Divergent Organizational Change in Hospitals

Exploring how hospital leaders and employees can contribute to successful outcomes.

by

Olaug Øygarden

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Summary

This thesis consists of three papers that aim to increase our understanding of how divergent changes to organizational structures and management systems in hospitals may be handled by leaders and employees in order to achieve outcomes that contribute towards organizational goals of service quality improvement. Reforms, new policies and the continuous large- and/or small-scale changes aiming for service quality improvement that they manifest in within hospital organizations have been identified as a move away from professional dominance and autonomy, and a move towards a healthcare system where managerial and market logics are influential. These changes have challenged the organizing principles of professional power in decisions regarding hospital organizational structures and management systems, and professional services are increasingly subject to organizational reform, budgetary control and managerial supervision.

Organizational changes that break with existing institutions in a field of activity are defined as divergent. Despite decades of managerial logic initiatives, health care organizations are still heavily influenced by the professional logic. Introducing changes that are based in a managerial or market logic into the work of health service professionals could therefore be considered as divergent, and potentially conflictual, organizational change which would be met with resistance rather than readiness for change and willing participation.

We know from previous research that quality improvement initiatives in hospitals very often fail to produce the intended results. We also know that involving health care professionals in processes aimed at improving hospital services is widely considered as a critical factor for achieving goals of quality improvement. However, the most widely documented reaction to divergent change from clinical staff is resistance or active opposition to new arrangements, and this is often identified as the reason
There are few studies of successful outcomes of divergent changes in health care organizations. There are also few empirical studies of professional engagement in such organizational change efforts. This means that there is an identified need for studies that shed light on how successful outcomes occur in a variety of contexts and related to a variety of different types of changes, as well as for more in-depth research on how divergent changes may be handled by hospital leaders and employees in order to achieve outcomes that contribute towards organizational goals of service quality improvement.

This thesis raises the two following research questions:

*How are frequent organizational changes in hospitals and middle manager change-oriented leadership related to organizational and employee outcomes relevant to hospital service quality?*

*How can hospital leaders and employees contribute to processes of implementing divergent changes to organizational structures and management systems in order to achieve outcomes that contribute towards organizational goals of service quality improvement?*

The first question is answered by Paper 1, titled “Changing to improve? Organizational change and change oriented leadership in hospitals.” The paper is based on data from a survey answered by 556 hospital physicians. It focuses on the relationships between a) the frequency of changes to organizational structures, goals, strategies and management that they report to have happened in the past 12 months and two outcome variables relevant to hospital service quality, b) change-oriented leadership practices performed by their immediate leader (i.e. middle managers) and the same outcome variables, and c) the role of physician participation in decision-making as a mediator of these relationships.

The second question is answered by Papers 2 and 3, and an overall discussion of the findings from all three papers. Papers 2 and 3 are
qualitative case studies following the processes of implementing a new organizational structure and a new management system. In comparison to Paper 1, they offer more detailed analysis of specific, divergent changes, the process of implementing them in hospital organizations and the involvement of both leaders and employees in these processes, and outcomes of such implementation processes in terms of how the changes contribute towards organizational goals of service quality improvement.

Paper 2, titled “Establishing a multidisciplinary day-care surgery department: Challenges for nursing management.” explores challenges encountered in the process of implementing a multidisciplinary department focusing on resistance from nurses, documenting and analysing a phenomenon which has previously been widely documented in studies focusing primarily on physicians. Second, it contributes with knowledge relevant to managerial practice by documenting the challenges that the implementation outcome represented for efficiently managing the department.

Paper 3 is titled “Readiness for change and good translations”. It analyses the process of implementing advanced task planning, a new digital task planning system for physicians, in three hospital departments as processes of translating a management idea and practice across conflicting institutional logics within the organization, and the implementation outcome as a translation outcome. This perspective implies that management ideas and practices inevitably change as they move from one time and/or place to another. There is an identified need in translation research for studies that focus on how translations work in relation to organizational goals. We know relatively little about what facilitates good translations, i.e. translations of new ideas and practices into working practices or routines that contribute to the attainment of organizational goals. This research gap resonates with the previously identified need for studies in health care organizations that focus on successful change outcomes.
The thesis argues that top-level leaders can contribute to successful quality related outcomes of divergent organizational changes in hospitals by fostering readiness for change through strategic translations of new management ideas and practices that take the professional logic and the needs and priorities of professional employees into account. Paper 3 presents a case in which this was successfully achieved, whereas Paper 2 revealed that nurses should also be considered as hospital professionals who need to be similarly convinced in order for change efforts to succeed. Further, leaders at lower organizational levels may contribute by signalling principal support for change initiatives by actively taking part in change implementation, or translation, processes themselves. Finally, in the continuously changing hospital context, middle manager change-oriented leadership seems to be an important contributor to quality outcomes.

Regarding the question of how employees can contribute, the findings of Paper 1 supports previous research identifying physician participation in decision-making as a contributor to positive quality outcomes. It also shows, however, that frequent organizational changes initiated at higher levels of the organizations may limit their possibility to do so. In Paper 3, the active participation from employees in the operative translation of advanced task planning, which followed the strategic translation, was found to be key in achieving a good translation. The paper also argues that professional participation needs to be guided by a willingness to consider and evaluate whether solutions and priorities grounded in a managerial logic may actually be valid and useful. Other findings from Papers 2 and 3 draw attention to the fact that engagement and participation appear in a wide variety of change processes and come in different forms, some of which are either passive or conflictual and detrimental to achieving service quality improvement, whereas other forms work in the opposite direction.
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PART 1
1 Introduction

This thesis consists of three papers that aim to increase our understanding of how changes to organizational structures and management systems in hospitals can be handled by leaders and employees in order to achieve outcomes that contribute towards organizational goals of service quality improvement. Norwegian hospitals deliver high quality health care services to the population and consistently out-perform most OECD countries on hospital care indicators (OECD, 2014). However, there are challenges concerning waiting times, patient safety, the flow of information and communication, coordination between different parts of the service, quality management and control, and use and distribution of resources (Brekke & Straume, 2017; NDH, 2005, 2019; NMHCS, 2012, 2018). These challenges point to the fact that quality is not simply a matter of medicine, but also a managerial and organizational concern (Braithwaite et al., 2016). While high competency levels and evidence based medical procedures are crucial to the provision of high quality care, so are appropriate and functional organizational structures and management systems. Health management research based in organizational theories therefore offers relevant contributions to current debates about and efforts aimed at improving the health care system (Reay, Goodrick, & Hinings, 2016).

Worldwide, health care systems are faced with financial pressure as the demand for health services is increasing with growing and aging populations, social pressure as expectations from the public are changing, clinical pressures as specialization and sub-specialization within the medical professions increases, and professional pressures as new and existing health care professions are demanding higher status (Lega & DePietro, 2005; Noordegraaf, 2015; Villa, Barbieri, & Lega, 2009). Technological developments, increased demand and expectations combined with limited possibilities for increased funding are driving the search for structural and managerial solutions to limiting costs while also
improving, or at least maintaining, service quality (Fulop, Walters, & Spurgeon, 2012).

Over the past four decades, a large number of public health care reforms and policies internationally and nationally have been aimed at solving these challenges. At the outset of 2018, the Norwegian Minister of Health Services restated that reduction in waiting times and quality improvement are strategic goals for the Norwegian hospital sector. The policy vision is to create “The Patients’ Health Service”. He pointed to the development of new ways of planning and organizing services as means to reach those goals\(^1\). Internationally, hospitals are introducing integrated, patient-centred organizational structures in order to achieve more patient-centred care, cost reductions and quality improvements. The new structures organize the delivery of services around the need of the patient instead of along the traditional lines of professional specialization (Vera & Kuntz, 2007). With regard to the planning of health service delivery work, the Minister announced that hospitals will be required to establish national planning indicators. These should describe the number of patients who do not turn up for their hospital appointments, the share of hospital consultations that are rescheduled, and the extent of time for which the hospitals are currently planning consultations ahead. The intent is to establish a national best practice for planning. These practices could ensure that patients more consistently receive the treatments they are entitled to within mandated guarantee deadlines, and enable hospitals to utilize their resources more efficiently as a result of a more coherent, long term matching of tasks and staff, instead of increasing efficiency by making health service professionals work faster and harder.

Reforms, new policies and the continuous large- and/or small-scale changes aiming for service quality improvement that they manifest in within hospital organizations have been identified as a move away from

\(^1\) https://www.regjeringen.no/no/aktuelt/sykehustalen-2018/id2585683/
professional dominance and autonomy, and a move towards a health care system where managerial and market logics are influential (Byrkjeflot & Kragh Jespersen, 2014; Kitchener, 2002; Martinussen & Magnussen, 2011; Reay & Hinings, 2005). These changes have challenged the organizing principles of professional power in decisions regarding hospital organizational structures and management systems (Byrkjeflot, 2011; Hood, 1991), and professional services are increasingly subject to organizational reform, budgetary control and managerial supervision (Noordegraaf, 2015).

Organizational changes that break with existing institutions in a field of activity are defined as divergent (Battilana & Casciaro, 2012; D'Aunno, Succi, & Alexander, 2000). Despite decades of managerial logic initiatives, health care organizations are still heavily influenced by the professional logic (Byrkjeflot, 2011; Currie, Lockett, Finn, Martin, & Waring, 2012; Heldal, 2015; Kitchener, 2002; Reay & Hinings, 2009; Waring & Currie, 2009). Introducing structures and systems that are based in a managerial or market logic into the work of health service professionals could therefore be considered as divergent, and potentially conflictual, organizational change which would be met with resistance rather than readiness for change and willing participation (Armenakis, Harris, & Mossholder, 1993; Battilana, Leca, & Boxenbaum, 2009; Choi, Holmberg, Löwstedt, & Brommels, 2011).

