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“ENTERPRISE WITHIN THE ENTERPRISE”

A STUDY OF MANAGEMENT AND PERFORMANCE IN A PUBLIC HEALTH CARE DELIVERY ORGANISATION

Mikael Ohrling

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“ENTERPRISE WITHIN THE ENTERPRISE”

A study of management and performance in a public health care delivery organisation

THESIS FOR DOCTORAL DEGREE (Ph.D.)

By

Mikael Ohrling, MD MBA BTheol

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Principal Supervisor:
Professor Mats Brommels, MD PhD
Karolinska Institutet
Department of Learning, Informatics, Management and Ethics
Medical Management Center

Co-supervisor:
Associate Professor Ulf Lockowandt, MD PhD
Karolinska Institutet
Department of Molecular Medicine and Surgery

Opponent:
Associate Professor Louise Bringselius, PhD
Lund University
Department of Business Administration

Examination Board:
Professor Sari Ponzer, MD PhD
Karolinska Institutet
Department of Clinical Science and Education
Södersjukhuset

Professor Hans Hjelmqvist, MD PhD
Örebro University
Faculty of Medicine and Health
School of Medical Sciences

Professor Jan Löwstedt, PhD
Stockholm University
Stockholm Business School

To my beloved family

“Lo ritornai da la santissima onda
rifatto si come piante novelle
rinnovellate di novella fronda,
puro e disposto a salire alle stelle.”

“From that most holy water I returned
made young again, as new trees are in spring,
when with new foliage they renew themselves,
pure, and disposed to rise up to the stars.”

Dante Alighieri, La Divina Commedia,
Purgatorio, Canto XXXIII, c. 1320

POPULAR SCIENCE SUMMARY OF THE THESIS

Managers in healthcare are challenged by a population that is getting older with increased demand of healthcare, and at the same time the medical and technological innovations offer new opportunities and possibilities. Nevertheless, it can be hard to balance quality and possibilities with expectations, cost and available resources, such as both staff and machines. The assumption in our research was that to be able to do this, the best way is to make decisions as close to the patient as possible at the frontline. Local, or decentralised, decision-making is suggested to improve the performance by better understanding the needs. However, to do so we have to empower managers with both authority and managerial skills, and that has to be done by the organisation. So, not just the individual decision maker has to be capable, but also the organisation as such. Accountability is important, in so far as the delegated power is used the right way, and as a way to strengthen the capabilities of the whole organisation.

In our research we have shown how a management model to ensure decentralisation can be constructed and introduced in the organisation with activities supported by evidence from the literature. Trust and autonomy are important factors, and so is coordination to prevent inequality or sub-optimisation. We have interviewed managers and they largely appreciate their decision space and now that they are accountable. Suggested improvements include looking at how a more balanced evaluation could be done and not with economy as main focus. Findings suggest that managers who are prone to delegate and who are proactive in general, tend to show better results. Decentralisation is not a state or something that happens once, in our case we show that this is an evolving process over time. We can see that both performance, and managers, benefit from decentralisation, but there has to be a balance between how much power you get, which you are held accountable for and the capacity of both the organisation and the individual.

During the pandemic outbreak of SARS-CoV-2 (Covid-19) there was demand of a rapid emergency response to mobilise all services towards the infection. We have studied how the organisation reacted during the first wave by interviewing members of the emergency management team and managers in the units carrying out the actions. We found that the ability to be rapid and flexible was facilitated by decentralisation, something which could have been a constraint since emergency management demands a high grade of coordination and collaboration over organisational borders. We could see how this was facilitated and developed to a very high grade in the decentralised environment.

There are not many studies done on service delivery organisations in healthcare and decentralisation. In our studies we have empirically found support to our assumptions on the positive effects of decentralisation in organisations. However, this has to be studied a lot more to understand how other factors, such as culture and other contextual conditions, may affect performance in combination with decentralisation.

ABSTRACT

Background

The challenges in healthcare are an everyday struggle for managers. Efficiency and responsiveness of public sector services have been of interest over the past decades. Different reforms have been launched. One important factor that has been identified is the degree of autonomy in decision-making, typically calling for a decentralised management model.

Aim

The overarching aim of this thesis is to explore decentralisation of management authority and accountability in a public healthcare provider organisation in primary and community care, and to assess its impact on organisational outcomes and how managers perceive a decentralised management model in ordinary and pandemic conditions.

Methods

Study I was a scoping review to explore the impact of decentralisation as evidenced by the literature. In the empirical studies II, III and IV qualitative research approaches were used with an explanatory case study research design. Purposive sampling, data collected in semi-structured, in-depth interviews and analysed with directed content analysis guided by theoretical frameworks. Balance score card data were used in study III.

Findings

In study I, a theoretical model was developed from Bossert's decision space conceptual framework to be used in the further empirical studies. Study II found support in the scientific literature for the underlying assumptions that increased responsibility will empower managers, since clinical directors know their local prerequisites best and are able to adapt to patient needs. In study III managers' perceptions of the decentralised management model supported the intentions to enable the front-line to make decisions to better meet customer needs and flexibly adapt to local conditions. In study IV we found a high grade of operational effectiveness, which is imperative in an emergency situation, and also a driver of new strategic positions to even better meet new demands.

Conclusions

Decentralisation can create conditions that support innovation and improvements locally. Activities for decentralisation have to be consistent with underlying assumptions, supported by evidence, and timely planned to give managers decision space and the ability to use their delegated authority, not disregarding accountability and fostering necessary organisational and individual capacities to avoid sub-optimisation. Congruence between the rationale of a management model, the managers' perceptions of the authority and accountability as well as management practices is crucial. The empirical findings of our case study are synthesised into a theoretical model potentially possible to apply in other organisational settings too.

LIST OF SCIENTIFIC PAPERS

I. **Ohrling, M**., Øvretveit, J., Brommels, M. Can management decentralisation resolve challenges faced by health care service delivery organizations? Findings for managers and researchers from a scoping review. *International Journal of Health Planning and Management.* 2021; 36:30–41. https://doi.org/10.1002/hpm.3058

II. **Ohrling, M**., Tolf, S., Solberg-Carlsson, K., Brommels, M. That's how it should work: The perceptions of a senior management on the value of decentralisation in a service delivery organisation. *Journal of Health Organization and Management*. Vol. No. ahead-of print. https://doi.org/10.1108/JHOM-12-2020-0474

III. **Ohrling, M**., Tolf, S., Solberg-Carlsson, K., Brommels, M. Managers do it their way: How managers act in a decentralised healthcare services provider organisation – a mixed methods study. Submitted.

IV. **Ohrling, M**., Solberg-Carlsson, K., Brommels, M. No man is an island: management of the emergency response to the SARS-CoV-2 (COVID-19) outbreak in a large public decentralised health organisation. Submitted.

Scientific papers not included in the thesis:

Ohrling, M., Øvretveit, J., Lockowandt, U., Brommels, M., Sparring, V. Management of the emergency response to the SARS-CoV-2 (COVID-19) outbreak in Stockholm, Sweden, and winter. *J Prim Health Care.* 2020. 12(3):207–214. doi:10.1071/HC20082

Øvretveit, J., **Ohrling, M**. Implementation science for managers and healthcare organisations responding to emergencies. Submitted.

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LIST OF ABBREVIATIONS

CQI	Continuous Quality Improvement
HRM	Human Resource Management
ICU	Intensive Care Unit
NHS	National Health Services
NPM	New Public Management
NWS	New Weberian State
PCHC	Primary and Community Healthcare
PCHc SDO	Primary and/or Community Healthcare Service Delivery Organisation
PREMS	Patient Reported Experience Measures
PROMS	Patient Reported Outcome Measures
PVM	Public Value Management
TQM	Total Quality Management
SLSO	Stockholms läns sjukvårdsområde (Stockholm Healthcare Services)
UK	United Kingdom
VBHC	Value Based Healthcare

PROLOGUE

Intrigued by an observation…

How long can a perambulation become? Well, in my case it begun many years ago. My endeavour for getting to know more and learn new things introduced me already in medical school to the world of ultrastructural studies and electron microscopy, and further later to clinical research. Although I trained as a specialist in internal medicine and haematology, a planned short time out from the university hospital and doctoral studies for improvement work in primary care, became an unplanned longer time with unexpected new directions.

Decades later with leadership and managerial experiences as clinical director, chief medical officer and the last twenty years as chief executive officer, I have got even more unanswered questions.

Culture, values, building teams and improvement have been like a silver thread on my journey, and still are. Organisations are nothing but humans, who are expected to thrive. We are talking about relationships. Trust. Getting things done is about culture and shared values, to get people on board and to work with human nature. Not against. People want to contribute, to do good and be a part of a prosperous culture. A meaningful and understandable context, that is supportive and empowering, with the patient's focus for improvement is successful.

Excursions during the years into other fields of knowledge have given me personally invaluable perspectives useful for a manager. However, nothing has been more valuable than all the moments meeting with colleagues, students, co-managers, superiors and patients. Ever since my first contact with medical management at the start of the Medical Management Centre in 2002 at the Karolinska Institutet, I have followed the research activities with the ambition to, sooner or later, test my hypothesis grown from experiences. Now I am here. Many years later. However, with a lot of experience and practice. I have "done it", and I am "doing it."

I have observed that the more decision space you get, the more energy is released for results and innovations. However, it can't be unconditioned. It is not the organisation scheme "that does it". It is the interaction, dialogue and shared values. And trust. This, no matter on what level I have been a manager or even no matter of situation. Is this true? What factors matters? Is there any evidence? What are the pitfalls? What we did not know at the start of our studies was a forthcoming pandemic. This has added a unique opportunity to get more insights of the importance of organisational efficiency and flexibility.

Curiosity and endurance are my driving forces, several general syllabus for doctoral studies have passed since start, and I have been following the path, like Dante on his long way journey in the Divine Comedy. No other similarities. My perambulation has now come to an end thanks to many people to whom I am grateful. Here is my contribution after decades of actions, observations and reflections. And now it starts….

1. INTRODUCTION

This thesis is focused on the impact of decentralisation on service delivery in healthcare. It is not a study of healthcare systems or specific techniques used in practice. It is a study of the effects on a large public organisation in primary and community care. However, to get the "big picture" the challenges in healthcare, healthcare as a system, improvement from a managerial perspective and governance principles will be introduced, to frame the theoretical perspectives of decentralisation. Decentralised management models from the perspective of unexpected emergency response, as in the outbreak of the SARS-CoV-2 (Covid-19) pandemic in 2020, are studied.

1.1 CHALLENGES IN HEALTHCARE

Managers in healthcare are struggling every day with challenges of different nature. In a review, the majority of challenges are identified in service delivery (23,8%), human resources (22,3%) and leadership/governance (21,2%). Among the items listed in service delivery are access (31,5%), cultural barriers (7,1%), quality (10,3%), overuse and waste of resources (7,4%) (Roncarlo *et al.,* 2017). All these items are of managerial concern and importance, directly related to how to practice management.

The Swedish Government report *Effective healthcare* (SOU 2016:2) identified the multifaceted control, not seldom with conflicting purposes, as a cause both to moral stress and inefficiency. Detailed control from purchasers, and complicated reimbursement systems, are risks of an increased administrative work-load, considered of no relevance to the patient, which undermine professional autonomy (SOU 2016:2, p 121 and pp 493-498).

Managers and employees in healthcare testify that they could do better if they had the right conditions. There are reports that many employees in the public sector perceive governance and management models as counterproductive (SOU 2018:38, p 13). The official statistics from the Swedish Work Environmental Authority show that organizational or social factors are the main cause to work-related diseases in the health and social care sector (Arbetsmiljöverket, 2020).

Demographic and technological change, rising expectations, both from patients as well as purchasers of healthcare, to increase efficiency and avoid higher costs are factors of increasing demands (Shoen *et al*., 2009). These challenges are met with different innovations and improvement methods. Despite that a lot of effort, beyond traditional medical knowledge, has been put into improvements in healthcare, the success is variable with a high number of failures or not lasting results (Walshe, 2009; Mozzocato *et al.,* 2010; Taylor *et al.,* 2014).

Primary and community healthcare (PCHC) services are facing an increasing demand, with patients living longer and more people experiencing chronic illness (van Weel *et al.,* 2012; Miller *et al*., 2018; SOU 2019:29; Angelis *et al.,* 2021). There are high expectations of such services to provide more and higher quality care locally and that they play their part in

reducing utilisation of more expensive hospital services. In addition, to provide more illness-prevention services and respond quickly to the needs of their populations for both treatment and many types of care (Watson *et al.,* 2017). Healthcare workers in these services are having to cope with too frequent administrative changes, as well as a more intense clinical work-load and are experiencing higher levels of work-related stress (Arbetsmiljöverket 2020). Recruitment and retention are becoming more difficult, which increases costs and reduces the continuity and quality of care. The Swedish Public Employment Service estimate that 55 % of the shortage of manpower is in the healthcare sector (Arbetsförmedlingen, 2019).

1.2 HEALTHCARE AS A COMPLEX SYSTEM

The nature of healthcare is complex and not manageable like a machine (Plsek and Wilson, 2001). Plsek and Greenhalgh (2001) introduced the complexity science as a possible paradigm with arguments for healthcare as a complex adaptive system. They define complex adaptive system as: "*a collection of individual agents with freedom to act in ways that are not always totally predictable, and whose actions are interconnected so that one agent's actions changes the context for other agents*." (Plsek and Greenhalgh, 2001, p. 625).

Healthcare is by nature filled with unpredictability, where unexpected events take place. Uncertainty and emergent causality are a part of the daily work (Plsek and Greenhalgh, 2001). Despite this, the dominant medical science paradigm, are in general based on linearity in daily operations. This is challenged by complexity (Greenhalgh and Papoutsi, 2018). Decentralisation can be considered to be associated with self-organisation, co-evolution and emergence, which are central elements in a complex adaptive system (Plsek and Greenhalgh, 2001). These elements are better to respond to the dynamics in healthcare (Best *et al.,* 2012; Booth, Zwar and Harrins, 2013; Braithwaite *et al.,* 2018).

The complexity in healthcare is increasing with new elements of unpredictability as a challenge for management. The pandemic outbreak of SARS-CoV-2 (Covid-19) is an example of an unforeseen event that required a rapid response and redesign of services (Ohrling *et al.,* 2020). However, the dominated focus in healthcare improvement has been efficiency and less attention has been given to effectiveness (Radnor *et al*., 2012). The importance in terms of the ability to be flexible and agile, to rapidly change the operations, has been shown in studies. This ability could be compromised with a too narrow-minded focus on efficiency (Tolf *et al.,* 2015).

1.3 MANAGER AS "SUPERMAN"

The headline of this section is from a quotation from an interview in Study III. From a manager's perception of what daily challenges might take from you. Managers are expected to fulfil the Triple Aim, or even Quadruple Aim, which is a recent update (Sikka *et al.,* 2015). The Triple Aim is about delivering at the same time higher quality, better patient experience and decreased cost (Berwick *et al.,* 2008). A range of constraining factors have to be challenged, such as increased administration and lack of coordination of care in the daily work (Berwick and Hackbarth, 2012). The fourth focus in the Quadruple Aim refers to staff satisfaction, with the connection that engaged staff will lead to more satisfied patients.

Mental models have been shown to facilitate the inherent challenge to the Triple Aim to the pursuit improvement of quality even under financial constraints (Højris Storkholm *et al.,* 2017). Elements in a reported improvement initiative aiming to achieve the Quadruple Aim, described as a value-based care project in allergology, have been described as the "*understanding of patterns of practice variation and benchmarking*" and "*critically dependent on the ability to translate evidence into practice*". Other important factors mentioned are financial incentives, understanding of social determinants of health and shared decision-making (Iglesia *et al.,* 2020).

From a managerial perspective, it is a challenge how to find a balance between external and internal complexity (Edwards and Saltman, 2007). There are structural, cultural and contextual barriers that have to be handled by management (Braithwaite *et al*., 2017). Managers need to have strategies to deal with both efficiency and effectiveness, and to know how to build dynamic capabilities for rapid and unexpected events (Teece *et al.,* 1997; Abrahamsson and Brege, 2005). However, to address these strategies, organisational concepts and management models in service delivery, are of special interest to understand how they can support managers, and their staff, in their complex operations (Øvretveit, 2012). Decentralisation is considered to provide the conditions for, and help, the implementation of a range of other solutions and local innovations (Ohrling *et al.*, 2021).

However, decentralisation in healthcare is mainly studied on national and system level. Empirical studies are few and mainly report decentralisation in healthcare systems level and the designs make it hard to find clear relations between outcomes and decentralisation rather than other factors. The effects reported in the studies are both positive and negative, limited and different in numbers and characteristics, which make them hard to compare. (Bossert, 1998; Bossert and Mitchell, 2011).

Managers of services are seeking solutions to these challenges. Could decentralisation within service delivery organisations that manage primary health care and/or community health care services be one way forward? Literature on national healthcare system decentralisation suggests that some decentralisations may have empowered local managers and clinical staff to make changes that respond to local needs, and sometimes reduce costs (Vrangbaek, 2007; Sreeramareddy and Sathyanarayana, 2013). But the findings vary, are often inconclusive, and appear to depend on the type of decentralisation and how it is implemented (Peckham, 2007 and 2016). Is there research on management decentralisation in primary and community healthcare? Could this type of decentralisation help address staff recruitment and retention challenges in these services? Might decentralisation provide the conditions for and help the implementation of a range of other solutions and local innovations?

And what researched-informed guidance can be found for managers about the possibilities that decentralisation can provide? These include managers performing roles at different levels of public- or private- service delivery organisations, such as UK primary or community health trusts (Fulop *et al.,* 2002), USA accountable care organisations (Shortell *et al.,* 2014), Netherlands integrated care organisations (Zonneveld *et al.,* 2017), and Nordic and Southern European NHS primary health care and/or community health care organisations.

Fifteen years of development of a management decentralisation model, in one of the largest primary and community healthcare organisations in Sweden, provide a unique opportunity to study the impact in service delivery. The fact that the pandemic outbreak has been an unexpected challenge, has made it possible to study the ability to cope with emergency situations in relation to decentralisation.

1.3.1 Performance and management models

Healthcare improvement is a strong principle intrinsic with the practice of medicine. Managerial practices, leadership, improvement and cultural attributes seem to be positively correlated with the performance of organisations, where those run by doctors even perform better, based on evidence (Lega *et al*., 2013). Ever since Donabedian's introduction of quality assurance in 1966 (Best and Neuhaser, 2004), a lot of effort beyond traditional medical knowledge has been put into different models for innovation and improvement in healthcare, as a way to meet the demands in relation to cost-effectiveness and efficiency (Deming, 1986; Batalden and Stoltz, 1993; Plsek, 2001; Taylor, 2009; Mazzocato *et al*., 2010). Quality improvement models, for example Lean, Six Sigma, Total Quality Management (TQM), Continuous Quality Improvement (CQI), and Business Process Reengineering (BPR) have in general a life-cycle time each of about three to five years (Walshe, 2009, p 154-155). Despite all efforts, research suggests that the effects of quality improvement efforts are limited and highly variable (Blumenthal and Kilo, 1998; Freeman and Walshe, 2004). Walshe (2009, p 156) argue that these models are more reinventions and repacking, due to consultant firms interests:

> *"To use a linguistic simile, these QI methodologies are more like dialect forms of a common language than they are like different languages. They share a basic grammar and vocabulary, and differ mainly in areas like pronunciation and accent."*

Walshe argues that these are often fashion offered by developers with an interest of new concepts, and have chosen to call these concepts "pseudoinnovations" (Walshe, 2009, p 156). These arguments take us back to the aphorism: *"Essentially, all models are wrong, but some are useful"* (Box and Draper, 1987, p 424). This was said about statistics, but could probably be true also in improvement work, when the effects are evaluated (Mazzocato *et al.*, 2010; Taylor *et al.,* 2014).

The challenges of the application in the complex context of healthcare and internal efficiency methods has been shown to be difficult and not sufficient in a fast changing environment (Mazzocato *et al.*, 2014 and 2016; Taylor *et al.*, 2014; Wells *et al.*, 2018). Challenges that have been identified in research consisting of major evaluations (Radnor *et al.*, 2006; Radnor and Bucci, 2007 and 2010; Antony, 2007; Lucey *et al.*, 2005) and from a review of the scientific literature, are an over reliance on technical tools without understanding of key principles as customer focus and context (Radnor, 2010 and 2013).

Management models, as NPM and VBHC, and quality improvement methods, its successes and failures have, thus, been in focus in healthcare. There has been far less interest in studying

internal governance structures and management approaches in the light of the organisational characteristics of public healthcare organisations (healthcare as a multi professional "knowledge corporation") and conditions related to their role as agencies, embedded in a structure of public administration.

Mintzberg (2017) argues that healthcare must be managed, however, not by remote control management in a disconnected world, where professionals are not only separated from "top" management and administration, but also from each other into differentiated components instead of integrated functions. The consequence according to Mintzberg (2017), will be "*more reorganisations, measurements like mad and an over belief in heroic "top-down" leadership for competition. All this will lead to even more dysfunctional healthcare*". At the same time, integrated care is prioritised and acknowledged by The World Health Organisation important for healthcare performance (Gröne and Garcia-Barbero, 2001). Hood has shown that more indicators and ranking lists led to manipulation (Hood, 2006). It is not enough to make this integration, or improvement of other kind, analytically and "cerebrally", it has to be managed. That is by managers finding out what is happening on the ground, not by "macroleading", but to get informed to give support. Mintzberg phrases it: "*True leadership is management practiced well."* (Mintzberg, 2017, p 22). Engagement, collaboration and mutual respect are guiding principles.

The correlation between performance and medical engagement are shown in studies (Lega *et al.,* 2013). Medical management skills and doctors' involvement are confirmed to lead to service change, innovation and improved productivity and quality outcomes for better clinical and financial performance (Ham, 2003). A loss of experienced managers might jeopardise the performance (Ham, 2012). The use of medical outcome data to understand performance and how to design the organisation needs these skills (Bohmer, 2006). Lega et al (2014) emphasise that the senior management culture influences the performance, which is of importance when appointing managers to get the best match with the goals. However, there are several important isomorphic factors to be understood as determinants how management practices should be organised for best performance (DiMaggio and Powell, 1983). They argue as follows (1983, p 147): *"Instead, we will contend, bureaucratization and other forms of organizational change occur as the result of processes that make organizations more similar without necessarily making them more efficient."*

Mintzberg (2017, p 17) challenges the concept "healthcare system", due to the fact that delivery is seldom put together over borders. It is not a system just because we think it is. A system has natural linkages to deliver where it needs to deliver. Cure comes over care, acute disease over chronic, treatment over prevention and promotion of health. The same goes for research. However, in most of the world, medicine has been prosperous, and life expectancy has increased dramatically. So, the healthcare system can't be considered failed, which is a complaint in many parts of the world, but to an expense. Mintzberg (2017, p 17) express this "*to suffer from success".* Reimbursement and financing are incorrectly interpreted, or perceived, as the "healthcare system", whilst the service delivery should be focus.

Finally, Mintzberg argues that this can't be fixed by more administration, re-engineering or reorganisations. Note that administration is crucial to oversee exceed cost control, challenge

exploitation by professionals and suppliers and to communicate significant improvement from the ground. However, history shows that significant change in healthcare comes from service delivery or even individual persons, "those who are doing the work", and not the top. Mutual respect and cooperation are needed, no *"blame games"* (Mintzberg, 2017, p 23).

1.3.2 Disaster management

The need for healthcare can be unpredictable, and managers have to deal with the unexpected. The principles of emergency and disaster planning are to establish a cooperative process to match urgent situations with available resources. This provides generic procedures for the unforeseen and division of responsibilities in emergency response is important. Plans are needed for the emergency response, but also for continuity while handling the emergency (Alexander, 2015). This might be considered a paradox, since the unforeseen is hard to plan, but in natural hazard science, the information and communication part is highlighted, and can, no matter what kind of disaster or emergency, be set in place, tested and updated in advance of a crisis. It is a living document and periodically adapted to changing conditions (Alexander, 2015).

In emergency and disaster response management, process-oriented approaches are used to a wide extent to ensure efficiency (Hofmann *et al.,* 2015). However, a drawback is that response processes prepared in advance, usually are impeded by unplannable execution contexts, unique processes, temporal urgency or other unexpected events (Hofmann *et al.,* 2015). Complexity perspectives have been introduced in disaster response management as a way to handle the dynamics of a disaster with focus on effectiveness and activities. In one study a framework is suggested based on analytical choices for the system dimension, system scope and system resolution to get directions for coordination as a result of the understanding that it is impossible for any actor to have the complete picture (Bergström *et al*., 2016).

Coordination under unpredictable conditions is a challenge, where information is critical (Comfort *et al.,* 2001; Arain, 2015). Comfort (2007, p 194) defines coordination as "*aligning one's actions with those of other relevant actors and organizations to achieve a shared goal."* This implies that an organisation must be able to both respond with creativity to unexpected events, and to interact with the environment for an adaptive performance in dynamic conditions (Comfort, 2007). Self-organisation is a process in the context of disaster that is considered potentially important to explore and understand. The process represents an important learning capacity dependent on open communication and feedback. All actors have to focus on the same problem at the right time, but still be flexible to changes needed to reach a shared goal demanding interaction and integrating information in the evolving knowledge base of the situation (Comfort, 1994). Decentralisation as a means to increase efficiency has shown to be effective, as to empower managers to handle effects and needs on both system and local level, and also to embrace the important aspects of effectiveness (Tolf *et al*., 2015).

2 HEALTHCARE MANAGEMENT AND DECENTRALISATION

2.1 ORGANISATIONAL RESEARCH

Organisational research is basically divided into two different traditions. One tradition with roots in economy research, and the other in sociology and anthropology (Miller, 1996). In the economy tradition, theories are focused on incentives, and in the other tradition it is about norms, values, culture and trust (SOU 2018:38). The organisational research field is interdisciplinary and uses methods from many different disciplines. The complex reality in organisations has been, and is, studied from numerous different theoretical perspectives with countless theories developed as a result. Before 1950, theories were more normative, and afterwards organisation and management has evolved as academic research fields. In the following the literature review will focus on management principles in healthcare and decentralisation.

2.2 HEALTHCARE MANAGEMENT PRINCIPLES

In the Nordic countries healthcare is by tradition a central part of the welfare state. Most of healthcare provision has been the responsibility of local or regional self-governing authorities, and it has been funded by a combination of state, regional and local tax. Consequently, healthcare provider organisations are part of public administration. They are *professional bureaucracies* (Mintzberg, 1979) constrained both by the autonomy of health professionals, as granted by state licensure, and by political decision-makers controlling the public purse. Healthcare has, like other public sectors, experienced different governance principles from the post-World War traditional public administration based on Weberian fundaments, the 80's and 90's era of *new public management* (NPM) to contemporary paradigms of different kind of *public value management* (PVM) (Stoker, 2006). These are all paradigms of collections of various specialisations, that can exist in parallel and mixed forms (Adler, 2001; Stoker, 2006; Bryson *et al.,* 2014; Hyndman and Ligouri, 2016).

In organisational research three ideal-typical forms of organisation and their respectively coordination mechanisms: market/price, hierarchy/authority, and community/trust has been described (Adler, 2001; Freidson, 2001; SOU 2018:38). The first type is connected to price mechanism and market thinking with competition, the second one to bureaucracy and formal regulation and the third is about networking and trust (Krohwinkel *et al.,* 2019; Bringselius, 2020). All three different logics have their own set of pros and cons. They can be combined and shift over time out from expediency. Adler (2001) argues that there should be a balance between the three logics, with focus on the one most important to achieve what is needed at the time. There is no competition between the logics. However, society in general is a strong influence.

2.2.1 New Public Management

Yet, both the political agenda as well as the scholarly debate has during the last three decades been dominated by *new public management* (NPM) (Simonet, 2011). NPM was driven by the assumption – and hope – that introducing business-like governance structures, financial incentives, marketisation and competition would be a remedy to "government failure", i. e. bureaucratic inflexibility, inefficiency, and low customer responsiveness (Hood, 1991). The first NPM initiatives in public healthcare systems (like in the UK and the Nordic countries) were the "purchaser-provider split" within public administrations, patient choice and deregulating the publicly funded healthcare market to private providers (Saltman, 1997). Stoker (2006) formulates that NPM seeks:

> *"…to dismantle the bureaucratic pillar of the Weberian model of traditional public administration. Out with the large, multipurpose hierarchical bureaucracies, [NPM] proclaims, and in with the lean, flat, autonomous organisations drawn from the public and private spheres and steered by a tight central leadership corps."*

The NPM principles encompassed economic foundations, behaviour centred on the individual, new managerial doctrines and new administrative technologies. The purpose was to achieve a decentralisation from a growing central governmental administration, with market and privatisation as a tool. NPM has been heavily criticised and is considered to be a failed paradigm (Farnham and Horton, 1996; O'Flynn, 2007).

The paradox is that NPM was launched for decentralisation and accountability to achieve a way from bureaucracy. The result has been shown to be the opposite. Research and evaluations show that professionals, crucial for the value creation in the interaction with whom they are there for, were marginalised. The result was distrust, decreased efficiency, inferior service quality and lower employee satisfaction (SOU 2018:38, p 15). The perception that the bureaucratic governance has hampered the core business in healthcare was shown in a survey from 2010, where 75 % of physicians acknowledged this (Brante, 2014). Other studies have shown how professionals perceive the dialogue between policy makers and top management to be very poor, suggested due to a stereotypical image of the physician as change-resistant, top-down management ideology or as coping strategies for the management and policy makers to avoid blame and critical information (Bringselius, 2013). However, this has urged for a new discourse of public management (Osborne, 2006; O'Flynn, 2007).

