity in health care markets, but the assumption that that professionals' will to compete is a strong driving force behind increased provider performance in competitive

health care markets does not find support in the thesis. To conclude, the thesis provides multiple arguments for applying a system-level approach, including the perspectives of all stakeholders involved along the patient pathway, as well as the professional community when designing economic governance models.

### **8.3 THE IMPORTANCE OF PROFESSIONAL VALUES**

The thesis shows that professional values committed to safeguarding patient needs play an important role for professionals' experience of economic governance, which is observed at the manager and staff level.

Professionals across the thesis studies constantly seem to place economic efficiency requirements in relation to their professional duty to meet patient needs of treatment and care, also considering aspects of quality and equity. Although the participants emphasize the reasonableness of managing resources efficiently and show acceptance toward the fact that resources always will be limited in health care, it seems conditional that this should not bring substantial harm to patients. The thesis thereby confirms the literature on professionalism, stating the professional ethos to protect patients is fundamental to the professional role (Swick, 2000).

The professionals' reasoning is characterized by their concern for the atypical patient who does not fit the model, and thereby becomes vulnerable. In Studies I and II respondents express concern for the few patients who (due to insufficient inclusion criteria) are misclassified as low risk, although having more extensive care needs. In Study IV concerns are raised for patients whose individual needs will be considered too costly and thereby not sufficiently supported when the rehabilitation period is over. This might to some extent be unavoidable, since economic governance models are defined at the system-level based on the typical needs of typical patients. However, the thesis shows the need for acknowledging atypical and unpredictable events in the design of economic governance models to enable flexibility for professionals, who on the contrary meet individual patients whose clinical profiles will deviate more or less from the average.

The high priority of the professional ethos manifests in professional behaviors going against system requirements when patients are put at risk. In Study IV, staff members describe strategies of trying to find ways around the system, when it provides obstacles for individualizing care. Similarly, the professional managers in Study II state that they have occasionally felt forced to overrule the economic logics of the patient choice model to protect patients, at the expense of the provider organization. Again, this suggests that professionals identify strongly with their patients and that their loyalty to patients will overarch that of the organization if patients are put at risk. The thesis findings thereby also confirm the substantial impact of internal reward processes driving behaviors of going around or against system requirements and incentives logics, which has been observed and described in the

motivational literature in several academic disciplines (Deci & Ryan, 2000; Gneezy et al., 2011; Perry et al., 2010; Swick, 2000).

The importance of health care managers having a more general awareness of professional values is also reflected in the thesis, which confirms the literature emphasizing that professionally trained managers have an advantage in health care organizations (Lega et al., 2013). The adaption to professional values is reflected in the managerial strategies observed in Study II, trying to increase the motivational impact at the staff level by translating the economically warranted needs for change into improvement initiatives, assuring staff that quality will come first. The relevance of the translational strategy that is described by managers themselves in Study II finds some support in Study IV, in which staff members emphasize the importance of their managers keeping a reasonable balance between increasing the economic awareness among staff and still maintaining focus on patients. There also seems to be a communicative style that is perceived as more successful in the current contexts. This is described from a managerial perspective in Study II, in terms of managers avoiding a too financially colored language that might be perceived as provocative by staff. This resonates with staff members' experiences in Study IV, where they express that they do not want to see themselves turned into financial officers. The thesis thereby substantiates the ability of professional managers to adapt the communication and management style to the motivational preference of staff, which is described in the literature (Postma et al., 2015). The managers' ability to integrate economic and quality requirements by using their professional expertise to assess how efficiency strategies could be implemented to also support quality improvement, observed in Studies I and II, is also consistent with the literature on professional hybridity (Noordegraaf, 2011).

This thesis provides no simple answer to when harm to professional values becomes a serious problem. Nevertheless, the thesis highlights the potential risk of misalignment between economic governance models and patient needs, not only for the sake of patients but also to avoid creating a harmful work environment for professionals. In Study I, the participants clearly express that the reason behind the strategy of overruling is to protect the well-being of their staff and themselves. In Study IV, respondents acknowledge that serious limitations to professional autonomy to meet patient needs would substantially impair job satisfaction. These findings show similarities with case studies in primary care settings, that identify risks for reduced job satisfaction when economic governance models are too narrowly defined (Campbell et al., 2008; McDonald et al., 2007). The thesis findings also resonates with the literature on stress and burnout among the health care workforce, identifying emotional strain as a potential downside of professional empathy, if workers are put in situations where they feel forced to provide insufficient care (Larson & Yao, 2005). Although we cannot provide an exact cutoff level representing the point of "enough is enough" for professionals, the GOV-EQ scale developed in Study III provides tools for monitoring the autonomy of professionals in meeting patient needs and the perceived alignment between available resources and patient needs on an organizational level. By collecting data across provider organizations and over time, risk areas could be identified and further explored, guiding appropriate actions before

too much damage is done. To conclude, the thesis provides substantial arguments for the importance of aligning economic governance models to professional values and for considering the implications for professionals' work environments, which supports the relevance of the quadruple aim that also acknowledges the pursuit of improving the experience of care delivery (Sikka et al., 2015).

#### **8.4 INTRINSICALLY MOTIVATING TO MANAGE ECONOMIC RESOURCES**

Based on the previous sections which describe the challenges in designing economic governance models and the importance of acknowledging professional values the reader might think this thesis is positioned against the use of economic governance models to increase the economic efficiency of health care. This is not the case. On the contrary, the thesis findings show that professionals find it meaningful and are motivated to contribute to resources being efficiently used, and identify many valid reasons for doing so.

In Studies I and II, managers describe that actions have been taken to increase the efficiency of the care flow and express appreciation for the bundle payment principle, providing clinical freedom to decide how to best use resources. This might not come as a surprise, since the responsibility of resource use is embedded in the managerial role and thereby represents the hybrid demands (Noordegraaf, 2011) put on health care managers. In addition, from a managerial (Hales, 1999) and motivational perspective (Michie et al., 2005), it makes perfectly sense that managers are motivated to respond to requirements imposed on organizational level, since their responsibility for making it happen is clearly part of their organizational role. What might be more surprising is that the thesis studies show that professionals at staff level also express engagement in economic issues, despite having no formal responsibility for the unit's budget or resource use. In Study IV, both survey and interview data suggest that staff members are motivated to contribute to resources being efficiently used. In addition, the managers in Study II emphasize that although staff members are primarily interested in organizational performance represented by quality indicators, resource use is not at all indifferent to them. This partly contradicts the empirical findings suggesting that professionals at the staff level are more hesitant toward economic requirements, perceiving this to be potential threat to the quality of care, compared to the perceptions of professional managers (Storkholm et al., 2017).

In the literature on provider payment models, critique has been raised regarding the use of financial incentives at the provider level only, since this provides no incentives at the individual level in provider organizations where a majority of professionals are salaried (Robinson, 2001). Although there might be a few exceptions (among the participants representing private providers in Studies I and II), the vast majority of participants in the thesis studies are salaried professionals employed by public providers. So, even though there are no obvious financial rewards, why do they seem to care about efficient resource use? The findings of Study IV suggest that there are many reasons for professionals at the staff level to

engage in issues of economic efficiency. Reducing unnecessary activities (and resource use) is described as enabling opportunities to increase the activities that provide value for patients, which can be regarded as an additional strategy to live up to the professional ethos (Swick, 2000). The positive association between managing economic resources and the quality of care is further supported by the positive correlations across subscale A and B in the GOV-EQ Scale, suggesting that individuals who are knowledgeable and motivated to engage in issues of economic efficiency also seem to be more knowledgeable about and engaged in improving the quality of care, or vice versa. The thesis thereby provides no support for the inherent conflict between economic efficiency requirements and quality of care that is occasionally emphasized in the academic discourse of professionalism arguing that imposing requirements on professionals to reduce health care spending may threaten the core of medical professionalism (Wynia, 2009). Instead, the thesis findings may be interpreted as a sign of hybridity (Noordegraaf, 2007) also present among staff, proposing that professionals at multiple organizational levels have the ability to integrate multiple health care demands in a synergetic rather than conflicting way. Similar ideas of the two-sided responsibility of public servants has been described in the Swedish public administration literature and represented in the “civil servant ethos” (Lundquist, 2001). It emphasizes the equal importance of protecting individuals’ needs of support from the welfare state, and still act as a gate keeper for individuals’ access to welfare services, to protect the overall public resources. The inbuilt dilemma for public servants balancing individual needs against the formal regulations of public services has also been described in the policy literature that explores the key role of street-level bureaucrats for the implementation of governance and policy applications (Brodkin, 2012).

In Study IV, using resources efficiently is also described as meaningful from a professional perspective, since saved resources may be used to invest in professional training and knowledge development. This is considered to be beneficial for patients and to be an important motivational factor for professionals who appreciate the development of new skills and expertise. The motivational impact of professional development is further confirmed by the managerial strategy of personalizing rewards observed in Study II. These findings are consistent with motivational theory proposing that competence development is a fundamental intrinsic motivator (Deci & Ryan, 2000) and highlighting the importance of considering professional development and the acquisition of new skills when trying to improve health care systems’ ability to support a positive experience of care delivery (Sikka et al., 2015).

In Study IV, the participants also describe their engagement in resources being efficiently used by taking the perspective as taxpayers. The importance of economic resources being fairly and reasonably used is emphasized, and the participants’ reasoning reflects a sense of personal relationship, or even ownership, of the publically funded resources, although their personal contribution represents a relatively small proportion of the health care budget. When sharing experiences of resources being unreasonably used participants expressed a strong commitment to these issues, and although more efficient use of resources will never get them their tax money back, it is almost as though the waste of public resources evokes a sense of

being stolen from. From a psychological perspective, the subjective assessment of how well health care resources are used in relation to internal convictions of how resources should be used is a perfectly valid motivator (Deci & Ryan, 2000). The individual engagement in how resources are used might be influenced by the Swedish health care system which is to a large degree publically funded, and in that sense public funds are an extension of the individual's money. However, this might not provide a full explanation, since the literature on PSM provides empirical examples showing that motivational preferences of doing what is best from a public perspective are also present in countries with a lower degree of public funding of welfare services, such as the United States (Vandenabeele, 2014).

To conclude, although identifying the underlying reasons behind why professionals engage in issues of economic efficiency goes beyond the scope of this thesis, the thesis findings show that professionals are intrinsically motivated to contribute to economic resources being efficiently used. In addition, the notion that their engagement requires financial rewards at an individual level (through, e.g., provider payment models) finds no clear support in this thesis.

## **8.5 THE CONDITIONS FOR BEHAVIOR CHANGE**

The thesis provides data on professionals' experiences of economic governance that encourages a more general reflection on the overall conditions for behavior change in response to economic efficiency requirements, considering external and internal factors that may facilitate or hinder desired behaviors. Overall, the thesis studies suggest that neither knowledge nor intrinsic motivation is missing at the professional level for appropriate behaviors to occur. However, the rewarding consequences provided by the external environment seem to be insufficient to reinforce professional behaviors contributing to economic efficiency, which seems to be linked to the scope of the economic requirements and how these are implemented in practice.

Applying theoretical perspectives of behavior change (Michie et al., 2011; Skinner, 1963) to the thesis context includes the consideration of available antecedents and the immediate consequences of desired behaviors, as well as the contingencies for how these factors are interlinked. A good start for changing peoples' behaviors is that the desired behaviors are clearly defined and articulated. In the thesis studies, the appropriate behaviors used to respond to the specific governance models are defined within the provider organizations and across studies it seems quite clear to managers and staff what they can do. The studies also show that antecedents for behaviors are provided through instructions and guidelines, which are communicated through dialogue between managers and staff. In summary, the participants seem to know what to do, and they do it if they have the opportunity. (The more complicated issue of whether this is enough to attain the economic requirements will be saved for later.) From a motivational perspective (Michie et al., 2011; Ryan & Deci, 2000) sufficient internal reward processes seem to be in place to maintain behaviors, based on

professionals finding meaning in managing resources efficiently as long as doing so does not entail substantial harm to patients.