We know from previous research that quality improvement initiatives in hospitals very often fail to produce the intended results. We also know that involving health care professionals in processes aimed at improving hospitals services is widely considered as a critical factor for achieving goals of quality improvement (Dellve, Strömgren, Williamsson, Holden, & Eriksson, 2018; Liff & Andersson, 2013; Spurgeon, Mazelan, & Barwell, 2011). Clinical staff are experts in the provision of health care services, their input is valuable in processes aiming to improve those services and successful change outcomes therefore depend on a balance between managerial and professional skills and power (Andreasson,
Whereas leaders in charge of implementing new ideas and practices may not always be attuned to whether or not these are useful to clinicians in their work, involving professionals could serve to better develop new solutions into practices that contribute toward better services (Bååthe, Rosta, Bringedal, & Rø, 2019; Heldal & Sjøvold, 2015).

However, the most widely documented reaction to divergent change from clinical staff is resistance or active opposition to new arrangements, and this is often identified as the reason for failure in achieving the improvements that change projects aim for (Pannick, Sevdalis, & Athanasiou, 2016). Regarding changes that entail a break with existing archetypal templates for organizational structures and management systems (Greenwood & Hinings, 1993), i.e. changes referred to as divergent (Battilana & Casciaro, 2012), there are few studies of successful outcomes in health care organizations (Chreim, Williams, & Coller, 2012). There are also few empirical studies of professional engagement, which is defined as active interest and participation, in such organizational change efforts (Denis & Baker, 2015; Gadolin, 2017; Mair et al., 2012). This means that there is a research gap and an identified need for studies that shed light on how successful outcomes occur in a variety of contexts and related to a variety of different types of changes, as well as for more in-depth research on how divergent changes can be handled by hospital leaders and employees in order to achieve outcomes that contribute towards organizational goals of service quality improvement.

Against a backdrop of reforms, policy priorities and shifting institutional logics at the organizational field level, and continuous and often divergent change at the organizational level, the three papers of this thesis broadly aim to increase our understanding of these issues. Extending this knowledge is important for several reasons. First, as stated at the outset of this introduction, health care systems internationally and Norwegian hospitals specifically are facing a number
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of pressures and challenges related to providing quality services to the population. The services that hospitals provide are crucial for the quality of life, and even survival, of the populations they serve. Second, organizational change projects require both financial input, time and personnel. Failed projects are therefore potentially a waste of resources which could otherwise be used in more productive ways. Third, failed projects are also a source of discontent, increased distrust in the relationship between health care management and professionals, and potential future resistance towards new initiatives (Arnetz, 2001). This issue is of great importance regarding what we know about the centrality of engaging a wide range of actors in change efforts in order to increase the probability of successful outcomes (Stouten, Rousseau, & De Cremer, 2018). Continuous effort to extend the knowledge and understanding of the processes through which quality can be improved is therefore needed, and the research presented in this thesis aims to form one part of this effort.

The following introductory presentation of the papers included in the thesis highlights how they each contribute towards this aim. In Norway, four state owned corporations, the regional health authorities (RHAs), supervise all public hospitals according to aims and priorities set by the Ministry of Health. The thesis reports on research that was done as part of a large-scale, longitudinal research project primarily following the process of implementing advanced task planning (ATP) for physicians in all the hospitals owned by one of the RHAs. The ATP project was an element of a larger change program aimed at improving resource efficiency and hospital service quality in terms of reducing treatment waiting lists and breeches to treatment waiting time guarantees.

The core research group consisted of five researchers, including the thesis author. As part of the main research project, a survey was conducted among all employees in the RHA hospitals. The survey was commissioned as a work environment survey and included questions regarding organizational change and leadership. Paper 1 in this thesis
analyses survey responses from hospital physicians, and focuses on the relationships between a) the frequency of changes to organizational structures, goals, strategies and management that they report to have happened in the past 12 months and two outcome variables relevant to hospital service quality, b) change-oriented leadership practices performed by their immediate leader (i.e. middle managers) and the same outcome variables, and c) the role of physician participation in decision-making as a mediator of these relationships.

Existing literature is not clear on how continuous organizational change affects physician job satisfaction, and the health care reform literature is ambiguous regarding how the changes introduced to hospital organizations have affected service quality (Braithwaite et al., 2016; Westgaard & Winkel, 2011). Management is widely called for as an important element in fostering both employee well-being and organizational performance, but the knowledge regarding which practices work to what ends and how they work is still incomplete (Lega, Prenestini, & Spurgeon, 2013). Also, the concept of change-oriented leadership has received less attention than other leadership concepts in the hospital context (Gilmartin & D'Aunno, 2007). Further, the health care reform literature has provided valuable insight into how the role of the medical profession as a group has shifted in terms of their influence on policy making and top-level leadership as a result of reforms (Byrkjeflot, 2011). Effects of the continuous changes that follow from reforms and new policies on the opportunities to participate in organizational decision-making for hospital physicians who are not in formal management positions, however, have been explored less. Finally, there is an identified need in the health management literature for more empirical research on how such participation in decision-making is fostered and how it may contribute to quality improvements (Denis & Baker, 2015). While Paper 1 is a relatively small-scale, cross-sectional study and not able to provide definitive answers to all of these questions, it nevertheless adds to our knowledge of these relationships.
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The paper relates to the overall theme of divergent changes through the assumption that current changes to hospital structures, goals, strategies and management systems are often divergent to the professional logic of physicians. It contributes to the overall aim of the thesis first by examining how organizational change decisions made by higher level leadership and the leadership style of middle managers in continuously changing hospital organizations may have an impact on hospital service quality. Second, it contributes by examining the role of physician participation in decision-making in providing service quality, and how this participation may be impacted by management decisions and leadership styles.

Papers 2 and 3 are qualitative case studies following the processes of implementing a new organizational structure and a new management system. In comparison to Paper 1, they offer more detailed analysis of specific, divergent changes, the process of implementing them in hospital organizations and the involvement of both leaders and employees in these processes, and outcomes of such implementation processes in terms of how the changes contribute towards organizational goals of service quality improvement. The concept of implementation refers to “the constellation of processes intended to get an intervention into use within an organization; it is the means by which an intervention is assimilated into an organization” (Damschroder et al., 2009, p. 3). The interventions studied in these papers are a multidisciplinary day-care surgery (DCS) department (Paper 2), and ATP for physicians (Paper 3). These were management ideas and practices that were new to the organizations in question. The activities involved in moving them from being ideas to being established structures and systems used in hospital management practice is referred to as implementation processes in the thesis. The term of implementation outcome or result is used to refer to the structures and systems that were in fact established in the organization at the end of the studied implementation processes.
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In parallel to the main research project, the research group was also invited to conduct a case study on the process and outcomes of implementing a new DCS department in one of the RHA hospitals. Hospital leadership wished to create a multidisciplinary, patient-centred department with one manager in charge of all the involved professional staff groups, and where elective surgery was shielded from emergency operations in order to increase effectiveness and efficiency and thereby improving quality as measured by the number of patients receiving treatment within centrally set deadlines. Paper 2 firstly details how the process of implementing this organizational structure was conflictual and how the multidisciplinary structure was met with resistance from both physicians and nurses. A failure to overcome this resistance over the course of the implementation process resulted in a compromised multidisciplinary structure. The paper secondly describes the challenges this compromise represented for efficiently managing the new DCS department.

The paper contributes to health management research, and nursing management research specifically, in two ways. First, it explores challenges encountered in the process of implementing the multidisciplinary department focusing on resistance from nurses, documenting and analysing a phenomenon which has previously been widely documented in studies focusing primarily on physicians. Second, it contributes with knowledge relevant to managerial practice by documenting the challenges that the implementation outcome represented for efficiently managing the department. The DCS study adds to the already extensive literature on resistance towards divergent change as opposed to the identified need for studies of successful change efforts. It does, however, also contribute towards the thesis aim of gaining insight into how different organizational actors can contribute towards the outcomes of change processes by focusing on nurses, a professional group which has been underrepresented in previous research (Gadolin, 2017).
Foreshadowing the Minister of Health Services’ 2018 goal statements on improving the planning of hospital work, the studied RHA set out to move all task planning for physicians from a variety of incoherent systems into one digital application in 2013. The task planning in most hospital work units had been done by means of multiple information and communication technology (ICT) systems that were not integrated with each other. A main drawback had been that the system was not well suited to distribute information to all who need to know, or to handle changes to long and short term plans as they came up. This created problems for the delivery of services, because it limited the possibility for an optimal match between available resources and tasks. The new digital task planning system was to be integrated with other relevant ICT applications (such as patient appointment books, employee Outlook calendars, intranet calendars, and surgery planning programs). The intention was to improve the logistics of daily tasks in the work units, resource efficiency and ultimately the quality of treatment and care as measured by established quality indicators. As part of the task planning project, planning routines were also to be changed by extending the time horizons for which detailed tasks and resources were matched in task plans. As the task planning project was ongoing, it was also merged with a project aimed at reorganizing outpatient clinic services in order to achieve higher efficiency and predictability.

Paper 3 analyses the process of implementing ATP in three hospital departments as processes of translating a management idea and practice across conflicting institutional logics within the organization, and the implementation outcome as a translation outcome. This perspective implies that management ideas and practices inevitably change as they move from one time and/or place to another (Czarniawska & Sevón, 2005). There is an identified need in translation research for studies that focus on how translations work in relation to organizational goals (Røvik, 2007; Røvik, 2016). We know relatively little about what facilitates good translations, i.e. translations of new ideas and practices
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into working practices or routines that contribute to the attainment of organizational goals (Røvik, 2011; Røvik, 2016; Wæraas & Nielsen, 2016). This research gap resonates with the previously identified need for studies in health care organizations that focus on successful change outcomes. As Papers 1 and 2, this paper offers contributions to health management research. It does so by detailing how a change initiative aimed at quality improvement may successfully be implemented into hospital management practice. It contributes to the overall aim of the thesis with an analysis of how a variety of organizational actors – leaders as well as employees – participated in different ways in the translation of ATP, thus identifying possible ways in which these actors can handle divergent changes so that they contribute towards organizational goals of quality improvement. In addition to this, Paper 3 contributes to Scandinavian institutionalist research on translation by focusing on editing and translation rules and practices (Røvik, 2016; Sahlin-Andersson, 1996; Teulier & Rouleau, 2013) that may facilitate good translations (Røvik, 2016), and the role of readiness for change (Armenakis et al., 1993) in achieving good translations.