2.2.1.1 Value-based Healthcare

During the last decade *value-based healthcare* (VBHC), introduced 2006 by Michael Porter and Elizabeth Olmstedt Teisberg in the United States, replaced NPM in some contexts as the management model of choice (Porter and Olmstedt Teisberg, 2006). The model was introduced in an American context with market competition and rapidly rising costs. The theory is based on the formula that value is the result of medical outcomes divided by cost. From the three perspectives of Adler (2001) this model could be characterised as a hybrid, overbalanced on market and price side. The rationale is that value is not just about costs, but

medical outcomes from a patient perspective evaluated in different tiers with Patient Reported Outcome Measures (PROMS) and Patient Reported Experience Measures (PREMS) in relation to costs (Porter, 2010). The model is considered to be appealing to healthcare staff focused on the medical results, since it is related to their intrinsic driving force to practice.

This model has been criticised as a conceptual management model, since it has been negatively associated with conflicts and complications in the organising of the new university hospital in Stockholm (Öhrming, 2017, pp 67-71; Grafström *et al.,* 2021, p 310). One reason might be the superficial and ambiguous understanding of the model. Value can be interpreted diversely, from a pure financial concept to the value of the service delivery (Fredriksson *et al*., 2015). Healthcare organisations implementing VBHC will benefit from focus on value for patients and is described as a key towards engagement in improvement work (Nilsson *et al.,* 2017).

Two more university hospitals in Sweden decided to use VBHC as their main strategies, more with emphasis on standardised care processes, patient involvement and not primarily organisational structures. Three different hospitals and three different approaches. The approach closest to the operations with a change agent among the physicians is described as the most prosperous (Krohwinkel *et al.,* 2019). However, the Swedish Agency for Health Technology Assessment (SBU) suggests in a systematic review that research on VBHC is limited. Existing research often has shortcomings and shows great variation in how VBHC has been applied (SBU, 2018).

In Sweden VBHC has been used for quality improvement with patient involvement and focus on outcomes in terms of patient reported outcome measures (PROMS) and patient reported experience measures (PREMS) in connection with the Swedish Quality Registers, more than for cost control and competition (Nilsson *et al.,* 2017; Krohwinkel *et al.,* 2019). Porter's approach is, though, oriented towards the market and price regulatory mechanism (Porter and Olmstedt Teisberg, 2006).

2.2.2 What comes next?

In public reforms there has been a push of the public organisations towards the private sector-like methods in NPM, followed by VBHC and other value-based approaches to facilitate change. Now a trend in the opposite direction is described with stability as one of the cornerstones (Bringselius and Thomasson, 2017). This is referred to as NWS, *New Weberian State* connecting back to Weberian theory on consistency, legality and transparency (Pollitt and Bouckaert, 2011). It refers to that change is not always what is wanted. It has to be balanced between different values to build legitimacy and confidence (Brunsson, 1993; Bringselius and Thomasson, 2017). The relation between NWS and NPM is described as seeking stability respectively seeking change as primary focus. Recruitment, standardisation of work and public sector values are suggested as the three central mechanisms in the NWS (Bringselius and Thomasson, 2017).

2.2.2.1 Public Value Management

Studies suggest that a new management paradigm based on partnership and networks is emerging. It is called *Public Value Management* (PVM), *New Public Governance* or *Networked Governance* in the literature (Stoker, 2016; Hyndman and Liguori, 2016; Krohwinkel *et al*., 2019). It is considered to be a reaction to the malfunction of the predecessors from the NPM paradigm. In this paradigm the third logic will be the most dominant and important, network and trust (Adler, 2001; Bringselius, 2020).

Even if scholars have many different perspectives and definitions of value, a common factor is that this paradigm is connected to modernity, where knowledge and professionalism are of growing importance in a society, and at the same time market and bureaucracy have been shown to have a limited effect. Freidson (2001) argues the professional component as the third logic for the balance in the model, beside market and bureaucracy. Adler (2001) and Freidson (2001) describe the balance as the important factor. The difference from institutional theory is that the logics are not competitive, however should be balanced (SOU 2018:38, p 22). Traditional professionalism's dark side as autonomous collectives without transparency has been replaced by an accountability-based new professionalism. This is a described by Light (2010) as a "*shift from a training-and-licence based model on accountability to a competency/performance model of professional work in teams".*

2.2.2.2 Trust-based Management

The Swedish government's response to the criticism of NPM was to establish a governmental inquiry, the trust delegation, to explore the possibilities with trust-based management. In a press release this is announced in 2015 as: "*New governance beyond New Public Management*" with the message that the government starts to develop research-guided new management models to offer a larger decision space for employees in the public sector. The professional knowledge and ethos will give guidance and the increased administrative burden must be reversed.

Trust is the coordination mechanism for the corresponding logic networking, one of the three ideal-typical forms of organisation described by Adler (2001). Trust-based management is an interplay between culture, governance and organisation. The aim is to improve quality in tax financed services by an increased decision space for employees in interaction with citizens (SOU 2018:38, p 61). The theory of philosophy of trust is based on the classic X- and Y-theory in organisational research, where the Y-theory is based on a responsible and helpful human nature (McGregor, 1960).

There are many definitions of *trust*, some straightforward and others more complicated. Mayer et al (1995) has presented a conceptual framework of the will to make yourself vulnerable for another party's actions by trustworthiness, based on the ability and skills to have the influence, integrity accepted and resilient over time and benevolence, which means the will to help and support the party that shows trust even at the expense of you own interest or without any reward. In an empirical study these three factors (ability, integrity and benevolence) have been found to be important mediators between trust and performance

(Mayer and Davis, 1999). This, in combination with trust propensity and risk taking, is considered as the foundation of the trust generating process (SOU 2018:38, p 65). In summary, trust-based management can be described as a management philosophy, where we choose to trust employees in the core business to have the knowledge, judgement and will to do their job without detailed control in the best way, and that the organisation should support to fulfil the needs identified in the interaction between these employees and the citizens (Bringselius, 2020, p 21). The differences between control-based management and trust-based management have been described by Bringselius and are illustrated in Table I.

Table I. Differences control-based and trust-based management (translated from Bringselius, 2020, p 71)

	Control-based	**Trust-based**
Key factors	Incentives, control, authority, regulation, formalities	Motivation, psychological security, community, meaning, informal relations
Focus	Central control	Needs and conditions in the core business
Responsibilities	Narrow, personal	Broad, collaborative
Main means of achieving goals	Compliance with decisions and formal processes	Peer learning and mutual adaptation
View of organisation	Detailed plans	Complex and dynamic network
Evaluation of accomplishment	Remote from measurements, focus on deviations	Continuous dialogue for support and promotion
Governance	Central	Collaborative

The governmental inquiry was accomplished in 2020 and in the official report seven guiding principles for analysing, planning and practicing were suggested: 1) strive to trust your collaborators with positive expectations, 2) citizens' perceptions and knowledge should be in focus and interpret what they value, 3) strive for openness and shared information, appreciate dissentient and have respect for criticism, 4) ensure qualified professional, administrative and psychosocial support in core business, 5) delegate authority and co-determination in combination with clear mandate and right conditions, 6) encourage all parts in the chain of command to an active and collaborative responsibility for the entirety and collaboration over borders and 7) reward knowledge development, learning and a practice based on research and proven experience (SOU 2018:38, p 67-70). These seven guiding principles are based on a trustful dialogue, appropriateness in setting goals and rules for accountability and psychological safety (Bringselius, 2018b).

O'Flynn (2007) describes the dominant focus for managers in the paradigm of public value management as a shift from results to relationships. This shift goes from economic framing to broader outcomes, with trust as a foundation. The approach and accountability move away from narrow contracts towards more complex and pragmatic systems. Managers need to operate effectively in a complex environment with tolerance for ambiguity and uncertainty (O'Flynn, 2007). Trust in employees to participate in organisational change will both benefit them personally as well as the organisation (Nielsen, 2020).

2.3 THEORETICAL PERSPECTIVES ON DECENTRALISATION

2.3.1 What is decentralisation?

This question does not have any easy answer. This is one of the challenges when studying decentralisation, both regarding concepts, definitions and how to establish an effect attributed to this (Peckham *et al.,* 2005). Definitions of decentralisation have flourished following World War II. The meaning varies from perspective, context, cultural influences, language, field of research and many other possible factors (Reichard and Borgonovi, 2007; Dubois and Fattore, 2009). In many studies the definition is completely left out, assuming its common knowledge (Pollit, 2005). The breadth of the literature on decentralisation is huge and found in many theories in different disciplines, with few if any links, which is challenging (Peckham *et al.,* 2005).

The idea of decentralisation as something more agile and accountable than larger bodies, can be traced back to the founder of the bureaucratic model, Max Weber, who wrote: "*The only alternative to bureaucracy is a return to small-scale organisation*" (Weber, 1947). The dynamics of decentralisation can be either understood as a state or a process, the content is generally described with words like power, authority, responsibility and accountability, and the receiving entity can be referred to more or less specific, but normally encompasses a higher and a lower entity (Bossert, 1998; Peckham *et al*., 2005; Saltman *et al.,* 2007; Dubois and Fattore, 2009).

Typically, the definition refers to transfer of authority and power from higher to lower levels or, even shorter, from centre to periphery (Rondinelli *et al*., 1983; Mills, 1994). However, it can be understood in multiple ways, serve different purposes, and has to be defined in the context. Is it fiscal? Operational? Administrative? Political? Horizontal? Vertical? (Saltman *et al.,* 2007; Dubois and Fattore, 2009).

A widely used definition is by Rondinelli et al (1983), who suggests a division into four categories: *delegation*, as transfer of responsibility to a lower organisational level, *deconcentration* to a lower administrative level, *devolution*, transfer of authority to a lower political level and finally, *privatisation* when something moves from public to private ownership. Despite this, Dubois and Fattore (2009) show that even these terms are used with different interpretations. This typology is challenged by other researchers, who consider devolution and privatization as separated concepts from decentralisation (Sherwood, 1969; Collins and Green, 1994). Silent decentralisation is a phenomenon described as an informal process of shift of power, such as network changes, initiative shifts without any formal reform or actively expressed policy (Dubois and Fattore, 2009).

2.3.2 Outcomes of decentralisation

Findings from research are contradictory. Several positive outcomes showed in some studies, are reported as negative in others. Contextual differences and other factors make the comparisons and attributions ambiguous. Peckham (2007) describes centralisation and decentralisation as complementary processes, but the knowledge base on weight of different factors does not give any clear answers (Peckham *et al.,* 2005).

When summarising the literature, decentralisation is said to improve control and accountability, increase staff motivation and satisfaction, stimulate local innovations and by that opportunities for local adjustments, and ultimately lead to better performance (Aas, 1997; Peckham *et al*., 2005; Lee and McKee, 2015; Cobos Munoz *et al.,* 2017). Inequality in funding or health outcomes, negative influence from strong local interest groups and the risk to lose the positive effects with central planning are arguments against decentralisation (Peckham *et al.,* 2005; Sumah *et al.,* 2016; Evans *et al.,* 2013).

Decentralisation might be a threat to equity. Coordination is an important focus and the central level has to guide local units not to sub-optimise the overall capacity of the organisation. Incentives have to reward not only unit-specific performance but also pay attention to coordination and overall performance (Wyss and Lorenz, 2000). Implementation of uniform solutions and get them to sustain is a challenge if a central function is too scarce. Finally, smaller decentralised organisational units might find it easier to align individual and organisational self-interest and promote concerted action among staff (Peckham *et al.,* 2005).

2.3.3 Types of research on decentralisation

There is a large amount of theoretical and empirical research as well as commentary about decentralisation within national government and national health systems in high-, low- and middle- income countries. Most consider political administrative decentralisation of different types: the two most common being transferring responsibilities for government services from central ministries to local authorities and privatization (Vrangbaek, 2007).

There is limited empirical research on decentralisation within regional integrated health systems, for example into Swedish public regional health systems or USA private regional health systems such as Kaiser Permanente. Even less research has been carried out into decentralisation within organisations that manage primary and/or community healthcare, such as some NHS primary and community trusts and some Swedish provider organisations. There is some limited research into decentralisation in hospitals. Research is also limited into management decentralisation within other service delivery organisations for non-healthcare public and commercial services and for manufacturing industry.

There is a growing body of one type of decentralisation research because it is a relevant strategy to address the challenges noted earlier: this is *"micro-decentralisation",* which is a term used to include clinical- and management delegation, role substitution, and local workforce redesign which may or may not include forming teams (Bohmer and Imison, 2013; Laurant *et al.,* 2014). This research is not considered in the bulk of the decentralisation literature which describes *"macro-decentralisation"* at a national level (Saltman *et al*., 2007). Overall, the research that does exist can be categorised as conceptual or empirical. Both conceptual and empirical research can be typified further as either descriptive studies or intervention studies. Evaluations often do not provide high certainty that observed outcomes are attributable to the decentralisation and not due to something else: there are challenges using research designs effectively to control for confounders for studying national

system decentralisations over time (Peckham *et al.,* 2005; Sreeramareddy and Sathyanarayana, 2013).

2.3.4 Concepts and frameworks relevant to decentralisation

There are a number of studies that provide general concepts and frameworks useful for researchers for comparing the degree of centralisation and decentralisation in healthcare service delivery organisations (termed *"professional bureaucracies"* by Mintzberg 1979). These frameworks can be used for research descriptions, evaluations and comparisons of decentralisation interventions. They can be used by managers planning or assessing decentralisation to check how similar and different an example is to their organisation (i.e. decentralisation in a Kaiser Permanente Health System Region compared to a Swedish regional health system). A smaller number of studies operationalised these concepts as measures or specifications that other researchers could use in empirical research carried out into decentralisation in another health system or PCHc SDO (i.e. a measure of decentralisation (Bossert and Mitchel, 2011) or of integration (Shortell *et al.,* 2000).

2.3.4.1 The concept of a "primary and/or community healthcare service providing organisation"

Some research describes service-providing organisation management divisions that include different primary healthcare providers and/or community healthcare services (PCHc SDOs). These include UK NHS community and primary healthcare trusts, some USA accountable healthcare organisations (Shortell *et al*., 2014), and divisions within some Nordic and Southern Europe NHS organisations. The other main organisational division model is for the management of primary and community health services to be combined with hospital management in one integrated care organisation (Øvretveit *et al*., 2010) or in geographical divisions or networks combining primary care providers with a local hospital (Shortell *et al.,* 2000).

2.3.4.2 Concepts and frameworks

Concepts and frameworks relevant for describing, comparing, designing or explaining decentralisation in service delivery organisations are discovered in diverse literatures. These included:

- Decentralisation and centralisation of policy, funding and management (Flynn, 2014),
- Decentralisation typologies (notably, Rondinelli *et al*., 1983; Vrangbaek, 2007; Dubois and Fattore, 2009),
- Decision space (Bossert 1998; Bossert and Mitchell, 2011; Roman *et al*., 2017; Liwanag and Wyss, 2019),
- Levels of work or stratified systems theory (Rowbottom and Billis, 1977; Jaques 1989; Gould, 1986),
- Managerial delegation (Jaques, 1989), and professional delegation (i.e. Bohmer, 2009),

- Integration methods or mechanisms for integrating separate or decentralised practitioners or service delivery units, or for integrating purchasing and service delivery (i.e. Ham *et al*., 2011; Øvretveit *et al*., 2010).

2.3.4.3 Theory of how decentralisation might produce outcomes

There are few studies that provide comprehensive models or theories that could be adapted to understand how decentralisation in PCHc SDOs could produce certain outcomes. One study presents a logic model of national health system decentralisation, listing types of decentralisation changes, the immediate outcomes, and then intermediate outcomes and finally long-term population health outcome that could follow from the earlier outcomes and the changes made through a decentralisation intervention (Sreeramareddy and Sathyanarayana, 2013).

A second study provides a similar type of logic model but is more specific and suited to considering decentralisation and its outcomes in a PCH SDO (Hutchinson *et al.,* 2004). A third theory builds on earlier work on decision space (Bossert, 1998) describing how actions or influences affect the ability of personnel to use any delegated authority to make decisions, which could then lead to cost, quality and health outcomes (Bossert and Mitchell, 2011). This latter research suggests that delegating authority alone may not be sufficient for managers effectively to exercise their new authority, there needs to be balance between authority, accountability and supporting institutional capacity.

2.3.5 Assessing and comparing decentralisation

Two conceptual frameworks are relevant for specifying changes in the decision-making authority of managers in service providing organisations, so as to more precisely describe one aspect of a decentralisation. These are the "decision space/capacity/accountability" model and the "stratified systems theory": they are related to each other and both have been tested in research.

The "decision space/capacity/accountability" model is discussed in review by Roman et al (2017) and operationalised in four empirical studies that applied this concept (Bossert and Beauvais, 2002; Bossert and Mitchel, 2011; Mohammed *et al.,* 2015; Liwanag and Wyss, 2018 and 2019). For example, Bossert and Mitchel (2011) used a survey questionnaire to gather data from managers at different levels. Questions were asked about different features of decision space, as well as about two other features of the model: capacities and accountability. Four questions were asked of executive district officers for health, to assess capacities in strategic and operational planning: "*whether the respondent had district strategic/annual health plans; representatives of other sectors participated in formulating those plans; mid- or end-of-year assessments were made on achievement of operational plan activities; and planning decisions were made using information on diseases and utilization of facilities".* Their answers were scored by respondents as "narrow/low", "medium" and "wide" using a scoring tool. For data analysis, two sets of "composite indicators" of which were generated from the individual questionnaire items: 1) summary scores of i) decision space, ii) capacity and iii) accountability, calculated for each respondent within a given

function, 2) then across all functions (i.e. overall indicators of each of these three dimensions of decentralisation).

The second frameworks for specifying changes in the decision-making authority and accountability is “levels of work” or “stratified systems theory” (Rowbottom and Billis, 1977; Jaques, 1976 and 1989; Gould, 1986). This theory conceptualises work as the exercise of discretion within limits and proposes that bureaucracies organise work through successively higher “levels of work”: “level 1” work is where work can be prescribed and carried out according to standards, with tight limits to the discretion exercised, for example the work of a nursing aid. “Level 2” is situational response work, such as professional work, undertaken within wider limits to discretion. “Level 3” is work to create systematic responses to situations and involves setting standards for and managing staff performing level 2. “Level 4” is strategic planning with wider discretion and longer time spans before the manager gets feedback about how effective their decisions were for meeting needs in the future.

3 RATIONALE, AIM AND RESEARCH QUESTIONS

3.1 RATIONALE

There is still very limited empirical research on the effects of decentralisation on healthcare delivery organisations, though a positive relationship is reported in the scientific literature and by many leaders. But there could also be negative effects, as risk for inequity and less coordination for most needed groups.

3.2 AIM AND RESEARCH QUESTIONS

The overarching aim of this study is to explore decentralisation of management authority and accountability in a public healthcare provider organisation in primary and community care, and to assess its impact on organisational outcomes and how managers perceive the model. To reach this aim four studies are performed with the following objectives and research questions:

- What is the impact on decentralisation on performance?
    - as evidenced by the literature (Study I)
    - as understood and perceived by clinical directors (Study III)
- How is a decentralised management model constructed and implemented
    - as described by a senior management team (Study II)
    - and how is this corroborated by the scientific literature (Study II)
- How is an emergency response met in a decentralised organisation
    - as in the SARS-CoV-2 (Covid.19) pandemic outbreak (Study IV)

4 STUDY DESIGN, SETTING AND METHODS

4.1 EMPIRICAL SETTING

4.1.1 Healthcare in Sweden

The Swedish health care system is a decentralised system with a regulating national legislation for policy, but regional independent bodies for provision (Anell *et al.,* 2012). The Health Care Act is the national legislation that regulates the responsibility of the regional bodies to provide health care to ensure human dignity, equity and cost effectiveness (Anell *et al.,* 2012).

The 21 regions are self-governing bodies elected by vote every fourth year at the same time as the election to the national parliament (Saltman, 2004). The regions can levy tax from the citizens to finance health care. The regional organisational models are different. The aspect that the regions run their own services and at the same time contract private health care providers can be more or less distinctly organised in purchaser and provider models. In a purchaser and provider system the policy and goals are set by the purchaser, based on population needs, and turned into tenders and contracts with providers. The provision is taken care of by service delivery organisations, either owned by the region or private providers. However, the providers view on what should be done may differ from the purchaser's.

4.1.2 Region Stockholm

The history of the counties date all the way back to the Viking Age and Middle Ages, when Sweden consisted of a number of self-governing "countries", initially loosely connected under a king, who incrementally gained power. In 1634 the crown was strong and established the counties, each with a personal representative of the king, a governor, to control the area. However, in 1862 The Municipal Ordinance, a decentralisation reform, stipulated that each county should have an independent popularly elected council. The larger cities did not at the time belong to the county council. The larger Stockholm area grew fast and in 1971, after some years of collaboration, the city and county were united in the Stockholm County Council. Run by the General Assembly of the County Council, elected every fourth year in popular vote, and responsible for healthcare, public transport and culture. In 2019 the County Council got extended responsibility with regional development and changed name to Region Stockholm (Regionarkivet, 2021).

The Stockholm region is the largest region of the 21 self-governing regions in Sweden. The region has the right to levy tax with a yearly turnover of around 11 billion Euros, and around 45 000 employees. The healthcare budget of the region is around 7 billion Euros. The region is organised in a political organisation, served by civil servants. The overarching decision-making is held together by the General Assembly and the Board of the Region.

Healthcare in Stockholm is organised in a purchaser-provider model since 1992. In 1999 there was an organisational split between the publicly owned provider organisations and the

purchasers' office. The purchaser is organised with a political board, responsible for tenders and contracts with healthcare providers, private and the public-owned by the region. The providers in the region are organised in hospitals and a primary and community healthcare organisation (Stockholm Healthcare Services, SLSO) with their own non-political executive boards, but elected by the General Assembly of the region. Power for decision-making is transferred to the executive boards by political decisions in budgets or owner directives. The executive boards delegate authority to the chief executive officers, and in turn a structure of delegation is set up for managers in the organisation.

There are three acute hospitals, one integrated acute and community care hospital in the northern part of the region, one eye specialist hospital and one university hospital, beside SLSO, that are owned by the region. There is one contracted private acute hospital and the rest of the private providers are in elective in-patient care, geriatrics or mainly private out-patient care in specialist or primary care. Around 1/3 of all healthcare is run by private providers and 2/3 are public and owned by the region. The university hospital is 1/3, SLSO 1/3, and the acute hospitals are 1/3 of the healthcare owned by the region (sll.se).

4.1.3 Study setting - Stockholm Health Care Services, SLSO

SLSO is one example of a PCHc SDO, and the case studied in this thesis - covering a population of 2,4 million. The yearly revenue is 1,3 billion Euros with around 12 500 employees (600 specialist physicians) in 120 clinics or health care centres divided into around 700 units. This is one of the largest public healthcare service delivery organisations in Sweden (Figure 1).

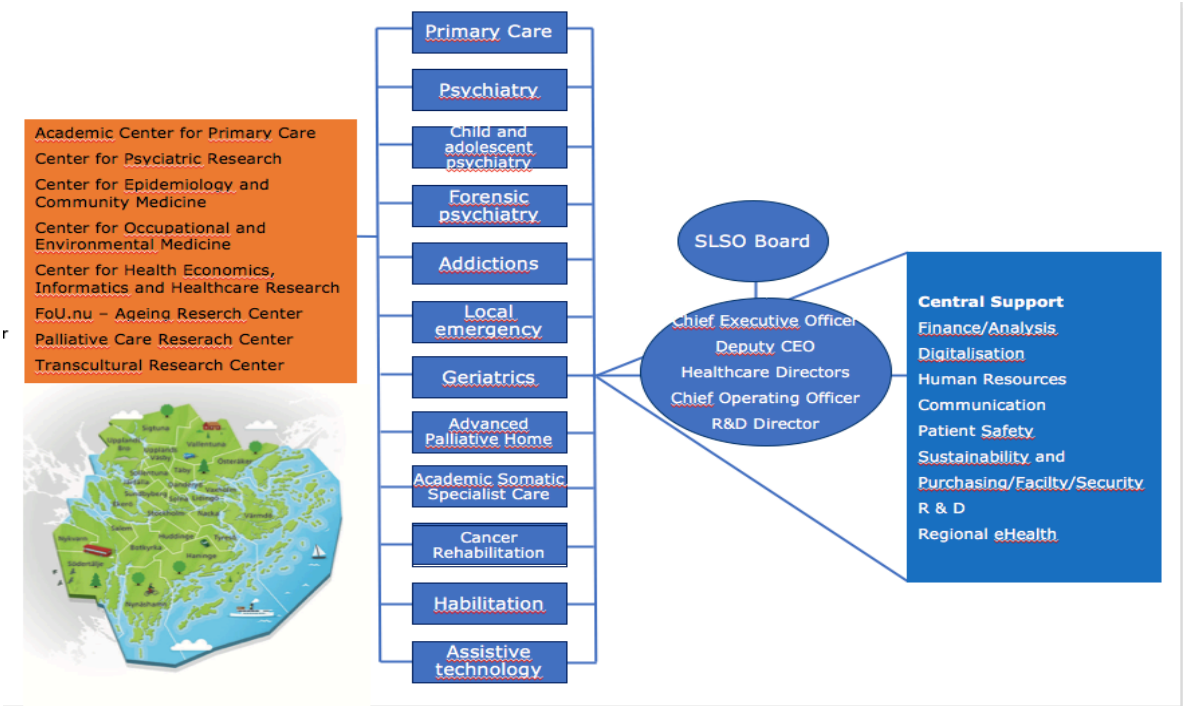

Figure 1. Organisational structure Stockholm Healthcare Services, SLSO

The regional health authority (Region Stockholm) manages its hospitals as separate entities but integrated 2004 all primary and community services into one provider organisation (SLSO), including all public services for primary care, geriatric care, local emergency services, mental health care, assistive technology, habiliation, some special somatic care in out-patient clinic and research centers in those areas in cooperation with Karolinska institutet.

Stockholm Health Care Services was established in 2004 as a merger of three public service delivery organisations in the region (North, Middle and South Provider District) after a decision in the General Assembly. The three public provider organisations, that constituted the new organization, had been in operation since the time of the split between the purchaser and provider in 1999/2000. They had developed somewhat differently in organisational and cultural perspective. One of the organisations had a flat structure and a decentralised managerial approach, and the other two a more traditional hierarchical structure with more limited decision space for the clinical directors. The elected non-political board of the new SLSO organisation had owner directives to act "business-like", now reformulated into regional regulations, within the limits of the regulations of a public healthcare organisation.

The chief executive officer was appointed by the regional board and started to build the new organisational structure and culture. The directions were clear from the start to establish a decentralised management model, like the one used in one of the three former provider organisations, that had been shown to be successful both in employee and patient satisfaction, financial terms and in improvement collaboratives. The leadership philosophy was communicated in three "guiding stars": decisions should be made close to the patient, far-reaching delegated authority and accountability in balance, and patient's focus. The foundation was the belief that every person wants and can contribute to "do good". The leading questions were: who are we here for? Where shall we go? A shared vision was established as "healthcare close to you when and where you need it" based on the values: patient's focus, equal values for all, and job satisfaction.

The 120 clinical directors and 650 first line managers are together with SLSO management team responsible for the development of the organisational structure and culture in interaction with their employees. An overview of the organisational process since 2004 aiming for decentralisation can be described as in Figure 2.

Figure 2. An overview of the organisational process in SLSO

The organisational process is a continuous, iterative, process with perpetual interactions between structure, culture and outcomes. However, some steps in the development follow a chronological order and some goes back and forth.

The vision and values were a starting point, established with all managers, have been revised from time to time, but is a foundation. The structure in smaller, so called profit units, was set from the second year when some organisational levels were abolished and monitoring systems could be introduced, managers were trained and collaboration over unit borders started incrementally. In short, the delegated authority can be described, as the authority delegated from the General Assembly to the executive board of SLSO and from them to the CEO, further delegated in full possible extent to the clinical directors, no matter of size of operations, who are the closest managers to the patient. This decentralised management model has been called "enterprise within the enterprise". The manager at the "smaller enterprise" (the clinic or the health centre) is given a large decision space but is also a part of the "larger enterprise" (SLSO) to ensure shared organisational capabilities.

The organisation is built flat in two levels, the SLSO management level (the senior management) and the clinical directors level both with clear accountability. In 2016 a try to free time for healthcare, research and development at the clinical level, and to decrease the local administrative burden an organisational change was made by introducing a division level. The aim was to relieve administration at local level in favour of more time for patients. This was not reached. The division level was abolished after extensive follow up, of which these studies are a part, in May 2018 and November 2019.

The organisation operates in a line structure with highly delegated authorities to the clinical directors, who are the managers closest to the patients. The clinical directors are interacting in management teams with regularly meetings led by an SLSO senior manager, who is a member in the SLSO management team. All clinical directors, sometimes with their management teams, meet the CEO and senior managers at "top managers forum" each semester. All the 650 first line managers meet the CEO and senior managers once a year at leadership days. These occasions are prone to managerial cultural themes and shared experiences with a specific aim to develop the common capabilities of the organisation.