However, the contingencies of external reward processes do not seem optimal from a behavioral perspective. When managers in Study II describe their efforts to operationalize tasks and provide feedback for staff, there seem to be challenges in accessing valid data on how resources are used. In addition, current economic figures are described as being too loosely linked to what staff members do and are therefore less useful as a motivational tool. Access to economic data is, of course, dependent on how resource use and costs are calculated and monitored within specific provider organizations and the level of complexity of the care provided. For example, in the first empirical case, one may assume that there would be greater challenges for the hospital providers who handle acute and elective care within multiple orthopedic domains to identify the resources used by patients assigned to the choice model, compared to specialized providers primarily managing the patient choice model. However, cost calculation is described as a generally challenging task for health care organizations (Keel, Savage, Rafiq, & Mazzocato, 2017), and the lack of valid data to support the analysis on how to increase economic efficiency and to enable feedback may be a universal challenge across providers. Based on the lack of appropriate data, there is also a risk that focus is directed toward what is easily measurable, such as purchasing costs, which might not be the best strategy for improving the overall efficiency of resource use.

In Study IV, respondents also describe staff behaviors (to increase economic efficiency) and rewarding consequences as being insufficiently linked in the sense that it is not clear to staff how their efforts make a difference. The metaphor of local savings disappearing into “the big black hole” of the large hospital was used several times during interviews to illustrate the lack of clarity regarding how local efforts are used to support the organization. Also previous experiences of how local savings have been “rewarded” by reduced resource allocation the following year stand as an example of how certain decisions may be perceived as a punishment from the individual perspective, which may explain some of the reported skepticism. Although there might be valid reasons behind such decisions, there is a risk that individuals perceive this as inadequate recognition of their efforts, which may have a demotivating effect. From a behavioral perspective, an increased mandate to decide on how savings are used and increased clarity on how saved resources are used to add value for patients (and professionals) in the organization are important factors necessary to increase the level of perceived reward among professionals and thereby encourage future engagement in economic issues.

The limitations of external reward processes that are described in the thesis raise questions about the general conditions for behavior change in times when health care providers face major economic constraints. In Study IV, the discrepancy between what individual staff members can do and what needs to be done to cope with the hospital’s major budget constraints, seems to be a risk factor that undermines staff motivation, although they could make an appropriate contribution. In the light of recent reports stating that a majority of

Swedish regions will face major economic challenges ahead (SKL, 2018a), the thesis reflects the importance of carefully designing how saving requirements are implemented in provider organizations (and at departments and units), to provide reasonable conditions for professionals to behave accordingly. There might also be opportunities for local managers to proactively handle experiences of unobtainable economic requirements, by focusing on what is expected by individual staff members and to clearly distinguish this from the challenges at provider or regional level.

In summary, applying a behavioral analysis perspective on the conditions for professionals to respond to economic efficiency requirements suggests that the lack of positive consequences in the external environment seems to be a challenge for behavior change over time. Again, the desired external reward do not primarily appear to be monetary in nature; instead, the rewarding effects of being able to influence how resources are utilized and to see how individual efforts contribute to improving health care are emphasized by professionals.

## **8.6 THE ROLE OF MANAGERS AND SYSTEM TRUST**

Although the thesis shows that managers apply strategies to align the prevailing governance models with professional values, and that staff appreciate their efforts, the thesis also reflects that the role of managers as intermediaries between the system and staff level is limited. This is because staff experiences also include their perception of the overall system, which managers have limited control over.

In Study IV, staff members rate their opportunities to influence economic issues as low. The interview data clarify that although they do what they can within their scope of action, they perceive little influence over overall resource allocation. Staff members also perceive their unit managers as having a limited mandate to influence economic decisions and that there is a distance between those making financial decisions at the top-management level and those who work on the ground. In Study II, similar experiences of distance are expressed, although the participating managers mainly address the level of policy makers when calling for a closer dialogue. The experience of having little influence over economic issues reflected in the thesis contrasts to the positive effects of budgetary involvement reported in the literature, contributing to more positive attitudes among professionals toward financial control (Macinati, 2010) and increased financial performance (Macinati & Rizzo, 2016). Additional literature on health care management also emphasizes the importance of professional managers' involvement and influence over how tasks are defined (Goodall, 2011; Lega et al., 2013), which seems to be a limitation in regard to economic decision making in the empirical settings included in the thesis. Although investigating how economic decisions have been made at the top-management and descending management levels lies outside the scope of this thesis, the findings suggest that there are limitations to overly top-down oriented approaches to increasing economic efficiency in limiting professional engagement - at least as perceived by professionals themselves.

Although health care professionals can be assumed to have limited influence over how the overall health care system functions, they seem recurrently preoccupied with assessing how the system works. The notion of “the system” seems to refer to the broader health care system in the region and appears to be constituted by multiple perceptions, ranging from the information they get at their own unit and provider organization, to that gained from being patients or relatives themselves. In Study IV, participants describe how they reflect on how resources are used in general, and that they judge the actions of important figureheads in the organization. The focus of their analysis seems to be to what extent decisions contribute to improving the value provided by the system to the overall beneficiary population. Selfish actions or obviously inappropriate use of the system’s limited resources seem particularly provocative. Also in Study I, the professional managers’ in-depth analysis of the consequences of the patient choice model and their concern for system flaws reflects a general awareness of the overall functioning of the system.

Although the thesis does not provide clear answers on what influences perceived system flaws have, this might be at risk of undermining professionals overall trust in the health care system and in decision makers. In Study IV, there seem to be a link between staff members’ assessment of the system’s reasonableness and their willingness to act in accordance with system requirements. The findings reflect a kind of required mutuality, in the sense that staff members seem willing to do their part if they believe that other system actors do theirs. Although a system is a more complex creature than single persons are, this perception shows interesting similarities with the observed impact of perceived trust (Ellingsen & Johannesson, 2007) and reciprocity (Fehr & Falk, 2002) on behavior, as described in the literature of behavioral economics. Empirical studies suggest that prosocial behavior increases if individuals trust their counterparts to be prosocial and that reciprocity works both ways, which means that egoistic and non-collaborative behavior increase the likelihood of punishing behavior in return (Fehr & Falk, 2002). The literature also proposes that there is a learning effect of reciprocity, which means that historic and recent behaviors are included in the assessment of counterparts (Wilkinson & Klaes, 2012). This resonates with the observations in Study IV, in which participants emphasize that the long history of economic constraints and the insufficient acknowledgement of individual efforts to reduce costs negatively influence their expectations.

In summary, the thesis provides insights to the conditions for managers to act as intermediaries. The findings indicate that managers’ ability to influence staffs’ experience of economic efficiency requirements is influenced by the level of mandate, and by staff members’ trust in the surrounding health care system as reasonable. Although the undermining effects of system distrust may be challenging to study and test empirically, the thesis raises questions about the symbolic nature of the decisions and actions made by key persons in top- management positions in health care systems, which may have a substantial impact further down in the organization.

## 8.7 COPRODUCTION OF VALID ECONOMIC GOVERNANCE

The thesis studies reflect challenges and opportunities with engaging professionals in increasing the economic efficiency of health care. Still, this remains one of the major challenges for future health care systems. The thesis suggests that closer collaboration between stakeholders at the professional, provider, and policy level may be beneficial, representing multiple perspectives on how resources can be more intelligently used, to improve economic efficiency and quality of health care.

The thesis provides insights into the complexity of economic governance that makes the idea of designing a perfect model in advance unrealistic, which raises questions about how the processes for governance and policy making may be improved. Based on the thesis findings, there seems to be a need for a more adaptive and flexible governance process that enables revisions of current governance practices. The thesis also reflects the need for establishing forums that brings professionals, provider representatives, and policy makers together to attain shared goals. Thereby the thesis confirms the relevance of coproduction in health care governance. The concept of coproduction originates from theories on service production, and its emphasis on focusing on service users as active agents in service production has been increasingly acknowledged in health care by the use of concepts such as self-managed care and patient-centeredness (Batalden et al., 2015). The key role of coproduction has also been acknowledged in the academic literature on public management, arguing that public management has been overly reliant on manufacturing logics, underestimating the central aspect of health care being a service. Adopting a service-oriented approach implies that public services should be coproduced, bringing key stakeholders together and putting the experience of service users at heart of public service design (Osborne, Radnor, & Nasi, 2013), which resonates with professionals' experiences described in the thesis.

The thesis findings further highlight the important role of evidence as a base for policy-level decisions. This is reflected in professionals' appreciation for clarity on how economic governance applications contribute to fulfilling health care aims, which require comprehensive data and evaluation of effects. In the literature on evidence-based policy, the importance of quantitative and qualitative evidence in documenting policy outcomes is emphasized, alongside identifying key factors in the policy process that increase adaption and specific policy content that is likely to be effective (Brownson, Chriqui, & Stamatakis, 2009). Arguments suggesting that professionals could contribute to policy evaluation have already been brought forward in this thesis. However, an increased use of evidence in policy making might also have positive effects on professionals apart from improving policy-level decisions as such. Based on health care professionals being extensively trained to apply principles of evidence-based practice, one may assume that policy-level decisions that appear to be anchored in evidence on what works (and why), rather than political ideology, are experienced as more credible in the eyes of professionals. In summary, the thesis suggests that an increased use of evidence to guide policy-level decisions and increased collaboration uniting system stakeholders may contribute to a more valid economic governance, in the

sense that imposed efficiency requirements are perceived as being reasonable and actionable by professionals, which might facilitate their response.

The idea of increasing trust in professionals to act autonomously that currently influences the Swedish debate on public management, resonates with the thesis findings supporting professional autonomy to meet patient needs to be a fundamental motivator. However, when reading the conclusions and recommendations made by The delegation of trust (Tillitsdelegationen) (SOU 2018:47, 2018), the argumentation behind increasing professional autonomy appears to mainly focus on its positive impact on the quality of public services and on mitigating the negative impact of extensive control systems associated with NPM. Strategies for how the governance of economic efficiency is to be handled are less salient. Although the proposed arguments for increasing professional autonomy are very valid, there might be a risk that the important issue of increasing economic efficiency is left in the shade. Guided by the thesis findings, it can be argued that professionals are not only an important resource for ensuring quality of public services but are also important for managing resources efficiently. Based on my experiences from the thesis project I personally believe that professional representation and involvement in finding solutions to the resource challenge in health care is vital, by using their insights on how resources may be used in smarter ways without having a substantial impact on the quality and equity of care. Professionals cannot afford to stand back on these issues and are needed to ensure that strategies and priorities for increasing economic efficiency are reasonable and sustainable from a patient and work environment perspective. Still, only by recognizing this as a shared mission that requires the collaboration of all system stakeholders and a willingness from all parties to acknowledge other actors' viewpoints, will the best way forward be identified.

## **8.8 METHODOLOGICAL CONSIDERATIONS AND VALIDITY OF FINDINGS**

Conducting research relies on the assumption that by applying scientific methods, we can make valid conclusions based on our findings. In general terms, research validity refers to the accuracy or appropriateness of inferences and conclusions made from a scientific study (Adam Kelly, O'Malley, Kallen, & Ford, 2005). Distinctions are made between internal validity, referring to the soundness of the design, and external validity, which refers to in what way findings are generalizable (Morgan, Gliner, & Harmon, 1999). Thus, research validity includes not only the validity of a specific method, but all components of a study, ranging from the formulation of research questions, the choice of study design and methods, and the choice of the target population, to the conclusions (Adam Kelly et al., 2005). Differences when assessing research validity across research paradigms should be acknowledged, including different standards for assessing quantitative and qualitative studies (Johnson, Onwuegbuzie, & Turner, 2007).

The overall validity of the thesis findings will be reflected on by considering multiple aspects of the empirical studies. To begin, the choice of study designs and study settings will be

discussed. Thereafter, aspects of reliability and validity will be discussed in relation to specific methods of data collection and analysis, in accordance with established criteria. Last, the overall generalizability of the thesis findings will be explored.