In the introduction to a recent collection of academic commentary on health care management, Ferlie and colleagues distinguishes between two common approaches to health management research (Ferlie, Montgomery, & Pedersen, 2016). Health services research is focused on evaluating health service programs and practice innovation, doing so with methodological sophistication, but without sufficiently connecting with other social science research and theory. The other common approach consists of more generic management texts diffusing private sector inspired models, concepts and organizational change programs into the health care sector. Ferlie and colleagues advocate for a third approach of “bringing social science back into health management research”. This thesis is positioned in this third category. Although the three individual papers investigate divergent change in hospitals from different angles, they share an overarching theoretical framework which
is used to make sense of the empirical data. The institutional logics perspective (Thornton, Ocasio, & Lounsbury, 2012), its identification of how such logics may co-exist within organizational fields and organizations and be in conflict with each other, and the related concept of divergent change forms the foundation in all three papers for understanding the context in which the organizational changes are taking place and their content. In Papers 2 and 3 this perspective is also used as a framework for understanding the challenges related to the process of implementing a multidisciplinary DCS and translating ATP, and the outcomes of these change processes.

The movement from a hospital system dominated by professional power to an increasingly more business-like system manifests in specific organizational changes in each hospital. These changes introduce organizational structures and management systems that diverge from traditional, professional logic patterns for organizing patient treatment and care. As stated earlier in this introduction, the overall purpose of the thesis is to increase our understanding of how such changes can be handled by hospital leaders and employees in order to achieve outcomes that contribute towards organizational goals of service quality improvement. It does so by asking and answering the following two research questions:

Research question 1:

How are frequent organizational changes in hospitals and middle manager change-oriented leadership related to organizational and employee outcomes relevant to hospital service quality?

Research question 2:

How can hospital leaders and employees contribute to processes of implementing divergent changes to organizational structures and management systems in order to achieve outcomes that contribute towards organizational goals of service quality improvement?
Research question 1 is answered by Paper 1. Research question 2 is answered by discussing and contrasting the findings of Paper 2 against the findings of Paper 3.

In the next section, the overarching theoretical framework for the thesis and the theoretical perspectives specific to each paper are presented. Following the theory section, a presentation of the research design, methods, results and findings for each paper is given. Finally, Part One of the thesis is concluded by a discussion of findings relevant to the overall research questions, their contributions to existing literature, and managerial implications.
Part Two of the thesis consists of the following papers:

**Paper 1:**

**Changing to improve? Organizational change and change-oriented leadership in hospitals.**
Olaug Øygarden, Espen Olsen & Aslaug Mikkelsen.
Submitted to *Journal of Health Organization and Management*.

**Paper 2:**

**Establishing a multidisciplinary day-care surgery department: Challenges for nursing management.**
Olaug Øygarden, Rune Todnem By, Gunhild Bjaalid & Aslaug Mikkelsen.

**Paper 3:**

**Readiness for change and good translations.**
Olaug Øygarden & Aslaug Mikkelsen.
Submitted, revised and resubmitted to *Journal of Change Management*.
Currently under revision following the receipt of a second “revise and resubmit” decision.
2 Context and theoretical background

The following chapter first presents a contextual understanding of how public reforms have changed the Norwegian health care field, in terms of shifting priorities and shifting authority of different actors in the field. Although the thesis is not primarily a study of the shift in doctrine in the public sector or of a specific hospital reform, the ideas inherent to such reforms can be understood as phenomena existing as both general prescriptive theories of how certain societal sectors should function, as well as specific, everyday work practices (Pollitt & Dan, 2011). The reforms are therefore relevant as a framework for understanding the specific organizational changes studied. The chapter further presents the foundational theoretical understanding of the health care context which forms the framework for the thesis, and the concept of divergent change, before presenting an overview of the theoretical concepts that are relevant specifically to each of the papers.

2.1 The Norwegian hospital context: NPM, reforms and shifting organizational designs

Starting in the late 1970s, widespread changes were introduced to public sectors, including health care services, across western countries. The commonalities of these changes across national contexts were recognized by Hood, who coined the term New Public Management (NPM) as a label for the “(…) broadly similar administrative doctrines which dominated the bureaucratic reform agenda (…)” (Hood, 1991, p. 3). The broad goals of these reforms from the perspective of policy makers were to improve the effectiveness and efficiency of the public sector, enhance the responsiveness of public agencies to their clients and customers, reduce public expenditure and improve managerial accountability (Christensen & Lægreid, 2011b, p. 1). NPM reforms have introduced managerial and economic principles as an alternative to traditional professional bureaucracies whose organizing principles are
professional hierarchies and power, with administration being merely a support function (Hansen, 2011; Mintzberg, 1979). Reforms have been directed at the structure of public service organizations, their managerial models, their systems for performance management and budget discipline, cutting costs, and their relationships with the public in terms of increased marketization, competition and privatization. They have also had the simultaneous effect of de-centralizing autonomy and control by introducing organizational structures and managerial roles at the organizational level, placing discretionary decision making and responsibility for results within the authority of the organizations and their managers, and centralizing autonomy and control by introducing incentive systems which steer these managerial decisions in certain directions (Christensen & Lægreid, 2011b).

The literature on NPM reforms has identified the Scandinavian countries as reluctant reformers, and as modernizers. This implies that while they have not rejected the NPM wave, reforms have not been as far-reaching as in countries like the UK, Australia or New Zealand which have been categorized as marketizers. These latter countries introduced reforms that more forcefully moved their public sectors towards private sector principles and models. Their reforms introduced competition and marketization, and relied heavily on incentivization strategies in order to steer the public organizations in the desired direction of more efficiency and lower costs (Pollitt & Bouckaert, 2004). With regards to Scandinavia, the content and principles of NPM have been identified as less compatible with pre-existing norms of valuing the role of a stronger and more expansive state, and the principle of egalitarianism. The pressure for reform was not as strong as in the marketizer countries, and the national governance systems made it difficult to introduce radical reform (Christensen, Lie, & Lægreid, 2007). Reforms in Scandinavia have, in comparison with the marketizers, been more focused on managerial strategies, user-responsiveness and performance measurement (Pollitt & Bouckaert, 2004). While the suitability of NPM
principles and strategies for the policy area of health care has been debated (Gregory, 2003), and Norway maintained a system of political control and relying on professional expertise for a longer period than other countries (Hansen, 2011), a number of reforms have been introduced to the Norwegian hospital system since the 1990s. The aims have been aligned with NPM in several ways, including a focus on cost-control, achieving a more equal distribution of health resources across the country, reducing the size of direct government control as well as the power of professionals in decisions regarding priorities and resource use, de-centralizing the system, and empowering the service users (Byrkjeflot, 2011).

The first among the hospital reforms most commonly referred to in the literature on these developments was the introduction of activity based funding in 1997. The existing funding system calculated funding based on the number of days patients spent in the hospital (Fjeldbraaten, 2010), and the reform was aimed at solving issues of increasing costs, low transparency, long waiting lists and low efficiency (Torjesen, 2008). The new system split the financing of hospital services into a funding scheme where 40% of resources were to be allocated based on reported activity related to diagnosis related groups (DRG), and 60% were to be allocated as block grants (Johnsen, 2006). This is a quasi-market model where public funds follow the service user (Byrkjeflot, 2005; Hansen, 2011). The DRG system rewards increased activity and productivity by increasing funds accordingly, and strengthens the transparency of resource use and allocation by providing statistics on activities, diagnosis and economy (Byrkjeflot & Torjesen, 2010; Hallandvik, 2010; Kjekshus & Westlie, 2008). It represents a management system element which contributed to a shift away from the previous near-exclusive dominance of professional priorities and control in making patient care decisions, where funds were made available regardless of efficiency, towards incentivizing throughput. Studying the balance in power between managerial and professional priorities, Arman and colleagues identified
that the focus on quantifying patient throughput is connected to a societal meta-trend of putting trust in numbers, and serves to legitimize increasing managerial control over professional activities (Arman, Liff, & Wikström, 2014).

Following this, a reform of hospital management structures in 2001 introduced unitary management of hospital departments as a replacement of a professionally divided system of physicians and nurses managing their own columns (Byrkjeflot, 2011). The unitary model was intended to better meet the demands of the increasingly complex hospital organizations by establishing clearer lines of managerial control (Johansen & Gjerberg, 2009). Scandinavian health care reforms have generally not replaced health care professionals as managers with other occupational groups to the extent that this has occurred in other countries (Byrkjeflot, 2011). However, whereas the previous model of separate management lines privileged physicians as managers for other physicians, the unitary model opened up management positions also to nurses and other health care professionals, as well as to other occupational groups if supported by a health care professional medically in charge (Johansen & Gjerberg, 2009; Torjesen, 2008). This professional neutrality was strongly resisted by the Norwegian Medical Association, who otherwise supported the general principle of unitary management (Johansen & Gjerberg, 2009). Unitary management represents an organizational structure which strengthens the priority of managerial control over hospital activities vis-à-vis the, particularly medical, professions’ desire to manage themselves. This reform is relevant to the case study on the process of implementing a multidisciplinary DCS department. The new department was intended to be managed by one, unitary manager in order to enable the control necessary for coordinating work that required input from a variety of professional specialties. The intended DCS structure was as such a representation of the managerial principle which was introduced by the 2001 reform.
Also in 2001, free choice of hospitals for patients was introduced. This has been characterized as a quasi-market element (Byrkjeflot, 2005), and combined with increased transparency of organizational performance it was intended to push hospitals towards better performance in order to attract patients and the funding associated with higher activity. This reform is also related to the DCS department case study, as the new department was argued for partly on the basis of the importance of offering efficient and high quality services so that patients would chose to receive their treatment there instead of in other hospitals. Following the introduction of the DRG system, hospital resources are dependent on the number of patients treated, and attracting patients who are free to choose the provider of the services they need has therefore increasingly become a management priority. The reform introducing free choice of hospitals has also been tied to the increased awareness and institutionalization of patient rights more broadly. These new rights have included an introduction of quality standards which hospitals have to abide by, waiting time standards and guarantees, a right to information, access to medical records, and rights to complain in cases of substandard treatment and care (Kjønstad, 2011). All three papers in this thesis relate to these new rights. In order to fulfil required quality standards and meet waiting time standards and guarantees, hospitals have to organize their services in organizational structures and with the aid of management systems which allow them to do so. The continuous pressure to meet changing requirements means that there is continuous change to organizational structures, goals, strategies and management systems. This is part of the underlying assumption of the variable of organizational change in Paper 1. The case studies in the two following papers are close-up studies of two specific changes introduced in order to meet these requirements.