4.1.1 Pandemic outbreak in Stockholm

The pandemic outbreak of SARS-CoV-2 (Covid-19) and the management of the emergency response in SLSO has been described in a rapid implementation research case study not included in this thesis (Ohrling *et al.,* 2020). The emergency response to the demand for care for COVID-19 and non-COVID-19 patients during March to July 2020, and preparations for the months to follow was described. SLSO made many changes quickly. One change included coordinating non-emergency private health-care services, following the local government emergency directive to do so. It is possible that the fast and effective response by management and services in primary and community health care reduced infection and hospital demand, which contributed to a lower mortality than otherwise expected.

Since the pandemic outbreak with the first wave from March to July 2020, the second wave out-break was from October 2020 to January 2021, directly followed by a third wave from February, without coming out clear from the second wave as from the first. In Figure 3 the demand for inpatient care and ICU care are shown. Under the first wave 25 % of all inpatient care took place in geriatrics, coordinated and partly operated by SLSO, and under the second and third waves periods with up to 45 %. The primary care and local emergency centres have been organised in clusters and infection nodes, coordinated by SLSO. Advanced and Palliative Home Care had special assignments to support in all the more than 380 elderly care homes run by the municipalities or contracted private providers with more than 15 000 residents, which were hit hard in the first wave. The operative coordination to manage the emergency response in the regional healthcare outside the hospitals, given as a formal assignment to SLSO, was directed to all private and public providers in 217 primary health care centres, 10 local emergency centres, 12 geriatric hospitals with nearly 1 000 beds, more than 1 000 beds in mental health services, 3 100 patients in advanced home care, 250 beds in palliative care, and medical services to the elderly care homes and support to the home care services in the 26 municipalities in the region. Infectious tracing units, mobile testing and vaccination centres are other special assignments. Operative collaboration with the hospitals to establish balance and flow to secure total capacity was set up on a daily basis. Communication and cooperation with the municipalities and the County Administrative Board were important, as well with the regional emergency organisation in Region Stockholm.

In the second and third wave the number of non-covid patients was much higher in comparison to the first, in combination with challenges in staffing and resilience, which have made the pressure on healthcare increasing along the pandemic. The pandemic was an unpredictable and unexpected event. In Study IV the SLSO emergency response was explored, which is of special interest because an emergency response build on principles that could be considered to be in conflict with a decentralised organisation.

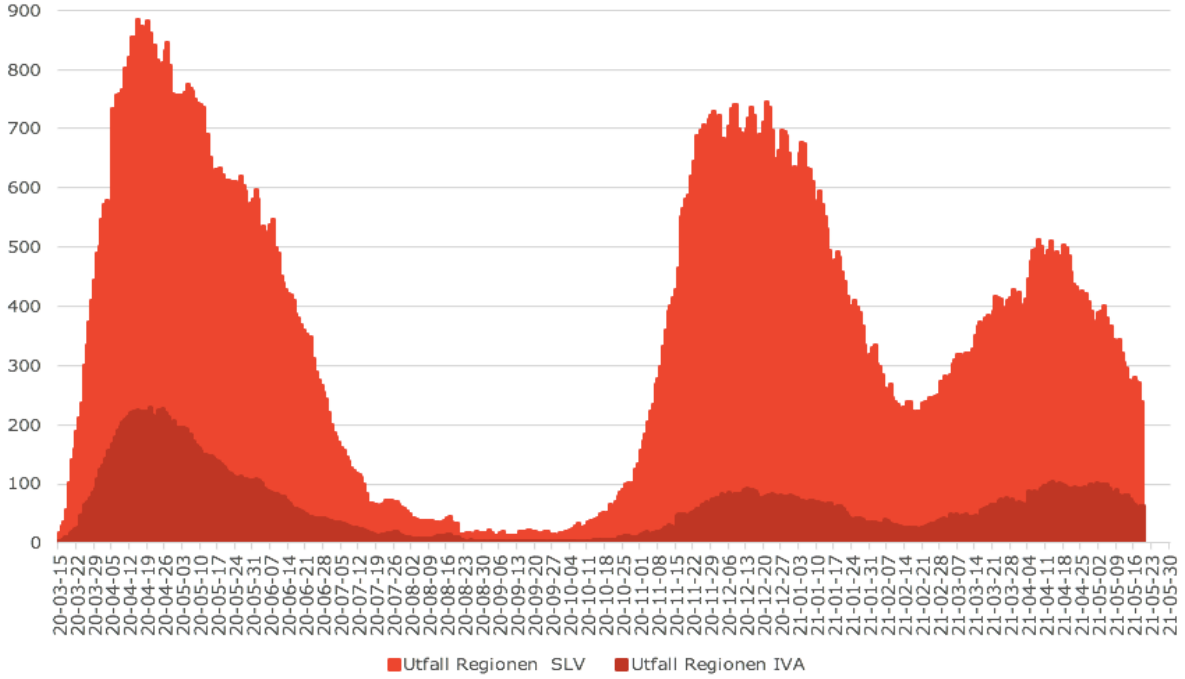

Figure 3. Number of inpatients (red) and ICU (dark red) during first, second and third wave in Stockholm

4.2 OVERVIEW OF THE STUDIES

The four studies in this thesis are outlined in Table III. Study I was a scoping review to establish a firm knowledge of the research field, and to make a synthesis of the available frameworks and models, to be used for the analysis of the empirical data. The revised framework from study I was used in study III and IV. In study II a logic modelling and *a priori* logic analysis was made of the management model, which was followed by *a posteriori* analysis of managers' perception of the management model in study III. Study IV drew from the findings in study I, II and III.

Table II. Overview of the studies in the thesis

	Study I	Study II	Study III	Study IV
Aim	To explore decentralisation in healthcare service delivery organisations, and synthesis of frameworks for further analytical use in empirical studies	To study construction and implementation and the compliance with evidence in the scientific literature of a decentralised management model in healthcare service delivery	To study managers' perception of the decentralised management model	To study managers' emergency response in the SARS-CoV 2 pandemic outbreak
Research design	Scoping review following the PRISMA-ScR statement	Case study	Case study	Case study
Data collection	Systematic search of databases and additional records according to pre-defined inclusion and exclusion criteria	Individual interviews (n = 24) Balanced score card data Documents		Individual interviews (n=25) Free text answers in repeated surveys (n=108) Documents
Data analysis	Thematic content analysis	Logic modelling Logic analysis	Directed content analysis Mixed methods	Directed content analysis
Data collection – time periods covered	Time span of articles 1990-2019	February-September 2018 (senior managers)	February-September 2018 (senior managers) October-November 2018 (clinical directors)	Interviews May-June 2020 (emergency team) Free text answers in surveys March-June 2020 (clinical directors)

4.3 THEORETICAL FRAMEWORKS APPLIED IN THE THESIS

Four frameworks for analysis have been used in this thesis. The first is the PRISMA-ScR statement used for the analysis in the scoping review in study I. This will be described in 4.4.1. The analysis in the empirical studies (study II, III and IV) were guided by three theoretical frameworks described as follows.

4.3.1 Dynamic effectiveness conceptual model

An organisation needs to be flexible and dynamic to meet with unexpected and unpredictable events. Abrahamsson and Brege (2005) define dynamic effectiveness "*how fast and well a company can go from one strategic positioning and productivity frontier to another*" (p 84). Their conceptual model for dynamic effectiveness is based on a case study from a multinational manufacturing company, but its elements could be relevant to any organisation. The model shows four dimensions of effectiveness (dynamic vs static and strategic vs operational) and four different states, "corners", in which an organisation can be positioned (Figure 4).

In the rationalisation corner the operational capabilities are in focus to increase the operational effectiveness, strategic capabilities are in focus in the positioning corner, the dynamic corner is characterised with a high operational effectiveness that reinforce the positioning, and in optimisation corner the rationalisation and positioning are integrated in an environment that is stable and not changing (2005, p 103). Dynamic effectiveness is the combination of high operational as well as strategic effectiveness, and the operational effectiveness paves the way for strategic effectiveness.

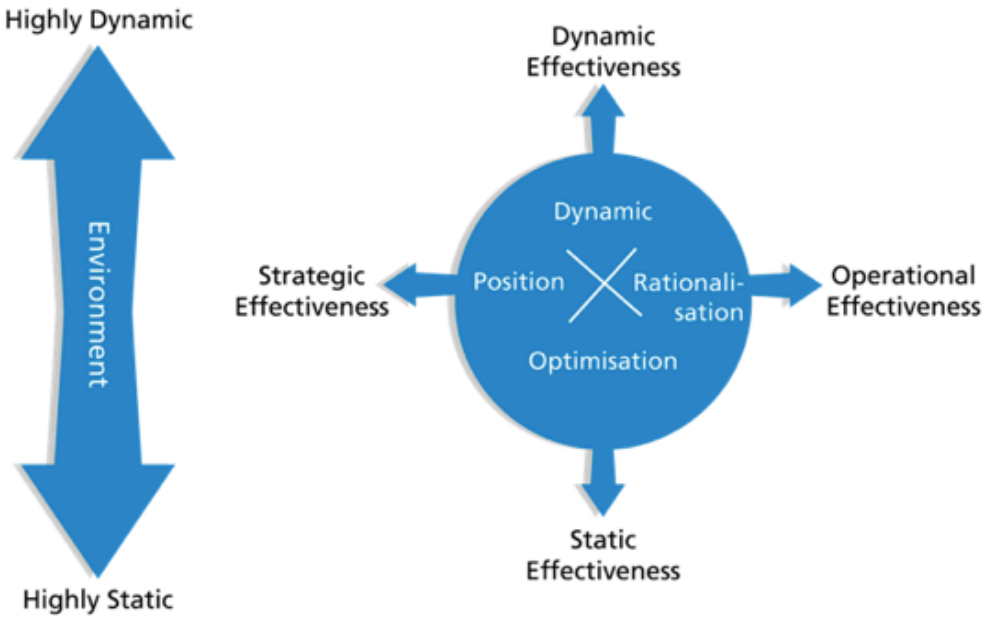

Figure 4. Adapted from Abrahamsson and Brege (2005, p 103) conceptual model for dynamic effectiveness. The four dimension and four states/corners in relation to the environment

The challenge according to Abrahamsson and Brege is to stay in the dynamic corner, once entered there. Increased operational effectiveness should be considered a strategic move of same importance and must go both ways, i. e. the operational effectiveness will drive new strategic positions that can increase the operational effectiveness even more.

4.3.2 Dynamic capabilities framework

The concept of dynamic capabilities comes from a need to re-evaluate a static resource-based framework, to understand the competitive advantage in the business sector as a complement

or contrast to the traditional emphasis on strategy and positioning (Porter, 1979). Teece et al (1997) describe a framework that encompasses more than ownership for assets required to reach sustainable advantages. Instead of resource-based this framework is efficiency-based, which focuses on how capabilities are used to gain new positions (Teece, 1997). The focus is competitive strategy and the framework illustrates essential elements of interest for healthcare to understand how both internal and external resources must be both explored and exploited to new positioning (O'Reilly and Tushman, 2008).

Dynamic capabilities can be defined as: "*the antecedent organisational and strategic routines by which managers alter their resource base—acquire and shed resources, integrate them together, and recombine them—to generate new value-creating strategies"* (Eisenhardt and Martin, 2000, p 1107). Teece et al (1997) use the definition: "*the ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments"* (p 516).

Dynamic capabilities are disaggregated into three categories, Figure 5. Sensing is scanning, creation, learning and shaping to understand rapidly changing conditions. Seizing is the ability to address these sensed conditions through new procedures, processes and services. Managing and reconfiguration comes after a successful identification of the situation and selection of procedures and designs. The concrete activities and actions constitute the micro-foundations of each category. A key to sustained effect is the ability to recombine, reconfigure and maintain necessary operational efficiency (Teece, 1997). The framework can be used to analyse what are the capabilities that constitute the micro-foundations, which are defined as concrete activities in the three capacities, that make the organisation dynamic (Teece, 2007).

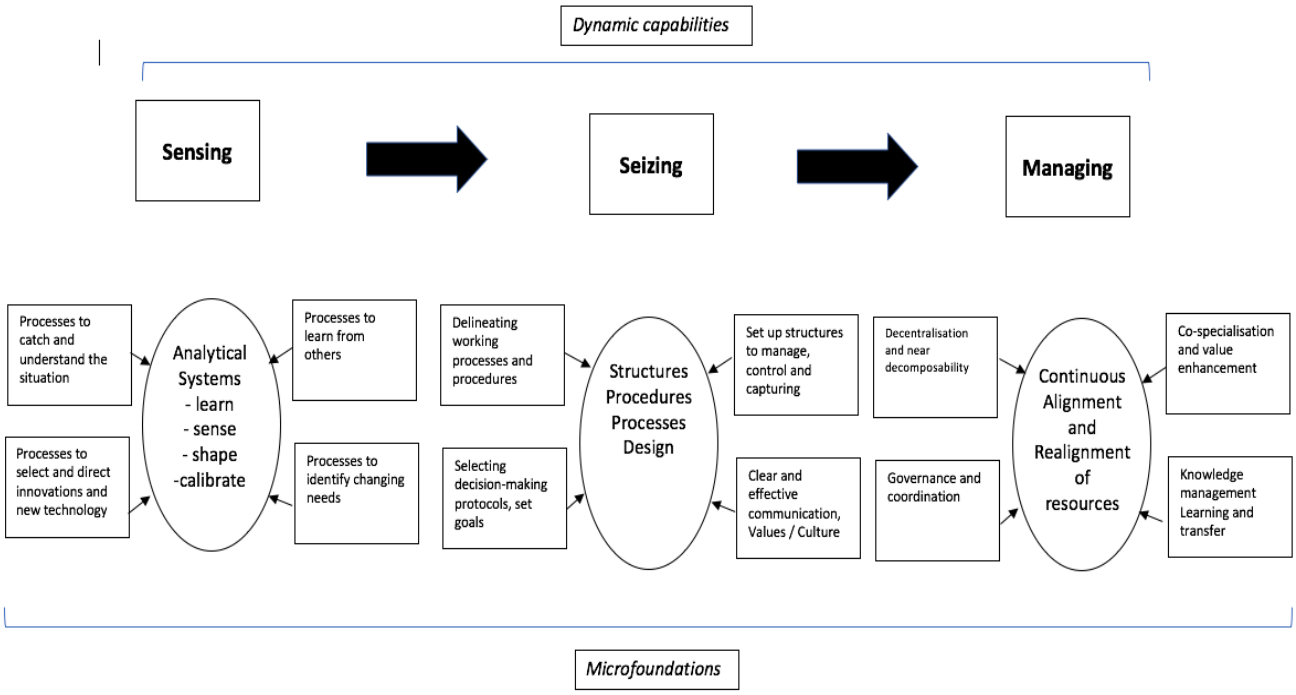

Figure 5. Foundations of dynamic capabilities adapted from Teece (1997)

4.3.3 Decision space analytical framework

Bossert decision space model is a conceptual framework to understand the relationship between decision space, institutional capacities and accountability. It is used to illustrate the interaction between the three dimensions of decentralisation, and their impact on organisational performance, as shown in Figure 6 (Bossert, 1998; Bossert and Mitchell, 2011; Ohrling *et al*, 2021a). Decision space in this model is defined by Bossert (1998) as "*the range of choice, or authority and responsibility, which decentralised organisations have been granted by central authorities to make decisions about or influence a range of functions or resource, by both formal and informal range of choice*", institutional capacities are defined as "*the ability of individuals, organisations or systems to perform appropriate functions effectively, efficiently and sustainably*" and accountability mechanisms are described "*to hold decision-makers responsible for both doing right thing and for doing it effectively…..to be operationalised to prevent abuses of power and to make decision-making more responsive to local needs*" (Bossert, 1998; Bossert and Mitchell, 2011).

The research literature supports that decision space is related to both the two other dimensions in decentralised systems (Roman *et al.,* 2017). Healthcare can be studied on national, regional, system or organisational levels. The framework is very wide and for use in service delivery organisations the dimensions must be adopted to the organisational level and defined accordingly to be analysed. Organisations also exist in different contexts and vary in size, structure and intended outcomes.

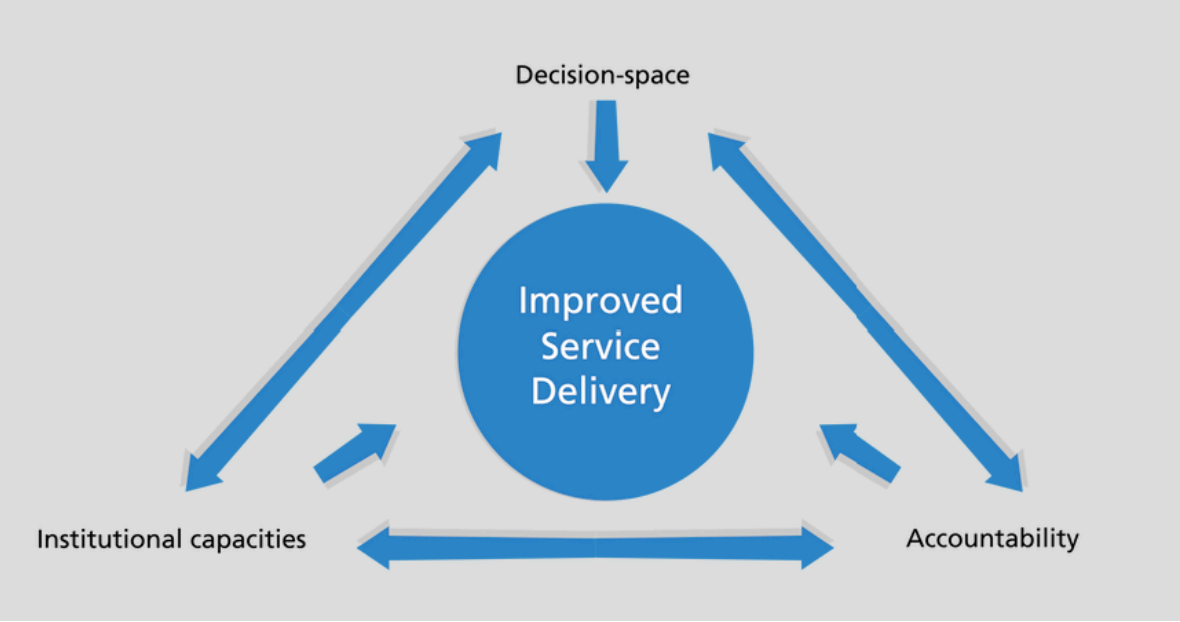

Figure 6. Decision space conceptual framework adapted from Bossert (Bossert and Mitchell, 2011, p 40)

4.4 STUDY DESIGNS

Two different study designs were used in this thesis. Study I is a review, which significantly differs from the design of the three empirical studies II, III and IV in the case study. However, the findings from the scoping review were used for the forthcoming analysis in the case study. The design of the three empirical studies was as a case study, but different methods were used, which will be presented in 4.6-4.8.

4.4.1 Scoping review (Study I)

The first study (Study I) was designed to find, summarise and synthesise published scientific studies to use for further research. The aim was to explore frameworks, concepts and models used to study decentralisation in healthcare service delivery organisations in primary and community healthcare. The intention was to use the synthesis in the analysis of empirical data in forthcoming studies.

Literature reviews can be designed with different methods. The various approaches have pros and cons, that should be considered (Grant and Booth, 2009). Scoping reviews are the method of choice, when a rigorous and transparent process for finding and synthesising primary research in a field with emerging evidence and scant knowledge is undertaken. It is ideal to identify research gaps and refine inquires because a range of study designs can be incorporated (Arksey and O'Malley, 2005; Levac *et al.,* 2010, Peters *et al*., 2017). A narrow scope in such a situation might lead to loss of relevant information.

The design was made to answer two research questions: Is there research into management decentralisation within healthcare delivery organisations that could help to address the challenges [for managers]? Might decentralisation provide conditions for and help the implementation of a range of other solutions and innovations?

Literature reviews can be regarded as aggregative or configurative reviews. The configurative reviews aim to generate theory and identify patterns from heterogenous data, in contrast to aggregative reviews that combine data to detect homogenous patterns to be tested (Gough et al., 2012). The review in my thesis is a configurative review.

4.4.2 Case study (Study II, III and IV)

The empirical studies (Study II, III, IV) in this thesis is done with an overall design as a single case study of a large decentralised service delivery organisation in a primary and community healthcare organisation (Crowe *et al.,* 2011).

The case study research design was considered most appropriate to inform the research questions. The case study method is described by Yin (2014, p 16) as:

> *"an empirical inquiry that investigates a contemporary phenomenon (the 'case') in depth and within its real-world context"*.

A case study can be approached in different ways. The epistemological approach for the case study method in this thesis can be described as interpretative, which involves understanding of managers' perception of a decentralised management model (Crowe *et al.,* 2011). In such an approach a critical and reflective perspective can be used in a wider sense to consider the influence of the environment (Doolin, 1998).

The case study method allows for studies of complex contemporary phenomena, where the contexts and events cannot be controlled as in an experimental situation (Eisenhardt, 1989; Yin, 2014). Moreover, data from different sources can be mixed, which enables explanation for possible causal links in the real-life intervention (Yin, 2014).

The organisation was selected because it adopted a decentralised management structure at its instigation in 2004, and has continually reviewed and revised the organisation, still preserving the delegated management authority of its managers. Clinical units ("result units" or "profit units") differ in terms of clinical area and size, thus creating a high degree of organisational diversity, beneficial to an organisational study.

The studies in this thesis aimed to explain any causal links between decentralisation and impact on performance from different perspectives by asking managers, about their experience and perceptions (Keen, 2006). The orientation of the management model of the case is defined towards decentralisation in a focused and consistent process ever since the start 2004. The characteristics as a large primary and community healthcare delivery organisation, with many different services, as a part of a hierarchical regional public service, makes this case unique as a *critical case* (Yin, 2014). The pandemic outbreak of SARS-CoV-2 (Covid-19) has also given an *extreme* and *unusual situation* to analyse the emergency response in a decentralised organisation (Yin, 2014). Moreover, the majority of senior managers including the author of this thesis was member of staff since start, which strengthen the longitudinal perspective of the in-depth analysis, considered of importance in organisational studies (Yin, 2014; Gummesson, 2000).

The empirical studies in the thesis are using logic modelling, logic analysis, qualitative and mixed methods, which together comprise the material for in-depth analysis within the case (Yin, 2014). The methods and frameworks for data collection and analysis will be described in 4.6-4.8.

4.5 STUDY I

4.5.1 Study design

The design is a scoping review following the PRISMA-ScR statement (Tricco *et al.,* 2018a, 2018b; Aromataris and Riitano, 2014; Peters *et al.,* 2017; Munn *et al.,* 2018) and selected articles analysed using qualitative content analysis (Hsieh and Shannon, 2005).

4.5.2 Data collection

In the scoping review (Study I) the literature search and selection followed the PRISMA-ScR (Preferred Reporting Items for Systematic reviews and Meta-Analysis - Extension for Scoping Reviews) guidance on reporting scoping reviews as well as other guides for conducting a search strategy and scoping were followed (Tricco *et al*., 2018a, 2018b; Aromataris and Riitano, 2014; Peters *et al.,* 2017).

Reproducibility, comprehensiveness and focus are important in the scoping review method, but also flexibility to ensure follow-up of 'relevant' ideas and findings found in the process. This is especially important in fields with emerging evidence or scant knowledge (Arksey and O'Malley, 2005). To increase reproducibility 'relevance' criteria to the two research questions were specified and operationalised in the inclusion and exclusion criteria for the review. This was done to avoid others using the same method to repeat the review with a different interpretation of 'relevance'.

This stipulates a rigorous approach in a five-step procedure: (1) planning, (2) exploratory, (3) successively focused search, (4) abstracting and (5) synthesising (Arksey and O'Malley, 2005; Colquhoun *et al.,* 2014; Aromataris and Munn, 2018). In the planning and exploratory steps several databases were used (PubMed, Web of Science, Google Scholar, CINAHL and PsycInfo) by two researchers independently for planning of the focused search. For the focused search PubMed was used and articles were collected with content for further analysis within this review, selected from the inclusion and exclusion criteria. The articles had to describe decentralisation in healthcare. In Appendix A search formulations are presented in detail. Further searches were then performed to identify other research that could also contribute to the analysis and answering the questions. Figure 5 shows the PRISMA flow diagram of the performed review (Tricco *et al.,* 2018a, 2018b).

4.5.3 Data analysis

The review was guided by the two research questions and the purpose. Sixty-three fulltext articles published between 1990 and 2019, were assessed for eligibility by two researchers separately (the first and second author). Abstraction tables based on the two research questions were used for abstracting in summaries for a structural assessment. These different summaries were reconciled in a process informed by negotiated consensus with the third author adjudicating (Bradley *et al.,* 2007). Thirty-nine articles did not meet the questions with any relevant information as in the inclusion criteria and were excluded. Twenty-four articles were selected for further qualitative analysis.

The first and second author separately derived themes based on the article content related to the research questions in a process informed by content analysis (Hsieh and Shannon, 2005). Data extracted from the articles that described type of healthcare organisation, type of study, decentralisation typology, positive and negative effects, frameworks or models, explanations and other data related to the questions were used. The themes were constituted from relevant text coherent with the research questions. These were reconciled in the same procedure as above with the third author adjudicating. These themes are reported as findings and a synthesis was made to present a refined theoretical model of interactions in decision-making adopted to service delivery organisations.

4.6 STUDY II

4.6.1 Study design

A qualitative study design was used based on semi-structured interviews. The decentralised management model was formulated as a programme theory and visualised in a logic model (Hayes *et al.,* 2011) to illustrate a complex process and relationships (WK Kellogg, 2004). Programme theory is defined by Weiss (1998) as *"the mechanisms that mediate between delivery (and receipt) of the program and the emergence of the outcomes of interest*". As the logic model gives no information on the scientific validity, for this *a priori* logic analysis was performed to confirm that the linkage between the challenges, underlying assumptions and the activities was compatible with the evidence as presented in the scientific literature (Brouselle and Champagne, 2010).

4.6.2 Data collection

The data collection was based on purposive sampling. The researchers contacted all members of the senior management team with oral and written information about the purpose of the study. The researchers who also conducted the interviews had no previous connections to the organisation. In total nine members, each with more than fifteen years of experience in management, were interviewed from February to September 2018 (n = 9). The purpose of the interview was to understand how the construction and implementation of the management model was done, and which and why activities were undertaken, with what expected result (Figure 7). Other data used were documents and administrative plans.

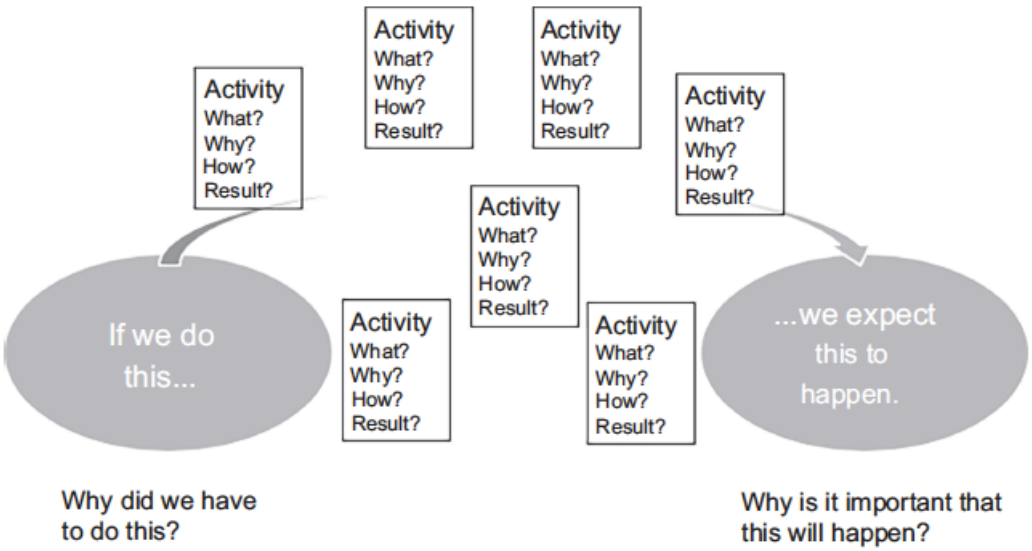

Figure 7. Interview process to understand the program theory

The interview process followed a standard procedure, anonymity and confidentiality as well as withdrawal was granted. The interviews were semi-structured, but still left room for follow-up questions to capture the participants' subjective point of view on the construction and implementation of the management model (Green and Thorogood, 2014, pp 95-96). The interviews were recorded and transcribed verbatim by an external actor. The interview guide is found in Appendix B.

4.6.3 Data analysis

Directed content analysis was used for analysis of the interview data (Graneheim and Lundman, 2004; Hsieh and Shannon, 2005; Assaroudi *et al.,* 2018) and used to construct of the programme theory.

The directed content analysis followed six steps. (1) familiarised with each transcript, (2) interviews coded independently using the relevant codebook (DeCuir-Gunby *et al.,* 2011) and compared to check consensus about the data, (3) coded text condensed into meaning units and sorted into Framework Matrices in NVivo 12 (Gale *et al.*, 2013), (4) the condensed meaning units were read and sorted manually into categories, (5) the categories specifically focusing on interrelations in order to construct the logic model as an expression of the programme theory was discussed. Lastly, (6) the findings were presented to the management group, with a following discussion, in order to achieve informant validation.

Interview data from the management model were checked with corresponding information (data triangulation) (Bowen, 2009). Those comprised of delegation schemes, managers' contracts, balance scorecard data, employee satisfaction surveys, annual reports and presentations from internal conferences were used.

The items were then structured into the logic model (Hayes *et al.*, 2011). In this the flow from underlying assumptions of how the model was intended to function to what outcomes could

be expected expressed as hypotheses of the management team was visualised. The focus was on the underlying assumptions, since they are drivers for the development of the model.