### **8.8.1 Study designs**

A general limitation to the design of the studies is that each study is conducted using only one empirical case (although Studies I and II include several provider organizations), which causes uncertainties in regard to the specificity of the findings in relation to other contexts. In addition, data is collected during one period, which limits the understanding about longitudinal changes of the observations and experiences that the studies address. Although the thesis as a whole addresses the perspectives of managers and staff, the individual studies have limitations in that data is collected from one target group at a time. Thus, there are uncertainties in regard to if the subjective experiences of managers also are shared by staff members within the same provider organization, and vice versa. In addition, all studies are limited to omitting the policy-level perspective, not including data describing the formal decisions and intentions behind the current governance applications. Similarly, the studies are limited by not including the top-management perspective of provider organizations.

The findings in Studies I and II provide insights about the conditions for implementing the patient choice model being slightly different across provider types and show important differences in regard to parallel assignments and organizational characteristics, which may have influenced the study participants' perspectives. This may not have been sufficiently captured by the current study designs.

### **8.8.2 Selection of cases and sampling of study participants**

#### *8.8.2.1 Selection of cases*

The selection of empirical cases can be reflected on from the perspective of being good representatives of the phenomena of interest, namely economic governance models applied in health care, and how they fit the purpose of the studies. From a Swedish perspective, Case 1 can be regarded as an "extreme" case, applying patient choice in specialized care, since few regions have chosen similar arrangements. Although this provides few comparative cases and brings uncertainties in regard to the validity of findings in other settings, the studies can still provide valuable insight for future policy applications by highlighting the importance of a thorough consequence analysis and the ability to make revisions if unintended consequences arise. Case 1 can also be considered to be more of typical case with perspective on the trend of moving elective, low-risk care outside hospitals, and insights from the study could be used as a reference in other cases of structural change, not necessarily including provider competition and similar incentive models.

Case 2 can be regarded as more typical, based on many public hospitals applying similar budget arrangements and sharing the challenges of economic constraints. However, Study IV highlights the important role of local implementation, which implies that the rather blunt tool of economic governance through (restricted) annual budgets should be analyzed with great attention toward how specific saving requirements strikes at specific departments and units.

#### 8.8.2.2 *Sampling of provider organizations and departments*

Although a purposeful sampling strategy was applied in Studies I and II to recruit a broad representation of provider organizations, it, to some extent, also represents a convenience sample. There were challenges in recruiting private specialized providers, including the decline of two providers, which might have influenced the study results. Also, for Studies III and IV, efforts were made to recruit several departments and clinical units at the same hospital. However, they declined participation due to substantial financial constraints and a high work load. The current economic situation at the participating department in Studies III and IV was described as being relatively balanced, compared to other departments. This raises questions about if the experiences would have been substantially different in units under more acute economic pressure, such as facing staff reductions or organizational change.

#### 8.8.2.3 *Sampling of participants*

For the qualitative data collection in Studies I, II, and IV, purposeful sampling was applied to recruit participants. However, the assessment of what persons who had relevant experiences for the study was made in a dialogue with operation- or unit managers, who were the speaking partners when establishing contact with the provider organizations. This might serve as a limitation, since the recruitment of participants was shaped by individual manager's interpretations of our needs and by their subjective judgement of what persons who might be appropriate. Also, the individual manager's time to engage in recruitment and their relationship to individual staff members might have influenced staff members' willingness to participate.

In Studies III and IV, a total sampling strategy was used to include all members of staff. 51 % responded to the survey, which raises questions about the study sample's representativeness and what factors might characterize staff members who filled out (and declined to fill out) the survey. In addition, the representativeness of the staff at the Department of Rehabilitation Medicine in relation to the larger population of health care staffs is unclear.

### **8.8.3 Considerations of qualitative methods**

In the qualitative research field, multiple guidelines and criteria for assessing the quality of qualitative studies exist, although they are extensively debated (Malterud, 2001b). Advocates representing the constructivist paradigm state that criteria used to assess rigor in the quantitative field cannot be used for qualitative studies, and propose alternative criteria, such

as credibility, dependability, confirmability, and transferability (Guba, 1981) to replace the traditional (positivistic) criteria of validity and generalizability. However, representatives for the realism view (Mays & Pope, 2000) argue that qualitative research can be assessed using the same broad criteria, but in a different way. Validity has been proposed as a broad criterion for assessing quality in qualitative research, suggesting specific activities to improve it. This includes the triangulation of methods or data sources, respondent validation and the attention to deviant cases. Providing a clear account of the trails of data collection and analysis is also emphasized as being critical to ensure the retest reliability of a study. The reliability of the analysis is also suggested to be improved by inviting additional researchers to the analysis and comparing alternate interpretations (Mays & Pope, 1995).

As the thesis represents more of a realist view than constructivist one, the methodological limitations of the qualitative studies will be discussed in accordance with the quality criteria presented above (Malterud, 2001b; Mays & Pope, 2000). Studies I and II show some limitations in regard to data triangulation, since the study focuses on the experiences of the participating managers, which are not confirmed or contrasted by any other data sources. For Study I, no formal data was collected to inform the analysis of consequences in general, or to follow up on specific observations mentioned in the interviews. Similarly, Study II focuses on managers' perceptions of their strategies as intermediaries, which was not accompanied by observational data or data on staff members' perceptions of their behavior. Thus, the subjective nature of the findings in Studies I and II should be acknowledged. In Study IV, on the contrary, data triangulation is one of the core components of the mixed method approach using quantitative and qualitative data sources. Although respondent validation has not been a formal part of the studies, the results of all studies have been presented to representatives of the participating provider organizations, and their input on the study findings and conclusions have been carefully considered.

Efforts have been made to increase the structure and transparency of data collection and analysis. Research colleagues have familiarized with raw data and have been involved in the analytic process to increase reliability by minimizing the risk of the thesis authors' individual bias being overly influential. Careful attention has been shown to the latent versus manifest meanings of data when applying a thematic approach, and the risk of "over-interpretation" in accordance with theory has been carefully considered when engaging in deductive analysis.

#### *8.8.3.1 Reflexivity*

In the qualitative field, much attention is directed to how the researcher influences the study results. Reflexivity, defined as the researcher's awareness of how own preconceptions and assumptions have shaped the research process, has been described as fundamental for the validity of qualitative studies (Mays & Pope, 2000). Reflexivity has also been proposed as a specific quality criterion (Malterud, 2001b). To increase reflexivity the role of the researcher should continuously be assessed (Mays & Pope, 2000), and subjective preconceptions should be reflected upon and declared by the researcher, which includes the involvement of other researchers in data analysis to discuss competing conclusions (Malterud, 2001b).

The thesis studies generally serve the purpose of exploring various phenomena and there are no aspects of the researcher taking an intervening role or trying to influence individuals or the organizations. Although the thesis author thereby can be described as an external, neutral observer there are many reasons to reflect upon how prior experiences and preconceptions might have influenced the studies. Having a professional and clinical background I believe my personal experiences might have influenced my understanding of the issues that I have explored. Although I have no experience of the care processes included in the thesis, I can relate to some of the general challenges that the study participants have shared with me, for example the experience of safeguarding patient needs in relation to economic considerations. This means that the study participants' experiences have engaged me, which might have influenced my style of interviewing and indirectly shaped the conversation by me paying attention to certain things. I have also discovered, when reading interview transcripts, that I have occasionally used expressions such as "we" rather than "you" when discussing general challenges in clinical work.

I have made efforts to articulate my own reactions and reflections during data collection to discover potential biases. In addition, I have recurrently reflected upon my analysis in relation to empirical data. On the other hand, the awareness of my professional background as a source of bias might also have made me too cautious to draw conclusions in fear of being perceived as partial. Inviting research colleagues to the analytical process has been a strategy to unveil my analysis, and the interdisciplinary nature of my supervisory team has provided me with multiple perspectives when analyzing the interview data.

Although my personal experiences might have influenced my objectivity as a researcher, I also believe that my professional background has served many advantages. My ability to relate to the participants' experiences might have shown in my reactions to their stories, and contributed to them perceiving me as genuinely interested in their experiences, which might have influenced their trust in me as a dialogue partner.

#### **8.8.4 Considerations of quantitative methods**

There are certain standards for assessing scale validity, which has been defined as the level of theoretical and empirical evidence that support the interpretations made when using a scale (Newton & Shaw, 2013). Scale reliability refers to whether a number of items can be assumed to measure a construct with (sufficient) precision, which can be considered as a condition for validity. Historically, three types of validity (content-, criterion-, and construct-validity) have dominated scale assessments. However, more contemporary assessment models apply a broader approach and identify five areas of evidence for scale validity: the content of the scale (1), the response process (2), the internal structure of the scale (3), the association with other variables (4), and the consequences of scale use (5). Thus, there is no single measure or statistical method to represent scale validity, rather scale validation is an ongoing processes integrating multiple perspectives (Furr, 2013).

The content of the scale (1) refers to how well scale items represent the underlying construct the scale is assumed to reflect, showing similarities to the concept of content-validity. This is undermined if irrelevant items are included in a scale, or if items representing important aspects of the construct are missing. Content validity can be enhanced during scale development, by carefully defining the construct in collaboration with subject matter experts (Furr, 2013). In Study III, efforts were made to increase the content validity of the GOV-EQ scale, by conducting interviews with the target group to evaluate the appropriateness of the identified sub-factors. In addition, an inductive item generation approach was used guided by the interview data. Although one could argue that subject matter experts would have been more appropriate to consult, the lack of scientific attempts to measure similar constructs provided arguments for consulting the target group first. Still, uncertainties remain about what settings the scale could be transferred to and still posit sufficient content validity.

Evidence about the response process (2) refers to what extent the interpretation of items made by participants reflects how they should be interpreted (based on the construct definition). The response process can be studied using a variety of observational methods provided by the cognitive interviewing methodology (Willis, 2004). In Study III, evidence about the response process was collected by conducting cognitive interviews prior to data collection, and although the interviews pointed at the need for minor revisions only, further improvement may have been possible by including more participants.

The internal structure of the scale (3) refers to how items are related to the underlying constructs they are assumed to reflect, and how multiple constructs are interrelated (if using a multidimensional scale). Factor analysis is one of the most important tools to assess scale dimensionality, accompanied by methods to assess the internal consistency of specific factors (Furr, 2013). In Study III, the internal structure of the scale was assessed using EFA and the internal consistency of factors was assessed using Cronbachs' alpha. The EFA showed a factor structure supporting the scale's ability to clearly distinguish between experiences related to economic efficiency and quality requirements. However, the results could be questioned considering the small sample size, in the light of general guidelines describing sample sizes of 100 as poor, 200 as fair and >300 as good (Williams et al., 2010). However, these guidelines have been challenged (Fabrigar et al., 1999), and studies reveal that clear factor structure, strong factor loadings (Costello & Osborne, 2005) and high communalities may compensate for sample sizes below 100 (MacCallum, Widaman, Zhang, & Hong, 1999). Although the sample size should be acknowledged as a disadvantage, the overall results from the EFA provide arguments for relying on the overall dimensionality of the scale. However the factor structure should be confirmed by a Confirmatory Factor Analysis based on supplementary data. In addition, the analysis of internal consistency identified areas of improvement for two less robust sub-factors, which should be acknowledged.

Associations with other variables (4) refer to the association between scale scores and other measures of theoretical relevance. This domain is related to the concept of criterion-related validity (if the scale can predict a certain measure) and construct validity (if the scale is

associated to measures that are theoretically similar) (Furr, 2013). In Study III, the sub-scales' association to another variable was assessed using multiple regression models, which showed significant associations between multiple sub-factors and a single item measure of behavioral change. This supports the sub-scales' ability to capture experiences that are relevant for behavior change. However, using a single item (which validity has not been assessed in-depth) as the criterion variable, causes limitations to this approach.

The consequence of scale use (5) refers to the alignment between how the scale is used and the initial purpose of scale development and validation, highlighting the risks of transferring scales to other contexts. Future use of the GOV-EQ scale should be preceded by careful considerations of the construct definitions and items, ensuring sufficient similarity in regard to how economic governance models are experienced at the staff level in the provider setting of choice.