The largest reform was implemented in 2002, and restructured the ownership of all public hospitals from local counties to the central government (Hansen, 2011). Hospitals were struggling with
overspending and an inability to provide consistent services across all counties, and four regional health authorities (RHAs) were created and given the responsibility of health care governance and planning at the regional level (Byrkjeflot, 2011). The central government is now in charge of setting budget frames, while the individual hospitals are decentralized and self-governed in terms of management of day-to-day activities, organizing, leadership, staffing, prioritizing within given frames, and choices regarding medical treatments (Byrkjeflot, Lægreid, & Christensen, 2011; Johnsen, 2006). This reform was both a structural and a management reform, thus transforming the organizational design of the hospitals, and a hybrid of both centralization and de-centralization (Lægreid, Opedal, & Stigen, 2005a). Hospitals have been given organizational autonomy and stronger management functions internally, but are also subject to political interventions and strict budget frames set by the central government, and obligated to operate according to set performance criteria (Byrkjeflot, 2011). Organizational managers have been given stronger positions as actors and decision-makers (Fjeldbraaten, 2010), partly in order to reduce the strong influence of professionals (Lægreid et al., 2005a). However, this increased procedural autonomy for the hospitals is combined with stronger centralized planning, steering, control and accountability demands, meaning that the substantive autonomy of hospitals and their managers has been reduced (Kjekshus, Byrkjeflot, & Torjesen, 2013; Torjesen, Hansen, Pinheiro, & Vrangbæk, 2017).

Again, this system structure is relevant in understanding the organizational changes studied in this thesis, and the goals they aim to achieve. The goals are specifically defined as organizational goals throughout the thesis. However, the content of goals that the new management ideas and practices aim to achieve are largely influenced by reforms and policies that come from levels above the hospital organizations. The responsibility for designing specific strategies of how to reach those goals is located at the regional and organizational levels.
The organizational structure of the DCS department was a strategy designed by the local hospital, whereas the management system of ATP was a regional initiative. Both were strategies for reaching centrally defined goals. This understanding of where different authorities and responsibilities are located in the system also underlies the assumption that the changes included as a variable in Paper 1 are arguably not initiated at the level of the departments where physicians work and experience performance obstacles. Organizational goals are influenced by levels above the hospital, while new strategies, structures and management systems are decided on by the organization, and largely at organizational levels above individual departments.

Alongside and following these reforms, a wide variety of quality development initiatives as well as market and/or transparency instruments such as standardized clinical guidelines, national quality criteria and quality measure publishing requirements have been added to the system (Byrkjeflot, 2011). In 2014, continuing the transformation of the funding mechanisms which began with the introduction of the DRG system, parts of hospital funds are now dependent on service quality as measured by set indicators. All of these developments contribute to continuous changes in hospitals, and to a continuously increasing focus on managing services in ways that ensure improved performance on these indicators as opposed to evaluating quality and performance based solely on professional opinions.

The wider reform literature has recognized a set of challenges created by NPM measures. These include fragmentation of services, coordination issues and inefficiencies because organizational units have been split up and made accountable only for their own results, meaning they work towards their goals in isolation from other units (Liff & Andersson, 2013). There are also problems related to increased costs resulting from the need to coordinate services across a multitude of sub-units and management levels (Christensen & Lægreid, 2011a; Torjesen et al., 2017). Policies and reforms have therefore started turning towards
reintegration and coordination, a development referred to as Post-NPM, whole-of-government, joined-up government or new public governance (Christensen & Lægreid, 2011a; Hansen, 2011). This development is the background for a trend towards more multidisciplinary organizational structures (Andersson & Liff, 2012; Gadolin & Wikström, 2016), a focus on integrated care (Torjesen, Kvåle, & Kiland, 2016), and for reforms such as the 2008 coordination reform. This reform transfers a set of former hospital responsibilities to local authorities at the municipal level and mandates cooperation between the municipalities, hospitals and RHAs in networks (Torjesen & Vabo, 2014). This post-NPM turn is relevant to the DCS department, as it was explicitly intended to improve the coherence of services for DCS patients by gathering all the necessary professional groups in one multidisciplinary department under one manager. It is also relevant to the ATP case, as this was a management system designed to ease the coordination of scarce resources and complex tasks across the hospitals. While the shift towards Post-NPM strategies implies an increased focus on integration and coordination, it has not implied less focus on managerial or market mechanisms. Rather, reform scholars have pointed out that the elements of the profession-dominated pre-NPM era, NPM and Post-NPM are layered upon each other, operating simultaneously and adding to the complexity of the context (Liff & Andersson, 2013). Again, the case studies in this thesis confirm this. While they were partly motivated by a need for better coordination of resources and tasks in order to improve service quality, they relied on managerial and market elements to do so.

Analysing the changes to the Norwegian health care system over the past decades, Byrkjeflot (2011) has identified them as a move from a profession state to a health care state. This framework describes, in the terms of the institutional logics perspective presented below, the shifting balance between the professional, state, managerial and market logics. In the profession state, physicians as a group were self-governed and also largely in charge of autonomously governing the health care system.
They controlled education and research, central administration of health care services, and service provision. This authority was legitimized and sanctioned by the state on the basis of their unique expertise. However, this dominance came to be seen as a problem, a driver of overspending and something that needed to be constrained, and NPM challenged medical professional power with its market and managerial logic focus on efficiency, measurable quality, transparency and accountability to the public, unitary and profession neutral management and the increased focus on patient rights. However, in contrast to a “pure” NPM perspective, which includes a minimization of state interference in public services, the Norwegian health care reforms have maintained and perhaps even strengthened the role of the state. The state logic is therefore still important. In addition to this, the role of actors such as patients and other occupational groups has been strengthened. While the medical profession has maintained a strong position of influence at all governance levels and in top-level hospital management (Kjekshus & Westlie, 2008), it is now one among many influential stakeholder groups (Byrkjeflot, 2011; Pinheiro, Berg, Kekäle, & Tynkkynen, 2017).

The move from professional dominance to a more complex system of influences has been met with resistance and conflict from physicians in particular (Berg & Pinheiro, 2016; Martinussen, Frich, Vrangbæk, & Magnussen, 2017; Torjesen, 2008). Physicians react to the increased focus on efficiency, economy, administrative work and regulation of their professional activities claiming that it is leaving them less time for patient contact and professional development (Fjeldbraaten, 2010). This is consistent with findings from similar processes internationally, and the resistance has been shown to be effective in terms of limiting the impact of attempted organizational changes (Currie et al., 2012; Reay & Hinings, 2005). Also, the reform literature has not been able to definitively establish clear and positive results following from NPM reforms in health care systems (Ackroyd, Kirkpatrick, & Walker, 2007; Braithwaite et al., 2016; Christensen & Lægreid, 2011b). The present
thesis is set against this contextual description of how a multitude of reforms have influenced the organizational structure and management systems of hospitals in ways that are divergent to the previously dominant professional influence, and in the light of known reactions from professionals to the changes that have happened in the Norwegian health care field. Having identified a need for research focusing on successful outcomes of and the involvement of professionals in divergent organizational change as presented in the introduction, the thesis argues that it is valuable to gain more understanding of how changes to organizational structures and management systems that follow the movement towards a more business-like hospital system can be handled by hospital leaders and employees in order to achieve outcomes that contribute towards organizational goals of quality improvement.

2.2 Foundational theoretical understanding of the health care context and the concept of divergent change

2.2.1 The institutional logics perspective

The way organizations and organizational life are shaped by institutions has been a central research topic throughout sociological history (Lawrence, Leca, & Zilber, 2013), and institutional theory is now one of the leading perspectives in organization studies (Heugens & Lander, 2009). Institutions are patterns of regularized conduct (Martin, 2003), they are enduring elements in social life (Lawrence & Suddaby, 2006) that are “both supraorganizational patterns of activity through which humans conduct their material life in time and space, and symbolic systems through which they categorize that activity and infuse it with meaning” (Friedland & Alford, 1991, p. 232). Institutions consist of regulative, normative and cultural-cognitive elements, and provide stability and meaning to social life. They are durable social structures, and they are relatively resistant to change, but do also change over time
The institutional logics perspective focuses on the cultural-cognitive elements of institutions, and argues that individual and organizational behaviour can only be understood if it is located in a social and institutional context that both regularizes behaviour and provides opportunities for agency and change (Thornton & Ocasio, 2008).