Quotations from the categories identified in the directed content analysis was used to illustrate the findings. Each quote was assigned a letter and number to ensure traceability.

The final step was the assessment of the management model by applying logic analysis recommended by Brouselle and Champagne (2010). This was done by exploring to what extent the underlying assumptions are corroborated by findings in the scientific literature (Brouselle and Champagne, 2010).

4.7 STUDY III

4.7.1 Study design

This is a mixed methods study based on semi-structured interviews and a semi-quantitative analysis to study managers' perception of the adoption and development of a decentralised management model. A conceptual framework that supports an analysis of the relation and interaction between delegated management authority ("decision space"), accountability, and individual and institutional capabilities, and their impact on organisational performance, shown in figure 11, is used.

4.7.2 Data collection

The sampling was purposive to select informants in order to receive a comprehensive picture of how managers perceive the management model and act accordingly (Bernard, 2002). Data was collected in three steps. The main data was from interviews in a first step in February to September 2018 with senior management team (n = 9), with the purpose to understand the logic behind the construction and implementation of the management model. The second step was in October and November 2018 with fifteen clinical directors (unit managers) (n = 15), to capture how the decentralised management model was perceived and adopted.

The interviews were semi-structured. The interview guide used for the senior management team is presented in Appendix C, based on Haye's (2011) "Logic Model Framework", designed to uncover assumptions about the causal mechanisms between actions and outcomes. This constitutes the programme theory of the management model as reported in study II (Ohrling et al., 2021a).

The purpose of the interviews with the clinical directors was to capture how the management model was perceived and adopted. A semi-structured interview guide with open-ended questions was used that addressed the three components in the revised Bossert (Bossert and Mitchell, 2011) model of management decentralisation (Ohrling *et al.,* 2021a).

In order to ensure a wide variation of unit managers, they were recruited from all kind of services One SLSO official, not involved with the research group, selected result units that

varied in size, geographical location, and organisational performance. Those managers were approached and asked for consent to be interviewed. All of them had worked in the organisation more than three years. Each interview followed a standard procedure. The informants were informed and gave their written informed consent before the recording started. Each interview was recorded and transcribed verbatim by an external actor.

In a separate blinded data collection, data on the organisational performance of the 15 profit units' managers for years 2016-2018, using balanced scorecard data and results of annual staff satisfaction surveys, were registered and presented without identification.

4.7.3 Data analysis

Directed content analysis was used to analyse the data from the interviews. The analysis of the interviews with unit managers were guided by the revised Bossert model (Ohrling *et al.,* 2021a) and performed as in study II. Lastly, the results were presented for all over 110 clinical directors at a leadership conference in December 2019 with "enterprise within the enterprise" as a theme.

A semi-quantitative analysis was used for the performance data. Three parameters were selected: financial results, quality and staff satisfaction. The quality parameter was derived from a regional performance target measuring timely access to service. Units were divided into three groups: "greens" were meeting all three performance measures consistently during the three years of observation, "yellows" met the targets in a majority of instances, whereas "reds" missed targets in a majority of instances. The condensed meaning units of all 15 unit manager interviews in the three groups, but blinded to the "colour" of the groups, were reanalysed independently by two researchers who then reconciled their assessments (Bradley *et al.,* 2004).

4.8 STUDY IV

4.8.1 Study design

This is a qualitative study using semi-structured interview data from the emergency team members and free-text answers in surveys from clinical directors (unit managers) to study managers' emergency response in the SARS-CoV-2 pandemic outbreak.

4.8.2 Data collection

The sampling was purposive and recruited all members involved in the SLSO emergency management team (n = 23). Three interviewers individually interviewed all the 23 persons (12 men and 11 women) that all had specific assigned functions, often based on their previous experience and expertise, organized according to the Region's crisis management model during the winter and spring of 2020 (Ohrling *et al.,* 2020).

All but three interviews were conducted via video due to the nature of the spread of Covid-19. They were recruited by either telephone contact or e-mail. All chose to participate. The interviews took place in May to June 2020.

The interviews were semi-structured, and guided by the three theoretical frameworks, with the emergency management team members. The interview guide addressed the participants' experience with working in the emergency management team, factors that facilitated or obstructed the work, learnings for the next crisis, and learnings for the organisation and healthcare system as a whole. The interview guide is presented as Appendix D.

Each interview followed a standard procedure. Each participant gave their oral informed consent for recording the interview twice: once before the interview started and once after the recording started. The interviews were transcribed *verbatim*.

Thirteen weekly surveys were sent out during the period of 28 March to 30 June 2020. The survey covered questions regarding the clinical directors', unit managers', urgent needs and experiences concerning the first Covid-19 outbreak and was mainly conducted for organisational purposes to enable rapid actions as feed back to the emergency management team and were of both a quantitative and qualitative nature. Several survey questions had an option for the participant to answer more in detail using a free text box. This was a stressful period, which was the reason to choose to analyse their free text answers, rather than ask managers to partake in time-consuming research interviews.

4.8.3 Data analysis

Directed content analysis were used for the analysis of the data both from the interviews and the free-text answers in the surveys. The interview data was analysed in two steps. (Figure 6). First, based on the Abrahamsson and Brege conceptual model (2005) a codebook with pre-selected categories in NVivo 12 was set up in order to assess the organisation in terms of possible dynamic effectiveness by coding and categorising the meaning units from the interviews (Graneheim and Lundman, 2004; Hsieh and Shannon, 2005). After this, the interview material was analysed using the Teece framework (1997) to find out whether dynamic capabilities could be identified, and the revised Bossert decision space model to explore if those could be explained by the decentralised management applied in the organisation (Bossert 1998; Bossert and Mitchell 2011; Ohrling *et al.,* 2021 a).

The process for analysing the survey free text answers was similar (Figure 8). Many of the main questions in the survey had a set of follow-up questions. The answers were collated to the main and follow-up questions for each participant to make meaning units and thereafter analysed with the Teece framework and the revised Bossert framework in the same way as the interview data. Only meaning units whose content expressed changes made or views regarding to the Covid-19 crisis were included.

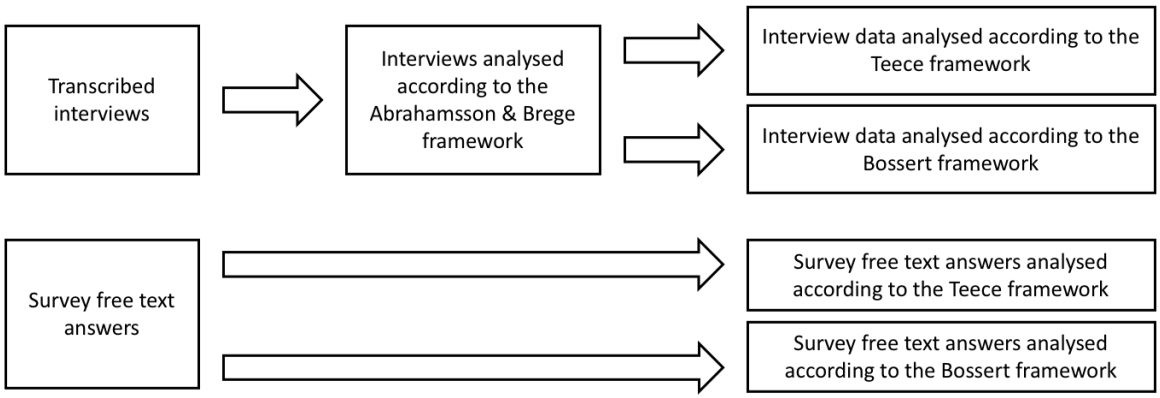

Figure 8. Overview of the data collection and analysis process

To ease data processing and improve transparency, we condensed and translated the coded meaning units were condensed and translated and sorted in framework matrices in NVivo 12 (Gale *et al.,* 2013). Interview data were checked with corresponding information (data triangulation) found in protocols and plans from the crisis management team (Bowen, 2009).

4.9 ETHICAL CONSIDERATIONS

The participation in the interviews in study II, III and IV was voluntary and performed after informed consent from each person. Information was given prior to the interview. Each interview followed a standard procedure. The participants were informed about the purpose of the study, and that they could withdraw from the study at any time, that all data would be handled confidentially, and that maximum effort would be made to maintain anonymity when presenting the data. Each participant gave their written informed consent before the recording started. In study IV this consent was confirmed twice orally and recorded, due to the Covid-19 situation the interviews were performed over telephone or video. Each interview was recorded and transcribed verbatim, and in study II and III by an external actor.

The research plan covering studies I, II and III has been approved by the Regional Ethical Board in Stockholm, dnr 2018/98-31/5. Study IV has been performed as a part of a larger project on “Implementation of management and organisation response to the COVID-19 outbreak: a study of the crisis organisation in Stockholm County’s healthcare area”, the research plan of which has been evaluated and endorsed by the Swedish Ethical Review Authority on 8 April 2020 (Dnr 2020-01521).

5 KEY FINDINGS

5.1 STUDY I

The database search with additional records added through other sources identified 5 613 records for review. After duplicates were removed in total 1 987 records were screened for discernible decentralisation in healthcare in title or abstract. 1 742 records were excluded, and after reading full abstract of the remaining 245 records, 63 full-text articles were selected and assessed for eligibility. 39 articles did not comply with the inclusion criteria and were excluded with reasons. The remaining 24 articles were used for the in-depth qualitative analysis and the content served as data in this review (Figure 9).

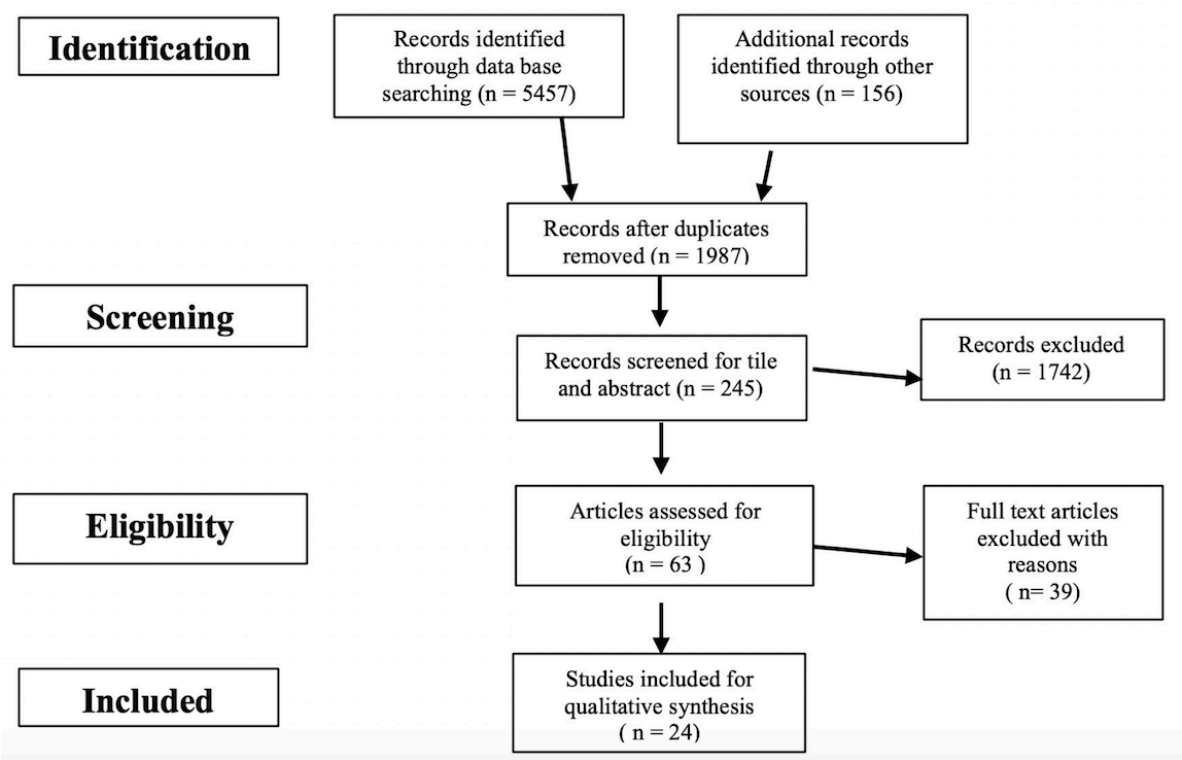

Figure 9. PRISMA-flow diagram of the performed review

5.1.1 Descriptive overview

The 24 articles consisted of 4 systematic reviews, 1 realist review, 1 protocol for systematic review with a narrative review, 12 narrative reviews, 5 empirical studies and 1 conceptual commentary. An observation is that most of the articles found on decentralisation in healthcare had a national or regional system level perspective, and the one on service delivery was focused on a hospital setting. Some of them complied with our criteria of ‘relevance’ and were included. A number of reviews of types of decentralisation were summarised but did not provide any additional relevant findings of empirical, conceptual or methodological relevant information, and were not included in this selected set for content analysis of 24 articles.

5.1.2 Thematic content analysis

The reconciled themes in the analysis were grouped in the following themes: (1) typologies, combining concepts, (2) methods, (3) empirical descriptions, (4) results of decentralisation and (5) explaining results.

5.1.2.1 Typologies, concepts and frameworks

A range of typologies and definitions are found, and to a large extent drawn from Rondinelli et al (1983), which defines four stages of decentralisation (Dubois and Fattore, 2009). Even though this typology refers to higher level country health systems, this is applicable for our case. It is noted that 'silent decentralisation' is one aspect, often ignored, since there is no formal reform or decision but significant effect is observed.

5.1.2.2 Methods for studying decentralisation

Decentralisation is a complex and interconnected set of processes. For correlation with decentralisation, processes need to be described (Liwanag and Wyss, 2018). The studies are real-life situations and single case studies with limitations in generalisability (Aas, 1997). Measures of decentralisation are a challenge. Recommendations are found in a framework describing decision space, institutional capacities and accountability (Bossert 1998; Bossert and Mitchell, 2011).

5.1.2.3 Empirical descriptions

There are few empirical descriptions, and none could be found in primary and community health care service delivery organisations. However, in the empirical reviews found, the importance of contextual factors is noticed (Sumah *et al*., 2016; Abimbola *et al.*, 2019). Effects of decentralisation will likely be different in various organisations due to contextual factors. Different factors have been identified as facilitators or constraints of effects (Evans *et al.,* 2013). However, a realist review concludes that "*the role of context on systems functionality involves too many determinants and causal networks to define in any detail*" (Abimbola *et al.,* 2019).

The implementation or process of decentralisation described as a complex and not a single-step change (Liwanag and Wyss, 2019; Hales, 1999). Decentralisation was described in several different ways, as a reform, state, structure or variable process over a time span. The common denominator was transfer of power from centre to periphery. The ability to use the transferred power is dependent on either institutional or personal capacities (Bossert and Mitchell, 2011; Liwanag and Wyss, 2018).

5.1.2.4 Results of decentralisation

The documented outcomes of decentralisation are few, mainly reported on system levels and cannot be attributed to the effects from other factors. The results reported are both positive and negative, but it is not clear how these can empower managers. One positive effect can be

negative from another perspective or stakeholder. For example, can better response for local needs from equality perspective be judged negative (Sumah *et al*., 2016; Evans *et al.,* 2013). Decentralisation with positive results is reported in the aspects of governance, financing and service delivery (Cobos Munoz *et al.,* 2017). In a hospital setting, decentralisation has been reported to improve cost containment, job satisfaction, information, greater perception of meaningful work, higher motivation and morale (Aas, 1997; Lee and McKee, 2015). At a clinical level, delegation of tasks from one profession to another, termed *"micro-decentralisation"*, showed lower cost and higher patient satisfaction (Laurant *et al.*, 2014).

The negative effects are focused on the risk for inequality, sub-optimisation, lack of coordination and care fragmentation (Wyss and Lorentz, 2000). There are also negative effects reported from micro-decentralisation in terms of higher referrals rates, repeat patient visits and testing (Bohmer and Imison, 2013).

5.1.2.5 Propositions explaining results

A number of factors explaining the effects of decentralisation have been studied on system levels, and one empirical study is found to be extended to service delivery level (Liwanag and Wyss, 2018). Five functions have been in focus: planning, financing, resource management, program implementation and monitoring and data management. Decentralisation is described as a long and complex journey, and the importance for central decision-makers' ability to balance and support local levels to perform well (Liwanag and Wyss, 2018).

Bossert has developed a decision-space model in a sequence of studies (Bossert, 1998; Bossert and Mitchell, 2011; Liwanag and Wyss, 2018). The model suggests an interaction between three dimensions of decentralisation: decision-space, institutional or organisational capacity and accountability, with synergies that produces improved outcomes (Figure 6). The degree of decision-making is related to responsiveness to local needs and the ability to build institutional capacity by learning-by-doing, which in turn relates to mechanism for accountability.

Another relevant model to explain success and challenges in implementation and results in decentralised service delivery is derived from stratified systems theory (Jaques, 1989; Rowbottom and Billis, 1977). The theory defines work in strata based on decision-making complexity equivalent to stratification of human capability.

In summary in this study the Bossert's decision space conceptual framework was identified as a model that could be combined with the model from stratified systems theory by Jacques to be adopted to as an analytic generalisation at a conceptual model of management decentralisation in healthcare service delivery organisations. The revised model is a novel theoretical contribution.

5.2 STUDY II

In this study the senior management's perceptions of the management model were conceptualised as a programme theory and further assessed by logic analysis.

5.2.1 Rationale of the programme theory

The rationale of a programme theory was to improve healthcare by empowering managers and increasing employee satisfaction. For this a number of underlying assumptions were made on the basis of the existing challenges, such as more creativity and increased involvement and engagement of managers and their staff. Trust, managers' skill, patient's focus, and the system perspective were identified as important factors in the interviews. The aim to develop a decentralised management model was to empower managers by transferring more power down the line, and give support to better reach their goals, with benefit to patients:

> *"You have to have the patient focus and the ability to talk with staff about this to get them onboard, which is a challenge. You are only as strong as your weakest link." (2)*

5.2.2 Guided by underlying assumptions

The challenges and a number of underlying assumptions were identified, for guidance to activities and expected outcomes (Table III).

Table III. The logic model illustrating how the management model was developed in practice

Target groups →	**Challenges** →	**Underlying Assumptions** →	**Activities** →	**Outputs** →	**Expected Outcomes**
Definition: Who will benefit?	*Definition: Constraints to be addressed*	*Definition: Assumptions how?*	*Definition: Designated activities for outcome*	*Definition: Direct result of activities*	*Definition: Expected concrete effects*
Direct: Managers Indirect: Other staff Patients and their relatives	Managers not involved Lack of responsibility Businesslike conditions higher autonomy Let people grow and take responsibility Need to increase managerial skills, creativity and commitment Flexibel adoption to local needs R & D more integrated	1. Increased responsibility empowers managers 2. Trust and large decision space near the patient 3. Top managers as an air traffic control to guide 4. Loyalty and trust both ways to be successful 5. Best decisions are made locally 6. System perspective to make better decisions 7. Continuous dialogue about accountability 8. Well trained managers for better performance 9. Improved health care and better performance by decentralisation	Decentralised profit units (A1) Train required leadership (A2) Clear delegated authority (A3) Monitoring performance (A4) Standardised processes (A5) eHealth cascade training (A6) Enhancing care value (A7) Digitalisation (A8) New managerial level to coordinate (A9) R&D coordination (A10)	120 profit units established >500 managers trained Freedom to use resources Balanced scorecard Psychiatry processes implemented >5 000 employees eHealth training > 10000 employees Improvement programme to enhance value Always Open app piloted for patient contact Four divisions for coordination R&D Division	Organisation and follow up structure clear Attention to performance and ownership Increased managerial capacity Focus on care processes One size does not fit all – need to adapt Reduced administration and more time to care Better performance

Delegated authority aimed to increase motivation and responsibility. Accountability has to be linked to this. The mindset of the senior management was to stress the importance to have focus on the location where the patients are treated. Trust with a high grade of decision latitude should be put there. Local needs are different between contexts and the assumption was that the unit managers are best to identify this:

> *"I would not dream of making a decision that another manager has been delegated to make." (1)*

An increased overview of the organisation is necessary to facilitate and strengthen the decision-making capacity of each manager was another assumption. This overview should be provided by the senior managers as a guidance to best local decision-making by the unit managers. This was compared to an "air traffic control tower" to give guidance without taking over.

> *"….enterprise within the enterprise means that the management team functions as a gutter and creates a "we" and by this a coherent organisation with a good knowledge about each other's operations, and we will not take the responsibility away from all our "internal enterprises"…." (6)*

Trust and loyalty in both directions were assumed to be of importance. Current local needs should be guiding, rather than previous general needs. Decisions should benefit the patients and support research and improvement activities, and not be made only for itself.

> "*The large enterprise can support to develop concepts, but the small [local] enterprise implements, uses and adopts it as needed. I can coordinate constructive working processes, but I can't decide that everyone should have this [if not needed], it is not compliant with our model". (8)*

Another important assumption was that coordination is a crucial support to collaboration and shared learning. The system perspective is needed for better decision-making and has to include research and development, integrated with clinical process improvement. The management model aimed to stimulate learning. Decision-making capacity also needs to be trained and managerial skills have to developed. A continuous dialogue and mutual trust and clear accountability are identified as important factors.

> *"Enterprise within the enterprise is necessary to increase accountability in the units." (6)*

The overarching assumption is that decentralisation in terms of delegated authority in combination with accountability will increase the organisational and individual capacity and lead to better performance and improved healthcare.

> *"The goal is that patients receive good care and that managers enjoy their work, and that they feel that they have both the responsibility and the decision*

space to further develop their enterprise so that it suits the patients even better, that they feel that they hold their enterprise in their own hands." (8)

5.2.3 Activities developed over time

A number of activities were initiated based on these underlying assumptions. In the interviews ten main activities (A 1-10) were identified, listed in Table III. The activities have been developed during a time of 15 years and can be considered as an evolving process. The activities can be categorised based on which one of the three dimensions of the Bossert model should be supported as illustrated in Figure 10 (Bossert, 1998; Bossert and Mitchell, 2011).

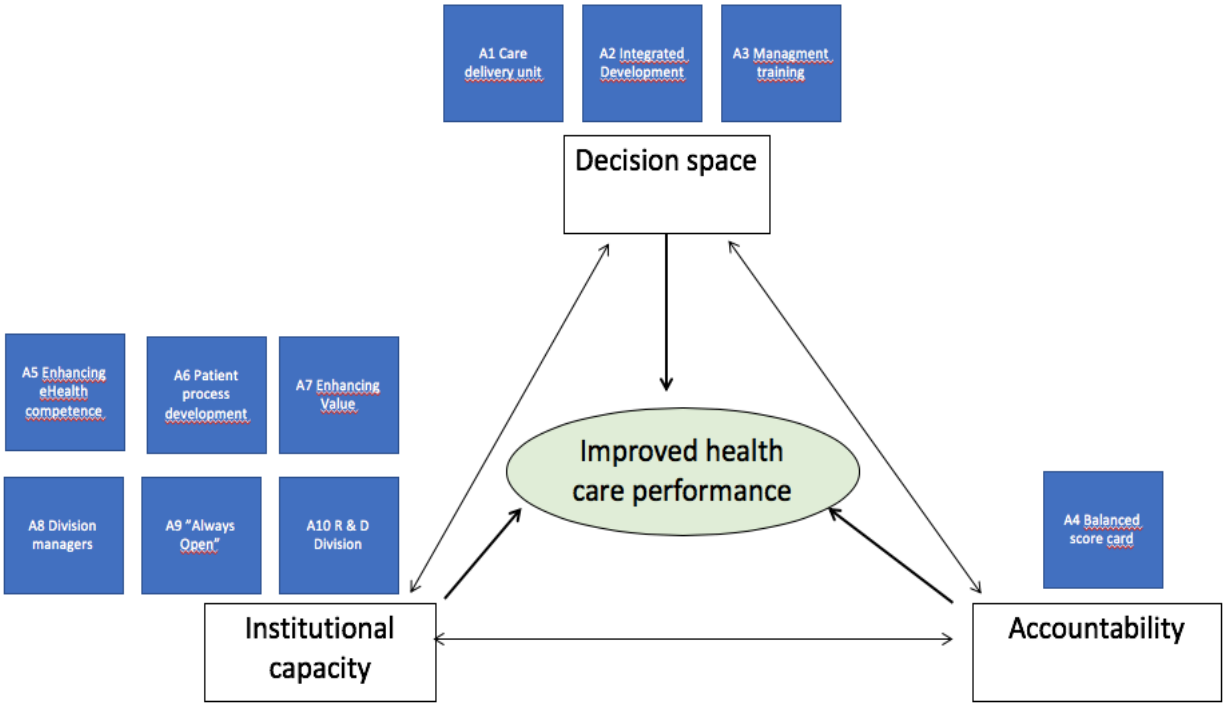

Figure 10. Identified main activities mapped to the Bossert decision space conceptual framework

One of the first initiative was to establish a structure. The large organisation was divided into profit units (A 1). A logical next step was to prepare the managers with new skills, since they had not been employed with the kind of profile needed in a decentralised organisation. Training programs on different levels and perspectives were launched (A 2). The delegated authority to the unit managers included budgeting, staffing and quality improvement, and closer relations with the purchaser than before. The focus of senior management was to provide them with the system perspective, coordinate initiatives, stimulate collaborations over borders and evaluate results and support the unit managers' decision-making. The model was called "*the enterprise within the enterprise"*, decisions should be made close to the patient. Managerial relations should be based on trust and values with clear formulated expectations for which the unit manager, coached by senior managers, is accountable. The unit manager could be considered as the "chief executive" of a subsidiary in a group (A 3).

To enable the unit managers to monitor the performance and to ensure a follow-up system, balanced score cards were introduced (A 4). The unit managers were responsible for action plans produced together with staff at the unit. The score card perspectives visualised the outcomes and could be used as a driver for benchmarking and the unit's improvement activities.

The improvement activities and development projects were a natural integrated part at each unit, but with support on the system level from the academic centres that were established in the organisation in collaboration with the university. Core facilities for improvement methods, research and education was consolidated in these centres. Cross organisational improvement collaboratives were established for development of standardised 'best practice' care processes in psychiatry (2011) and in primary care (2014) as a result of shared follow-up work (A 5). These initiatives were based on continuous improvement principles and evidence. Initially, they were initiated top-down but became the unit managers' tool for benchmarking and shared development of evidence-based care. To better meet patients' needs, large-scale programmes on how to use digital tools were launched to train all 12,500 employees of the organisation with a cascade method based on "train the trainers" principles (A 6).

These two activities were combined into an "Enhancing Value" programme (A 7). The aim was to use the knowledge in process improvement and eHealth solutions to be clearly connected to medical outcomes in a data driven improvement initiative for the benefit of the patients.

To support increased mobility in patient communication and interaction an organisation-wide digitalisation programme "Always Open" was established initially in primary care (A 8). This was a way to increase the organisational capacity for interactions with patients through new ways, such as chats, chatbots and digital consultations.

In 2015 a discussion started around the possibilities to consolidate some functions on shared organisational level discipline-wise, with the purpose to decrease the administrative work in each unit, lower administrative cost and at the same time increase efficiency locally close to the patient in terms of more time for patient care, research and improvement. A division level was introduced in April 2016, still with the same delegated authority with large decision latitude for the unit managers. The division level was abolished after evaluation in May 2018 and November 2019 due to negative effects.

To strengthen the research and development core facilities a research and development division was introduced in October 2018 (A 10). The aim was to make the organisation a stronger research partner in the region, better coordinate research in our six research centres and to better support the organisation to ensure compliance to ethical principles and regulations. This division has now been partly reintegrated in the clinical setting and partly developed a research support system.

5.2.4 Linkage compatible with evidence

The scientific literature and other research articles explaining effective decentralisation are used to test the logic of the underlying assumptions to the programme theory (Table IV) (Ohrling *et al.,* 2021b).

The management model and the linkage between the elements displayed in the logic model found support in the scientific literature as shown in the table below and presented in detail in the article of study II. In summary, support was found in the literature that increased responsibility can empower managers, the unit managers know their local prerequisites best and are better to adapt to the needs from patients, increased overview will strengthen managers decision-making capacity supported by senior managers as "air traffic control tower", and to counteract sub-optimisation. Shared trust and loyalty improve managerial capacity, increased managerial skills promote creativity and engagement at the local level and system perspective is needed to support collaboration and learning.

Table IV. Positive effects found in the scientific literature related to underlying assumptions

Underlying Assumptions
Definition: Theoretical assumptions how the programme will work
1. Increased responsibility will empower managers to deliver the best possible patient care + *Cobos Munoz et al, 2017; Hales 1999; Vancil 1979; Drucker 1989; Thomas and Dunkerley 1999; Wynen et al 2014.*
2. The most important locus is where the patient is treated, where a high level of trust and large decision space should be put + *Burns 1995; Aas, 1997; Coulter 1997*
3. Top management as an air traffic control to guide in the right direction without taking over decisions + *Wyss and Lorentz, 2000; Guanais and Macinko, 2009;*
4. Loyalty and trust go both ways in order for improvement efforts to be successful + *Bossert 1998; Osborne and Gaebler 1993; Thornley 1998; Arrowsmith and Sissons 2002*
5. The best decisions are made locally + *Sreeramareddy and Sathyanarayana, 2013; Sumah et al 2016; Guanais and Macinko, 2009; Colombo and Mastro 2004*
6. Offer a system perspective to help make better decisions + *Sumah et al 2016; Bossert and Mitchell 2011; Peckham et al 2005; Saltman et al 2007.*
7. Continous dialogue about responsibility/accountability + *De Vries 2000; Lee and McKee 2015*
8. Well trained managers have the capacity to take responsibility, and decisions are made locally, for better care for patients + *Liwanag and Wyss, 2018; Wynen et al 2014*
9. Improved healthcare and better performance with decentralisation + *Levaggi and Smith 2004; Osborne and Gaebler 2003; Blomqvist 2004; Aucoin 1990; Dubnick 2005; Guest 1987; Ingraham 2005; Meyer and Hammerschmid 2010; Storey 1989; Saltman et al 2007; Weber 1964; Bergman 1998; Bossert 1998; Darvishmotevali 2018.*

5.3 STUDY III

The programme theory how senior management conceptualised the decentralised management model of the organisation and activities undertaken was analysed in study II. In study III the unit managers' perceptions, as gathered from interviews with 15 selected informants, is to be contrasted to findings in study II.