#### **8.8.5 Considerations of mixing methods**

In mixed method studies the timing for when methods are mixed, and how, should be carefully considered (Creswell & Clark, 2007). A limitation to the study design of Study IV is that it relies on the assumption that participants in the focus group interviews could provide us with valuable information to guide the interpretation of survey data. There might have been shortcomings in the participants' abilities to comprehend the survey data presented to them during the interview sessions, which might have influenced their reasoning. In addition, we do not know if the experiences of the interview participants are very different compared to the experiences of the larger population of staff. Also, group dynamic processes might have influenced individual members reasoning to converge toward a group consensus.

#### **8.8.6 Generalizability**

Based on the exploratory nature of Studies I and II, the findings should be transferred to other settings or populations with caution. Still, the findings could contribute to the understanding of similar phenomena in other contexts on a theoretical or conceptual level. For example, the characteristics of professionals' consequence analysis, including multiple system levels and various types of consequences, may be used as a guiding light to a better understanding of patient choice reforms in other settings. In addition, the importance of alignment of economic governance models and professional values (to avoid economic efficiency requirements to negatively influence patients and professionals) is probably a relevant principle also in other governance contexts. Still, the findings of Studies I and II are probably particularly relevant for health care settings sharing (any of the) the specific features of Case 1, such as patient choice, provider competition, and structural change of care provision.

The issue of generalizability in regard to Study III primarily revolves around to what extent the scale produces valid data if used in other settings. The promising psychometric properties suggest that this could be the case, although additional empirical studies are needed to confirm the factor structure. One of the most important conditions for using the scale in other contexts is that the construct definitions and items are scrutinized, preferably in dialogue with professionals at the staff and manager level to ensure that they fit the provider context and how economic governance strategies are perceived at the staff level. Careful attention should also be shown to how the written instruction to introduce the scale is formulated.

Generalizing the findings of Study IV to other contexts can be assumed to be more appropriate if they share the features of Case 2, such as to large hospital settings that face general requirements of reduced resource use. In addition, the findings may have more relevance in professional contexts that share the characteristics of rehabilitation medicine, such as including responsibility for patients with complex conditions which implies stakeholder collaboration.

Considering the generalizability of the thesis as a whole, the findings might be more relevant for publically funded health care systems, in which professionals also identify with being tax payers and are therefore more engaged in how economic resources are used, compared to health care contexts dominated by private insurances and out-of-pocket payments.

## **8.9 IMPLICATIONS FOR RESEARCH**

The thesis supports the relevance of future studies exploring the consequences of economic governance strategies from the perspective of professionals at the manager and staff levels based on the apparent and complex consequences for clinical practice.

Generally, studies including multiple providers and settings are encouraged to increase the understanding of the complex process of turning governance models into practice. A careful selection of contrasting cases, taking a policy-level, provider, or management perspective, could provide useful insights to the consequences of specific governance models but could also shed light on the factors that determine how governance applications are perceived by professionals.

Studies that further explore differences across provider types are encouraged to increase the knowledge about how factors such as parallel assignments and complementary steering mechanisms interact with economic governance requirements. This is particularly relevant in health care markets that apply a mix of public and private providers, partly having different roles in relation to the overall health care system.

Due to the complexity of economic governance, future studies that apply multiple or mixed methods are encouraged to provide rich data and enable triangulation of data. The GOV-EQ scale could provide a useful tool for capturing staff experiences in regard to economic and

quality requirements in larger populations of professionals, although its psychometric properties need to be validated in additional settings.

Since the thesis provides insights to the complex process by which governance models trickle down through organizational layers of health care providers, future studies that include data across system levels are strongly encouraged. This includes data reflecting the intentions and assumptions of policy makers, the local implementation of economic governance requirements by top-management in provider organizations, the actions taken by managers involved in care delivery and the experiences among staff working close to patients. Studies collecting data to illustrate multiple perspectives on the same phenomena may provide opportunities for a deeper understanding of the process in which formal requirements are interpreted, implemented, and communicated in provider organizations and how this influences the subjective experience at the staff level. The discrepancy between policy-level intentions and professional perceptions of economic governance, the communicative interplay between managers and staff in regard to economic issues and the role of professionals' trust in the overall health care system merits particular attention.

## **8.10 IMPLICATIONS FOR PRACTICE**

The thesis findings have several implications for practice that address multiple system levels.

At the policy level, the findings support the importance of aligning economic governance models with desired patient outcomes and quality indicators, as well as with a sustainable work environment for professionals involved in care delivery. Reimbursement models should be designed to support the provision of high-quality care and minimize the risk of crowding out effects for vulnerable patients. In addition, reimbursement models should be designed to support stakeholder integration and collaboration to minimize the risk of care fragmentation. This requires careful consequence analysis in policy making, and on a conceptual level, the findings in Study I could function as a roadmap for proactivity. Further, the thesis encourages the use of professional perspectives in policy making, using the experiences and insights from those working close to patients.

The thesis further reflects the relevance of forums for policy development and improvement that bring policy makers, provider organizations and professionals together in a shared mission to get most value out of public resources. Such forums could provide opportunities for dialogue but should include processes for data collection and the evaluation of current policy applications to inform the improvement process.

From a top-management perspective, the thesis highlights the important role of the local implementation of economic governance requirements in provider organizations. The thesis further proposes that decisions at the top-management level, such as strategies for internal resource distribution and monitoring of economic performance at the local level, should be carefully considered in regard to what it means in practice at the department, unit, and

professional level. The thesis suggests that the connection between professional behaviors that serves the purpose of increasing economic efficiency and rewarding consequences is important for the overall engagement in such issues, which could be facilitated (or hindered) by local guidelines and decisions governing resource use. The thesis further suggests that top-management representatives play an important role in supporting department and line managers in making sense of economic governance requirements in dialogue with staff by providing them sufficient knowledge and the mandate to do so.

For professional managers, the thesis provides insights about the importance of applying managerial strategies to translate economic governance models into something that is more meaningful from a staff perspective by focusing on patient needs and the quality of care. The thesis encourages professional managers to operationalize economic governance requirements into tasks that are perceived as feasible and relevant to staff without necessarily going too in-depth into the financial side of things. Based on Study IV, clinical managers can be advised to keep a balanced focus on economic issues in dialogue with staff, but still be encouraged to discuss how resource utilization can be optimized, to bring more value for patients. The thesis further suggests the importance of managers supporting staff members who experience insufficient opportunities to fulfil their professional duty.

For health care professionals at the staff level, the thesis highlights the importance of reflecting on what implications economic requirements have in clinical practice, distinguishing between the requirements embedded in the professional role and economic challenges at the overall system level, which individual staff members have limited abilities to control.

Last, the thesis reflects the importance of professionals at the staff and manager level to continuously identify, communicate and require changes in system flaws that are at risk of bringing substantial harm to patients and/or to impair the work environment for the professional community.

## 9 CONCLUSIONS

The thesis concludes that professionals are well aware of economic efficiency requirements and intrinsically motivated to manage resources carefully. The thesis challenge the literature that emphasizes the importance of designing provider payment to target professional level, by concluding that the multiple reasons professionals identify for managing resources efficiency may be enough to mobilize change.

The thesis concludes that professionals at the staff and manager level are aware of and engaged in issues of economic efficiency, independent of being accountable for units' financial performance. Professional engagement does not seem limited to organizational roles, but is rather rooted in a common concern for the overall health care system to fairly provide high-quality care to all patients. The thesis thereby challenges the common notion that professionals' concern for patients is in conflict with economic efficiency requirements, concluding that a synergetic integration of multiple health care purposes may be present among professional staff and managers. The thesis further suggests that the professional concern for the functioning of the health care system also includes the care for a sustainable work environment and knowledge development for the professional community.

Still, the thesis confirms the priority of the professional ethos and concludes that economic governance models should be aligned with professional values to meet patient needs, since misalignment will impose emotional strain on professionals and contribute to a harmful work environment. The importance of managers having the ability to adapt to professional values is further confirmed by the thesis and is reflected in the alignment strategies reported by managers, as well as in staff members' descriptions of how they prefer managers to act.

The thesis provides arguments for professionals being a valuable source of knowledge when evaluating economic governance models based on their insights into the complexity of consequences evolving over time. The thesis concludes that particular attention should be paid to how economic requirements influence the conditions for care delivery and how common structures for education and research are affected. The thesis suggests that provider collaboration (rather than competition) may be a more appropriate strategy for supporting knowledge development.

The thesis further concludes that health care professionals posit system-level awareness and show concern for the entire patient journey, including aspects of economic efficiency, quality, and equity of health care. This confirms the need for economic governance models that unites stakeholders to make decisions that are sustainable from a long-term perspective.

The thesis highlights the need for increased collaboration and dialogue, bringing professionals and policy makers closer together to design economic governance models that efficiently support and balance the multiple aims of health care and that are perceived as valid by professionals. In addition, the thesis suggests that the motivational effect of clarifying how professionals' efforts to use resources more efficiently contributes to increased value for patients should not be underestimated.

# 10 SVENSK SAMMANFATTNING

## Bakgrund

Hälso- och sjukvårdssystemet har en mycket central roll i välfärdsstaten genom att säkerställa medborgarnas tillgång till sjukvård. Att bedriva sjukvård tar omfattande resurser i anspråk och genom medicinsk utveckling och demografiska förändringar står många länder nu inför utmaningar där behoven ökar och de ekonomiska resurserna är begränsade. För att möta framtida behov behöver sjukvårdens resurser användas mer effektivt och den ekonomiska styrningen av vården präglas alltmer av styrmodeller som uppmuntrar både offentliga och privata vårdgivare att bli mer effektiva. Användandet av ekonomiska ersättningsmodeller och ökad konkurrens mellan vårdgivare som medel för att stimulera till ökad effektivitet har kommit att få alltmer uppmärksamhet.

Forskningen som utvärderar hur ekonomiska styrmodeller fungerar visar dock inte på några entydiga resultat och det saknas fortfarande kunskap om hur den ekonomiska styrningen påverkar hälso- och sjukvården, både ur ett resurs- och kvalitetsperspektiv. Förvånansvärt få studier belyser professionens upplevelse, trots att en förändring av deras beteenden i den kliniska vardagen är en förutsättning för att förändring ska ske på vårdgivarnivå.

Forskning om hur organisationer fungerar och kunskap om ledarskap kan bidra till förståelsen för hur den ekonomiska styrningens krav påverkar de som arbetar kliniskt. Studier på hälso- och sjukvårdsområdet har t.ex. visat att ledarens förmåga att anpassa yttre krav till vårdprocessens karaktär och till professionella värderingar är en nyckelfaktor för att organisationen ska nå sina mål. Även motivationsforskningen kan bidra genom att visa på betydelsen av inre motivationsfaktorer för att åstadkomma förändring och vikten av att yttre krav (och belöningar) ligger i linje med individens egna drivkrafter. Motivationsforskning inom offentlig sektor har t.ex. visat att den inre tillfredsställelsen av att bedriva god vård och möta patienten behov är en särskilt viktig motivationsfaktor för personer som arbetar inom hälso- och sjukvården.

Avhandlingen sammanför hälso- och sjukvårdssystemets olika nivåer genom sitt fokus på hur den ekonomiska styrningen uppfattas (snarare än styrmodellens formella utformning), när den sipprar ner från beslutsfattare och tjänstemän för att nå de organisationer som bedriver vård, till att slutligen påverka professionen i arbetet med patienten.

## Syfte

Avhandlingen syftar till att utforska hur sjukvårdens professioner upplever den ekonomiska styrningen av vården.

Avhandlingens studier syftar specifikt till att utforska professionens perspektiv på konsekvenserna av en specifik ekonomisk styrmodell som innefattar vårdval inom elektiv ortopedi (Studie I), vilka strategier chefer och ledare använder sig av för att sammanlänka en

rådande ekonomisk styrmodell och medarbetarnas motivation (Studie II), samt att undersöka hur medarbetare upplever kraven på ekonomisk effektivitet i sitt kliniska arbete (Studie IV). Avhandlingen innehåller också en metodstudie (Studie III) som syftar till att utveckla en självskattningsskala som mäter medarbetares upplevelser av styrningen av ekonomisk effektivitet och kvalitet i hälso- och sjukvården, samt utvärdera dess psykometriska egenskaper.