Greenwood and Hinings (1993) used the term archetype to describe how interpretive schemes impact on organizational design. Design is defined as consisting of organizational structures and management systems. An archetype is an overall pattern of design, describing specific organizational forms. Interpretive schemes are the ideas, beliefs and values that underpin archetypes, as archetypes are held together by values that are seen as appropriate in the institutional context in which the organization is embedded (Greenwood & Hinings, 1993; Greenwood & Hinings, 2006). Along the same line of thinking, D’aunno and colleagues (2000, p. 679) define organizational templates as “patterns for arranging organizational behaviour that specify organizational structures and goals”. In organizational fields, certain templates are considered acceptable. Organizational fields consist of “those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products” (DiMaggio & Powell, 1983, p. 148). In combination, the organizations form a recognized area of institutional life (DiMaggio & Powell, 1983), and is a community of actors held together by their joint values and beliefs (Reay & Hinings, 2009). The health care system organizational field consists of suppliers (health professionals, hospitals and other facilities), resource and product consumers (patients and clients), regulatory agencies (government and professional associations), and other organizations that produce similar services or products (such as alternative medicine) (DiMaggio & Powell, 1983).

Organizations arrange core activities to conform with accepted templates, they reflect certain beliefs or values, and the templates are
taken for granted as the right way to organize. Greenwood and Hinings (1993) argue that the structures and systems given by an organizational archetype are not neutral instruments, but embodying intentions, aspirations and purposes. Archetypal coherence is a state in which there is a coherent relationship between the interpretive scheme and organizational design. Regarding organizational changes, the motivation for organizational members is to initiate changes that ensure continued alignment between the organization and existing institutions (Battilana & Casciaro, 2012; Greenwood & Hinings, 1996).

The concept of interpretive schemes and the theoretical models where schemes are seen as significant in determining organizational archetypes of design were precursors to the institutional logics perspective (Thornton et al., 2012). The concept of institutional logics allows for analysis of how the institutional environment affects individuals as well as organizations. Institutions affect the thoughts, feelings, and behaviour of individual and collective actors (Lawrence & Suddaby, 2006). The content and meaning of institutions are defined by institutional logics (Friedland & Alford, 1991). These logics are the organizing principles for a field, and guide the behaviour of actors through assumptions, values, beliefs and taken-for-granted rules (Reay & Hinings, 2009; Thornton & Ocasio, 1999). The logics link social-level institutions with organizations and individual action, and form the basis for a sense of common purpose and unity within an organizational field (Reay & Hinings, 2009; Thornton & Ocasio, 2008). When individuals or organizations identify with an institutionalized group, such as a profession, they will most likely cooperate with the group by following its norms and prescriptions (Thornton & Ocasio, 2008). Logics inform what is considered as legitimate organizational designs (Greenwood & Hinings, 1993; Kitchener, 2002), and are considered to be cognitive maps, prescribing sources of legitimacy and authority, and bases of norms and attention (Thornton et al., 2012).
Importantly, the institutional logics perspective as developed by Thornton and colleagues, regards individuals not as “mindless” actors who simply go along with whatever the environment around them demands. This stands in contrast to earlier neo-institutional theory and to the original conceptualization of institutional logics by Friedland and Alford (1991) which more clearly emphasized structure over agency. Institutional logics, as defined by Thornton and colleagues, “shape rational, mindful behaviour, and individual and organizational actors have some hand in shaping and changing institutional logics” (Thornton & Ocasio, 2008, p. 100). Further, this perspective allows for an analysis of how multiple logics may co-exist within organizational fields and organizations, and of how organizational fields and organizations may change as new logics are introduced or the balance between co-existing logics shifts.

Institutional logics scholars have defined seven ideal type institutional logics: markets, states, corporations, professions, families, religions, and community (Thornton et al., 2012). The cultural rules and cognitive structures associated with each logic shape organizational designs by focusing the attention of decision makers on issues and solutions, such as alternative organizational forms, that are consistent with the prevailing logic (Friedland & Alford, 1991; Haveman & Rao, 1997; Thornton & Ocasio, 2008). Research on institutional logics in the health care field and hospitals has often focused on the relationship between the medical professional logic and the market and corporate logics (Andersson & Liff, 2018; Byrkjeflot, 2011). The corporate logic is often referred to as a managerial logic in this research. The organizing principle of the health care field has traditionally been grounded in a professional logic, more specifically medical professionalism. Battilana (2011) calls this an institutionalized template for organizing. Status and power is conditioned by the dominant field logic as it defines the rules of gaining, maintaining or losing power within the organization (Thornton & Ocasio, 2008), but fields are also shaped by processes of structuration.
that suit the most powerful actors so that the logics of these actors are reflected in the dominant logic (Reay & Hinings, 2009).

The professional logic bases the legitimacy of hospitals in the technical quality of the services that are offered (Ruef & Scott, 1998). It highlights the autonomy and trust-based authority of the professional, and prioritizes professional judgment in, ideally de-centralised, decision making (Andersson & Liff, 2018; Freidson, 2001; Mintzberg, 1979; Noordegraaf, 2015). Medical professionalism mandates physician dominance over all other health service professionals, and position them as key decision makers both in clinical and administrative matters (Battilana & Casciaro, 2012). Managers working in organizations that are characterized by this template, or logic, tend to focus on facilitating the work of physicians and not contradict them (Giaimo, 2002). This physician authority is grounded in the social legitimacy of what their profession does, and the fact that they alone have the expertise and ability to treat patients (Abbott, 1988; Freidson, 1986). However, while physicians are the traditionally most powerful actors in the health care field, other health service professionals may also adhere to a professional logic, recognized by professional authority and autonomy being central values (Kristiansen, Obstfelder, & Lotherington, 2015).

Following this, hospitals are defined in the literature as professionalized organizations, where strong professional groups are able to resist change initiatives imposed by other actors than the professionals themselves (Abbott, 1988; Battilana & Casciaro, 2013; Reay et al., 2016; Scott, Ruef, Mendel, & Caronna, 2000). Hospitals are also defined as highly institutionalized, meaning that they are characterized by quite stable structures of order and meaning (Muzio, Brock, & Suddaby, 2013; Reay et al., 2016). Since actors are mainly interested in implementing organizational changes that maintain the alignment between organization and existing institutions, the power of professionalization and the professional logic has caused stability in the health care system.
However, as presented in the preceding section on the Norwegian hospital context, policies and practices from the private sector have increasingly been introduced to the public sector, hospitals included (Byrkjeflot & Kragh Jespersen, 2014; Currie & Guah, 2007). The ideal types of market and managerial logics are distinct from the professional logic (Thornton et al., 2012), and are sometimes combined in descriptions of the health care field as business-like (Martin, Currie, Weaver, Finn, & McDonald, 2017; Reay & Hinings, 2009). The market logic represents competition among service providers and the use of market signals to improve services and contain costs, whereas the corporate logic represents the managerial control of professional activities through performance management regimes, standardization, surveillance and audit (Martin et al., 2017). The managerial logic emphasizes stronger, more efficient, business-like and hierarchical management with clear accountabilities (Ackroyd et al., 2007; Arman et al., 2014; Byrkjeflot & Kragh Jespersen, 2014; Reay & Hinings, 2005; Scott et al., 2000). Managerialism does not treat physicians as autonomous professionals, but as employees who are responsible for transforming organizational resources into tangible results for their customers through efficient and controlled processes in which managers are influential (Kitchener, 2002; Noordegraaf, 2015).

In this thesis, organizational changes, their content and the process of implementing them are mainly analysed in relation to the professional, the managerial and the market – referred to in combination as business-like – logics. In the Norwegian health care field, the turn towards a managerial logic has been more prominent than the market logic influence (Kristiansen et al., 2015). But while standard market competition plays a very limited role in the national health system, policies for patient choice, activity-based funding and private provider contracting has indirectly introduced competition into the field (Brekke & Straume, 2017). Also, in a Scandinavian context, the state logic is important to the health care field (Byrkjeflot, 2011). The state plays an
important role in defining the demands put on hospital organizations, and
the goals they need to fulfil. The content of the state logic centres on
redistribution, democratic participation and bureaucratic domination,
and on citizenship, the status of interest groups and increasing
community good (Thornton et al., 2012).

Previous research has contributed with an understanding of how the
health care field has changed as a result of the introduction of new logics
and an analysis of the field as complex because it is ruled by several co-
exisiting logics. It has contributed with an identification of changes at the
organizational level as either convergent or divergent depending on the
relationship between the logic of the change content and the logic of the
organization or groups of organizational actors who are at the receiving
end of the change (Battilana, 2006), and understanding of the reactions
that divergent changes may be met with. This thesis does not aim for a
contribution towards the institutional logics literature. However, in
pursuing the overall research aim, the thesis rests on the understanding
of previous studies of institutional logics in the health care field, and
aims to use this understanding in the analysis of empirical data.

2.2.2 Divergent change

When new, contradicting logics are introduced in an organizational field,
it can replace the existing one, or the two can exist side by side in rivalry
over extended periods of time. Studies of logics in health care fields have
found that the presence of several logics seems to persist, and that the
new market and managerial logics have not eliminated the formerly
dominant professional logic (Byrkjeflot, 2011; Reay & Hinings, 2009).
The contradictions in a field ruled by more than one dominant logic
represent opportunities for further transformation and change (Thornton
& Ocasio, 2008). One such form of change can manifest at the
organizational level as changes to the organizational structures and
management systems that make up organizational designs.
Greenwood and Hinings (2006) differentiate between organizational changes as radical or convergent depending on whether they break with the institutionalized, taken-for-granted way of organizing in the relevant field or not. Convergent changes fine-tune the direction the organization is already moving in, and the organization stays within the template that the dominant institutional logic in the field prescribes. Radical changes imply that the organization “busts loose” from an existing orientation and moves from one template-in-use to another (Greenwood & Hinings, 1993). The reforms described above have broadly represented such radical changes to Norwegian hospitals, introducing organizational design elements that were foreign to the previously dominant professional logic.