The content analysis of the interviews generated six themes and 21 categories with sub-categories. The themes were "general understanding of the management model", "appraisal of the model", "delicate balance between central and peripheral management", "decision space", "institutional capacities", and "accountability", summarised from study III below.

5.3.1 General understanding of the management model

The delegated authority given with a large latitude based on trust was confirmed by the unit managers. Some of them used the same principle within their units. The aim of autonomy was explained so as to increase their drive and responsibility.

5.3.2 Appraisal of the model

Generally, the high degree of autonomy and the central support of the organisation was considered to be in balance. However, some were critical and experienced too much involvement from senior managers with negative effects. Others wished for more, implying that they felt insecure.

5.3.3 The delicate balance between central and peripheral management

The balance between perceived ideologically driven expectations on public services and financial requirements was problematised by some unit managers as difficult to handle. A new organisational division-like level was introduced during the study, which some unit managers perceived as a step away from decentralisation.

5.3.4 Decision space

The autonomy and the delegated authority given were appreciated by the unit managers. They used the decision-making latitude, which was considered large. However, although the delegation was formally wide, the actual span was more limited. A reason to this was the difficulty to adapt the formal delegation to local conditions due to such a difference between the units in size, location and type of care. The largest constraint of the decision space expressed by the unit managers was the purchaser due to externally" micro-managing".

Flexible use of the formal rules and the ability to limit one owns decision space in order to strengthen the collaboration between units were mentioned in the interviews. Risk-adverse or risk-willing behaviour were perceived of importance by the unit managers, how the delegation was used. Financial requirements, culture and tradition were mentioned as some of the internal constraints.

5.3.5 Institutional capacities

The unit managers identified central financial and human resource management support as beneficial. The large-scale development programmes to increase eHealth knowledge and care processes among staff at the local units, were mentioned as important actions to build institutional capacity. Several unit managers expressed that the internal collaboration between the units needed to be improved. Insufficient internal collaboration and communication are concerns raised.

5.3.6 Unit managers need to be proactive

Complaints management, support for patient safety methods and media contacts were other central functions that were mentioned by unit managers as important to build institutional capacity. Dissemination of new practices could benefit from a structured organisation-wide support, since several unit managers experienced that processes were not shared across units. Proactivity and shared processes proposed as efforts to strengthen the organisation's brand and strategic planning, which in turn could enhance collaborative processes across organisational borders and unify the organisation.

5.3.7 Accountability

The awareness that the unit managers are fully accountable was without any doubt in the interviews. A unit manager described the role as “the Superman assignment”. Thus, the responsibility has to be supported by sufficient leadership capacity in balance with the decision latitude given. An opinion was that the financial focus was too heavy in relation to quality. Improvement trends should be visualised rather than metrics. The unit managers perceived that good finances provide large degrees of freedom but also opportunities to fly under the radar. The risk of being passive due to insufficient feed-back or not held accountable was a concern. Others, especially those who have further delegated authority to subunits, reported that they actively monitored and assessed performance internally.

5.3.8 Perceptions and actions in terms of performance

The interviewed unit managers were grouped into three groups using balanced scorecard data. The findings on their perceptions on the management model were identified for each group in a blinded process and categorised in decision space, institutional capacity and accountability, as exhibited in Table V. Between groups there were more similarities than differences. The high degree of decision latitude was confirmed. They used their delegated authority accordingly. They felt autonomous with delegation over budgets and could set salaries. Managers were content with the balance between central and local decision-making.

The institutional capacity was related to the support given by central management. Management and leadership development was appreciated, but managers by and large felt that it was rather general and that they should take responsibility for their competence development. The organisation-wide organisational and process development programmes were acknowledged, but it was said that it suited some specialties better than others, and that

the initiation and implementation of those programmes could be improved. In terms of accountability, managers emphasised that they are responsible for the economy of their units, first and foremost. In addition, managers mentioned that they are hold accountable for staff satisfaction and a good work environment.

In one group the unit managers emphasised their autonomy and active use of the delegated authority. New activities were introduced "without permission" to meet local needs and often negotiated to be included in the contracts with the purchaser. Changes in delegations with short notice were criticised, but the need for central policies was acknowledged. They felt independent and did not need much of central support, but the access to expert functions was appreciated. They urged central management to be more strategic and to encourage all units to be more "business-like", but also wished the central management to be a "shield" towards purchaser and politicians. They felt their responsibilities clearly expressed, accountable to fulfil contracts and deliver high quality care, and they were prone to delegate further to subordinates and held these accountable.

A second group of managers expressed that as long as their budget is in balance their decision latitude is large. The central level was sometimes involved in decision-making, even though the managers found their delegated authority adequate. There was a tendency to be more critical that certain central functions were not as supportive as expected. The managers in this group related their accountability mainly to the financial bottom-line. This group tended to be dissatisfied with certain central functions that were less supportive than desired. There was also some criticism regarding the divisional structure introduced in 2016, which was experienced as a centralisation and counterproductive. Discussions in the divisional management team were said to pay too little attention to strategic and long-term issues. In terms of accountability these managers emphasised that the main focus was on the financial bottom-line

In the third group, more rules were wanted by some managers. This to be "safer" in their management assignment. There was a perception of organisational inertia and a culture of "isolationism" with a lack of interest to take responsibility for the whole discussed in this group. They asked for more support from central management in leadership development and in relations to the purchaser. The divisional structure made them feel that their management authority was reduced. Their responsibilities were clear.

Table V. Group findings categorised in decision space, institutional capacity and accountability

Theme derived from framework	Categories derived from Group 1 findings	Categories derived from Group 2 findings	Categories derived from Group 3 findings
Decision Space	Express that nobody is strong enough on their own Experience a large degree of freedom Test boundaries Express independence and autonomy Understand why certain rules must be applied Experience that not enough trust is shown toward the unit Express that they delegate further out into the organisation	Experience a large degree of freedom Express that part of the managerial role is to handle a large degree of decision space Express a wish for more central direction Express understanding of central direction Express limited understanding of the degree of decision space given Express that evidence based work enables freedom Utilise freedom to make decisions within reason Express understanding of the organisation's external limitations	Experience that the purchaser organisation micro manages Express understanding of the need for collaboration Experience that efficiency dictates freedom Experience organisational inertia Express understanding that reality has its boundaries Express need to sub-delegate in order to handle situations Express a culture of isolationism Express a wish to be independent but with support functions
Institutional Capacities	Experience that the organisation is not fully capable of capturing innovation Express that units need business-like management Experience that the support functions are clear Express that they do not require or ask for support Experience that HR support is sufficient Experience lack of long-term central organisation strategy Express awareness of the organisation's capacities Express that units build their own institutional capacities Experience that central management could better anchor their actions	Experience that central institutional capacities are low Experiende that strategic issues are not handled at division level, mostly urgent operative managerial issues Experience that there is adequate central support Express that they do not see the purpose of the organisation's institutional capacities Experience that the institutional capacities need adjustment Express distrust toward central management Express that the central support functions have become more evident than before and have reduced the risk of making mistakes Express need for more support regarding financial issues	Express focus on quality Challenge the balance between strategy and ideology Express understanding of the organisation's strategy Express the need for a central "gatekeeper" function in the organisation toward external actors and purchaser organisation Express the need for more collaboration in general Experience that the organisation's institutional capacities are inadequate Experience too little focus on strategic issues Express a culture of believing one can ignore central decisions
Accountability	Understand their responsibilities correctly	Understand their responsibilities correctly	Understand their responsibilities correctly Express that their units are followed up regularly

After the analysis, the first group was identified as consisting of managers of high-performing units, the second group of medium and the third group of low-performing units. As this comparison shows, the managers of high-performing units were highly proactive, used their delegated authority and were keen to further delegate to the front-line. They did not need much support from central management but saw its role as setting central policies and engaging in "strategic management". The managers of low-performing units were more dependent on clear-cut rules and referred to unfavourable conditions like organisational inertia. The group "in the middle" felt that there was a proper balance between central and local decisions, although the divisional structure had tipped the balance unfavourably. They would have appreciated more in-depth discussions on how well performance-targets were met. The differences between the groups are related mostly to how actively managers used the freedom allowed by the management model.

5.4 STUDY IV

5.4.1 A highly dynamic organisation

The emergency management team was rapidly mobilised with an early analytic capacity. This enabled the organisation to understand how to structure the internal emergency management system for procedures, operations and communication, as well as network and collaboration with external actors.

The pandemic as such urged for a rapid response. A positive attitude, right competence in the organisation, improved collaboration, trust and no blame-game in combination with a large decision space, and that less urgent and important issues were set aside were all factors

expressed by the interviewees that facilitated the redesign of the ordinary management team into an emergency management team. A clear, shared goal and an emergency management model to support the emergency management team were important facilitators. The findings from the interviews showed a high grade of dynamic effectiveness of the emergency organisation. The competence needed was mobilised to the emergency management team.

5.4.2 Dynamic capabilities and decision space

The dynamic capabilities were identified in the interviews and characterised in the three dimensions in Teece framework (1997) as "sensing", "seizing" and "managing", summarised in an overview in Figure 11. In parallel an analysis of the data was done by mapping the meaning units to the revised Bossert model; delegated authority, organisational and individual capacity and accountability (Ohrling *et al.,* 2021a).

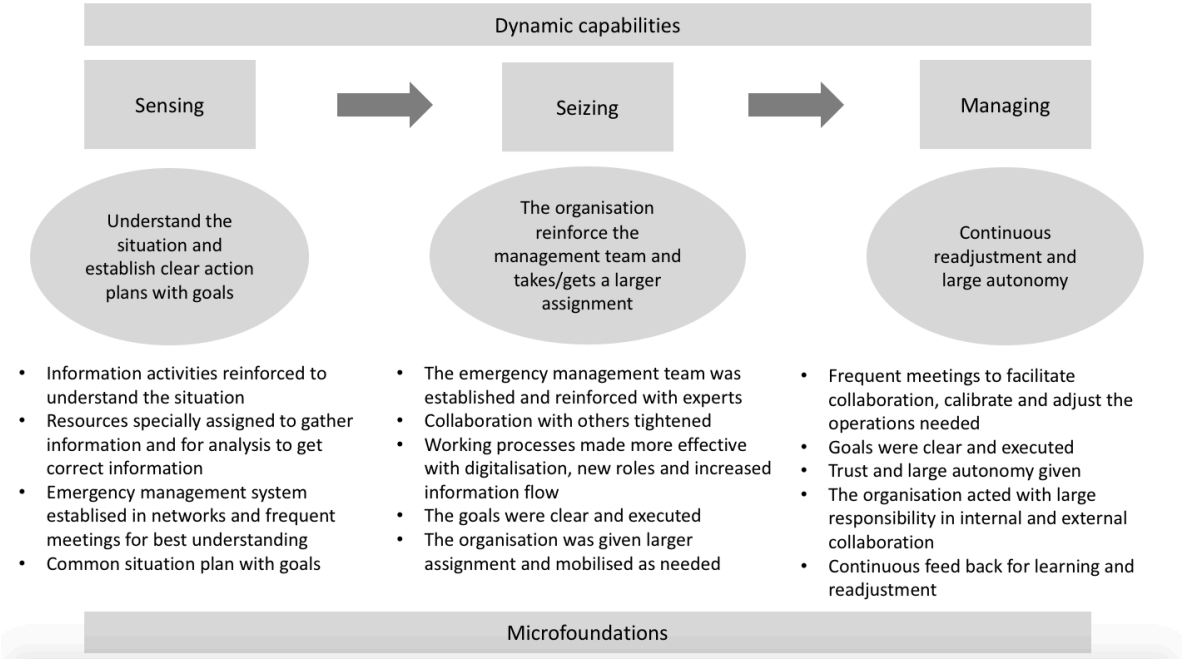

Figure 11. Dynamic capabilities emergency response adapted after Teece (1997)

5.4.2.1 Sensing and shaping the unexpected

The managers described how early mobilisation of resources were crucial for an increased ability to analyse and understand the situation. Roles were assigned in the emergency management team on basis of expertise and experience of the person. Some were recruited from outside. A clear target and goals to be reached, flexibly adjusted and clearly communicated to everyone, were important to create a common understanding. A positive attitude without prestige of the team members and a lot of trust in one another enhanced cooperation and cohesion. Systematic collaboration was enhanced, internally by scheduled and frequent meetings and externally by utilising the organisation's already established networks in the system. However, initially the mandate of the emergency management of SLSO was unclear in relation to private providers and the regional emergency organisation. Information was crucial to understand the situation and what needed to be done. Shared

situation plans and clear goals for the activities facilitated rapid, correct and shared information in the emergency management team.

5.4.2.2 Seizing is rapid response and actions

Important changes to SLSO operations, that normally would have needed a long time to make, were now realised rapidly and meetings were readjusted after what had to be done in a flexible way. Initially, the extensive adjustments of management procedures were intended to reinforce the emergency management team, but also to coordinate activities and information with other stakeholders. External competencies and managers from units with crucial competence were recruited to the emergency management team, which increased the ability to make rapid analysis and decisions. Task shifting occurred in several services, and competences could be directed to areas where most needed in the system. However, managers describe how SLSO contributed actively to coordinate the regional system even before formal mandates were given, because they could see the need and had the competence required. The initiative to give SLSO the formal mandate came from SLSO itself and not the superior regional emergency organisation.

Borders between service units lost importance. The shared focus and goals made it possible in a flexible way to establish new processes to mobilise needed capacity. Prompt reporting and feed-back for instant learning and readjustments turned out to be crucial. Problems could be solved more rapidly thanks to more appropriate organisational constellations, well defined roles and effective networking, both internally and at systems level. Unclear or less well-informed decisions made by the regional emergency organisation led to waste of resources.

The members in the emergency team had to work fast and pragmatic. The medical competence and experience of those senior managers and experts with clinical background were considered crucial success factors. The management team members' trust in one another, the lack of panic, the team's focus, decision capacity, experience, ability to listen and control over the situation were mentioned as success factors. Members of the emergency team expressed that they were confident and proud to contribute and felt a lot of trust and support.

One important strategic decision was to rapidly scale-up digital consultations and the provision of e-health information to both the public and staff. The digitalisation process had met some resistance, but became over night the normal contact way, a change that in normal conditions would have taken a long time to get in place. Special information channels were designed with involvement of the whole emergency management team and spread to private and public managers in primary and community care and to contact persons in the municipalities long before the formal mandate was given to SLSO. The information was spread rapidly and timely as decisions were made. A clear goal facilitated the emergency management team's effort to redesign procedures and processes. The organisation was given a formal extended responsibility to coordinate all healthcare in the region outside the hospitals.

5.4.2.3 Managing means to readjust and improve

The managers stressed that the work needed continuous adjustments and rearrangements. The follow-up was tight and rapid to be able to have maximum flexibility to adjust after needs. Managers expressed that they had to solve even ambiguous situations and be prepared to adjust if needed or if new information required changes. Provide up to date information for each function was an important task of the emergency management team. Another important task for the emergency management team was to make things happen rapidly by coordinate and manage the operations run by the organisations different services with guidance from the functions in team. A clear goal helped to keep focus on the right things.

The big picture was shared by everyone, which made the whole team to work in the same direction. Members were expected to take responsibility, be creative and proactive to solve problems independently but within given frames and coordinated. Some emergency management team members expressed that the regional level had complicated the implementation of the local emergency work, since decisions sometimes were made but rapidly reversed, which led to unclear roles and mandates as a consequence. SLSO had many times to make suggestions to the regional level to get things to happen. The perception within SLSO was that the regional emergency organisation had difficulties to grasp the situation, because they were too far away from the reality and had no control over how things evolved.

The role as an emergency management team member was to support teamwork, and, in some cases, also to manage the operations in a clinic or service. In normal situations the SLSO services are networking widely with other providers, which greatly facilitated the establishment of the coordinated cluster organisation and external collaboration.

5.4.2.4 What were perceived outcomes?

The managers suggested that it is important to maintain the good collaboration with external partners and stakeholder, but also to preserve the improved internal coordinated way of working. The collaboration with the private providers and the regional purchaser's office has reinforced both the ability to be flexible and effective throughout the whole system. The focus should be broadened from acute care to include plans on patient groups in priority order. The role of a future emergency organisation should be more succinctly defined.

The perception of the interviewees was that the ability of the emergency management team was better equipped to lead crisis operations than the regional emergency organisation. The SLSO team was engaged and could make rapid changes with confidence, which spread a feeling of safety and control in the organisation. The work process of the emergency management team functioned well. Resilience planning is important before the next crisis.

Managers suggested that the organisation needs to continue to reinforce the internal collaboration between services. Some were worried that such an opportunity would be missed when the organisation is back to normal. The managers expressed a feeling of confidence and safety based on the achievements. The trust for each other had been strengthened. Overall, more rapid processes in daily operations in the region would be an advantage.

5.4.2.5 Perception of decision space and accountability

The role and the accountability were ambiguous at start, and some members of the team were not used to make decisions on their own and take personal responsibility. On the other hand, managers expressed that SLSO was used to delegated authority and trust-based management, which was reinforced and helped to manage this emergency. Trust has promoted problem solving in the cluster organisation. There was no "blame game", which was described as a key factor that had made people come forward. One manager said that no detailed directives were given to the clinical directors, that this would not have been effective, but support and trust were given to enable them to take responsibility.

5.4.2.6 Perception of institutional and individual capacity

The managers expressed that the mobilising of a proper emergency organisation rapidly increased the feeling of confidence and trust. The function of communication has given appropriate information in a timely way. A suggestion is to keep the new processes for collaboration across the clinic and service boarders to increase learning from each other. The need to reflect over how emergencies should be met and how to continue the fruitful collaboration with other stakeholders was emphasised. The "digital explosion" was identified as something that should give more leverage to the organisation and could be used to free time and resources

5.4.3 What did the unit managers express?

The unit managers expressed in general that the emergency organisation was perceived good and stable. It was quickly mobilised with clear functions, that were supportive but sometimes dispatched information needed to be clarified better. They expressed that actions were taken that increased their units' operational and strategic work, and that they utilised their degree of decision space and accountability, as well as leaned on the organisation's capacity, to achieve these changes. The cluster organisation and the digitalisation were actions that were highly appreciated, and the managers expressed a clear wish to keep and develop these initiatives.

5.4.3.1 Rapid initial changes

At the unit level routines was rapidly introduced to adapt to the situation. Work processes were redesigned and measures to protect both patients and staff against infection were taken, such as increasing the use of digital consultations, proper use of personal protective equipment and limitations to physical visits. Units used to work on the digital platform had a more rapid transition, with a risk for inequality for those with lower digital literacy. Risk patients were taken care of to make them feel safe when in need to visit.

5.4.3.2 Strategies to meet the demand

Internal and external collaboration increased. An organisation that clustered the primary health care centres, both private and public, was established in geographic areas. These clusters managed staffing, separated care flows due to the pandemic, and shared information

and regular updates on the situation. This new work process was highly appreciated and managers expressed a wish to continue after the crisis. Stress and anxiety among staff were a large part of the managers' daily work and strategies for education, task shifting, working from home and practical issues like free parking to avoid public transport when travelling to work were emerging. The "open door" policy was mentioned by several managers as well as psychological support and consultations.

5.4.3.3 Decision space and accountability

The decision latitude they had was utilised, sometimes together with fellow managers in the clusters. They felt free to organise the local work as needed following the central decisions. Sometimes central instructions were delivered too late, but local solutions were already developed. Sometimes other actors' decisions elsewhere in the system had a negative effect on the ability to act, and at those moments central support was needed to preserve necessary decision space. Unit managers expressed that they experienced an increased responsibility to achieve what was needed even though not reimbursed. This did not make them to hesitate to ensure that needs were met, although they expressed a concern for ordinary performance targets that might not be met during these conditions.

6 DISCUSSION

Decentralisation in healthcare has been proposed as a way to increase the responsiveness to local needs and improve healthcare. The available evidence is conflicting, and there are only few empirical studies on service delivery organisations, and preferably hospital settings (Peckham, 2007). The majority of studies are on national or regional systems level (Ohrling *et al.*, 2021a). However, at the same time a lot of the challenges in healthcare delivery are at the micro- and meso-levels in the operations close to the patient. Probably solutions can also be of importance on these levels on efficiency and agility (Tolf *et al.,* 2015).

Broadly, this thesis contributes to increase both the theoretical and empirical understanding of the mechanisms of decentralisation in healthcare service delivery organisations in primary and community care as well in everyday operations as in case of emergency and unexpected events. The thesis provides research-informed guidance to healthcare managers on the possibility to use decentralisation as one strategy to deal with everyday challenges, and to understand how and what the dynamic capabilities are in an unexpected event such as the pandemic outbreak of SARS-CoV-2 (Covid-19). Further implications for research will be discussed.

More specific, this thesis presents a revised decision space model, fit to service delivery organisations in healthcare, to be used to better understand and explain how the dimensions of decentralisation interact between decision-making, capacity as well at organisational as individual levels and accountability (study I), and how a decentralised management model is conceptualised and implemented, from assumptions supported in the scientific literature and in relation to the revised decision space model, by a senior management (study II). This is contrasted to unit managers' perceptions and experiences of the decentralised management model, and their perceptions and actions in terms of performance (study III). Emergency management is about proactive planning, but in real-life unpredictable and unexpected events might need a rapid and focused response and a high dynamic effectiveness beyond plans to build needed capabilities, which is suggested to be facilitated by decentralisation in this thesis (study IV).

To what extent is this supported by the literature and previous research studies?

6.1 THE "TRINITY" OF DECENTRALISATION

6.1.1 Decentralisation in service delivery

In the synthesis of the scoping review two theories were found to be of interest to use for future empirical studies in service delivery organisations. The interactions between the dimensions of decentralisation in the Bossert's decision space conceptual framework (Bossert, 1998; Bossert and Mitchell, 2011; Liwanag and Wyss, 2018), and a theory based on stratified system approach to decision-making complexity, on the basis of cognitive ability at individual level (Rowbottom and Billis, 1997; Jaques, 1989). These two models were

combined in the synthesis into a revised model as more appropriate model for studies of real-life conditions in decentralised service delivery organisations. The model has been tested in the empirical studies of this thesis and have been found to be relevant to understand perceptions of the impact of decentralisation.

Bossert's conceptual framework of decision space is useful for understanding of the interactions in the decentralisation dimensions defined as decision space, institutional capacity and accountability (Bossert, 1998; Bossert and Mitchell, 2011; Roman et al., 2017; Liwanag and Wyss, 2018). It has been used on systems level. However, there are limitations to the concept for management decentralisation in service delivery units. A manager in service delivery has a formal delegated authority, which is clearly described in a delegation scheme. The perspective on national level conflate formal and informal authority. Stratified systems theory provide ways to specify this in terms of the formal authority delegated to management positions regarding finance, human resources, quality and other resources (Jaques, 1989). In the revised model decision space is replaced with formal delegated authority as specified in delegation schemes in line with the individual's position and presumed managerial experiences, Figure 12 (Jaques, 1989).

"Capacity" on institutional level is identified as an important factor in the Bossert model to reach a successful result with decentralisation. This has been shown in our empirical studies, not only on institutional but also on individual level. Differences in individual work capacity and "entrepreneurial motivation" between different managers are of importance, and will be of importance whether the organisation will improve after decentralisation which is consistent with stratified system theory (Jaques, 1989). In addition, the organisation's capacity effectively to specify the manager's role and provide the resources and training to perform the new role was noted as factors of importance in a number of studies (Collins and Green, 1994; Abimbola et al., 2019, Cobos Munoz et al., 2017; Bossert and Mitchell, 2011 and Sreeramareddy and Sathyanarayana, 2013). Thus, the second corner, capacity, has to encompass not only the organisational, but also the individual capacity, which is clarified in the revised model. This can also be considered to be a "loop of" feed-back for understanding, learning and support between senior managers and less experienced managers.

The third corner of the framework is accountability, which also has to be defined in a service delivery context to motivate managers to exercising their formal authority and includes accountability for meeting standards for coordination so as to ensure decisions made by the manager take account of the impact on other services.

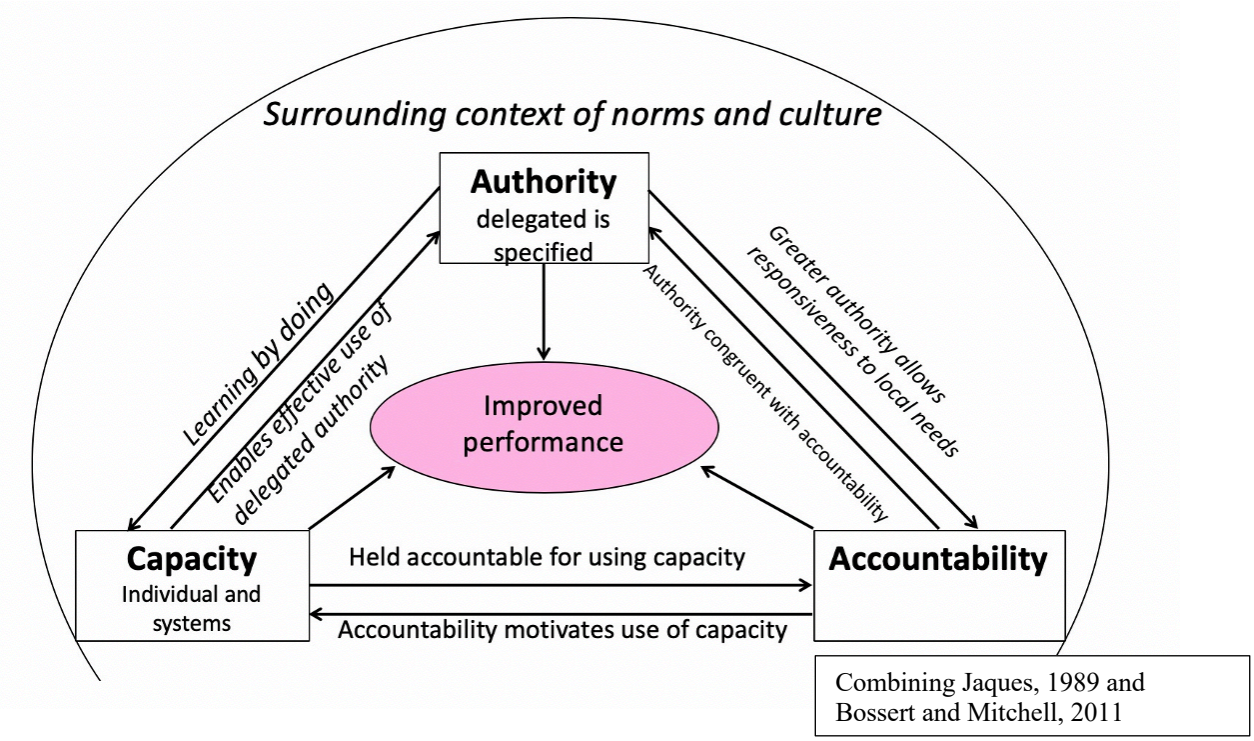

Figure 12. Revised Bossert model: effective decentralisation through authority delegation, capacity development both on individual and organisational levels and accountability in service delivery organisation

The three elements delegated authority, capacity on organisational and individual level, and accountability, have to interact in their contextual reality for the overarching goal improved performance. Decentralisation, regarded as to give more freedom from central control to local decision-making, is thus not an end in itself.

Reviews and studies comment on the challenges to attribute outcomes to the decentralisation rather to other influential contextual factors. Norms and culture are of importance to understand effects of decentralisation (Robalino *et al.,* 2001; Peckham *et al*., 2005; Bossert and Mitchell, 2011; Sreeramareddy and Sathyanarayana, 2013; Liwanag and Wyss, 2018). Organisational norms and cultures of different types is shown in research to constrain or enable managers ability to exercise formal authority by cultures providing the surrounding context (Roman *et al.,* 2017; Mannion and Davies, 2018). This complies with managerial experience in healthcare, and is of special interest in our case, which is a highly decentralised operative organisation in a highly hierarchical public organisation based on bureaucratic traditions as an expression of the political process.

A recent study of the strategic governance in Region Stockholm during the years 2017-2019 concludes that all forms of governance come with consequences, that have to be adopted to the conditions and prerequisites of the organisation, which in turn imply that governance is contextual specific. The study includes the four main areas: public health care providers and purchaser, public transport, regional planning and culture, that all differ a lot from each other. The findings reported are that the regional organisational scheme is unclear, the group concept and “holistic thinking” is not defined for the region but communicated in terms of reinforced owner governance but not specified, unclear division of responsibility, a large amount of governing documents, several and non-compatible governance models,

inconsequent goal formulations, deficiencies around indicators and a large amount of distrust is noted in the interviews (Höglund and Mårtensson, 2020).
The researchers suggest that the unclarities are the main reason for the lack of trust in the system. However, they also conclude that the decision space is a general problem in the region (Höglund and Mårtensson, 2020, p 149). They challenge the "one size fits all" strategy with support of their theoretical analysis, that shows that such a strategy leads to an imbalance between the authorising level and the possibilities for true value creation at the operative level and by that the value for society. The administrative burden increases and the decision space decreases, the bureaucracy increases and managers latitude to do what should be done becomes endangered (Höglund and Mårtensson, 2020).