## **Metoder**

Avhandlingen utforskar två praktiska exempel av ekonomisk styrning. Det första innefattar en lokal vårdvalsmodell inom elektiv ortopedi, där den ekonomiska styrningen präglas av ökad konkurrens mellan vårdgivare och ekonomiska incitament. Modellen vilar även på en strukturell förändring av vårdgivarnas uppdrag, genom att specifika patientgrupper förflyttas från sjukhusen till fristående, specialiserade vårdgivare. Det andra exemplet innefattar en mer traditionell form av ekonomisk styrning, där en fast årlig budget används i styrningen av ett stort offentligt universitetssjukhus, som vid studiernas genomförande stod inför ett ansträngt ekonomiskt läge och besparingskrav.

Studie I och II vänder sig till flera av vårdvalets vårdgivare och är utformade som utforskande kvalitativa studier. Studierna baseras på intervjuer med professionella i ledande funktioner. Studie III tillämpar etablerade metoder för utveckling och utvärdering av självskattningsskalor och har fokus på professionella på medarbetarnivå. Trots att den psykometriska utvärderingen bygger på analys av kvantitativ enkätdata så innehåller utvecklingsprocessen även inslag av kvalitativ metod. Studie IV bibehåller fokus på medarbetare och en mix-metod-design tillämpas för att samla in kompletterande kvalitativ intervju-data för att vägleda tolkningen av den enkätdata som samlats in i Studie III.

## **Resultat**

Studie I visar att professionen uppfattar vårdvalsmodellens konsekvenser som mångfacetterade. Det inkluderar konsekvenser för vårdens organisation, för patienterna, för professionens arbetsmiljö samt för utbildning och forskning. Professionens analys kännetecknas vidare av att vårdvalsmodellens konsekvenser analyseras både utifrån den egna organisationen och utifrån det regionala sjukvårdssystemet som helhet.

Studie II visar att professionella i ledande roller använder sig av strategier för att sammanlänka den ekonomiska styrmodellens krav med medarbetarnas drivkrafter och professionella värderingar, bl.a. genom att motivera till förändring med fokus på kvalitet och nyttan för patienten.

Studie III beskriver utvecklingen och utvärderingen av en självskattningsskala som bedöms ha förmågan att mäta medarbetares upplevelser av styrning av ekonomisk effektivitet (Subskala A) och kvalitet (Subskala B), samt ha goda psykometriska egenskaper.

Studie IV visar att medarbetare är medvetna om kraven på effektiv resursanvändning och motiverade till att ta ekonomiska hänsyn i det kliniska arbetet, under förutsättning att det inte innebär en betydande risk för patienten. Medarbetarna i studien upplever små möjligheter att påverka hur de ekonomiska resurserna i allmänhet fördelas och ser vissa begränsningar i hälso- och sjukvårdssystemets förmåga att möta patienternas behov längs med hela vårdkedjan. Medarbetarnas engagemang för patienten tycks inte vara begränsat till deras organisatoriska roller, utan istället vara grundat i ett engagemang för sjukvårdssystemet som helhet och för att resurserna fördelas på ett rimligt och rättvist sätt.

## **Slutsatser**

Sammantaget visar avhandlingen att både ledare och medarbetare i hälso- och sjukvården är medvetna om de ekonomiska krav som ställs på verksamheten och att de är motiverade till att bidra till att resurserna används så effektivt som möjligt. Professionens engagemang tycks inte primärt styras av lojalitet till den organisation de tillhör, utan mer vara drivet av en ansvarskänsla för hälso- och sjukvårdssystemet som helhet och dess förmåga att på ett rimligt och rättvist sätt möta patienternas behov, samt erbjuda en hållbar arbetsmiljö för professionen.

Avhandlingen bekräftar vidare den stora betydelsen av den professionella etiken och visar på värdet av att ekonomiska styrmodeller är samstämmiga med patientens behov och god vårdkvalitet. Avhandlingen bekräftar vidare vikten av att professionella ledare tar hänsyn till professionens värderingar och drivkrafter i sitt ledarskap.

Avhandlingen belyser att professionen, med sin djupa förståelse för patientens väg genom vården och för hur sjukvårdssystemet som helhet fungerar, är en värdefull källa till kunskap som kan användas i utvärderingar av ekonomiska styrmodeller. Avhandlingen belyser även vikten av ökad samverkan i arbetet med att utforma den ekonomiska styrningen och synliggör behovet av dialog mellan aktörer såsom beslutsfattare, vårdgivarrepresentanter och profession.

Avhandlingen visar på behovet av att hälso-och sjukvårdssystemets aktörer samlas kring gemensamma mål gällande den ekonomiska styrningen. Ökad samverkan skulle kunna förbättra förutsättningarna för att skapa ekonomiska styrmodeller som ställer krav på en effektiv resursanvändning och samtidigt tillgodoser sjukvårdens uppdrag gällande kvalitet och jämlikhet, på ett sätt som gör att professionen uppfattar kraven som ställs på dem som rimliga och genomförbara.

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## 12 APPENDIX

### 12.1 APPENDIX A – INTERVIEW GUIDE STUDIES I & II

- **Bakgrund, kontextuell förståelse**

*Vad är din roll, ansvar och mandat i relation till vårdvalsmodellen?*

*Har du tidigare erfarenheter av den här typen av styrmodeller?*

- **Kunskap och syn på vårdvalsmodellen**

*Har du fått information om syfte och bakgrund till modellen?*

*Hur såg instruktionerna ut gällande konsekvenserna för verksamheten?*

*Har du några generella åsikter om den här typen av styrmodeller/ersättningssystem?*

- **Strategier relaterade till vårdvalsmodellen och ersättningssystemet**

*Vad infördes – nya rutiner? Vad gjordes annorlunda?*

*Vad upphörde – avskaffande av rutiner?*

*Har vårdvalsmodellen fått andra konsekvenser för verksamheten?*

- **Ledarskap**

*Hur har du anpassat ditt ledarskap till styrmodellen?*

*Vilka reaktioner har du mött?*

*Hur har du bemött dessa?*

- **Medarbetarnas motivation och drivkrafter**

*Hur tror du att medarbetarnas motivation påverkas av vårdvalsmodellen?*

*Har du försökt att påverka deras motivation? Hur?*

*Hur tycker du medarbetarnas arbetsmiljö påverkas av vårdvalsmodellen?*

*Hur påverkas medarbetarnas behov av kompetensutveckling?*

*Hur påverkas medarbetarnas behov av autonomi/självständighet?*

*Hur påverkas medarbetarnas relation till patienten och/eller kollegor?*

## 12.2 APPENDIX B – INTERVIEW GUIDE STUDY IV

- **Påverkan på kliniskt beteende**

Den första frågan handlar om hur mycket ni tar hänsyn till ekonomiska krav i ert dagliga arbete, hur mycket det påverkar ert beteende.

**Visa enligt illustration:** I enkäten ställde vi en fråga som vi tror fångar detta: ”Jag tar hänsyn till verksamhetens ekonomi”. Där har ni svarat i genomsnitt 3,3, ni instämmer till viss del.

*Hur kommer det sig att resultatet ser ut såhär?*

*Hur tar ni hänsyn till ekonomiska krav i ert kliniska arbete?*

- **Hur ser era upplevelser ut av balansen mellan ekonomi och patient?**

I enkäten ställde vi en del frågor kring hur ni upplevde balansen mellan de ekonomiska resurser som finns och de behov patienterna har.

**Visa enligt illustration:** Både med tanke på **hela organisationen**, med frågor såsom: ”Vi har de ekonomiska tillgångar som behövs för att kunna möta patienternas behov” och frågor med fokus på ert **självbestämmande** såsom ”Verksamhetens ekonomiska förutsättningar påverkar mina möjligheter att göra det som är bäst för patienten”. I genomsnitt har ni svarat M= 2,28 på organisationsnivå, när det gäller den professionella rollen har ni svarat M= 3,31.

*Hur kommer det sig att resultatet ser ut såhär? Hur har man tänkt när man har besvarat de här frågorna?*

*Vad betyder det här? Är det en tillräckligt bra eller en otillräcklig balans?*

- **Hur ser upplevelserna ut utifrån kunskap, delaktighet och motivation?**

Nästa fråga handlar om era förutsättningar för att kunna agera på de här kraven. Vi ställde frågor om hur mycket man visste om kraven som ställs på en när det kommer till ekonomi, hur mycket ni upplever att ni kan påverka ekonomiska frågor, samt hur motiverade och engagerade ni känner er i frågor som rör ekonomi.

**Visa enligt illustration:** Här svarade ni såhär: När det gäller **kunskap** ligger medelvärdet runt tre (m=3.08).

En stor grupp håller inte med om att ni är **delaktiga**, 80 % väljer 1 eller 2, genomsnittet ligger strax under två (m= 1,97).

När det gäller **motivation** för de här frågorna så ligger genomsnittet på  $m=3,08$ , det finns både de som håller med och de som inte håller med.

*Hur kommer det sig att resultatet ser ut så här?*

*Hur har man tänkt när man har besvarat de här frågorna?*

*Vad betyder det här?*

- **Vad skulle kunna påverka upplevelsen?**

*Finns det något som skulle få er att ta ännu mer eller ännu mindre hänsyn till ekonomi i ert kliniska arbete?*

*Finns det något som skulle få er mer eller mindre engagerade i de här frågorna?*

*Vad är det som gör de är frågorna engagerande, om de kan bli det?*

- **Chefens roll?**

*Vilken roll spelar chefen för er upplevelse av ekonomiska krav i arbetet?*

*Spelar det någon roll vad chefen gör?*

*Vad är önskvärt?*

## 12.3 APPENDIX C – SWEDISH VERSION OF THE GOV-EQ SCALE STUDY III

De rubriker som anger namn och innehåll för de olika sub-faktorerna var ej inkluderade i enkäten i samband med datainsamling. Instruktions-texterna som föregår frågorna är dock identiska med den enkät som användes. Enkätens försättsbrev, som berörde studien syfte samt förtydligade förutsättningarna för deltagande och samtycke, har dock exkluderats.

### Enkät om upplevelsen av den ekonomiska styrningen av vården

#### Ekonomi (Subskala A)

Följande avsnitt handlar om hur du upplever att fokus på ekonomiska frågor i verksamheten påverkar dig i ditt arbete. Med ”ekonomiska frågor” menar vi i allmänhet de krav på ekonomisk effektivitet som är aktuella i din verksamhet. Det kan innebära många olika saker, t.ex. att det finns krav på hur arbetet ska utföras eller riktlinjer för hur ni får använda era resurser, såsom material och personal. Med ”verksamhet” menar vi den enhet där du är anställd och utför det mesta av ditt arbete, så utgå framförallt från ett enhetsperspektiv när du fyller i enkäten. Ange i vilken utsträckning du tycker att följande påståenden stämmer med din uppfattning.

Kunskap & medvetenhet (A)	Instämmer Inte				Instämmer helt					
1. Jag vet hur jag ska ta hänsyn till verksamhetens ekonomi i mitt arbete.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
2. Jag vet vad jag ska göra i min roll för att verksamhetens ekonomi ska bli så bra som möjligt.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
3. Jag har klart för mig hur jag kan hushålla med verksamhetens ekonomiska resurser.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
4. Jag vet hur jag ska lägga upp mitt arbete för att verksamhetens ekonomi ska gå ihop.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
5. Jag har svårt att se hur jag kan påverka verksamhetens ekonom (R).	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
6. Jag är medveten om verksamhetens ekonomi i de beslut jag fattar i arbetet med patienten.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
<b>Delaktighet (A)</b>										
7. Jag känner mig delaktig i frågor som handlar om verksamhetens ekonomiska läge.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
8. Jag får vara med och påverka hur verksamheten använder sina ekonomiska resurser.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
9. Jag har möjlighet att tycka till om hur vi tar oss an effektiviseringar av verksamheten.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
10. Mina åsikter spelar roll när det fattas beslut i ekonomiska frågor.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5

<b>Motivation (A)</b>	Instämmer Inte			Instämmer helt
<i>11. Det är motiverande att arbeta med frågor som rör verksamhetens ekonomi.</i>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<i>12. Det är meningsfullt att försöka förbättra verksamhetens ekonomi.</i>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<i>13. Jag intresserar mig för det ekonomiska läget i verksamheten.</i>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<b>Påverkan på professionell autonomi (A)</b>				
<i>14. Verksamhetens ekonomiska förutsättningar påverkar mina möjligheter att göra det som är bäst för patienten.</i>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<i>15. Verksamhetens ekonomiska ramar påverkar mina möjligheter att följa mina etiska värderingar</i>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<i>16. Jag känner mig fri att göra det som är bäst för patienten, oavsett verksamhetens ekonomi.(R)</i>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<b>Påverkan på kliniskt beteende (A - Enskild fråga)</b>				
<i>22. Jag tar hänsyn till verksamhetens ekonomi i mitt kliniska arbete.</i>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5

Följande frågor handlar om hur du i allmänhet uppfattar balansen mellan de ekonomiska resurser och det uppdrag ni har i verksamheten. Det är inte säkert att ni på enhetsnivå själva kan påverka detta, men vi är intresserade av din upplevelse. Utgå från ett enhetsperspektiv när du fyller i enkäten.