Organizations that operate in a context of multiple institutional pressures are exposed to multiple normative orders and/or logics (Reay & Hinings, 2009), and the previous section on hospital reforms describes how the context surrounding Norwegian hospitals has developed into a complex environment of this type. Such a fragmented field is potentially beneficial for initiating further changes that break with the traditionally dominant institutional order. Organizational members are generally believed to be motivated to initiate changes that ensure alignment between the organization and existing institutions (Battilana & Casciaro, 2012; Greenwood & Hinings, 1996). But different members may not agree on interpretive schemes, and there are alternative “ways of doing things” available to them (Kraatz & Block, 2008). According to Seo & Creed (2002), the incompatibility of co-existing institutions in a field enable actors to critique the existing arrangements and take action to change them.

Norwegian hospital reforms have introduced managerial and market logic elements to the organizational field and thereby expanded the variety of available alternatives for organizing and managing services. The 2002 reform of hospital ownership decentralized the responsibility of making decisions on how to organize activities in order to fulfil
centrally given demands. Regional and organizational level actors have therefore also been given actual authority to design and attempt to implement changes to organizational structures and management systems. Regional and top-level hospital managers have predominantly accepted the new logics, and there is movement towards a more balanced set of priorities guiding professional middle managers as well (Byrkjeflot & Kragh Jespersen, 2014). However, the reform literature presented in the previous section is also clear on the fact that the professional logic is still a vital force guiding the attitudes and behaviours of professional employees, and particularly physicians. Organizational changes that are primarily anchored in managerial and/or market logics can therefore still be considered as radically new by those groups who maintain a professional logic as their primary ideal for how hospitals should be structured and managed.

Other writers characterize changes that break with existing institutions in a field of activity as divergent (Battilana & Casciaro, 2012; D’Aunno et al., 2000). Divergent changes involve transformation of organizational goals, and of beliefs and norms. This transformation does not necessarily have to be completely new to a field or an organization in order to be considered as divergent, and Norwegian hospitals have indeed moved past the point where all managerial or market logic change can be considered as divergent for the organization seen as one, holistic entity. Too many divergent changes have already been implemented for this to be true, and for some organizational actors beliefs and norms have already shifted towards seeing managerial and market logic structures and systems as convergent to existing arrangements. The introduction of new such design elements may still, however, be considered as divergent to the professionals who are at the receiving end of initiatives aimed at changing parts of the organizational design. The concept of divergent change is therefore a relevant perspective for understanding the organizational changes studied in this thesis, as those changes challenge the professional logic of the employees that they affect.
In addition to differentiating between convergent and divergent, or radical, change, Greenwood and Hinings (1993) separate evolutionary change from revolutionary change depending on the scale and pace of the organizational changes implemented. In the two case studies reported on in this thesis, the changes are defined as divergent in content, while evolutionary in scale. Processes of implementing divergent changes that are relatively small-scale and slow, i.e. evolutionary, could nevertheless be expected to be challenging. First, those who initiate the changes need to be able to think in new ways about the institutions they are embedded in (i.e., act as institutional entrepreneurs), and second, they need to convince others to change their practices in ways that break with their institutionalized norms (Battilana & Casciaro, 2012; Battilana et al., 2009). The relationship between co-existing logics existing in the same organizational fields or organizations is often described as conflictual or competitive, not least in health care (Besharov & Smith, 2014; Greenwood & Suddaby, 2006; Reay & Hinings, 2005; Scott et al., 2000). According to Battilana and colleagues (2009), divergent changes that threaten the privileges and positions of certain groups will ignite these groups as institutional defenders, defending beliefs and practices of the existing arrangements. Many studies in hospital settings, and particularly of physicians, have found this to be true. Currie and Procter (2005, p. 1330) summarize this as a phenomenon of physicians being “able to define the purpose of health services and control the actual delivery and general development of services (…) and to resist, subvert and modify any proposed change that threatens their interest within the organization”. This makes it difficult for change initiators to achieve the “convincing of others” which is crucial to transforming existing arrangements.

The change initiatives studied in Papers 2 and 3 were both aimed at improving performance on stated organizational goals of quality improvement, and the new organizational structure (Paper 2) and management system (Paper 3) diverged from logics inherent in the
hospitals’ existing organizational design. Existing research both within literature using the institutional logics perspective and within health services research more broadly finds that quality improvement initiatives in hospitals very often fail to achieve the results desired by change initiators. Gadolin, studying the active involvement of health care professionals in quality improvement work from an institutional logics perspective, reviews the literature on such failure and concludes that the disappointing results are “often attributed to the failure to understand complexity and context in relation to planned, management initiated approaches to management and change” (Gadolin, 2017, p. 2). Further, he finds that what is widely considered a critical success factor in quality improvement initiatives in health care contexts, namely the active participation of professionals, is often identified as lacking. This lack of participation is often attributed to conflicting views on the part of managers and professionals of appropriate principles for who the legitimate actors for dictating practice are, and different perceptions of both how to define quality, and how to improve it. In other words, the challenge is often rooted in the divergent nature of the proposed changes.

The broader health services research literature also points to the engagement of health care professionals as a critical element in improving the quality of hospital services (Pannick et al., 2016; Spurgeon, Barwell, & Mazelan, 2008). Medical engagement “refers to the active interest and participation of physicians in organizational (as well as individual professional) activities to improve care and services” (Denis & Baker, 2015, p. 88). Previous research has documented a link between medical engagement and organizational performance (Spurgeon et al., 2011). Further, a variety of facilitators and barriers to such engagement have been identified (Taitz, Lee, & Sequist, 2012). The facilitators include engaged leadership, physician compacts detailing the rules of engagement between physicians and the organizations and outlining mutual expectations, appropriate compensation and realignment of financial incentives for taking part in quality initiatives,
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providing and reporting data, and offering physicians academic promotion based on their engagement in quality work. Barriers include existing institutional culture and physician desire for autonomy, which again points to the divergent nature of the quality improvement initiatives as a challenge.

However, while the participation and engagement of health care professionals, and particularly physicians, in organizational change aimed at quality improvement is widely considered and documented as important in turning initiatives into results in several strands of literature concerned with health service improvement, there are few empirical studies of medical engagement in organizational change efforts (Denis & Baker, 2015). Leaders at all organizational levels are central actors in the implementation of organizational change. However, turning change initiatives into changed behaviour in hospital organizations ultimately entail the actions of health care professionals (Nyland, Pettersen, & Östergren, 2009). Yet, there is a lack of actor level studies of such involvement (Gadolin, 2017). This means that there is a need for more in-depth research on how divergent changes can be handled by hospital leaders and employees in order to achieve outcomes that contribute towards organizational goals of service quality improvement.

Research on divergent change has been part of the effort to understand institutional change, how the patterns for organizing which exist on a supra-organizational level and are taken for granted by organizational actors change over time. This research has concentrated on how and why change occurs, who initiates change, and with what effects (Battilana, 2011; Micelotta, Lounsbury, & Greenwood, 2017). This thesis does not present findings that contribute towards new explanations of or perspectives on institutional change, or develop the literature on who initiates it or why. These are undoubtedly central questions within the institutional literature. However, the three papers of the thesis and the discussion in Part 1 focus on what happens in hospital organizations after such changes have in fact been initiated – how they may impact
organizational and employee outcomes, what the challenges encountered in the process of implementing them may be, and how different organizational actors can take part in these processes in order to achieve implementation outcomes that enable fulfilment of organizational goals of service quality improvement.

2.3 Theoretical models and concepts specific to each individual paper

2.3.1 The Job Demands-Resources Model and change-oriented leadership

The study presented in Paper 1 employs the literature on Norwegian health care reforms and the concept of divergent change as a foundation for exploring how frequent changes to management, organizational structures and overall goals and strategies in hospitals are related to physician job satisfaction and the occurrence of performance obstacles. It further explores the role of participation in decision-making as a mediator of these relationships. The following paragraphs represent a summary of the theoretical framework presented in the paper.

The paper analyses survey data from physicians without formal managerial responsibilities. The reform literature tells us that hospital organizations are continuously changing as a result of new policy priorities and demands, that these changes may be in conflict with the professional logic of physicians, and that this is particularly so for physicians who are not in management positions. In other words, the changes are divergent to this group of organizational actors. The paper takes this as an assumption guiding the construction of its hypothetical model, and considers these organizational changes as a job demand.

The Job-Demands Resources Model (Bakker & Demerouti, 2007; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) proposes that a wide
variety of job characteristics act as determinants of employee well-being and performance. The model posits that job demands negatively impact employee health and well-being, whereas job resources may spark a motivational process leading to job-related learning, work engagement and organizational commitment. Organizational change can both increase existing and introduce new demands (Smollan, 2017), as well as represent a demand in and of itself.

The hypothetical model in Paper 1 includes two outcome variables that are important to hospital service quality. First, job satisfaction has been found to contribute towards organizational performance (Bryson, Forth, & Stokes, 2017). Earlier research on physician job satisfaction indicates that dissatisfaction has a negative impact on patients and quality of care (Casalino & Crosson, 2015). The quality of services is also dependent on a work system that enhances and facilitates the work performed by health care professionals (Dekker & Leveson, 2015). Sufficient and functioning medical, ICT and other types of equipment, sufficient and competent staff and an organization of work that ensures coordination, collaboration and communication are system elements referred to as structural quality indicators in the national system of quality indicators (NDH, 2019). The absence or sub-optimal functioning of these elements are considered as performance obstacles, defined as “the work system design characteristics that inhibit performance and are closely associated with the immediate work setting” (Peters & O'Connor, 1988, p. 106). The occurrence (or not) of such performance obstacles can be considered as a relevant measure of the quality of care that a hospital is able to offer, and represents the second outcome variable in the hypothetical model.