This is the regional context within Stockholm Health Care Services operates, as one of the public service delivery organisations in healthcare beside the hospitals. A decentralised management model has been constructed and implemented within this regional context, which is described and analysed in study II. In study III managers showed that their perceptions of the management model in Stockholm Health Care Services were, by and large, in line with the intention to empower in the frontline. They appreciated their delegated authority. However, in the interviews the unclarities at the regional level due to the ambition to standardise governance over such various and different areas in the region as for example public transport, regional planning, culture and healthcare, could be noted by the managers, and were commented upon as constraints in study III.

6.1.2 Definition of decentralisation

A definition of decentralisation that is better customised for a management model in a service delivery organisation, which is an operative context, has been derived from the revised Bossert decision space model. The definition of decentralisation in this thesis is a *management practice where service delivery managers receive and exercise delegated authority to achieve high service performance within specified limits to their authority and are held accountable for doing so*.

This is based on the theory that the four most important factors, derived from the concept of decision space and elements influencing decision-making in a decentralised service delivery context, explaining effective decentralisation are 1) delegated authority, clearly specified in relation to different sources, with limits to this authority specified, 2) the capacity of the manager to appropriately exercise this authority which is a function of their individual competence and the system's capacity to provide the support they need, 3) effective accountability for performance, which means a) operating within limits such as standards, including those requiring coordination, and b) exercising authority appropriately to achieve high service performance and 4) a culture of norms that support using initiative to meet local needs and achieve high service performance (Jaques, 1989; Bossert, 1998; Bossert and Mitchell, 2011; Ohrling *et al.,* 2021a).

6.2 CONCEPT, IMPLEMENTATION AND RECEPTION

In study II the senior managers described the challenges of the organisation at the time when the process of decentralisation started. The aim was to empower managers in the frontline to become more responsive to local needs and accountable for improved performance, but still utilise the shared strengths of SLSO, as being a large and diversified organisation. Mutual trust, increased managerial skills, increased engagement, creativity and employee satisfaction were expected outcomes, to drive improved performance. A number of underlying assumptions could be shown and visualised in a logic model, and activities were implemented for intended effects (Hayes et al., 2011).

The key findings from study II are the importance of a logic linkage between challenges, underlying assumptions and activities supported by evidence in research literature, anchored in a timely planned model, and the balance of activities covering all three corners of the revised Bossert model to foster necessary organisational and individual capacities to use delegated authority and avoid sub-optimisation (Bossert, 1998; Bossert and Mitchell, 2011; Roman *et al.,* 2017; Ohrling *et al.,* 2021a).

In study III the unit managers' perceived effects at the clinical level from the activities were analysed. Their perceptions of the decentralised management model supported, by and large, in line the intentions to enable them to run daily operations adapted to local conditions. They appreciated and used their delegated authority and perceived the development programmes for leadership training helpful. In the *a priori* logic analysis (Brouselle and Champagne, 2010) in study II assumptions and activities were scrutinised and key impact factors identified. The evolving process, autonomy, trust, coordination and balance are prominent in the findings from all the three empirical studies II, III and IV.

6.2.1 Decentralisation as an evolving process

The logic model used in study II clearly showed that the development of a decentralised management model can be considered as an evolving process. The incremental development from 2004, and still going on today, with a clear goal from start to transfer power as close to the patient as possible by empowering unit managers and to avoid sub-optimisation, was described in the study. A chronological order was presented in the logic model, and the process was shown to be iterative and incremental. This is confirmed with observations from other studies (Hales, 1999; Liwanag and Wyss, 2019).

Decentralisation is not conceptualised as a specific event with a beginning and end, but as a directed and evolving process. It is political, in the sense that different stakeholders may or may not anticipate or recognise how the changes affect their interests as they perceive them. Other describe decentralisation as a variable process back and forth (Cobos Munoz *et al.,* 2017). This was a finding in our study II, where some activities aimed for decentralisation gave opposite effects and was readjusted. Furthermore, the ability to use the decision space is dependent on the capacity, both organisational and individual, that can vary over time, that makes the decentralisation process go back and forth, also observations reported from other studies (Bossert and Mitchell, 2011; Liwanag and Wyss, 2017).

Decentralisation as an evolving process is also consistent with theories of change in a complex system, where effects occur that are both intended and unintended, and which may or may not be recognised. This may result in further actions and changes by implementers intended to progress the decentralisation or revise it to address emerging problems. Other actors at different levels of the system can either help or hinder the implementation at achieving its original goals (Greenhalgh and Papoutsi, 2018).

6.2.2 Effects of autonomy

The underlying assumption that increased responsibility will empower managers to get them more involved and more committed by transfer of power closer to the patient is connected to the idea of self-governing and autonomy (Vancil, 1979; Hales, 1999; Drucker, 1989). The assumption made by the senior managers in study II to get more motivated, committed and empowered managers by granting more autonomy is supported in research (Thomas and Dunkerley, 1999; Wynen *et al.*, 2014). Unit managers in study III confirm the intention of the senior management to entrust them to be autonomous to increase their drive and responsibility. They also expressed that same principles on delegation were applied by them in their own units. Organisational performance such as productivity, quality and organisational adoption to needs, are described in the literature to benefit from this (Aucoin, 1990; Dubnick, 2005; Guest, 1987; Ingraham, 2005; Meyer and Hammerschmid, 2010; Storey, 1989; Wynen *et al.,* 2014). Innovation and experimentation are reported to be stimulated by increased autonomy (Blomqvist, 2004; Sreeramareddy and Sathyanarayana, 2013; Darvishmotevali, 2018).

The unit managers were in general content with the balance between the high degree of autonomy and the organisation's central support. However, some were critical towards too much involvement from central management, whilst others wished more. This leads to the importance to secure, managerial experience and leadership on individual level, and the organisational ability to support autonomy and avoid inertia due to unutilised resources (Liwanag and Wyss, 2019; Wynen *et al.,* 2014). The professional autonomy, like the freedom for a doctor to practice out of the best interest for the patient, is an important aspect of health care in direct relation to deccentralisation (Vancil, 1979).

6.2.3 Importance of trust

An emerging new paradigm around value and networking appears to succeed new public management (Stoker 2016; Hyndman and Liguori, 2016; Krohwinkel *et al.,* 2019). In study II several assumptions on the importance of trust are conceptualised in the programme theory. One assumption is that a high level of trust, and by that a large decision space, should be put on the most important locus, where the patients are treated, which has been shown in other studies to be important (Burns, 1995; Aas, 1997; Coulter, 1997). This also correlates to the assumption that a continuous dialogue about accountability and responsibility is crucial to build trust (DeVries, 2000; Lee and McKee, 2015; Bringselius, 2020). The senior management considered more or less this a natural way of management.

The same observations are described already during the 1970s in the decentralisation process of a Swedish bank. Confidence and trust were expressed as building stones "*guided by the fundamental needs and wishes in human nature*" to get managers throughout the hierarchy to relinquish power to subordinates (Wallander, 2003). In study III the organisational performance was linked to unit managers' perceptions in terms of the three elements of decentralisation. In the high performance group the unit managers were prone to delegate the management authority further down the line and to hold subordinates accountable. Wynen et al (2014) describe that the willingness of senior managers to further delegate their authority is crucial for more rapid and focused decisions. Trust and reciprocity are shown in studies to be important to benefit from decentralisation (Perronne *et al.,* 2003; DeVries 2000; Arrowsmith and Sisson, 2002; Bojke *et al.,* 2001).

Trust is connected to the new emerging paradigms in healthcare management and is the coordination mechanism described by Adler (2001) in the third logic, networking. Professional knowledge is another component emphasised in this logic, since competence is of growing importance in society (Freidson, 2001). This also relates to professional autonomy connected to decentralisation (Vancil, 1979). This autonomy has also been problematised in relation to professions getting "marketed and colonised", with conflicts of interest to follow as a potential threat to professional knowledge (Light, 2010). In study II the assumptions can by large be considered to be trust-based, which is confirmed in the interviews with the unit managers. The reciprocity is an important aspect identified by the senior managers in study II. It has been described in a theoretical model, *"the social trap"*. If one party does not collaborate, the other ones will not either, even though everyone knows it would be much better to do this. If this mutual trust balance does not function, the "trap" will close (Rothstein, 2003 and 2018).

In study IV, trust is mentioned as crucial several times in the interviews of the emergency management team and in the free text answers from the unit managers. The emergency management team expressed that the high operative effectiveness, confidence and feeling safe came from a trust in each other, that was strengthened and facilitated by the emergency management model with clear roles and functions. An empirical research study supports that high performance work teams are based on shared values and team structures (Edmondson, 1999). The interest what impact trust might have in organisations has increased in recent years. Research can be summarised that organisations that are characterised with a high grade of trust between employees, but also between employees and management, are more successful in different aspects (Rothstein, 2018). The empirical studies in this thesis corroborate these findings.

6.2.4 Coordination and collaboration

Teece *et al* (1997) identifies coordination as one of the three most important organisational processes, beside learning (dynamic) and reconfiguration (transforming). Coordination is expressed in different ways, both vertical between senior management and unit managers and horizontal, between units and specialities, also beyond the organisation. The efficiency and effectiveness of the coordination, both internally and externally are described as very important for performance (Teece *et al.,* 1997; Aoki, 1990). In study II the programme theory

consists of assumptions that coordination in terms of senior management's overview of the organisation and situation, as a guidance to the unit managers will increase the decision-making ability. This is confirmed in the interviews and perceived as helpful by the unit managers in study III. In study IV the coordination mechanism is one of the crucial capabilities identified by the emergency management team, as a micro-fundament to a high dynamic effectiveness during the pandemic. The managers appraised the improved coordination processes developed by the emergency management team, that made it possible to drive new strategic positions. The managers expressed the importance to further maintain the processes and procedures for better coordination. These empirical findings confirm the theory on dynamic effectiveness as a synergy between operational activities and the ability to reach new positions, as a drive for strategic effectiveness (Abrahamsson and Brege, 2005).

Collaboration is more than coordination and could mean shared resources to build integrated care (Gröne and Garcia-Barbero, 2001; Zonneveld *et al*., 2017; Rafiq *et al*., 2019). It is also an important ability to collaborate in new logics to meet patients' needs for services in approaches adjusted to the medical knowledge in co-production with the patients (Brommels, 2020). Some managers in study III proposed reinforced structures for sharing of new practices and processes across organisational borders. They confirmed the assumption that decision-making is supported by system perspective to increase learning and collaboration in the decentralised model. This role of a senior management to reduce risk of fragmentation and other negative effects as silo thinking and sub-optimisation, is highlighted in the research literature (Wyss and Lorentz, 2000; Peckham *et al.,*2005). In study IV the emergency management team concluded that the ability of being both flexible and effective in operations enabled a better collaboration on the systems level between all stakeholders with a shared focus, which in turn reinforced the collaboration even more. The collaboration that surfaces in that situation is a good example of emerging co-evolution in a complex adaptive system (Plsek and Greenhalgh, 2001).

6.2.5 Adjusting activities

The SLSO organisation is a conglomerate of different services and units, divided into the decentralised "profit units", "*the enterprises within the enterprise"*. The smallest profit unit has around ten employees and the largest over a thousand. The unit managers have the same latitude of delegated authority for the unit, and thus the same responsibility. This could be illustrated as the left picture in Figure 13, the organisation with four areas of services and R & D in a symmetric organisational structure. However, the interviews with the unit managers gave a picture that could be illustrated as right in the figure. What does this mean?

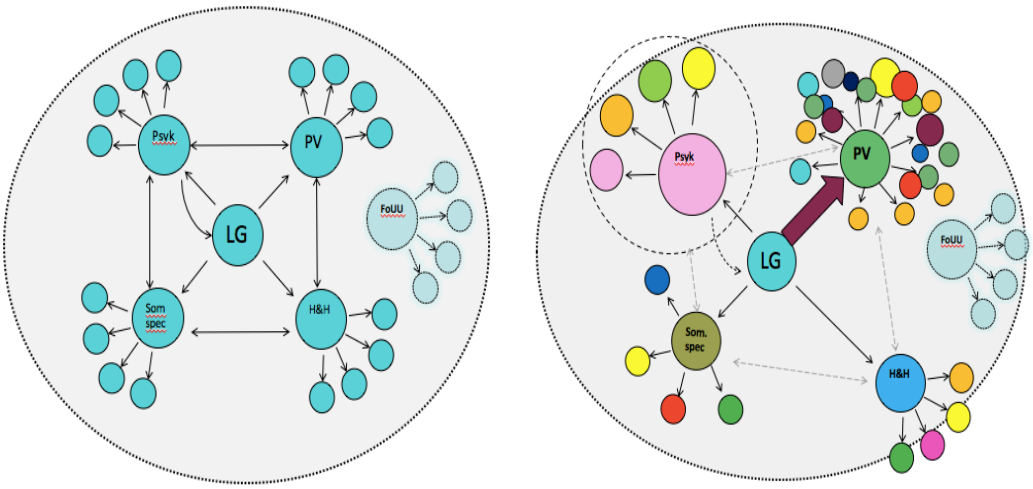

Figure 13. Left - expected organisational structure of SLSO, Right – perceived organisational structure of SLSO as described in the interviews. Primary care (PV), Psychiatry (Psyk), Habiliation and Assistive Technology (H&H) and Somatic specialist care (Som Spec), and a Research and Development division (FoUU) managed by the management team (LG).

Primary care consists of nearly a hundred "profit units" ranging from 20 to 120 employees with rather similar content but different challenges due to local conditions. Psychiatry consists of a number of large clinics with rather similar content and some special services working tight together, somatic specialist care is an area with the most diversified kind of services rather separated from each other but in need of close collaboration with all other services, and habilitation and assistive technology, are very different from the other services with a much closer collaboration with stakeholders outside healthcare. This implies that *"one size does not fit all"* and that even though the principles in the management model are the same for all the units, the practice and organisational consequences have to be adopted for best performance.

In study III several managers reported that the formal large delegated authority could be perceived more limited because the units differ so much, and the formal delegation was difficult to adapt to local conditions. They also stated that formal rules need to be applied flexibly. If a beneficiary collaboration with other units could be strengthened by reducing one's formal decision space, this was done. This even goes beyond the organisational borders shown in study IV.

Hales (1999) concludes that the organisational structure has an impact on managerial behaviour. A defined subunit, or a defined "profit centre", is an important element in a decentralised organisation (Vancil, 1979). Vancil (1979) describe a decentralised organisation as "*an organisation where managers are accountable for the performance of a defined subunit"*. These "profit centres" are described as units with a smaller number of employees and often a service of a single speciality (Vancil, 1979). The first activity in the implementation of the management model was to divide the large organisation into smaller autonomous units. However, the optimal size of a service is complicated, since it depends on what functions these undertake, and how technology or other factors enable executing (Sass, 1995; Tester, 1994). Smaller organisations are supported by Bojke *et al* (2001) and Walshe

et al (2004) since larger organisations often fail to deliver expected results. DeVries (2000) and Peckham *et al* (2005) argue that an "optimal size is a fantasy", and need to be a compromise for each function. Partnership with patients is more easily established for better understanding on local needs in smaller units (Coulter, 1997; Colombo and Mastro, 2004; Donaldson, 2001; Wynen *et al.,* 2014). On the other hand, an early study by Starkweather (1970) concludes that there are so many other factors of importance than just organisational size that matters, as for example the professionalisation and managerial skills.

The unit managers in study III appraised the model with autonomous profit units but were concerned on the differences between the services and given conditions. However, this was generally solved by using the delegated decision space in a flexible way. One size "does not fit all", which is shown in Figure 12. Teece (1997, p 1323) conclude that *"more decentralised organisations with greater local autonomy are less likely to be blindsided"*. Decentralisation and local autonomy assist the ability to scan the environment, calibrate the requirements for change and to rapidly reconfigurate (Teece *et al.,* 1997). These capabilities are expressed in the interviews in study III and IV and found in organisations referred to as "high-flex" (Teece *et al.*, 1997). In the study of the strategic governance at the regional level in Region Stockholm the analysis showed that a "one size fits all" ambition is rather counterproductive, and not aligned with the need for operative services to adjust for a better performance (Höglund and Mårtensson, 2020, s 162). The same observations were made in study III within the SLSO organisation, where the introduction of a uniform divisional level aiming to simplify by reducing administration and free time for patients, was perceived the opposite as counterproductive and constraining by the unit managers. The introduction of the divisional level facilitated same processes but was considered a larger constraint leading to negative silo effects (Aas, 1997; Wyss and Lorenz, 2000). A benefit can be a problem in another context and cannot be taken for granted to give the same effect when transferred to a new environment (Peckham *et al*., 2005).

6.3 DECENTRALISATION – WHAT WORKS?

Decentralisation of management within a service delivery organisation in healthcare is about enabling front-line managers and their staff to be responsive in a more efficient and rapid way to adapt to local needs and a better resource utilisation. In the studied organisation the senior management expressed these intentions in their programme theory, and the management model implemented. The model relied on a balance between unit managers' delegated authority, demonstrated as an extended decision space, their accountability for performance as measured by a balanced score card, their experience and individual capability as well as the organisation's structures for guidance and support ("organisational capacity"). The unit managers expressed their perceptions of the management model in the interviews by large in line with these intentions. Their delegated authority was appreciated by the unit managers, and central support in human resources and investments is appreciated, as well as leadership development and organisation-wide improvement programmes, although the utility of the latter varies between units.

The style and practices of unit managers in terms of organisational performance were similar. All managers were pleased with their delegated management authority which gave them an

appreciated autonomy, they were very well aware of their responsibilities, and especially their financial accountability. Contextual factors such as different external conditions and various operations defined by their medical and service content and contracts with the purchaser affect the organisational performance, regardless a decentralised management model. Individual experiences and skills of the manager, prone as well as able to be proactive to use their delegated authority are factors to recognise. Regardless the differences found between services in relation to performance in study III, the similarities in opinions across the three groups indicate that the management model in itself worked as intended.

To what extent does the literature on management decentralisation support or refute these observations from the three cornerstones of the revised Bossert model?

6.3.1 Delegated authority to full extent

The main value of management decentralisation suggested in the literature is that it enables decisions at the local level, to ensure that patients' needs are properly understood, requirements be more knowledgeably analysed and resources better utilised for better performance (Blomqvist, 2004; Sreemareddy and Sathyanarayana, 2013; Colombo and Mastro, 2004; Wynen *et al.,* 2014; Darvishmotevali, 2018). All managers in study III were pleased with their delegated authority. However, there were differences how actively the managers used their delegated authority. This is dependent on manager experience (Liwanag and Wyss, 2019). The importance that the top management in a decentralised management model refrain from micro-manage is identified in the literature. This might create unclarities in responsibility as well as negative effects on focus and time to make the change (Wyss and Lorentz, 2000; Guanais and Macinko, 2009). Furthermore, it might have negative effects on motivation and staff morale (Burns et al., 1995; Hales, 1999; DeVries, 2000; Osborne and Gaebler, 1992). One study claims that a decentralised organisation where staff is hired locally comes better out on recruitment and retention and can establish better conditions of employment (Thornley, 1998). Conversely, other studies discuss the lack of capacity for managing human resources (Kolehmainen-Aitken, 1999; DeVries, 2000).

An argument against decentralisation is the risk for fragmentation, inequality or even poor performance (Peckham *et al.,* 2005; Sumah *et al*., 2016). This calls for coordination at some level in the organisation. As regards coordination, a conclusion from one review on systems level is that it is a challenge to identify the right combination of decentralised and centralised functions, in order to achieve optimal performance, and certainly some form of coordination must be maintained at the central level no matter how extensive the form of decentralisation" (Saltman *et al.,* 2007). The introduction of standardised care processes and large-scale training programmes throughout the organisation are activities to mitigate inequalities.

In study III the managers identified financial restrictions and tradition as internal limits to the decision space, and the micromanaging purchaser to be seen as the most important externally induced restriction to decision space, and the largest constraint. Hales (1999) concludes that there is evidence that decentralised organisations can operate within a centralised system. However, there is also evidence that managers' behaviours tend to adhere to previously centralised procedures even if authority is decentralised.

6.3.2 Organisational and individual capacity a challenge

The performance of the whole organisation needs to be supported by an organisational capacity is shown in our findings consistent with recent research, which shows this to be necessary for a successful implementation of decentralisation and to ensure equal standard of services provided (Bossert and Mitchell, 2011; Lega *et al*., 2013; Abimbola *et al.,* 2019). The importance of right kind of coordination is stressed to avoid inequality (Evans *et al.,* 2013).

Managers have to be empowered by training and continuous support and encouragement to improve healthcare, to which they are held accountable. The understanding of medical consequences of decision-making given in training to healthcare managers in a systematic scientific-like approach integrated with practice is shown to improve performance (Savage, *et al.,* 2018). Large-scale and systematic training in cascade models as the eHealth competence and Enhancing Value programmes is important to build both organisational and individual capacity showed in several studies (Augustsson, *et al.,* 2017; Kinnunen, *et al.,* 2019; Nielsen, *et al.,* 2021).

Internal training programmes in leadership and management are important to ensure that managers can use their decision-making capacity. Other studies have shown the importance of training for making effective use of increased decision latitude and authority delegated to the managers (Bossert and Mitchell, 2011; Abimbola *et al*., 2019; Cobos Munoz *et al.,* 2017; Jaques, 1989; Liwanag and Wyss, 2019). The organisations capacity to be clear in delegation, support and to be able to train the managers accordingly is as crucial.

6.3.3 Accountability without any doubt

Accountability has to be clearly declared in balance with the delegated authority specified in a delegation scheme (Jaques, 1989). Balance score cards were introduced already at start to give the managers tools to monitor their performance and to ensure accountability, control and effective follow-up. The method followed at large Kaplan and Norton's principles (1992). However, an empirical study shows the dilemmas of the balance score card, which has been a reason to modify and adopt the method to organisational conditions (Johansson *et al.,* 2006). This made the strategies and goals clear not only for the managers but for the organisation as a whole. It was used as a signal system of values.

Performance is related to organisational culture and internal management principles (Osborne and Gaebler, 1992; Peckham *et al.,* 2005; Keroack *et al*., 2007). If accountability for performance is weak or if the delegated authority is overruled by senior managers there will be no positive effect on performance (Rowbotton and Billis, 1977; Jaques, 1989; Hales, 1999). Mutual trust and loyalty both ways are identified in the study as important factors supported by other reports (Bossert, 1998; Osborne and Gaebler, 1992; Thornley, 1998; Arrowsmith and Sisson, 2002).

6.3.4 Perceptions and outcomes for performance

Plant's (2009) concept of post-bureaucratic organisations are, in contrast to traditional bureaucratic public organisations, characterised by a high grade of decentralisation and result-oriented leadership, which allow managers to make decisions enhancing improved performance. Organisational performance such as productivity, quality and organisational adoption to needs, has been shown to benefit from this (Aucoin, 1990; Dubnick, 2005; Guest, 1987; Ingraham, 2005; Meyer and Hammerschmid, 2010; Storey, 1989; Wynen *et al.,* 2014). Studies on the financial impact of decentralisation emphasise that delegating employees decision-making authority will give performance gains and promote improved cost control without adversely affecting quality of care or population health (Richardson et al., 2002; Lee and McKee, 2015). Many authors also claim that innovations are promoted in decentralised service organisations (Satlman et al., 2007; Osborne and Gaebler, 1992; Weber, 1964; Bergman, 1998; Bossert, 1998; Darvishmotevali, 2018).

In study III the unit managers perception to organisational performance differed as described in chapter 5.3.8. Overall, there were more similarities than differences, but proactivity and to what extent the managers used their delegated authority and how prone they were to further delegate and involve subordinates, held accountable, in the decision-making seemed to be related to a high performance.

Organisational performance is said to be enhanced by highly motivated, committed and empowered managers (Wynen et al., 2014; Aucoin, 1990; Dubnick, 2005; Guest, 1987; Ingraham, 2005; Meyer and Hammerschmid, 2010). In addition to positive effects on performance, the responsibility related to managers having delegated authority, and thus autonomy, and being held accountable accordingly, is reported to empower them to deliver the best possible patient care (Wynen et al., 204; Cobos Munoz et al., 2017; Hales, 1999; Vancil, 1979; Drucker, 1989; Thomas and Dunkterley, 1999). In more general terms, management decentralisation has an impact on cost containment and increased staff morale, motivation and satisfaction (Osborne and Gaelber, 1992; Burns, 1995; Aas, 1997; Thornley, 1998).

Bossert's decision space model, its development in subsequent empirical studies and stratified systems theory synthesised in study I is proposed as an explanatory model to guide management decentralisation in service delivery organisations, Figure 11 (Rowbottom and Billis, 1977; Bossert, 1998; Jaques, 1989; Bossert and Mitchell, 2011; Liwanag and Wyss, 2018; Abimbola *et al*, 2019; Ohrling *et al.,* 2021a).

This combined model allows clear conceptualisation of the accountability to higher levels for ensuring coordination across decentralised units, a finding reported in some studies but not included in comprehensive theories of decentralisation (Ham *et al*., 2011). These studies propose that coordination of care or integration could be reduced if certain powers are decentralised without corresponding measures to maintain or increase coordination or integration such as centrally setting common standards. For example, decentralising authority to a nurse manager to manage aspects of a physiotherapists work would also require clarification of the authority of the senior manager of physiotherapist. Cross-functional or

multi-disciplinary teams are ways to ensure integration and coordination, but, if certain management authorities are decentralised to a team member's professional manager, then the general manager of the multi-disciplinary team may have less authority to coordinate the team (Jaques, 1976 and 1989). Another example is that delegation of authority from the centre to lower levels to purchase digital technology also requires the lower level to purchase technology that meets required technical standards, so as to allow communication with others and to ensure an integrated communications system. Without corresponding coordination requirements and accountabilities, decentralisation of authority to units and professional staff may lead to reduced overall health system performance.

6.3.5 The contextual impact

In line with observations, when building institutional capacity and enlarging decision space to held managers accountable, proper attention has to be paid to the context (DeVries, 2000; Liwanag and Wyss, 2019). Responses to new decentralised structures might be both positive and negative, calling for a readiness to make adjustments. Different contexts have been explanations in a number of reviews to different processes and outcomes (Sumah et al., 2016; Abimbola et al., 2019). A challenge is to attribute the effect to decentralisation. Peckham et al (2005) notes in a review that there are several other factors such as *"organisational culture, external environment, and performance monitoring processes"*, that are strong influential factors as well.

Local conditions and requirements may differ even within the large organisation, between profit units and even within profit units due to external environmental factors, internal culture or contracts. Managers have to adopt and be flexible to use their authority and utilise the resources the best way. This is supported by the literature as an important factor, that managers can have decision latitude enough to reach the goals, but also need to be able to interact with the delegating part to be near cross-borders without breaking legal rules (Mintrom and Luetjens, 2017).

The hierarchical context of Region Stockholm is challenging, but still a decentralised management model where managers are delegated authority with support both on organisational and individual levels, and held accountable for the performance, has been possible to construct and implement built on elements studied in this thesis.

6.4 DECENTRALISATION AS FACILITATOR IN EMERGENCY?

In study IV we have had the unique opportunity to study how the Covid-19 pandemic outbreak was met as an unexpected event in a decentralised organisational context, with requirements of both strong coordination and a fast focused response. A rapid adjustment in operations needed as a response to a radically changed environment by a decentralised organisation with delegated decision-making authority to front-line managers could be studied.

Healthcare could be described as a complex adaptive system, characterised by unpredictability and unexpected events (Plsek and Greenhalgg, 2001). Complexity

perspectives have been introduced in disaster response management as a way to handle the dynamics of a disaster with focus on effectiveness and activities (Bergström *et al*., 2016). Plsek and Greenhalgh (2001, p 625) define complex adaptive system as: *"a collection of individual agents with freedom to act in ways that are not always totally predictable, and whose actions are interconnected so that one agent's actions change the context for other agents."* This indicates the conditions for emergency management consisting of a complex understanding of the event as well as the ability to collaborate.

6.4.1 Highly dynamic to deal with the unexpected

The study of emergency management team members' perceptions in the interviews and the unit managers' free text survey answers showed a highly dynamic organisation displaying both high operational effectiveness and rapid strategic repositioning. An unexpected event will require an ability of organisations to rapidly adjust. Too much focus on efficiency, can even impede flexible responses. Consequently, the management literature emphasises that organisations need to be both "lean" and "agile" (Tolf *et al.,* 2015).

The analysis showed a highly dynamic organisation displaying both high operational effectiveness and rapid strategic repositioning compatible to the theory of Abrahamsson and Brege (2005). The decision space available as well as the organisation's institutional capacity were utilised to achieve these changes, for which the team was held accountable which has been shown in other studies (Bossert and Mitchell, 2011; Roman *et al.,* 2017).

6.4.1 Dynamic capabilities mobilised

Structures and processes needed for change and adjustment, dynamic capabilities, were activated in all three categories of the Teece framework to constitute the *"micro-foundations"* as concrete activities from which the operations could be run (Teece, 1997).