Ange i vilken utsträckning du tycker att följande påståenden stämmer med din uppfattning.

<b>Organisatorisk samstämmighet mellan resurser och uppdrag (A)</b>	Instämmer Inte			Instämmer helt
<i>17. Jag tycker de ekonomiska resurser vi har i verksamheten är rimliga.</i>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<i>18. Vi har de ekonomiska tillgångar som behövs för att kunna möta patienternas behov.</i>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<i>19. Jag tycker att de ekonomiska förutsättningarna för verksamheten är hållbara på lång sikt.</i>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<i>20. Verksamhetens ekonomiska ramar är tillräckliga för att vi ska klara av vårt uppdrag.</i>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<i>21. Kraven på verksamhetens ekonomi går ut över våra patienter.(R)</i>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5

## Kvalitet (Subskala B)

Följande avsnitt handlar om hur du upplever att kvalitetsfrågor hanteras i verksamheten och hur det påverkar dig i ditt arbete. Med ”kvalitetsfrågor” menar vi det resultat (behandlingsutfall) ni åstadkommer i arbetet med patienterna och hur ni arbetar med uppföljning och förbättringsarbete. Utgå framförallt från ett enhetsperspektiv när du fyller i enkäten. Ange i vilken utsträckning du tycker att följande påståenden stämmer med din uppfattning.

<b>Kunskap &amp; medvetenhet (B)</b>	Instämmer		Instämmer helt							
	Inte									
23. Jag vet vad som bidrar till god kvalitet för våra patienter.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
24. Jag vet vad jag kan göra i min roll för att vi ska hålla en så hög kvalitet som möjligt.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
25. Jag har klart för mig hur jag kan engagera mig i förbättringsarbete.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
26. Jag vet hur jag ska lägga upp mitt arbete för att det ska bli god kvalitet i det jag gör.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
<b>Delaktighet (B)</b>										
27. Jag får vara med och påverka hur verksamheten jobbar med kvalitetsfrågor.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
28. Jag känner mig delaktig i verksamhetens förbättringsarbete.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
29. Jag har möjlighet att påverka var vi lägger fokus i förbättringsarbetet.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
30. Mina åsikter spelar roll när vi arbetar med kvalitetsfrågor.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
31. När vi ska jobba med förbättringsarbete är det redan bestämt hur det ska göras.(R)	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
32. Jag har svårt att se hur jag kan påverka kvaliteten i verksamheten (R)	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
<b>Motivation (B)</b>										
33. Det är motiverande att arbeta med förbättringsarbete.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
34. Jag tycker att det ingår i min roll att engagera mig i hur vi kan förbättra kvaliteten i verksamheten.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
35. Det är meningsfullt att försöka förbättra kvaliteten i verksamheten.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
36. Jag intresserar mig för hur vi ligger till kvalitetsmässigt jämfört med andra verksamheter.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
<b>Påverkan på kliniskt beteende (B – Enskild fråga)</b>										
37. Jag tar hänsyn till verksamhetens kvalitet i mitt kliniska arbete.	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5

## 13 REFERENCES

- Adam Kelly, P., O'Malley, K. J., Kallen, M. A., & Ford, M. E. (2005). Integrating Validity Theory with Use of Measurement Instruments in Clinical Settings. *Health Services Research, 40*(5, part 2), 1605-1619.
- Anell, A. (2013). *Vårdval i specialistvården. Utveckling och utmaningar*. Sveriges Kommuner och Landsting (SKL).
- Anell, A. (2015). The Public–Private Pendulum — Patient Choice and Equity in Sweden. *New England Journal of Medicine, 372*(1), 1-4.
- Anell, A., Glenngard, A. H., & Merkur, S. M. (2012). *Sweden: Health system review. Health systems in transition*. (1817-6119). European Observatory on Health systems and Policies, World Health Organization.
- Appleby, J., & Dixon, J. (2004). Patient choice in the NHS. *BMJ, 329*(7457), 61-62.
- Arman, R., Dellve, L., Wikström, E., & Törnström, L. (2009). What health care managers do: applying Mintzberg's structured observation method. *Journal of Nursing Management, 17*(6), 718-729.
- Auschra, C. (2018). Barriers to the integration of care in inter-organisational settings: a literature review. *International journal of integrated care, 18*(1), 5, 1-14.
- Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings. *Journal of Applied Social Psychology, 34*(10), 2045-2068.
- Barnum, H., Kutzin, J., & Saxenian, H. (1995). Incentives and provider payment methods. *The International Journal of Health Planning and Management, 10*(1), 23-45.
- Batalden, M., Batalden, P., Margolis, P., Seid, M., Armstrong, G., Opipari-Arrigan, L., & Hartung, H. (2015). Coproduction of healthcare service. *BMJ quality & safety*(0), 0: 1-9.
- Bauchner, H., Fontanarosa, P. B., & Thompson, A. E. (2015). Professionalism, governance, and self-regulation of medicine. *JAMA, 313*(18), 1831-1836.
- Benabou, R., & Tirole, J. (2003). Intrinsic and Extrinsic Motivation. *Review of Economic Studies, 70*(3), 489-520.
- Berlowitz, D. R., Young, G. J., Hickey, E. C., Saliba, D., Mittman, B. S., Czarnowski, E., . . . Rubenstein, L. V. (2003). Quality improvement implementation in the nursing home. *Health Services Research, 38*(1 part 1), 65-83.
- Berwick, D. M., Nolan, T. W., & Whittington, J. (2008). The Triple Aim: Care, Health, And Cost. *Health Affairs, 27*(3), 759-769.
- Blomgren, M. (2003). Ordering a profession: Swedish nurses encounter new public management reforms. *Financial Accountability & Management, 19*(1), 45-71.
- Bradley, E. H., Curry, L. A., & Devers, K. J. (2007). Qualitative data analysis for health services research: developing taxonomy, themes, and theory. *Health Services Research, 42*(4), 1758-1772.
- Brandsen, T., Boogers, M., & Tops, P. (2006). Soft governance, hard consequences: The ambiguous status of unofficial guidelines. *Public Administration Review, 66*, 546-553.

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Bright, L. (2008). Does public service motivation really make a difference on the job satisfaction and turnover intentions of public employees? *The American Review of Public Administration*, 38(2), 149-166.
- Brodkin, E. Z. (2012). Reflections on Street-Level Bureaucracy: Past, Present, and Future. *Public Administration Review*, 72(6), 940-949.
- Brorström, B., Hallin, B., & Kastberg, G. (2004). The significance of control models: intentional and unintentional effects. *Qualitative Health Research*, 14(7), 889-904.
- Brownson, R. C., Chiqui, J. F., & Stamatakis, K. A. (2009). Understanding Evidence-Based Public Health Policy. *American Journal of Public Health*, 99(9), 1576-1583.
- Bryman, A. (2006). Integrating quantitative and qualitative research: how is it done? *Qualitative research*, 6(1), 97-113.
- Burström, B. (2009). Market-Oriented, Demand-Driven Health Care Reforms and Equity in Health and Health Care Utilization in Sweden. *International Journal of Health Services*, 39(2), 271-285.
- Cameron, J., Banko, K. M., & Pierce, W. D. (2001). Pervasive negative effects of rewards on intrinsic motivation: The myth continues. *The Behavior Analyst*, 24(1), 1-44.
- Campbell, S. M., McDonald, R., & Lester, H. (2008). The experience of pay for performance in English family practice: a qualitative study. *Annals of Family Medicine*, 6(3), 228-234.
- Cashin, C., Chi, Y.-L., Smith, P. C., Borowitz, M., & Thomson, S. (2014). *Paying for Performance in Health Care Implications for Health System Performance and Accountability: Implications for Health System Performance and Accountability*. The European Observatory on Health Systems and Policies, World Health Organization.
- Chaix-Couturier, C., Durand-Zaleski, I., Jolly, D., & Durieux, P. (2000). Effects of financial incentives on medical practice: results from a systematic review of the literature and methodological issues. *International Journal for Quality in Health Care*, 12(2), 133-142.
- Conrad, D. (2015). The Theory of Value-Based Payment Incentives and Their Application to Health Care. *Health Services Research*, 50, 2057-2089.
- Conrad, D., & Perry, L. (2009). Quality-based financial incentives in health care: can we improve quality by paying for it? *Annual Review of Public Health*, 30, 357 - 371.
- Cook, D., Thompson, J. E., Habermann, E. B., Visscher, S. L., Dearani, J. A., Roger, V. L., & Borah, B. J. (2014). From 'Solution Shop' Model To 'Focused Factory' In Hospital Surgery: Increasing Care Value And Predictability. *Health Affairs*, 33(5), 746-755.
- Corbin, J. M., & Strauss, A. L. (1993). The articulation of work through interaction. *Sociological Quarterly*, 34(1), 71-83.
- Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical assessment, research & evaluation*, 10(7), 1-9.
- Creswell, J. W., & Clark, V. L. P. (2007). *Designing and conducting mixed methods research*. California: Sage Publisher.

- Crewson, P. E. (1997). Public-service motivation: Building empirical evidence of incidence and effect. *Journal of Public Administration Research and Theory*, 7(4), 499-518.
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125(6), 627-668.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268.
- Dixit, A. (1997). Power of incentives in private versus public organizations. *The American Economic Review*, 87(2), 378-382.
- Drennan, J. (2003). Cognitive interviewing: verbal data in the design and pretesting of questionnaires. *Journal of Advanced Nursing*, 42(1), 57-63.
- Eijkenaar, F., Emmert, M., Scheppach, M., & Schöffski, O. (2013). Effects of pay for performance in health care: A systematic review of systematic reviews. *Health Policy*, 110(2-3), 115-130.
- Ellegård, L. M., & Glenngård, A. (2018). *Att visa tillit genom val av ersättningsmodell— effekter av anslagsfinansiering i hälso-och sjukvården i Region Skåne. I Styra och leda med tillit. Forskning och praktik. SOU 2018: 38. Tillitsdelegationen.*
- Ellingsen, T., & Johannesson, M. (2007). Paying respect. *Journal of Economic Perspectives*, 21(4), 135-149.
- Ellingsen, T., & Johannesson, M. (2008). Pride and prejudice: The human side of incentive theory. *American Economic Review*, 98(3), 990-1008.
- Eurohealth. (2017). *Measuring efficiency in health care. 23(2).* European Observatory on Health Systems and Policies, World Health Organization.
- Evetts, J. (2003). The sociological analysis of professionalism: Occupational change in the modern world. *International sociology*, 18(2), 395-415.
- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, 4(3), 272.
- Fehr, E., & Falk, A. (2002). Psychological foundations of incentives. *European economic review*, 46(4), 687-724.
- Fereday, J., & Muir-Cochrane, E. (2008). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International journal of qualitative methods*, 5(1), 80-92.
- Flodgren, G., Eccles, M. P., Shepperd, S., Scott, A., Parmelli, E., & Beyer, F. R. (2011). *An overview of reviews evaluating the effectiveness of financial incentives in changing healthcare professional behaviours and patient outcomes. Issue 7 Art. No: CD009255.* Cochrane Database of Systematic Reviews.
- Fotaki, M. (2014). *What Market-Based Patient Choice Can't Do for the NHS: The Theory and Evidence of How Choice Works in Health Care.* London: Centre for Health and the Public Interest.
- Fotaki, M., Roland, M., Boyd, A., McDonald, R., Scheaff, R., & Smith, L. (2008). What benefits will choice bring to patients? Literature review and assessment of implications. *Journal of Health Services Research and Policy*, 13(3), 178-184.