Changing management, reorganizing or introducing new overall goals and strategies may reduce the prevalence of obstacles if the new structures and practices are wisely designed and successfully implemented. However, as the reform literature points out, many of the ongoing changes in hospitals are motivated fully or partially by increasing resource efficiency (i.e. cutting costs), and they may therefore
result in an increase in performance obstacles as resources diminish. Further, if the changes represent a job demand for employees they may, in line with the JD-R model, lead to lower work engagement (Bakker, Schaufeli, Leiter, & Taris, 2008). Work engagement may contribute to reducing the occurrence of performance obstacles, as engaged employees are more likely to go the extra mile and contribute to finding workarounds (Debono et al., 2013) or solutions to eliminate performance obstacles. Job demands may also contribute to negative emotions for employees, which narrows cognitive skills and the employees’ ability to come up with such solutions (Fredrickson, 2001).

Research testing the JD-R model has found that as demands increase and resources decrease, job satisfaction decreases as a result of maladaptive coping (Alarcon, 2011; Lewig & Dollard, 2003). Job resources, on the other hand, may fuel job satisfaction (Sousa-Poza & Sousa-Poza, 2000; Tims, Bakker, & Derks, 2013). Based on the centrality of autonomy and control (decision authority and skill discretion) in the professional logic, and previous research on how the role of professional autonomy has shifted as a result of the reforms and policies that shape organizational changes within hospitals, Paper 1 focuses on the role played by physician participation in decision-making as a mediator of the relationship between frequent organizational change, performance obstacles and job satisfaction. In the JD-R framework, job control is included as a central resource (Bakker & Demerouti, 2007). Job control includes not only autonomy over immediate tasks and time constrains but also participation in decision-making (Alarcon, 2011). Job control has consistently been found to be an important resource for fostering job satisfaction, motivation and engagement.

Many theories on leadership styles make some sort of distinction between leaders who primarily focus on production and work tasks, and leaders who focus on staff relationships (Borgmann, Rowold, & Bormann, 2016; Sellgren, Ekvall, & Tomson, 2006). Yukl has further elaborated the task-relations dichotomy of leadership behaviours,
arguing that it is important to distinguish between task-, relations- and change-oriented behaviours (Yukl, 1999; Yukl, Gordon, & Taber, 2002). The leadership practices measured in Paper 1 are performed by hospital middle managers, i.e. managers responsible for organizing staff and patient treatment in individual departments. Change-oriented leadership is of particular interest in continuously changing organizations such as hospitals. Change-oriented leadership behaviours include monitoring and interpreting the environment, envisioning new possibilities for the organization, explaining the need for change, suggesting new and creative solutions and experimenting with new approaches for achieving objectives, taking a long-term perspective on problems and opportunities, and negotiating for support from other actors on behalf of the department. This leadership style has previously been found to positively impact job satisfaction as well as performance. Change-oriented leaders may be effective in reducing the prevalence of performance obstacles due to their ability to search for and suggest new solutions to department level problems. The literature on change-oriented leadership outcomes does not, however, clearly define the role of employee autonomy as a mediator (Borgmann et al., 2016). Change-oriented leadership may be positively related to autonomy because change-oriented leaders solicit the advice of employees in finding new solutions, and facilitate participatory change processes leading to more employee involvement (Bryson, Barth, & Dale-Olsen, 2013; Greubel & Kecklund, 2011; Teo, Pick, Newton, Yeung, & Chang, 2013). This can lead to an experience of participation in decision-making in the work setting for employees.

In summary, Paper 1 assumes that current organizational changes to management, organizational structures and overall goals and strategies in hospitals are often divergent to the professional logic of physicians, and that hospitals are continuously changing organizations. It aims to answer the following research question:
How are frequent organizational changes in hospitals and middle manager change-oriented leadership related to organizational and employee outcomes relevant to hospital service quality?

2.3.2 Introducing a divergent organizational structure – conflict and resistance

Paper 2 follows the establishing of a multidisciplinary DCS department with unitary management. Hospitals operate as an intricate web of role divisions between physicians, nurses, specialists, support staff, and managers. There are also subgroups within each group based on seniority, expertise levels, and disciplinary specialties, each of which may operate in a distinct community of practice (Currie et al., 2012; Ferlie, Fitzgerald, Wood, & Hawkins, 2005). The professional logic will influence not only decisions about clinical patient treatment and care but also opinions and decisions about how to organize services, and the traditional organizational structure has been based on a principle of unidisciplinary departments where each profession and specialty controls their own staff resources and professional development. The business-like logic, on the other hand, is a driver in the current search for more cost-efficient and patient-centred ways of organizing health services. But while post-NPM health service policies internationally are pushing for multidisciplinary and patient-centred organizational structures (Fulop et al., 2012; Gadolin & Wikström, 2016), there are challenges involved in moving away from professional and discipline based organizing.

In the face of divergent changes to organizational structures, professionals and particularly physicians, who are the elite and traditionally most powerful professional group (Battilana, 2011; Nancarrow & Borthwick, 2005), have proven able to fend off attempts at introducing new, dominant logics to their field (Reay & Hinings, 2009) and to successfully resist organizational changes that break with profession-controlled organizational structures (Currie et al., 2012;
Currie & Procter, 2005; Kitchener, 2002). In other words, the needed support and professional engagement is often lacking, and the often limited effects of health policy changes have been linked to such resistance (Martinussen & Magnussen, 2011).

Physicians are by far the most widely studied health care occupational group in terms of the content of their professional logic, and their reactions to divergent change. Institutional logics in relation to what guides nurses is a much less studied phenomenon (Gadolin, 2018). More knowledge of how his group reacts to divergent change is therefore needed. Some previous studies identify nurses as adhering to a professional logic that is mostly similar to the logic guiding physicians. Nurse professional logics are thus described as centred around providing high quality care as defined by their professional norms and values, professional autonomy, flexibility and empowerment (Kristiansen et al., 2015; Van den Broek, Boselie, & Paauwe, 2014). However, their power to resist and curtail change initiatives grounded in a conflicting, business-like logic is weaker than that of physicians due to their location in the inter-professional hierarchy in hospitals. Other studies of institutional logics in health care point out that professional logics within organizations are not monolithic, and draw a clearer division between physicians who base their actions on a logic of cure, whereas nurses base theirs on a logic of care and/or a nursing logic particularly conducive to multidisciplinary organizational structures, as it is aligned with a more holistic care for patients and coordination of patients’ logistical flow (Andersson & Liff, 2018; Burgess & Currie, 2013; Currie & Spyridonidis, 2016; Gadolin & Wikström, 2016; Glouberman & Mintzberg, 2001). Based on this latter view, one could expect nurses to be willing to be included in a new, multidisciplinary department.

The overall aim of Paper 2 is to explore challenges for nursing management in introducing new and divergent organizational structures.
It does so by asking three research questions. The first two questions are related to the role of nursing staff reactions to the intended multidisciplinary structure in shaping the implementation outcome.

Research question 1:

*What were the arguments for and against the establishment of the multidisciplinary DCS department and how did these relate to professional and business-like logics?*

Research question 2:

*What was the organizational structure that was eventually put into practice, and how did this structure bridge the challenges encountered in the implementation process?*

The third research question is related to challenges embedded in the implementation outcome. This outcome was an organizational structure that resulted from conflicts in the implementation process, and compromises made on the intended, multidisciplinary structure with unitary management.

Research question 3:

*What were the challenges embedded in the eventual organizational structure?*

Battilana and Casciaro (2012) identify two main challenges related to transforming divergent changes into established practices in hospitals. The first is that organizational actors need to be able to think outside established patterns of how hospitals are traditionally structured and managed. The DCS case is an example of how hospital top management actors were in fact able to go beyond the traditional and profession dominated pattern of unidisciplinary organizational structures, and

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2 For purposes of clarification, the research questions as stated in the published version of the paper have been slightly re-phrased in Part 1 of the thesis.
suggest a diverging structure. The second challenge identified by Battilana and Casciaro, however, is to be able to convince other actors to change their practices in ways that break with their institutionalized norms. The case study does document that this was difficult, and not only with respect to physicians but also with nurses. This relates to the thesis aim and the second, overall research question by illustrating how a wide variety of organizational actors need to be included in efforts to understand how divergent changes may succeed in reaching stated quality goals – not just managers and physicians, who are most commonly studied, but also other professional groups.

### 2.3.3 Introducing a divergent management system – readiness for change and good translations

The case study presented in Paper 3 goes deeper into an implementation process of a new management idea and practice, ATP, where regional top-level actors were also able to go beyond traditional patterns of hospital management. This case study suggests strategies for how the convincing of others may come about, how leaders and employees took part in the process of translating ATP in each department, and analyses more closely how the initial idea was transformed through this process.

Planned implementation of improvement projects can only take place when the projects are sufficiently supported by hospital actors at all organizational levels (Dückers et al., 2009). The needed support from hospital employees can be conceptualized as readiness for change (Armenakis & Bedeian, 1999; Armenakis & Harris, 2002; Armenakis et al., 1993; Holt, Armenakis, Feild, & Harris, 2007; Holt, Armenakis, Harris, & Feild, 2007). Readiness for change is understood as the cognitive precursor of the behaviours of either resisting a given organizational change effort, or accepting, embracing and adopting it (Armenakis et al., 1993; Holt, Armenakis, Harris, et al., 2007). According to existing theory, readiness is created when change agents are able to communicate a change message that fosters five key change
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beliefs - discrepancy, appropriateness, self-efficacy, principal support and personal valence (Armenakis & Bedeian, 1999; Armenakis & Harris, 2002). Discrepancy refers to the belief that there is a gap between the current state and what it should be. Believing in the appropriateness of the suggested change means believing that a specific change designed to address a discrepancy is correct for that particular situation. Believing in efficacy means that the change recipients believe they and the organization can successfully implement a change. Believing in principal support means trusting that both formal leaders (vertical change agents) and horizontal change agents (opinion leaders) are committed to the change, and believing in valence means believing that the change is beneficial to the change recipients themselves.