In emergency and disaster response management process-oriented approaches are used to a wide extent to ensure efficiency (Hofmann *et al.,* 2015). However, a drawback is that response processes prepared in advance, usually are impeded by unplannable execution contexts, unique processes, temporal urgency or other unexpected events (Hofmann *et al.,* 2018, p 967). Coordination under unpredictable conditions is a challenge, where information is critical (Comfort *et al.,* 2001; Arain, 2015).

The dynamic capabilities are used to continuously upgrade and extend the organisations asset base. The concept originates from the business sector how to achieve competitive advantage (Teece, 1997; Eisenhardt and Martin, 2000). The characteristics in general of dynamic capabilities in highly unpredictable environment are the absence of formal routines and the creation of new, situation-specific knowledge. Prototyping and testing proceed in an iterative way, as managers adjust to changes and new information. This manner offers a rapid learning through immediate feed-back based on real-time information and intense communication internally and externally (Eisenhardt and Martin, 2000). These conditions are compatible with the actions undertaken by the emergency management team during the pandemic analysed in study IV.

The fact that the emergency management team so rapidly mobilised, understood the situation and took a large responsibility to mitigate spread of infection and ensure care of patients in a safe way, has been a reassuring proof of the organisation's capacity and ability to readjust, despite the size of the organisation and its high number of services providing units. The organisation showed a high grade of dynamic effectiveness.

The unit managers expressed in general that the emergency organisation was perceived good and stable. It was mobilised quickly with clear functions, that were supportive but sometimes dispatched information needed to be clarified better. They expressed that actions were taken that increased their units' operational and strategic work, and that they utilised their degree of decision space and accountability, as well as leaned on the organisation's capacity, to achieve these changes. The cluster organisation and the digitalisation were actions that were highly appreciated, and the managers expressed a clear wish to further maintain and develop these initiatives.

6.4.2 Decisions were made as needed

The managers stressed the fact that a large degree of autonomy and decision space with delegated authority was given on a trust base. Research has shown that organisations characterised by a high grade of trust between employees are more successful in different aspects (Rothstein, 2018). The decentralised model made it possible to be focused with a high grade of operational effectiveness, and feed-back and learning made it possible to reach new strategic positioning, such as establishing the cluster organisation.

Comfort (2007, p 194) define coordination as *"aligning one's actions with those of other relevant actors and organizations to achieve a shared goal."* This implies that an organisation must be able to both respond with creativity to unexpected events, and to interact with the environment for an adaptive performance in dynamic conditions (Comfort, 2007).

Decentralisation as a means to increase efficiency has in the literature shown to be effective to empower managers to handle effects and needs on both system and local level, and also to embrace the important aspects of effectiveness (Tolf *et al*., 2015). The unit managers expressed that actions were taken that increased their units' operational and strategic work, and that they utilised their degree of decision space and accountability, as well as leaned on the organisation's capacity, to achieve these changes.

6.4.3 The interaction between operations and strategy

The weekly survey sent out to the unit managers was one important source of information, on which both operative and new strategic decisions could be considered by the emergency management team. This modus operandi further increased dynamic effectiveness. This increase, driven by operational activities and used to strengthen the strategic position made it possible to became even more responsive. Abrahamsson and Brege (2005) define this cross-section between strategic and operational effectiveness as the *dynamic corner*, where the two perspectives reinforce one another. The operational and strategic processes are by

this integrated into an important logic of dynamic effectiveness (Abrahamsson and Brege, 2005, p 107).

This means that the ability to be agile and flexible relies on the dynamic capabilities and the ability to identify (sensing), structure (seizing) and to operate and lead (managing) resources (Teece, 1997). The operational effectiveness emerges from a delegated authority, decision space, and the accountability that follow the responsibility given, anchored in the local conditions. However, this process will also create a unique opportunity of learning in the organisation that will strengthen not only the individual capacity but also the institutional capacity of the organisation to, as in this case, to cope with a pandemic (Ohrling *et al.,* 2021a).

This way the necessary coordination and overview will be secured. This is also confirmed in the interviews with the emergency management team in study IV. The strengthened strategic effectiveness will come from the delegated authority and the given decision space for unit managers and enables the emergency management team to make decisions to reorganise, readjust and reinforce with competence and experience needed, as an expression of organisational capacity, to be able to reach new strategic positions. Together, strategic and operational effectiveness will reinforce the overall dynamic effectiveness of the organisation. The dynamic capabilities and micro-foundations, as a platform for agile and flexible management, and the operational effectiveness as a driver for new strategic positioning and by that higher dynamic effectiveness can be described in relation to delegated authority, accountability and individual and organisational capacity as in Figure 14.

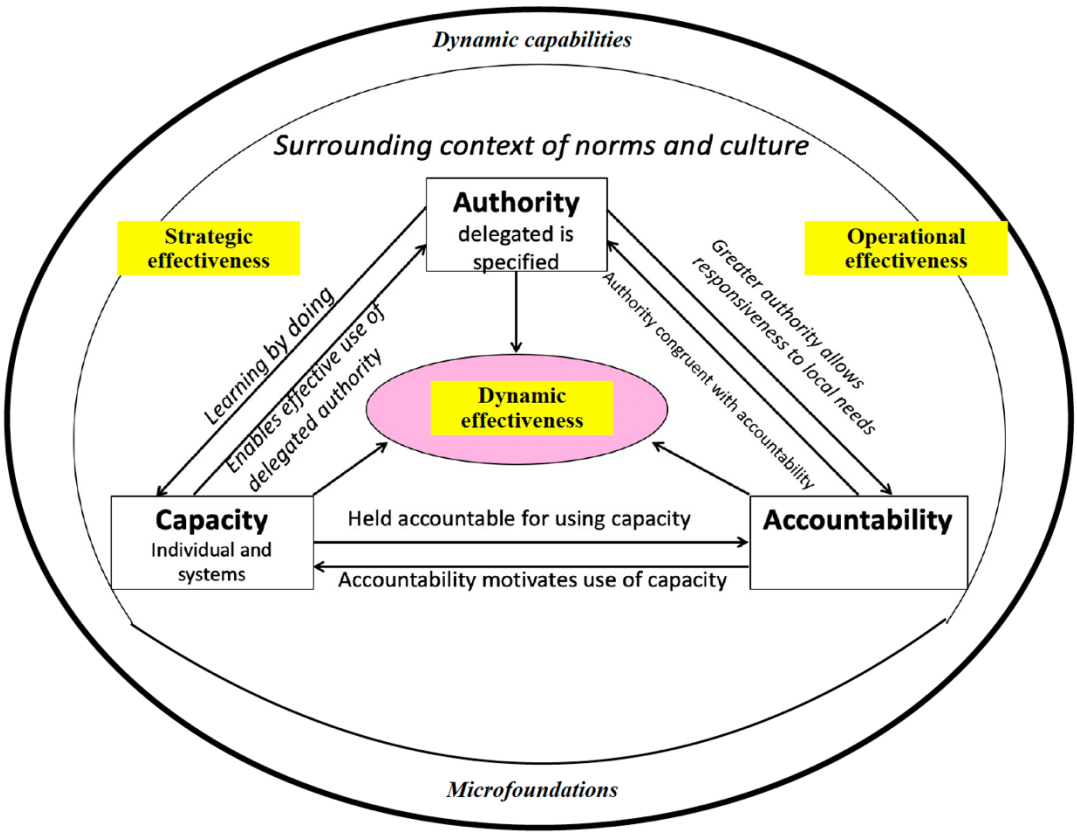

Figure 14. Combined model of Teece framework, Abrahamsson and Brege conceptual model and the revised Bossert model.

Our findings show the importance of building capacity on an institutional level for the emergency management of the whole organisation. Recent research has shown this to be necessary for a successful implementation of decentralisation and to ensure equal standard of services provided (Bossert and Mitchell, 2011; Lega *et al.,* 2013; Abimbola *et al.,* 2019). Lack of coordination, or that of the right type, is a threat to equality and, in an emergency situation, may lead to wrong priorities (Evans *et al.,* 2013).

7 METHODOLOGICAL CONSIDERATIONS

A range of methodological issues and choices were identified, consciously discussed, and handled to approach the research questions with respect to the trustworthiness and risk of bias. I will discuss these issues and choices from different perspectives.

I will start to comment on the philosophy of science standpoints as an overarching fundament to my research design and methodology (O'Brien *et al.,* 2014). I will then comment on the methodological considerations on the scoping review from the five-stage framework of Arksey and O'Malley (2005). Since this is a single case study, I will address the criteria by Yin (2014) to assess quality in research design, with additional reflections on trustworthiness of the three empirical studies using the assessment criteria from Guba (1981). Finally, which might be one of the most challenging parts in the methodology in my thesis, I will reflect on the fact that I have been a researcher in my own organisation.

7.1 PHILOSOPHIC STANDPOINTS

Philosophy of science has many different perspectives of which I will comment on how this have guided my research in the aspects of epistemology (the study of knowledge), ontology (the study of what exists), and methodology.

The overarching standpoint is in line with the post-positivist consensus that has emerged during recent years. It is non doctrinal, which means that there should be a higher grade of interaction between traditional philosophy outside logic and other areas of philosophy and various special sciences (Boyd *et al.,* 1991, p xiii).

In concrete terms this means that I have had a pragmatic standpoint from a philosophy of science perspective regarding ontology and epistemology, where the correct and appropriate methodological choices and research designs have been guiding the approaches in line with post-positivism and a critical realism paradigm.

The origin and scope of knowledge of the empirical studies in this thesis, the epistemological viewpoint, is the reality studied with the qualitative (study II och IV) and mixed (study III) methods, which I have chosen to provide evidence. The approaches have been both deductive and inductive (Bryman, 2016).

Ontologically the categories used to describe the reality are just provisional, because of the fact that there is a difference between the study object and the terms used (Bryman, 2016). The research involves subjective perceptions and different methods and will, from different perspectives, give different results. Perceptions and reality are separate, and a perceived part of a reality is never complete (Bhaskar, 2013). This implies that my approach is to represent the reality and not to "find the truth", which is an approach of a critical realist and the philosophic fundament for this thesis (Mays and Pope, 2000).

7.2 SCOPING REVIEW (STUDY I)

A scoping review is a type of literature review with a broader scope in comparison to a systematic review, with a study design aimed to address many different types of study designs without a narrow range (Arksey and O'Malley, 2005). This approach does not assess the quality of included studies. However, the technique provides a broader mapping of the relevant literature in the field of interest, and by that offer a method to identify gaps in the existing evidence base. This is especially appropriate when the range of material in the research field itself, as in this study, is difficult to grasp (Arksey and O'Malley, 2005).

I consider this method most appropriate for my study I. Research on decentralisation in healthcare service delivery is very scant in the literature. A quality appraisal of the studies was less important than finding the literature there is, with a broad scope. In general, the methods and designs in organisational research are found in a wide range of different types. A formal quality assessment could be a constraint for identification of relevant material. Scoping reviews are considered to be particularly relevant in fields with emerging evidence or in complex concepts (Arksey and O'Malley, 2005; Levac *et al.,* 2010; Colquhoun *et al*., 2014).

This method can be described as a tool for synthesis of knowledge. The approach is exploratory in its nature and is used in my study to summarise research findings to find out implications for managers and researcher, as well as drawing conclusions for further empirical studies, compliant to the methodology. It is a hypothesis-generating method (Tricco *et al.,* 2016).

As in all methodologies it is important to be consistent with a protocol. Arksey and O'Malley (2005) advanced further by Levac et al (2010) propose a framework in six stages to ensure an explicit guideline for transparency, and to allow for readers to judge the appropriateness of the chosen method, and validity and reliability (Tricco *et al.,* 2016).

1) Identifying the research question, since the approach is broad it is important to clearly articulate the research question and variables that will guide the scope of inquiry. In my study the research questions were formulated and tested in the research group to check for understanding and need for clarification.

2) Identifying relevant studies, which is a balance between breadth and comprehensiveness. The strategy that I adopted was to use different sources for searching research evidence. Literature databases, reference lists in journals and additional records identified in other sources.

3) Study selection was done in two steps as an iterative process. Inclusions and exclusions criteria were proposed and agreed upon in the research team. I and one other researcher made the screening and eligibility process. All the abstracts were read in the screening process and in the eligibility process all full articles were read independently and chartered for inclusion proposal. From this the articles to be included was proposed separately by me and the other researcher for reconciliation with a third researcher. The search process is documented.

4) Charting the data. Abstraction tablets were developed and used by me and one of the other researchers separately. Data was extracted consistent and purposefully in relation to the research questions in themes, that were reconciled with the third researcher.

5) Collating and summarising were done by thematic content analysis and themes were reported as findings and used for generating hypothesis for further empirical research.

6) Consultation is the last stage in the framework and is considered as an essential component in a scoping review. This might be considered done indirectly by me being a practicing manager beside my research studies and the two other senior researchers. This will be discussed more when I comment my role as a researcher in my own organisation.

However, the fact that a scoping review does not in a formal sense appraise the quality of the studies can be considered a limitation. As I already have commented this is of no relevance, if the studies searched for need a broad approach, and when it could be a risk to miss information if the search is done in an emerging field, as in this case. I consider the scoping review method the most appropriate for my study.

7.3 EMPIRICAL STUDIES (STUDY II, III AND IV)

7.3.1 Case study

Empirical studies of decentralisation in service delivery organisations, and more specific in primary and community care, were more or less a white paper from a research perspective. The organisation in this thesis with a long decentralised tradition gave an opportunity not only to study the management model, but also to study how an unexpected event, such as the pandemic outbreak was received in this context, in an exploratory approach as a single case.

Case studies use a number of qualitative methods or combination of qualitative and quantitative methods, and are most suitable in real-life contemporary open settings, where processes, events and context are intertwined (Keen, 2006; Yin, 2014). A challenge for the researcher is to build the case for maximum confidence in the findings, but also to pay attention to value judgements and the risk of bias in the interpretation (Keen, 2006). Validity and generalisation are aspects in designing and conducting in single case studies that demand awareness (Yin, 2013).

A case study design can be judged from the quality criteria defined by Yin (2014). Those are construct validity, internal validity, external validity, and reliability. The rationale for using a case study design has been discussed in chapter 4.4.2.

Construct validity is about establishing correct operational measures, which is done in the data collection phase by using multiple data sources and methods (Yin, 2014). The purposive sampling used in all studies was aimed to secure appropriate data from different parts of the organisation as from the two managerial levels in relation to a plausible chain of evidence.

The internal validity is in focus in the data analysis phase to establish causal relationships by cognitive mapping and explanation building (Yin, 2014). This was done by using different theoretical frameworks in all empirical studies II, III and IV, such as logic modelling, logic analysis, decision space model, stratified system theory, dynamic capabilities theory and dynamic effectiveness conceptual framework to explore causality. The data was collected from two levels of the organisation, both senior management and unit managers, which further supported the internal validity.

The external validity is about establishing the domain to which the findings can be generalised and are done in the research design phase (Yin, 2014). Analytical generalisation is an appropriate logic for generalising findings, especially from a single case like this. It means extraction of a more abstract level of ideas from findings in the case study (Yin, 2013). Relevant research questions, study design and the analytical generalisation were supported from different theoretical perspectives listed above. The theoretical contribution from study IV allows the findings from the in-depth interviews and analysis to be generalised into other settings.

Reliability refers to the operations of study, such as it can be repeated with the same results (Yin, 2014). The research documentation has been rigorous to ensure the possibility to understand the research process and make it repeatable. Study protocols and code books have been digitally documented in a database created in NVivo, also used for the coding. All data has been made traceable. All interviews were digitally recorded and transcribed verbatim following the ethical approval, to reduce the risk of recall bias.

7.3.2 Trustworthiness

In this case qualitative and mixed methods have been used. There are two opposing views, whether qualitative research can be assessed according to the same quality criteria as quantitative methods or not (Mays and Pope, 2000). Mays and Pope (2000, p 50) argue for the realist position that quality in qualitative research can be assessed with the same broad concepts of validity and relevance as in quantitative studies, but "*need to be operationalised differently to take into account the distinctive goals of qualitative research*". Malterud (2001) concludes in a research paper that "*rather than thinking of qualitative and quantitative strategies as incompatible, they should be seen as complementary*". Specific challenges in qualitative research that affect the studies are identified as reflexivity, transferability, interpretation and analysis. Consistent for all elements are approaches that are systematic and transparent (Malterud, 2001).

Four criterias that are accepted by many used for evaluation of the quality of qualitative research and trustworthiness are presented by Guba (1981) and will be discussed as a complement to the criteria of Yin (2014), in the following.

7.3.2.1 Credibility

Credibility, corresponding to internal validity employed by positivist investigators, is about the match between the respondents' views of the phenomenon under scrutiny and the

researcher's representation of them (Shenton, 2004). The data collection methods have to be appropriate to represent what really takes place in the real-life setting studied.

I brought a large pre-understanding into these studies of both the concept of decentralised management, and the organisation studied as such. This helped to understand the literature, formulate research questions, study designs and interpretations to further strengthen the credibility (Shenton, 2004). This is both a challenge and an advantage that has to be clarified (Coghlan, 2019). Bias and skewness were avoided by several measures. The role as a researcher in my own organisation and reflexivity is discussed in chapter 7.4.

The following measures were taken to ensure credibility and promote confidence: well established research methods, prolonged engagement, purposive sampling, triangulation, debriefing and scrutiny with peers, and member checks.

Directed content analysis is a well-established research method used in all three empirical studies (Graneheim and Lundman, 2004). The approach was to conceptually use theoretical frameworks by deductively derive categories from these theories to increase credibility. The coding of the meaning units was done using these predetermined categories (Hsieh and Shannon, 2005). A code book (Gale *et al.,* 2013) derived from the theories was used to ensure harmonisation in coding made independently. In study II a logic model was used to present the elements of the decentralised management model and the linkage between them, which is a way to reinforce credibility (Yin, 2014). The a priori logic analysis is one more method used in this aspect (Brouselle and Champagne, 2010). Study III is a mixed method study, where the semi-quantitative analysis was done blinded and independently by me and another researcher to secure credibility.

Prolonged engagement was achieved for the interviewers invited to familiarise with the culture and organisation before the first data was collected. In all three studies the interviews were conducted with researchers independent from the management of the organisation. Though, in study IV researches from within the organisation, but independent from the emergency management organisation, were interviewers. This was also a measure to keep me totally off the interview situation with the informants.

In study II informants were purposive recruited from the senior management team, who were all contacted from independent researchers to be invited. In study III the sampling was purposive as well in order to receive a comprehensive picture of how managers perceived the management model. To increase credibility the informants represented two managerial levels in the organisation. That made it possible to test unit managers perception to assumptions made by the senior management. In study IV all members of the emergency management team were recruited, and free text answers in surveys from unit managers were used in a similar way (Bernard, 2002). All participation was voluntary, could be withdrawn whenever wanted, and oral and written consent were secured. This support the informants to be at ease in the interviews.

Triangulation can be done in different ways and typical in case studies to increase credibility. Data source triangulation, analyst triangulation, theory perspective triangulation and methods

triangulation (Yin, 2013). In all studies data source triangulation was used with documentation. In study III method triangulation was applied by a mixed method design, which is described as a way to increase confidence in findings (Creswell and Plano Clark, 1997).

Lincoln and Guba (1985) emphasise the importance of member checking as the single most important measure to increase credibility. The information in study II is brought back twice to the senior management team. Study III is presented to all unit managers, not just the interviewed. The information in the interviews in study IV is checked with each informant and the free text answers from all unit managers are reported back in a collated form.

Debriefing and scrutiny with peers have been continuous processes to deal with emerging questions, findings and interpretations of various kind. This is not only within the research group and other researchers from different disciplines, but also with practitioners to broaden the perspectives to catch different nuances.

7.3.2.2 Transferability

This corresponds to external validity or generalisability and applies to the degree research findings are applicable in other situations. Some argue that since findings in qualitative studies are from specific conditions it is impossible to demonstrate that they could be applicable to other situations (Erlandson *et al.,* 1993). Others claim that even if the situation is unique, it could be considered as an example in a broader group and therefore transferability should not be rejected (Stake, 1994; Denscombe, 1998). Caution is adviced for the latter position, since the contextual impingement must not be belittled (Gomm *et al.,* 2000). Yin (2013) suggests analytical generalisation as a method to increase transferability, which means that the findings are used to make a logic contribution on a more abstract level that could be transferred to other situations and settings. In all empirical studies in the thesis the findings are presented as such with quotations, but also interpreted in a more analytical level to benefit others elsewhere with interest to follow or test the methodology and suggested implications of the findings in the thesis.

If this is possible or not, and whether the findings can be transferred to another situation or not, is decided by others who knows their situation and conditions. However, to facilitate this I have tried to collect and develop thick data descriptions both in the three studies as well in the thesis framework, with the ambition to provide as much information as possible on the organisational setting and the contextual factors in the region. The latter is recently scrutinised in research studies of the strategical governance in the whole region, which I found most useful to contribute to the understanding of the hierarchical context around our study organisation in the thesis (Höglund and Mårtensson, 2020). Thick data is important to make those comparisons needed to decide on transferability. From this aspect the context, sampling, collection and analysis of data, the findings with quotations, as well as the use of analytical frameworks to illustrate generalisable principles systematically from described theories are provided in detail, as strategies to develop thick data to enable readers to assess relevance to their circumstances and transferability.

The purposive sampling in all three empirical studies is also to ensure transferability, as well as credibility, to seek the informants that can give the right insights. The informants in all three studies have been sampled from the perspective that they had relevant knowledge about the decentralised management model and in study IV the emergency organisation and what was done there. In study III an SLSO official selected, blinded from the interviewers and research group, result units that varied in size, geographical location, type of care service, and organisational performance, to ensure a wide variation of unit managers to be interviewed. In study II and IV the sampling was done from the relevant teams.

7.3.2.3 Dependability

Dependability corresponds to reliability and is described by Lincoln and Guba (1985) as closely tied to credibility. It is about the consistency of the research, the stability of data and whether the research is repeatable (Elo *et al*., 2014). An inherent challenge in qualitative research is that reality is changing constantly and research conditions with that, which is an unavoidable fact when research replication is considered. However, it is essential that the research shows consistency, that can be followed throughout the research process (Lincoln and Guba, 1985).

The methodological descriptions are made in-depth to follow the steps in the research process in detail (Guba, 1981). To ensure consistency in the interviews semi-structured interview guides were used. Overlapping methods, such as examination of documents to verify and better understand information from the interviews, are strategies to increase dependability and highlight differences in perception in relation to formal representations, for example managers' perception of decision space in relation to the formal delegation scheme. Frequent communications or reconciliation meetings between researchers were regularly scheduled to ensure a stepwise replication by comparing the emergent insights for guidance on future steps. The results of the meetings were turned into new research steps that were documented. However, the meetings were not documented as such, which could be considered a deficiency. The frameworks, data collection and analysis processes are well documented in all empirical studies, II, III and IV to support consistency (Shenton, 2004).

7.3.2.4 Confirmability

This is consistent to objectivity, and concerns the neutrality, accuracy, and relevance of data free from researchers' bias (Lincoln and Guba, 1985). It is about reassuring, as far as possible, that the findings are the perceptions of the informants and not the researcher's preference (Shenton, 2004).

The three main strategies used in this thesis to promote confirmability in the empirical studies are accurate detailed explanations of interpretations and conclusions, triangulation in all kinds of perspective, admittance of predispositions and a continuous reflexivity from that to avoid any kind of bias or "over-interpretations" of the findings from the interviews (Begley and Tobin, 2004; Shenton, 2004).

Triangulation was done both in data (study I, II, III and IV), analysts with independent researchers doing coding (study I, II and III) and interviews separately (study II, III and IV), methods (study III and IV) and frameworks (study II, III and IV). Analysis and interpretations were done by researchers with different scientific background both separately for reconciliation and in teams with respect to avoidance of bias. Reflexivity will be commented in chapter 7.4.

7.4 BEING A RESEARCHER IN MY OWN ORGANISATION

The fact that I am the chief executive of the target organisation of my studies means that I had to handle a number of methodological challenges beyond these discussed above. If you are heavily involved in something, it is not easy to make it a target for your studies. However, personal engagement could be a resource, and a study of your own premises can even be considered an asset (Alvesson, 2003).

My background is as an internist in clinical haematology at the University hospital. A planned temporary break for improvement work in primary health care, led to leadership and management positions, and became a new unplanned path. Management for me became synonymous with improvement work and building cultures. Initially, in primary care followed by palliative care, back to the hospital as clinical director and chief medical officer, and forward as chief executive. Initially, in one of the three regional primary and community care organisations, that 2004 merged into the one now studied. My involvement in the organisation from start, and the fact that I am the chief executive, might raise questions about neutrality and objectivity. My predisposition should be declared and clarified as a criterion for confirmability, done hereby (Miles and Huberman, 1994).

I will start to discuss my role as a researcher, which depends on the type of research. Doing research on your own organisation could be considered as action research by definition (Coghlan, 2019). However, there are different characteristics and approaches (Waterman *et al.,* 2001). Hart and Bond (1995) defined four action research types related to identified distinguished characteristic, and the type named organisational is corresponding to the research in this thesis. To be more specific, the original social psychological theories of Kurt Lewin from the 1940s, as a foundation to action research, have become integral and significant for management research (Gummesson, 2000). A range of modalities have developed and in common is the action and collaborative manner in the research (Coghlan, 2019). This characteristics of the research in this thesis could be as collaborative management research, which is an approach that seeks to add value by practitioners and researchers in a joint venture with mutual responsibilities to increase one another's learnings and knowledge (Shani et al., 2008).

My first contact vid Medical Management Centre was at the start. In 2002 I was admitted to the research programme in partnership with the region (at the time county council) and was registered to the doctoral programme. Value-based health care, health care improvement and decentralisation were my fields of interest. In 2017 it was time to describe our management model in SLSO, and a collaborative with the researchers at Medical Management Centre was established, that also developed to research with use of my experience and observations.

My action research approach could further be defined as a study "not deliberately in-action", which corresponds to case study methodology. Data is collected and analysed with established qualitative and mixed methods to study the decentralised management model (Coghlan, 2019). However, since I am not doing action research in the meaning that the research process as such deliberately is planned or intended to be the driver of a change process, I do not qualify for the role of a "true" action researcher (Shani and Pasmore, 1985).

However, the research is in line with several action research principles, with me as the chief executive and researcher. Undoubtedly, this makes me an insider researcher. My role has been more like a "self-ethnographer", defined as an observing participant (Alvesson, 2003). I work in the studied setting, and as a researcher I could access the organisation for empirical research. I use my experiences and knowledge to understand decentralisation from data gathered by other researchers to avoid bias. Alvesson (2003) emphasises that self-ethnography does not focus on "self" in other aspect than *"one's own cultural context, rather than what goes on around oneself rather than putting oneself and one's experiences in the centre."*

My preunderstanding has been obvious for the whole research team and has cautioned us to avoid any kind of situation where informants or informant data could be identified directly or indirectly or any other step in the analysis or interpretations to be skewed. We have together consciously and thoroughly considered my situation before each step in the research. I have continuously reflected both with peers and the research group on my role in relation to the research and been aware of the challenges. I have in the research situations actively taken the role as a researcher and by that intellectually and emotionally separated my dual role to my best without losing the essential positive part of preunderstanding. I have been open to all findings and interpretations not to be trapped in my own beliefs and hypothesis.

The personal knowledge and experience of my own organisation and the public system have been a clear advantage supported by theoretical frameworks and continuous reflections, discussions and reconciliations in the research team. Nevertheless, the limitations have to be acknowledged as well. The risk to be trapped in flatter is one, but more viciously are blind spots, taboos, granted assumptions and the avoidance of unfavourable findings (Alvesson, 2003).

In my daily work as a chief executive I actively work with my management team and unit managers aiming at achieving stellar performance across the organisation. Consequently, all performance assessment had to be performed using quantitative, objective measurements, collected applying procedures safeguarding against manipulation. Paradoxically, administrative systems in routine use, not controllable by people held accountable, were, in that respect, safer, and thus more valid, than a specifically designed data collection for those purposes. That justifies this use of secondary data sources in my studies.

Informants interviewed are my colleagues and subordinates. Therefore, all qualitative data to be used (study II, III and IV) were collected by members of the research team who have no personal stake in the success or failure of the organisation. Data were collated and the case description were approved by those members as well, to avoid my researcher's bias.

Discussions on empirical patterns and tentative explanations were performed continuously in the full team. My task was first and foremost to contribute with research questions, design proposals and theoretical interpretations. I had no role in the interviews, coding and analysis of the material before it was presented in an unidentifiable form for interpretation to the whole research group. The role and contribution of all team members who are co-authors of the case studies are disclosed in detail in the manuscripts.

The scoping literature review (study I) consisted only with published material outside my organisation and posed less of a problem concerning potential bias. The risk of unconsciously favouring interpretations during the synthesis phase corresponding to the organisation and management model applied in my organisation was neutralised by the participation of the other team members in the analysis.

Finally, have the learnings during this research process changed direction or impact in the studies? Yes, undoubtedly. The initial plan was to study one of the large-scale implementation projects in the decentralised organisational context and use gathered material. The unique situation due to the pandemic gave us the opportunity to change perspective. The learnings from study II and III on the importance of balance between the three corners of the revised Bossert model became extremely interesting to test in a situation of unpredictable and unexpected events, like the pandemic. Does it promote agility? However, this change of studies in the thesis does not follow the steps and nature in “classic” action research (Coghlan, 2019).