- Fredriksson, M., Blomqvist, P., & Winblad, U. (2012). Conflict and Compliance in Swedish Health Care Governance: Soft Law in the 'Shadow of Hierarchy'. *Scandinavian Political Studies*, 35(1), 48-70.
- Freidson, E. (2001). *Professionalism. The third logic*. Oxford: Polity press.
- Frey, B. S. (1997). On the relationship between intrinsic and extrinsic work motivation. *International Journal of Industrial Organization*, 15, 427-439.
- Frey, B. S., & Jegen, R. (2001). Motivation Crowding Theory. *Journal of Economic Surveys*, 15(5), 589-611.
- Frolich, A., Talavera, J., Broadhead, P., & Dudley, R. (2007). A behavioral model of clinician responses to incentives to improve quality. *Health Policy*, 80(1), 179-193.
- Furr, M. (2013). *Scale construction and psychometrics for social and personality psychology*. London: SAGE Publications Ltd.
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational behavior*, 26(4), 331-362.
- Gaynor, M., Moreno-Serra, R., & Propper, C. (2013). Death by Market Power: Reform, Competition, and Patient Outcomes in the National Health Service. *American Economic Journal: Economic Policy*, 5(4), 134-166.
- Georgellis, Y., Iossa, E., & Tabvuma, V. (2011). Crowding Out Intrinsic Motivation in the Public Sector. *Journal of Public Administration Research and Theory*, 21(3), 473-493.
- Glasziou, P. P., Buchan, H., Del Mar, C., Doust, J., Harris, M., Knight, R., . . . Stockwell, A. (2012). When financial incentives do more good than harm: a checklist. *BMJ*, 345, e5047.
- Glenngård, A. H. (2015). *Primärvården efter vårdvalsreformen*. Stockholm: SNS förlag.
- Gneezy, U., Meier, S., & Rey-Biel, P. (2011). When and Why Incentives (Don't) Work to Modify Behavior. *Journal of Economic Perspectives*, 25(4), 191-210.
- Godager, G., & Wiesen, D. (2013). Profit or patients' health benefit? Exploring the heterogeneity in physician altruism. *Journal of Health Economics*, 32(6), 1105-1116.
- Goodall, A. H. (2011). Physician-leaders and hospital performance: is there an association? *Social Science and Medicine*, 73(4), 535-539.
- Gosden, T., Forland, F., Kristiansen, I., Sutton, M., Leese, B., Giuffrida, A., . . . Pedersen, L. (2000). *Capitation, salary, fee-for-service and mixed systems of payment: effects on the behaviour of primary care physicians. Issue 3. Art. No.: CD002215*. Cochrane Database of Systematic Reviews.
- Gosden, T., Forland, F., Kristiansen, I. S., Sutton, M., Leese, B., Giuffrida, A., . . . Pedersen, L. (2001). Impact of payment method on behaviour of primary care physicians: a systematic review. *Journal of Health Services Research and Policy*, 6(1), 44-55.
- Grant, A. M. (2008). Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity. *Journal of Applied Psychology*, 93(1), 48.

- Greer, S., Wismar, M., & Figueras, J. (2016). *Strengthening Health System Governance: Better Policies, Stronger Performance*. The European Observatory on Health Systems and Policies, World Health Organization.
- Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Ectj*, 29(2), 75-91.
- Hackett, J., Glidewell, L., West, R., Carder, P., Doran, T., & Foy, R. (2014). 'Just another incentive scheme': a qualitative interview study of a local pay-for-performance scheme for primary care. *BMC Family Practice*, 15(1), 168.
- Hales, C. (1999). Why do managers do what they do? Reconciling evidence and theory in accounts of managerial work. *British journal of management*, 10(4), 335-350.
- Hales, C. (2002). 'Bureaucracy-lite' and Continuities in Managerial Work. *British journal of management*, 13(1), 51-66.
- Healy, M., & Perry, C. (2000). Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm. *Qualitative Market Research: An International Journal*, 3(3), 118-126.
- Hinkin, T. R. (1998). A Brief Tutorial on the Development of Measures for Use in Survey Questionnaires. *Organizational Research Methods*, 1(1), 104-121.
- Hood, C. (1995). The "New Public Management" in the 1980s: variations on a theme. *Accounting, organizations and society*, 20(2), 93-109.
- Jegers, M., Kesteloot, K., De Graeve, D., & Gilles, W. (2002). A typology for provider payment systems in health care. *Health Policy*, 60(3), 255-273.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational researcher*, 33(7), 14-26.
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of mixed methods research*, 1(2), 112-133.
- Jones, L., Pomeroy, L., Robert, G., Burnett, S., Anderson, J. E., & Fulop, N. J. (2017). How do hospital boards govern for quality improvement? A mixed methods study of 15 organisations in England. *BMJ quality & safety*.
- Joumard, I., André, C., & Nicq, C. (2010). *Health Care Systems: Efficiency and policy settings*. OECD Economics Department Working Papers. Paris: OECD Publishing.
- Keel, G., Savage, C., Rafiq, M., & Mazzocato, P. (2017). Time-driven activity-based costing in health care: A systematic review of the literature. *Health Policy*, 121(7), 755-763.
- Kickert, W. J. M. (1997). Public Governance in the Netherlands: An Alternative to Anglo-American 'Managerialism'. *Public Administration*, 75(4), 731-752.
- Kirkpatrick, I., Jespersen, P. K., Dent, M., & Neogy, I. (2009). Medicine and management in a comparative perspective: the case of Denmark and England. *Sociology of Health and Illness*, 31(5), 642-658.
- Kitzinger, J. (1995). Qualitative research. Introducing focus groups. *BMJ: British Medical Journal*, 311, 299-302.
- Klijin, E.-H. (2008). Governance and Governance Networks in Europe. *Public Management Review*, 10(4), 505-525.

- Kolstad, J. T. (2013). Information and quality when motivation is intrinsic: Evidence from surgeon report cards. *American Economic Review*, 103(7), 2875-2910.
- Komaki, J. L., Minnich, M. L. R., Grotto, A. R., Weinshank, B., & Kern, M. J. (2011). Promoting Critical Operant-Based Leadership While Decreasing Ubiquitous Directives and Exhortations. *Journal of Organizational Behavior Management*, 31(4), 236-261.
- Korlén, S., Amer-Wählin, I., Lindgren, P., & von Thiele Schwarz, U. (2018). The development and validation of a scale to explore staff experience of governance of economic efficiency and quality (GOV-EQ) of health care. *BMC Health Services Research*, 18(963), 1-13.
- Kuhlmann, E., & Burau, V. (2008). The 'health care state' in transition. *European Societies*, 10(4), 619-633.
- Kuhlmann, E., Burau, V., Correia, T., Lewandowski, R., Lionis, C., Noordegraaf, M., & Repullo, J. (2013). "A manager in the minds of doctors:" a comparison of new modes of control in European hospitals. *BMC Health Services Research*, 13(1), 246.
- Kuhlmann, E., & von Knorring, M. (2014). Management and medicine: why we need a new approach to the relationship. *Journal of Health Services Research and Policy*, 19(3), 189-119.
- Larson, E. B., & Yao, X. (2005). Clinical Empathy as Emotional Labor in the Patient-Physician Relationship. *JAMA*, 293(9), 1100-1106.
- Le Grand, J. (2003). *Motivation, agency, and public policy: of knights and knaves, pawns and queens*. New York: Oxford University Press Inc.
- Le Grand, J. (2009). Choice and competition in publicly funded health care. *Health Economics, Policy and Law*, 4(04), 479-488.
- Lega, F., Prenestini, A., & Spurgeon, P. (2013). Is Management Essential to Improving the Performance and Sustainability of Health Care Systems and Organizations? A Systematic Review and a Roadmap for Future Studies. *Value in Health*, 16(1, Supplement), S46-S51.
- Leutz, W. (2005). Reflections on integrating medical and social care: five laws revisited. *Journal of Integrated Care*, 13(5), 3-12.
- Liff, R., & Andersson, T. (2011). Integrating or disintegrating effects of customised care: the role of professions beyond NPM. *Journal of Health Organization and Management*, 25(6), 658-676.
- Lindgren, P. (2014). *Ersättning i sjukvården: modeller, effekter, rekommendationer*. Stockholm: SNS förlag.
- Lundquist, L. (2001). *Tystnadens förvaltning. Om förvaltning, kunskap, språk och etik i socialt arbete*. Socialstyrelsen.
- Lynn, L. E., Heinrich, C. J., & Hill, C. J. (2000). Studying Governance and Public Management: Challenges and Prospects. *Journal of Public Administration Research and Theory*, 10(2), 233-262.
- MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological Methods*, 4(1), 84.

- Macinati, M. S. (2010). NPM reforms and the perception of budget by hospital clinicians; lessons from two case-studies. *Financial Accountability & Management*, 26(4), 422-442.
- Macinati, M. S., & Rizzo, M. G. (2016). Exploring the link between clinical managers involvement in budgeting and performance: Insights from the Italian public health care sector. *Health Care Management Review*, 41(3), 213-223.
- Madara, J. L., & Burkhart, J. (2015). Professionalism, self-regulation, and motivation: How did health care get this so wrong? *JAMA*, 313(18), 1793-1794.
- Magee, H., Davis, L.-J., & Coulter, A. (2003). Public views on healthcare performance indicators and patient choice. *Journal of the Royal Society of Medicine*, 96(7), 338-342.
- Malterud, K. (2001a). The art and science of clinical knowledge: evidence beyond measures and numbers. *The Lancet*, 358(9279), 397-400.
- Malterud, K. (2001b). Qualitative research: standards, challenges, and guidelines. *The Lancet*, 358(9280), 483-488.
- Mandavia, R., Mehta, N., Schilder, A., & Mossialos, E. (2017). Effectiveness of UK provider financial incentives on quality of care: a systematic review. *British Journal of General Practice*, 67(664), e800-e815.
- Mays, N., & Pope, C. (1995). Rigour and qualitative research. *BMJ: British Medical Journal*, 311(6997), 109.
- Mays, N., & Pope, C. (2000). Assessing quality in qualitative research. *BMJ*, 320(7226), 50-52.
- McDonald, R., Harrison, S., Checkland, K., Campbell, S. M., & Roland, M. (2007). Impact of financial incentives on clinical autonomy and internal motivation in primary care: ethnographic study. *BMJ*, 334(7608), 1357.
- McGivern, G., Currie, G., Ferlie, E., Fitzgerald, L., & Waring, J. (2015). Hybrid manager-professionals' identity works: the maintenance and hybridization of medical professionalism in managerial contexts *Public Administration*, 93(2), 412-432.
- McGrail, K., Green, B., Barer, M. L., Evans, R. G., Hertzman, C., & Normand, C. (2000). Age, costs of acute and long-term care and proximity to death: evidence for 1987-88 and 1994-95 in British Columbia. *Age and Ageing*, 29(3), 249-253.
- Melichar, L. (2009). The effect of reimbursement on medical decision making: do physicians alter treatment in response to a managed care incentive? *Journal of Health Economics*, 28(4), 902-907.
- Meterko, M., Young, G. J., White, B., Bokhour, B. G., Burgess, J. F., Berlowitz, D., . . . Nealon Seibert, M. (2006). Provider Attitudes toward Pay-for-Performance Programs: Development and Validation of a Measurement Instrument. *Health Services Research*, 41(5), 1959-1978.
- Michie, S., Johnston, M., Abraham, C., Lawton, R., Parker, D., & Walker, A. (2005). Making psychological theory useful for implementing evidence based practice: a consensus approach. *BMJ quality & safety*, 14(1), 26-33.
- Michie, S., Van Stralen, M. M., & West, R. (2011). The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implementation Science*, 6(1), 42.

- Montague, W. P. (1909). May a Realist be a Pragmatist?: I. The Two Doctrines Defined. *The Journal of Philosophy, Psychology and Scientific Methods*, 6(17), 460-463.
- Morgan, G. A., Gliner, J. A., & Harmon, R. J. (1999). Evaluating the validity of a research study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38(4), 480-485.
- Mossialos, E., Dixon, A., Figueras, J., & Kutzin, J. (2002). *Funding health care: options for Europe*. European Observatory on Health Care Systems, World Health Organization.
- Myndigheten för Vårdanalys. (2012). *Patient-Centeredness in Sweden's Health System: An assessment and six steps for progress*. Myndigheten för Vårdanalys.
- Myndigheten för Vårdanalys. (2014). *Vårdval och vårdutnyttjande - Hur fördelas vården mellan olika socioekonomiska grupper vid vårdval i specialistvården?* Myndigheten för Vårdanalys.
- Myndigheten för Vårdanalys. (2015). *Lång väg till patientnytta*. Myndigheten för Vårdanalys.
- Newton, P. E., & Shaw, S. D. (2013). Standards for talking and thinking about validity. *Psychological Methods*, 18(3), 301.
- Noordegraaf, M. (2007). From "Pure" to "Hybrid" Professionalism: Present-Day Professionalism in Ambiguous Public Domains. *Administration & Society*, 39(6), 761-785.
- Noordegraaf, M. (2011). Risky business: How professionals and professional fields (must) deal with organizational issues. *Organization Studies*, 32(10), 1349-1371.
- Numerato, D., Salvatore, D., & Fattore, G. (2012). The impact of management on medical professionalism: a review. *Sociology of Health and Illness*, 34(4), 626-644.
- OECD. (2017). *Health at a Glance 2017: OECD Indicators*. Paris, OECD Publishing.
- Olafsen, A. H., Halvari, H., Forest, J., & Deci, E. L. (2015). Show them the money? The role of pay, managerial need support, and justice in a self-determination theory model of intrinsic work motivation. *Scandinavian Journal of Psychology*, 56(4), 447-457.
- Osborne, S. P. (2006). The New Public Governance? *Public Management Review*, 8(3), 377-387.
- Osborne, S. P., Radnor, Z., & Nasi, G. (2013). A New Theory for Public Service Management? Toward a (Public) Service-Dominant Approach. *The American Review of Public Administration*, 43(2), 135-158.
- Perry, J. L., Hondeghem, A., & Wise, L. R. (2010). Revisiting the motivational bases of public service: Twenty years of research and an agenda for the future. *Public Administration Review*, 70(5), 681-690.
- Postma, J., Oldenhof, L., & Putters, K. (2015). Organized professionalism in healthcare: articulation work by neighbourhood nurses. *Journal of Professions and Organization*, 2(1), 61-77.
- Prendergast, C. (1999). The provision of incentives in firms. *Journal of Economic Literature*, 37(1), 7-63.
- Rainey, H. G. (1982). Reward preferences among public and private managers: In search of the service ethic. *The American Review of Public Administration*, 16(4), 288-302.

- Ratray, J., & Jones, M. C. (2007). Essential elements of questionnaire design and development. *Journal of Clinical Nursing*, 16(2), 234-243.
- Rechel, B., Duran, A., & Saltman, R. (2018). *What is the experience of decentralized hospital governance in Europe? Policy Brief 28*. The European Observatory on Health Systems and Policies, World Health Organization.
- Rechel, B., Maresso, A., Sagan, A., Hernández-Quevedo, C., Williams, G., Richardson, E., . . . Nolte, E. (2018). *Organizing and financing of public health services in Europe*. European Observatory on Health systems and policies, World Health Organization.
- Robinson, J. (2001). Theory and practice in the design of physician payment incentives. *Milbank Quarterly*, 79(2), 149-177.
- Roland, M., Campbell, S., Bailey, N., Whalley, D., & Sibbald, B. (2006). Financial incentives to improve the quality of primary care in the UK: predicting the consequences of change. *Primary Health Care Research & Development*, 7(01), 18-26.
- Roland, M., & Dudley, R. A. (2015). How financial and reputational incentives can be used to improve medical care. *Health Services Research*, 50(S2 Part 2), 2090-2115.
- Rosen, M. (2010). *Guldgruvan i Hälso-och sjukvården: Översyn av de nationella kvalitetsregistren: Förslag till gemensam satsning 2011–2015*. Sveriges Kommuner och Landsting (SKL).
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54-67.
- Saltman, R. B. (2008). Decentralization, re-centralization and future European health policy. *European Journal of Public Health*, 18(2), 104-106.
- Saltman, R. B. (2015). Structural patterns in Swedish health policy: a 30-year perspective. *Health Economics, Policy and Law*, 10(2), 195-215.
- Saltman, R. B., & Duran, A. (2016). Governance, Government, and the Search for New Provider Models. *International Journal of Health Policy and Management*, 5(1), 33-42.
- Schofield, J., & Sausman, C. (2004). Symposium on implementing public policy: learning from theory and practice: introduction. *Public Administration*, 82(2), 235-248.
- Scott, A., Sivey, P., Ait Ouakrim, D., Willenberg, L., Naccarella, L., Furler, J., & Young, D. (2011). *The effect of financial incentives on the quality of health care provided by primary care physicians*. Cochrane Database of Systematic Reviews.
- Shafritz, J. M., Ott, J. S., & Jang, Y. S. (2015). *Classics of organization theory, 8th edition*. Boston: Cengage Learning.
- Shortell, S. M., O'Brien, J. L., Carman, J. M., Foster, R. W., Hughes, E., Boerstler, H., & O'Connor, E. J. (1995). Assessing the impact of continuous quality improvement/total quality management: concept versus implementation. *Health Services Research*, 30(2), 377.
- Sibbald, B., McDonald, R., & Roland, M. (2007). Shifting care from hospitals to the community: a review of the evidence on quality and efficiency. *Journal of Health Services Research and Policy*, 12(2), 110-117.
- Sikka, R., Morath, J. M., & Leape, L. (2015). The Quadruple Aim: care, health, cost and meaning in work. *BMJ quality & safety*, 24, 608-610.

- Skinner, B. F. (1963). Operant behavior. *American Psychologist*, 18(8), 503-515.
- SKL. (2018a). *Ekonomirapporten 2018 - Om kommunernas och landstingens ekonomi*. Sveriges Kommuner och Landsting (SKL).
- SKL. (2018b). *Öppna jämförelser - Hälsa och sjukvårdsrapporten*. Sveriges Kommuner och Landsting (SKL).
- SOU 2017:56. (2017). *Jakten på den perfekta ersättningsmodellen – vad händer med medarbetarnas handlingsutrymme?* Tillitsdelegationen.
- SOU 2018:47. (2018). *Med tillit växer handlingsutrymmet – tillitsbaserad styrning och ledning av välfärdssektorn*. Tillitsdelegationen.
- Sox, H. C., Blank, L., Cohen, J., Kimball, H., Smelser, N., Copeland, R., . . . European Federation Internal, M. (2002). Medical professionalism in the new millennium: A physician charter. *Annals of Internal Medicine*, 136(3), 243-246.
- Spector, P. E. (1992). *Summated Rating Scale Construction: An Introduction*. Newbury Park, CA: Sage.
- Stajkovic, A. D., & Luthans, F. (2003). Behavioral management and task performance in organizations: conceptual background, meta-analysis, and test of alternative models. *Personnel Psychology*, 56(1), 155-194.
- Steele, J. R., & Reilly, J. D. (2010). Bundled Payments: Bundled Risk or Bundled Reward? *Journal of the American College of Radiology*, 7(1), 43-49.
- Storkholm, M. H., Mazzocato, P., Savage, M., & Savage, C. (2017). Money's (not) on my mind: a qualitative study of how staff and managers understand health care's triple Aim. *BMC Health Services Research*, 17(1), 98.
- Strauss, A. (1988). The articulation of project work: An organizational process. *Sociological Quarterly*, 29(2), 163-178.
- Swick, H. M. (2000). Toward a normative definition of medical professionalism. *Academic Medicine*, 75(6), 612-616.
- Teddlie, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of mixed methods research*, 1(1), 77-100.
- Tummers, L., & Bekkers, V. (2014). Policy implementation, street-level bureaucracy, and the importance of discretion. *Public Management Review*, 16(4), 527-547.
- Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*, 15(3), 398-405.
- Walshe, K., & Smith, J. (2011). *Healthcare management* Berkshire: UK: McGraw-Hill Education.
- Van den Broeck, A., Vansteenkiste, M., & De Witte, H. (2008). Self-determination theory: A theoretical and empirical overview in occupational health psychology. *Occupational health psychology: European perspectives on research, education, and practice* (pp. 63-88): Nottingham University Press.
- Van Herck, P., De Smedt, D., Annemans, L., Remmen, R., Rosenthal, M., & Sermeus, W. (2010). Systematic review: Effects, design choices, and context of pay-for-performance in health care. *BMC Health Services Research*, 10(1), 247.

- Vandenabeele, W. (2007). Toward a public administration theory of public service motivation - An institutional approach. *Public Management Review*, 9(4), 545-556.
- Vandenabeele, W. (2014). Explaining Public Service Motivation The Role of Leadership and Basic Needs Satisfaction. *Review of Public Personnel Administration*, 34(2), 153-173.
- Vandenabeele, W., Brewer, G. A., & Ritz, A. (2014). Past, present and future of public service motivation research. *Public Administration*, 92(4), 779-789.
- Wendt, C., Frisina, L., & Rothgang, H. (2009). Healthcare System Types: A Conceptual Framework for Comparison. *Social Policy & Administration*, 43(1), 70-90.
- West, M. A., Borrill, C., Dawson, J., Scully, J., Carter, M., Anelay, S., . . . Waring, J. (2002). The link between the management of employees and patient mortality in acute hospitals. *International Journal of Human Resource Management*, 13(8), 1299-1310.
- Wiig, S., Aase, K., von Plessen, C., Burnett, S., Nunes, F., Weggelaar, A. M., . . . Fulop, N. (2014). Talking about quality: exploring how 'quality' is conceptualized in European hospitals and healthcare systems. *BMC Health Services Research*, 14(1), 478.
- Wilkinson, N., & Klaes, M. (2012). *An Introduction to Behavioral Economics 2nd edition*. New York: Palgrave Macmillan.
- Williams, B., Onsmann, A., & Brown, T. (2010). Exploratory factor analysis: A five-step guide for novices. *Australasian Journal of Paramedicine*, 8(3), 1-13.
- Willis, G. B. (2004). *Cognitive interviewing: A tool for improving questionnaire design*. Thousand Oaks, CA: Sage Publications.
- Winblad, U., & Andersson, C. (2010). *Kåren och köerna: En ESO-rapport om den medicinska professionens roll i styrningen av svensk hälso-och sjukvård. ESO 2010:9*. Finansdepartementet.
- Wohlin, J., Stalberg, H., Ström, O., Rolfson, O., Willers, C., & Brommels, M. (2016). *Införande av värdebaserad ersättningsmodell och vårdval för höft-och knäprotesoperationer i Stockholms Läns Landsting*. Karolinska Institutet.
- World Medical Association. (2019). *1964 WMA declaration of Helsinki - Ethical principles for medical research involving human subjects (with amendments 1975-2013)*. <https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/>.
- Vrangbaek, K., Robertson, R., Winblad, U., Van de Bovenkamp, H., & Dixon, A. (2012). Choice policies in Northern European health systems. *Health Economics, Policy and Law*, 7(Special Issue 01), 47-71.
- Wynia, M. (2009). The Risks of Rewards in Health Care: How Pay-for-performance Could Threaten, or Bolster, Medical Professionalism. *Journal of General Internal Medicine*, 24(7), 884-887.
- Young, G. J., Beckman, H., & Baker, E. (2012). Financial incentives, professional values and performance: A study of pay-for-performance in a professional organization. *Journal of Organizational Behavior*, 33(7), 964-983.
- Yukl, G. (2012). Effective leadership behavior: What we know and what questions need more attention. *The Academy of Management Perspectives*, 26(4), 66-85.