8 CONCLUSIONS

Decentralisation, expressed as formal delegated authority to managers for a better response to local needs and improved healthcare, can resolve some challenges faced by healthcare service delivery organisations. To minimise some negative consequences that may result from their actions, centrally set coordination standards and local management accountability is necessary: managers need clear guidance about how they can assess the effects of their actions on other services and they are held accountable to such effects as well as for the performance of their own services.

Decentralisation is an evolving process, and no management model will have the intended impact if not anchored in a conceptual framework based on relevant underlying assumptions to solve a problem or situation. Autonomy, trust and proactivity are important factors for managers to be able to utilise the given decision space and involve subordinates, which in turn depends on the organisational capacity to give necessary support and coordination.

Decentralisation increases the ability to be flexible and rapid. Organisational performance is connected to how the unit managers used their decision space. Some managers asked for more guidance and rules, while others were more prone to delegate and proactively find their own ways within their delegated authority. This is an important observation that senior management in a decentralised organisation would do well in recognising.

Decentralisation contributes to the empowerment of managers to navigate in complex conditions. Unpredictable and unexpected events such as the pandemic Covid-19 outbreak demand a high grade of ability to be flexible and agile. The ability to identify, use and manage the resources as dynamic capabilities to ensure needed actions is crucial. This is related to operational effectiveness, which in turn is dependent on the given decision space. A high grade of operative effectiveness will meet the needs of the situation and be a driver for the strategic effectiveness to reach new strategic positions. The new strategic positions will strengthen the organisational capacity, which is a crucial component to ensure coordination and dynamic effectiveness in a decentralised model. Teamwork on all levels based on trust in a mutual relationship is shown, both in previous research, as in this thesis, to be of crucial importance.

Decentralisation can be defined in so many ways and there is need for more research to better understand the attribution of the delegated authority to performance since the organisational and individual capacity as well as accountability and contextual factors are of importance.

9 POINTS OF PERSPECTIVE

9.1 IMPLICATIONS FOR PRACTICE

A region is a self-governing body, but still a hierarchical context especially in relation to service delivery. However, this thesis has showed that decentralisation can be achieved in such a context. A clear aim to improve performance by decentralisation, conceptualised in a management model that evolves over time has been presented. Findings of interest to support research-informed guidelines is for example that decentralisation can be considered as "capacity". The individual capacity and motivation of managers varies and is of importance to the organisation's performance. However, the organisational capacity to give support and clearly describe the manager's role, authority and accountability and to train for this is as important.

This research can be used by managers to guide their self-assessment of their personal competencies and of the capacity of the organisation to enable decentralisation and improved performance from it. In regards to coordination, a conclusion is that even as the organisation or health system remain mainly decentralised, some functions have to be centralised to secure the overview as a support to managers in decision-making. The right combination of decentralised and centralised functions has to be identified, in order to achieve optimal health system performance. Some form of coordination must be maintained at the central level no matter how extensive the form of decentralisation is.

The revised Bossert's conceptual framework of decision space adjusted for service delivery organisations is useful for understanding scope of action and can help management to balance the interactions in decentralisation between the three "corners", delegated authority, organisational and individual capacity and accountability.

Organisational norms and cultures of different types constrain and enable managers ability to exercise formal authority by cultures providing the surrounding context. Manager's ability to exercise authority depends on individual capacity, organisational capacities and accountability, that motivates managers to use their delegated authority, and also for meeting standards for coordination so as to ensure decisions made by the manager take account of the impact on other services and the whole organisation. The contextual factors must be considered.

9.2 RESEARCH IMPLICATIONS

There are still many gaps to better understand how decentralisation can be attributed to improved healthcare. Four main areas of research can be suggested:

9.2.1 Decentralisation, centralisation and integration

Decentralisation is implicitly considered in relation to current or future levels of centralisation or integration arrangements in many studies. Research and practical guidance could be improved by more explicitly considering decentralisation in the context of current or future centralisation or integration. Decentralisation pursued at the same time as centralisation of some functions is possible. Further, decentralisation might highlight the need to formalise integration requirements. For example, in new standards that the decentralised units or staff need to be held accountable for to ensure that decentralisation does not damage coordination with other units or cause sub-optimal system performance. Opportunities for future research exist to measure or document how decentralisation affects horizontal integration or coordination, and which central controls or changes affect integration or coordination. In addition, to develop an assessment system and measures for all the three aspects of decentralisation, centralisation and integration. This could improve reporting of studies, allow contextualised comparisons between different decentralisation initiatives, and better decisions about which type of decentralisation to use, given the existing centralisation and integration arrangements in one place. Figure 15 illustrates likely interrelations between these elements.

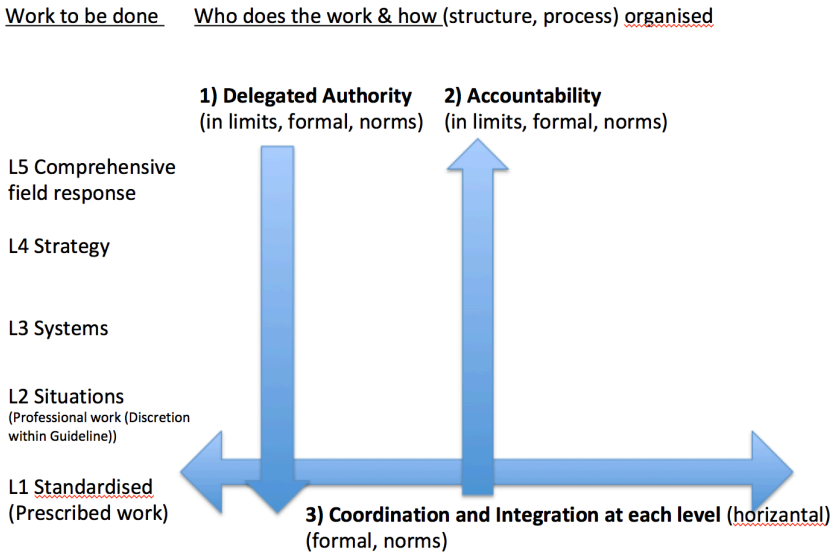

Figure 15. Organisational levels of work and delegation, accountability, and integration adding integration to the model from Rowbottom and Billis, 1997

9.2.2 Micro-decentralisation

More publications and empirical observations show that professional delegation and substitution is increasing as a method of responding to growing demand and costs. Examples are more use of paid- or unpaid- community health workers, patient peer support persons, medical technicians, nursing assistants, and nurse practitioners or non-medical specialists, often supported by digital health technologies (Bohmer and Imison, 2013). These may be separate initiatives or combined in teams such as in some patient-centred medical home models. This literature and the innovations taking place ars little considered in studies of

national decentralisation or in the few studies of decentralisation within service delivery organisations.

The implications are that some decentralisation research might consider this as *"micro-decentralisation"* and take into account the broader context within which such micro-decentralisation is taking place, which includes the regulatory environment and changes in financing. This could bring more consideration of professional and occupational autonomy, competition and conflict to decentralisation which has perhaps been underestimated when the focus has been on national system decentralisations. Certain decisions are already decentralised to some professionals by delegation by the state or by default. Examples are clinical decisions by physicians about medical tests and treatments that commit the resources of the organisation within defined limits. Speed and Gabe (2013) propose that professional autonomy can be reduced by centralisation. Some types of decentralisation may need one or more profession's support to be implemented and this support will be affected by their perception of whether the change advances or reduces their interests or autonomy. Research into clinical delegation and substitution also might be improved by using the decentralisation research better to describe the context, level and type of decentralisation within which clinical delegation and substitution is carried out and the changes needed at each level to implement micro-decentralisation for workforce-redesign.

9.2.3 Informal norms and cultures as a context for formal delegation

Sociological research finds that a large amount of organised behaviour depends on a range of informal norms and cultures, and that it is to be expected that specific types of decentralisation will have different effects depending on these informal norms and cultures (Henderson and Argyle, 1986; Haung and Ho-Mou, 1994; Becker *et al*., 2005). A third challenge for decentralisation research is give more consideration to the environment of norms and cultures within which a decentralisation initiative is carried out. This is the "informal context" of decentralisation, but nonetheless may be more influential for implementation and outcomes than formal aspects of a decentralisation.

For example, some types of formal decentralisation within a culture of careful following of many precise rules may not result in staff using new delegated authorities to make more local decisions: the habit may to be assume that there is a rule that will stop use of the new authority. Another example is that some clinical professionals spend time on coordination work which, formally, they may not be required to do, but the informal norms of their unit or profession may give this work high priority. A decentralisation change might be made which includes holding staff formally accountable for a limited type of performance, and not formally accountable for this coordination work. Some staff may continue to spend time on coordination work if they are used to following informal norms that value this activity. Other staff with different norms may change their behaviour to optimise individual- or unit-performance, as measured by the limited performance measures that do not include the unit's contribution to the whole-system performance.

9.2.4 More precise descriptions of decentralisation and context

How could conflicting and contradictory evidence about the success of national and local decentralisations be understood? Are some studies using the same term "decentralisation" to describe very different changes? Does "success" depend on which stakeholder perspective the study takes? "Success" or effectiveness can be speculated to be dependent on many variables, including: a) the particular type of decentralisation (i.e. delegation, contracting out, relocation, etc), b) the above-mentioned combination of decentralisation, centralisation and integration that existed before further decentralisation (the starting point and context), c) the decentralisation implementation strategy and its effectiveness, and d) the competence of those to whom a function or authority is delegated and the facilitation and support provided to them, e) which stakeholder perspectives are taken and criteria of success or effectiveness considered, f) which outcomes are intended or measured (i.e. which type of equity? which type of costs?), and g) the "fit" or "compatibility" of the type of decentralisation to the culture and norms of the units and occupations. To understand or explain the outcomes and effectiveness of a decentralisation, future studies need precisely to describe the above features a)-g).

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12 APPENDICES

12.1 APPENDIX A – LITERATURE SEARCH STUDY I

This main search was used on the refined list of search terms identified in the exploration steps. The search terms were entered using various combinations into PubMed with the following results:

1)”Decentralisation" OR "Decentralization" = 2079

2) ”Decentralisation" OR "Decentralization" AND "Health care" = 788

2b)”Decentralisation" OR "Decentralization" AND "Healthcare" = 167

- 3) ”Decentralisation" OR "Decentralization" AND "Primary Health care" = 207

- 3b ”Decentralisation" OR "Decentralization" AND "Primary Healthcare" = 14

- 4)”Decentralisation" OR "Decentralization" AND "Health care" and “Delegation” = 11

- 5)”Decentralisation" OR "Decentralization" AND "Primary Health care" AND “Delegation” = 2

- 6"Decentralisation"[All Fields] OR "Decentralization"[All Fields] AND "Delegation"[All Fields] = 18

7 "Decentralisation"[All Fields] OR "Decentralization"[All Fields] AND Delivery of health care, Integrated [All Fields] = 57

8 “Primary Health Care”[Mesh] AND ”Personnel Delegation"[Mesh] = 22

9“Primary Health Care”[Mesh] AND ”Personnel Delegation"[Mesh] AND “Delivery of health care” [Mesh] = 20

10 “Primary Health Care”[Mesh] AND ”Personnel Delegation"[Mesh] AND “Delivery of Health Care, Integrated” [Mesh] = 0 eng

11 "Primary Health Care"[Mesh] AND "Delivery of Health Care, Integrated"[Mesh] = 2072

12.2 APPENDIX B - INTERVIEW GUIDE SENIOR MANAGEMENT STUDY II

INTERVJUGUIDE

Kartläggning av utvecklingen av SLSOs verksamhetsmodell

FRÅGOR

Inledning. Vi börjar med ett par inledande frågor.

1. Skulle du kunna kort beskriva din bakgrund, din roll i organisationen, och hur länge du har arbetat här?
    a. Varför arbetar du på SLSO?
    b. Hur kom du hit?

Verksamhetsmodell (Max 30 minuter)

2. Vad är SLSOs roll i sjukvårdssystemet?

3. Vad skulle du säga kännetecknar ditt verksamhetsområde [namnge]? Har ni någon särskild fokus eller profil? [Value Proposition/Key Activities] ha kvar omformulerat
    a. Antal medarbetare och underställda chefer?
    b. Hur stor marknadsandel har ni?

4. I dina egna ord, vad skulle du säga att ditt verksamhetsområde [namnge] gör? (fånga i stort) [Value Proposition/Key Activities]
    a. Hur bidrar det ni gör till verksamhetsmålen?

5. Inom management brukar man prata om kunder. Vilka skulle du säga är ditt verksamhetsområdes [namnge] kunder? [Customer segments]
    a. (Sammanfatta och ge namn till de olika kundsegmenten)
    b. Vilka anser du är de viktigaste?
    c. Vad ser du som den största skillnaden med ditt verksamhetsområde [namnge] jämfört med andra landsting när det gäller de olika patientgrupperna/kunderna?
    d. Kundsegment patient: Varför väljer patienter att vända sig till aktörer inom SLSO och inte någon annanstans? (Hur får patienterna information om er verksamhet?)

6. Hur kommer patienterna hit? (långsiktigt? kortsiktigt? Kallelser?) [Channels + Customer relationships]
    a. Finns det specifika kundsegment/patientgrupper som idag inte söker sig till sjukhuset och som ni i framtiden skulle vilja locka hit? Hur?
    b. Finns det grupper som ni skulle vilja ”undvika”? Hur?
    c. Är det några specifika kundsegment/patientgrupper som premieras respektive inte premieras av dagens styrsystem? (exemplifiera)

7. Vad har ni för intäkter? (Vad får ni era pengar ifrån?) [Revenue streams]

    a. Hur påverkar dagens ersättningssystem hur sjukhusverksamheten är organiserad och vården bedrivs? (exemplifiera)

8. Vilka är de viktigaste resurserna/tillgångarna som används för att ta hand om de olika kundsegment du har nämnt (ta var för sig)? [Key resources]
    a. Vad utför dessa resurser för uppgifter? [Key activities]

9. Vem eller vilka samarbetar/samverkar sjukhuset med för att upprätthålla sin verksamhet? [Key Partnerships]
    a. Finns det andra som du tycker det vore bra att samarbeta med? Varför?

10. Vilka utgör ditt verksamhetsområdes [namnge] största kostnader? (fasta? rörliga?) [Cost structure]
    a. Personal utgör en stor kostnad inom hälso och sjukvård. Hur kommer personalsituationen i framtiden se ut inom ditt verksamhetsområde [namnge] jämfört med idag? (Antal anställda, arbetsuppgifter, etc)

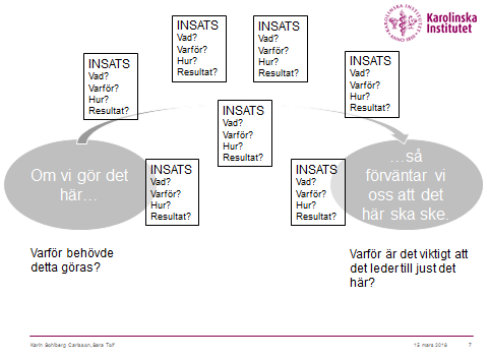
11. Vilken uppföljning sker av ert arbete? / Hur följer ni upp ert arbete?
    a. Vad mäter ni? (T.ex. aktiviteter, resursanvändning/kostnader, medicinska utfall)
    b. Hur mäter ni?
    c. Hur speglas det ni mäter era verksamhetsmål?
    d. Vilken uppföljning tycker du att man ska mäta inom ditt verksamhetsområde [namnge] som man inte mäter idag? Ha kvar.

Programteori. Nu går vi över till delen där vi är ute efter att förstå vilka tankar, drivkrafter som ligger bakom ledningsmodellen men också vilka insatser som gjorts.

12. Berätta om SLSOs ledningsmodell?
    a. Övergripande, varför behövdes den här ledningsmodellen överhuvudtaget initialt? Vilket problem försökte ni lösa? (Syfte?).
    b. Vad vill ni uppnå med att använda den här modellen?
    c. (Beskriva den?)
    d. Hur tänker ni att ledningsmodellen ska lösa det problemet?
    e. Hur upplever du att den här idén om modellen mottagits i verksamheten? (Modellens styrkor och svagheter)
        i. Stabsnivå
        ii. Verksamhetsområdesnivå
        iii. Resultatsenhetsnivå
    f. Vad driver dig att fortsätta arbeta enligt den här modellen?

Nu kommer vi in på vilka aktiviteter som har gjorts och görs för att uppnå det övergripande syftet.

13. Kan du berätta om vilka insatser som har gjorts (i enlighet med ledningsmodellens syfte)?



a. Insats _____
    i. Beskriv insatsen (Vad)
    ii. Vad var syftet med den insatsen?
    iii. Vad har ni gjort för att uppnå det syftet? (Hur)
    iv. Hur gör det att det övergripande syftet uppnås? (Varför?)
    v. Hur vet ni om syftet med insatsen uppnåtts? (Hur mäter ni?)
b. Insats _____
    i. Beskriv insatsen (Vad)
    ii. Vad var syftet med den insatsen?
    iii. Vad har ni gjort för att uppnå det syftet? (Hur)
    iv. Hur gör det att det övergripande syftet uppnås? (Varför?)
    v. Hur vet ni om syftet med insatsen uppnåtts? (Hur mäter ni?)
c. Insats _____
    i. Beskriv insatsen (Vad)
    ii. Vad var syftet med den insatsen?
    iii. Vad har ni gjort för att uppnå det syftet? (Hur)
    iv. Hur gör det att det övergripande syftet uppnås? (Varför?)
    v. Hur vet ni om syftet med insatsen uppnåtts? (Hur mäter ni?)

d. Insats Resultatenheter bildas (2004)
    i. Beskriv insatsen (Vad)
    ii. Vad var syftet med den insatsen?
    iii. Vad har ni gjort för att uppnå det syftet? (Hur)
    iv. Hur gör det att det övergripande syftet uppnås? (Varför?)
    v. Hur vet ni om syftet med insatsen uppnåtts? (Hur mäter ni?)
e. Insats Styrkort införs över hela SLSO (2005?)
    i. Beskriv insatsen (Vad)
    ii. Vad var syftet med den insatsen?
    iii. Vad har ni gjort för att uppnå det syftet? (Hur)
    iv. Hur gör det att det övergripande syftet uppnås? (Varför?)
    v. Hur vet ni om syftet med insatsen uppnåtts? (Hur mäter ni?)
f. Insats Utvecklingsenhet blir del av varje resultatenhet (2007)
    i. Beskriv insatsen (Vad)
    ii. Vad var syftet med den insatsen?
    iii. Vad har ni gjort för att uppnå det syftet? (Hur)
    iv. Hur gör det att det övergripande syftet uppnås? (Varför?)

v. Hur vet ni om syftet med insatsen uppnåtts? (Hur mäter ni?)

g. Insats Alla resultatenhetschefer ska bli ledare
   i. Beskriv insatsen (Vad)
   ii. Vad var syftet med den insatsen?
   iii. Vad har ni gjort för att uppnå det syftet? (Hur)
   iv. Hur gör det att det övergripande syftet uppnås? (Varför?)
   v. Hur vet ni om syftet med insatsen uppnåtts? (Hur mäter ni?)

h. Insats Kompetenslyftet e-hälsa (2011?)
   i. Beskriv insatsen (Vad)
   ii. Vad var syftet med den insatsen?
   iii. Vad har ni gjort för att uppnå det syftet? (Hur)
   iv. Hur gör det att det övergripande syftet uppnås? (Varför?)
   v. Hur vet ni om syftet med insatsen uppnåtts? (Hur mäter ni?)

i. Insats Processarbete psykiatri + primärvård (under kompetenslyftet e-hälsa)
   i. Beskriv insatsen (Vad)
   ii. Vad var syftet med den insatsen?
   iii. Vad har ni gjort för att uppnå det syftet? (Hur)
   iv. Hur gör det att det övergripande syftet uppnås? (Varför?)
   v. Hur vet ni om syftet med insatsen uppnåtts? (Hur mäter ni?)

j. Insats Värdelyftet
   i. Beskriv insatsen (Vad)
   ii. Vad var syftet med den insatsen?
   iii. Vad har ni gjort för att uppnå det syftet? (Hur)
   iv. Hur gör det att det övergripande syftet uppnås? (Varför?)
   v. Hur vet ni om syftet med insatsen uppnåtts? (Hur mäter ni?)

k. Insats Ny nivå av verksamhetsområdeschefer (April 2017)
   i. Beskriv insatsen (Vad)
   ii. Vad var syftet med den insatsen?
   iii. Vad har ni gjort för att uppnå det syftet? (Hur)
   iv. Hur gör det att det övergripande syftet uppnås? (Varför?)
   v. Hur vet ni om syftet med insatsen uppnåtts? (Hur mäter ni?)

l. Insats Alltid öppet
   i. Beskriv insatsen (Vad)
   ii. Vad var syftet med den insatsen?
   iii. Vad har ni gjort för att uppnå det syftet? (Hur)
   iv. Hur gör det att det övergripande syftet uppnås? (Varför?)
   v. Hur vet ni om syftet med insatsen uppnåtts? (Hur mäter ni?)

14. Hur mäter ni att dessa samlade insatser leder till att ledningsmodellens övergripande syfte uppnås?

15. Vad behöver du för stöd utifrån för att kunna driva verksamheten på det sätt du tänkt (enligt verksamhetsmodellen)?
    a. Skulle du vilja att det stöd du fått sett annorlunda ut?

16. Ni har ju flera olika verksamhetsområden. Hur väl passar ledningsmodellen in på vart och ett av verksamhetsområdena?

Förändring av programteorin över tid

17. Håller ledningsmodellen under olika förutsättningar?
    a. Om du tittar tillbaka till det initiala problemet. Är det ff samma eller finns det ett annat övergripande behov man försöker lösa med hjälp av ledningsmodellen?
    b. Underlättande/hindrande faktorer?
    c. Vad har du kompromissat med?

AVSLUTANDE FRÅGOR

18. Finns det något mer du vill tillägga?

19. Avslutningsvis, finns det några dokument som du anser vara av stor vikt för att öka vår förståelse kring det vi just diskuterat gällande SLSO:s verksamhet och strategi?

12.3 APPENDIX C – INTERVIEW GUIDE UNIT MANAGERS STUDY III

Inledande frågor

1.Skulle du kunna kort beskriva din bakgrund, din roll i organisationen, och hur länge du har arbetat här?
a. Hur länge har du arbetat som chef?
b. Vilka tidigare erfarenheter har du som chef och ledare?

Frågor om verksamheten

2.Skulle du kort kunna beskriva den verksamhet du leder och är chef för?

a. Vilket/vilka mål har den här verksamheten? Vad vill ni uppnå för era patienter?
b. Vilka patientgrupper kommer till er verksamhet?
c. Vad erbjuder ni era patienter?

Frågor om graden av ansvar och befogenheter

Vi skulle nu vilja ställa några specifika frågor om din roll som verksamhetschef för att förstå graden av ansvar och befogenheter som du har.

3.Vilket resultatansvar har du som verksamhetschef? (Accountability)

a. Vad ska du rapportera till ledningen vad gäller resultat? (kvalitet, ekonomi etc)
b. Hur sker återkoppling mellan dig och SLSOs ledning vad gäller verksamhetsresultat? (Accountability)
i. Vad är bra?
ii. Vad kan förbättras?

4. Hur får/tar du reda på hur det går för din resultatenhet? Specifika patientgrupper?

a. Hur använder du data som genereras i t.ex. Take Care?
b. Har du någon gång gjort någon förändring p.g.a. sådan data? Hur? Varför (inte)? (decision space)

5.Vilka befogenheter (vad du får och inte får göra) har du som verksamhetschef? (Decision space)

a. I vilket grad har du rätt att sätta löner? Anställa? Arbetsbefria? (Decision space, Human Resources)
b. Vilken grad kan du bestämma vilket utbud/aktiviteter ni erbjuder era patienter? (Medicinsk undersökning och behandling) Kan du t.ex. utforma verksamheten utifrån lokala behov? (Decision space/verksamhet)
c. I vilken grad kan du styra vad verksamhetens pengar ska gå till? (Decision space/ ekonomi) (Budget, överskott, inköpsstak)

d. I vilken grad har du rätt att befordra anställda/ge större ansvarsområden?
e. I vilken grad kan du bestämma om vidareutbildning för de anställda?
f. Finns det oskrivna regler/normer som påverkar dina befogenheter?
g. Hur har ditt ansvar och dina befogenheter ändrats över tid sedan du blev resultatenhetschef inom SLSO?

Frågor om SLSO-övergripande aktiviteter och satsningar (institutional capacity)

SLSO:s styrning och ledning av sina verksamheter bygger på en delegering av ansvar och befogenheter till resultatenhetsnivå och kan av den anledningen karakteriseras som en decentraliserad organisation.

6. Hur upplever du att SLSO:s styrning påverkar det mål som du beskrev med din verksamhet i början av intervjun? [Peka på målet med hjälp av vår modell]

a. Vad anser du om det sättet att styra verksamheten?
b. Vad är det i detta sätt att styra som hjälper dig att uppnå målet?
c. Vad är det i detta sätt att styra som hindrar dig att uppnå målet?
d. Upplever du att du har hög eller låg grad av ansvar och befogenheter att styra din verksamhet?

7. Finns det någon form av stöd eller utbildning som du skulle önska för att öka din möjlighet att nå det mål du beskrev tidigare?

a. Vilket stöd får du idag från SLSO:s centralt?
b. Vilket stöd skulle du önska som du inte har idag?

8. Kan du beskriva hur du upplever samarbetet mellan viktiga aktörer/instanser som dina patienter behöver? (Somatisk Specialistvård, Primärvård, Psykiatri och Habilitering och hjälpmedel)

a. Inom ditt verksamhetsområde?
b. Mellan olika verksamhetsområden?
c. Externa aktörer?
d. Förslag på stöd/förbättring/styrning?

9. Vilka beslut anser du bör tas centralt och vilka bör tas lokalt? (balans centrala direktiv/lokal autonomi)

a. Finns det beslut som idag tas centralt som du skulle tycka skulle tas på lokal nivå?
b. Finns det beslut som idag tas lokalt som du skulle tycka skulle tas på central nivå?

10. Under åren har SLSO centralt kommit med några insatser, tex resultatenheter infördes, processarbete, värdelyftet, införandet av VO-chefer, kompetenslyftet, Alltid öppet etc. Är det några av dessa insatser eller andra som du kan berätta om? (använd flipchart).

Aktivitet A

- Vad är din upplevelse av hur satsningen/aktivitetenlanserades/genomfördes?
  Vad var bra? Vad kunde ha gjorts annorlunda?
- Vilket stöd fick din verksamhet i att implementera satsningen?
  Vad var bra? Vad kunde gjorts annorlunda?
- Vad var syftet med denna aktivitet?

Aktivitet B

- Vad är din upplevelse av hur satsningen/aktivitetenlanserades/genomfördes?
  Vad var bra? Vad kunde ha gjorts annorlunda?
- Vilket stöd fick din verksamhet i att implementera satsningen?
  Vad var bra? Vad kunde gjorts annorlunda?
- Vad var syftet med denna aktivitet?
  Hur påverkade aktiviteten din verksamhet att uppnå ert mål?
  Har aktiviteten fungerat som ett stöd för dig?

Frågor om lokala satsningar och samarbeten [innovation och spridning] (använda flipchart)

11. Har ni på er resultatenhet gjort någon egen satsning för att

a. Lösa ett problem?
b. Förbättra patientvården?
c. (Berätta)

12. Vilket stöd har du fått från ledningen för att genomföra satsningen?

a. Önskar du något annat stöd än det du fått?
b. Kunde något gjorts annorlunda från ledningen? (Motstånd?)

13. Har ni delat med er av satsningen till andra resultatenheter? Hur?

14. Finns det något du skulle vilja tillägga vad gäller det ansvar och befogenheter som du har som verksamhetschef eller gällande SLSO:s sätt att styra verksamheten?

Stort tack för att du ställde upp på intervjun!

12.4 APPENDIX D – INTERVIEW GUIDE EMERGENCY MANAGEMENT TEAM STUDY IV

Du är inbjuden till den här intervjun för att du har en ledande roll i SLSO:s krisledningsorganisation, LSSL.

1) Berätta om din roll i LSSL.

2) Hur ser du på din roll som ledare i LSSL?
    a. Vad tror du förväntas av dig i den rollen?
    b. Hur ser du på din roll och ditt ansvarsområde i relation till de andra strömmarna i LSSL?

3) Kan du beskriva LSSL:s sätt att arbeta och hur det har utvecklats över tid?
    a. Hur tycker du att LSSL har fungerat *(bra eller dåligt)*?
    b. Med den kunskap du har idag – vad skulle du vilja ta med dig till en ny krisledningsorganisation?
    c. Nu när vi så småningom går ur LSSL – vad är det viktigaste vi gör idag som du skulle vilja fortsätta göra efter krisen?

4) Från ditt perspektiv, vilka faktorer tycker du har underlättat införandet och genomförandet av krisledningsorganisationen?
    a. På vilka sätt har det underlättat?

5) Vilka faktorer tycker du har försvårat eller hindrat införandet och genomförandet av krisledningsorganisationen?
    a. På vilka sätt har det försvårat?

6) Hur upplever du informationen på Insidan och i chefsbrev?
    a. Vad för information har du mest haft nytta av?
    b. Vilken typ av information saknar du?

Avslutande frågor

7) Givet det vi har talat om under intervjun, finns det något mer du vill tillägga? Finns det frågor eller ämnen vi särskilt bör belysa i kommande intervjuer?

8) Finns det någon annan i krisledningsorganisationen eller någon/några verksamhetschefer du skulle rekommendera oss att intervjua för att öka vår förståelse?

9) *Be om kontaktuppgifter till dessa personer.*