Readiness is “influenced by the content (i.e. what is being changed), the process (i.e. how the change is being implemented), the context (i.e. the circumstances under which the change is occurring), and the individuals (i.e. characteristics of those being asked to change) involved and collectively reflects the extent to which an individual or a collection of individuals is cognitively and emotionally inclined to accept, embrace, and adopt a particular plan to purposefully alter the status quo” (Holt, Armenakis, Harris, et al., 2007, p. 235). In a highly institutionalized and professionalized context, such as hospitals, fostering readiness for change could be particularly challenging. If a change initiative’s content diverges from a previously agreed upon norm of how “things should be done” (Battilana, 2011), it will be challenging for a change agent to reach an agreement on the five key change beliefs. There is no reason to assume that change recipients and change agents share the same understandings of a change initiative. Various constituents can ascribe divergent meanings and value even to ostensibly mutually beneficial initiatives (Bartunek, Rousseau, Rudolph, & DePalma, 2006).

The complexity of the health care organizational field may therefore be a constraint to change agents who have to shape their change message wisely so as to take differing institutional logics into account (Amis &
Aïssaoui, 2013). Institutional logics specify “which issues to consider salient, which ends to pursue, which means to employ, and which standards to use to define success” (Smets, Jarzabkowski, Burke, & Spee, 2015, p. 934). Particularly fostering a belief in the discrepancy which is presented by change agents (the goal) and the appropriateness of the suggested solution (the means) can be difficult when the change effort is based in an institutional logic which is in conflict with the logic of change recipients. Previous research has found that medical professionals are often sceptical to whether reforms, policies or smaller organizational interventions are actually useful or appropriate in terms of attaining the goals that change initiators set out to reach (Aasland, Hagen, & Martinussen, 2007; Heldal & Sjøvold, 2015; Tummers, 2012). Even if there is agreement on the importance of stated goals, professionals may evaluate the appropriateness of the intended change as unsuitable for reaching those goals. The judgment of valence (the reward) for change recipients would also be expected to differ according to which institutional logic forms the basis of the evaluation. If readiness for change is in fact necessary for divergent changes to be implemented successfully, and if the underlying change beliefs are difficult to foster due to conflicting logics, one could expect that these change efforts would lead to de-coupling (Meyer & Rowan, 1977) – a symbolic adoption of changes in order to satisfy legitimacy demands from the managerial logic, but no meaningful change in actual practices.

According to the neo-institutional theory presented by DiMaggio & Powell (1983), the structures of organizations within a field become increasingly similar through processes of isomorphism - one unit in a population is forced to resemble other units facing the same set of environmental conditions. Practices and structures become infused with value beyond their technical efficiency (DiMaggio & Powell, 1983), and are ceremoniously adopted because they provide organizations with legitimacy in their institutional environment, not primarily because they enable technical performance (Meyer & Rowan, 1977). When
organizations maintain their existing core activities as before, despite the apparent adoption of new, more legitimate structures or practices, there is de-coupling between appearances and practice (Meyer & Rowan, 1977). The identification of isomorphic pressures that drive a development towards similarity in organizational fields by diffusing templates for organizing, and that organizations conform in order to increase their symbolic performance, has been called one of the most influential research hypotheses in organization theory (Heugens & Lander, 2009). The implication is that organizations behave within and conform to a system that offers a limited selection of socially constructed, approved and taken-for-granted templates for organizing, and that these institutional prescriptions are quite resilient (Greenwood & Suddaby, 2006).

Developing from neo-institutional theory, Scandinavian institutionalism has taken an interest in investigating how management ideas travel into, and are shaped as they turn into practice, within specific organizations (Boxenbaum & Pedersen, 2009; Czarniawska & Joerges, 1996; Wedlin & Sahlin, 2017). Czarniawska and Sevon (1996) outlined this as a process where ideas are turned into objects such as models or books and dis-embedded from their specific context, transferred to new places, re-embedded and translated into new objects and then sometimes into actions. If these actions are repeated, they could become new institutions in the form of taken-for-granted practices, which could become objects of further translation processes.

This perspective on how management ideas spread and shape practices within organizations challenges the more traditional explanation of diffusion and emphasizes that ideas and practices, as well as those actors involved with them, inevitably change as they move from one time and/or place to another (Czarniawska & Sevón, 2005). Translation research within Scandinavian institutionalism also challenges the idea of stability and homogenization within organizational fields (DiMaggio & Powell, 1983) by emphasizing that “a thing moved from one place to
another cannot emerge unchanged: to set something in a new place is to construct it anew” (Czarniawska, 2009, p. 425). So while ideas may travel as a result of organizations trying to imitate each other because they believe others have found ideas of superior quality (pragmatic reasons), and/or because certain ideas become fashionable at certain points in time (power-symbolic reasons) (Czarniawska & Sevón, 2005; Røvik, 1996), these travels do not necessarily cause increasingly identical organizational practices. Several empirical implementation studies of ideas and practices in health care settings such as mobile IT (Nielsen, Mathiassen, & Newell, 2014), reputation management (Wæraas & Sataøen, 2014), hospital management models (Kirkpatrick, Bullinger, Lega, & Dent, 2013), LEAN (Andersen & Røvik, 2015), health care centres (Waldorff, 2013) and clinical guidelines (Spyridonidis & Currie, 2016) have found this to be true. Ideas and practices travel into the organizational field of health care, often times from the private sector, may be presented by management as interventions to implement in order to improve hospital performance, and are translated into new versions in the health care field, but often also in every single organization, or even departments.

Scandinavian institutionalism has contributed with valuable knowledge about how management ideas and practices travel and are translated into new geographical locations, organizational fields and between organizations (Boxenbaum & Pedersen, 2009; Wedlin & Sahlin, 2017). This work has pointed out how ideas and practices are dis-embedded from their source context in order to travel to and be re-embedded in a new one, and that the travelling object inevitably changes through this process (Czarniawska & Sevón, 2005; Czarniawska & Joerges, 1996). Empirical research has identified that translations occur according to certain translation or editing rules and practices (Kirkpatrick et al., 2013; Morris & Lancaster, 2005; Røvik, 2016; Sahlin-Andersson, 1996; Teulier & Rouleau, 2013; Wæraas & Sataøen, 2014). In other words, we know that ideas and practices change as they travel, and we know
something about how they are changed through translation. However, Røvik (2007; 2016) points to the issue of organizational effects of translated versions of ideas as a “blank spot” in translation research – few studies focus on how translations work in relation to organizational goals. We know relatively little about what facilitates good translations, i.e. translations of new ideas and practices into working practices or routines that contribute to the attainment of organizational goals (Røvik, 2011; Røvik, 2016; Wæraas & Nielsen, 2016).

The concepts of editing rules and practices (Sahlin-Andersson, 1996; Teulier & Rouleau, 2013) and translation rules (Røvik, 2016) are employed in Paper 3 to study the details of the translation processes which transformed ATP into established practices in three hospital departments. Sahlin-Andersson (1996) studied translations of abstract organizational concepts into practice in new settings and found that there are regularities to how actors perform translations. She coined the translating actors as editors and the regularities as editing rules. She identified how there are rules concerning context, formulation and logic. Contextual rules concern the fact that a concept has to be dis-embedded from a source context before it can travel to and be re-embedded in a new one. Rules of formulation concern the way concepts are labelled and how their story is told, often in dramatized ways. Rules concerning logic concern how new ideas and practices are presented according to a certain plot adhering to a rationalistic logic of causes (the new idea or practice) and effects (positive results).

Teulier and Rouleau (2013) expanded on this framework of contextual, formulation and logic rules by identifying a set of editing practices that translators use. They found that middle managers performed translation in several translation spaces, using several editing practices. The middle managers de-contextualized the technology by reframing problems and staging their discussions, worked on formulation by readjusting the vision of and rationalizing the change, and worked out issues of logic by stabilizing their shared understanding of the new technology and taking
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absent stakeholders into account. Teulier and Rouleau further argue for
the existence of a fourth set of rules in addition to Sahlin’s three
categories. These rules specifically concern the re-embedding of a new
idea, and include editing practices of speaking for the technology and
selling the change.

I have used these editing practices as analytic tools for identifying how
different actors translated ATP. These editing practices are understood
as mainly concerning how a change is discursively constructed and
communicated. In order to also uncover how the content of the ATP
practice changes through translation, the translation rules identified by
Røvik (2016) are also utilized. He argues that a translation process can
reproduce management practices as elements of it are simply copied, or
modify practices as elements are added or omitted.

Paper 3 contributes with an analysis of how the use of editing practices
and translation rules connects with translation outcomes that represent
better or worse versions of an initially identical idea and practice, and
investigates the role of readiness for change in this process. Maintaining
the significance of the context of differing institutional logics, the initial
research questions concerned how the concept of readiness for change
can increase our understanding of the translation process and translation
outcomes specifically in the context of differing institutional logics. This
was further specified into the following set of research questions:

How were the editing practices employed in the strategic translation of
ATP related to department level readiness for change?

How were differences in department level readiness for change related
to the use of editing practices and translation rules in operative
translations?

How were different constellations of editing practices and translation
rule use in the departments related to the quality of the operative
translations?
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3 Methodology

I start this chapter by presenting and discussing the philosophy of science considerations that have gone into designing and researching this study. I then go on to a description of the research setting, the research design of the thesis and each individual paper, and the data collection and analysis. I conclude the methodology chapter by reflecting on ethical considerations relevant to the study, and research quality and trustworthiness.

3.1 Philosophical considerations

3.1.1 Social science paradigms and the functionalist approach

Mature natural sciences are characterized by a strong degree of agreement on the fundamental ideas of what it sets out to study, and of how these studies should be done in order to qualify as science. Social sciences, on the other hand, are not unified on these issues in the same way (Sharrock, 2013), and organization studies encompass many differing perspectives reflecting fundamental beliefs about the nature of organizations (Gioia & Pitre, 1990) and are at a low level of paradigm development (Bowring, 2000; Pfeffer, 1993).

According to Burrell and Morgan (1979), social theory about organizations can be divided into four mutually exclusive paradigms. I continue by discussing two of these – the functionalist paradigm, which is tied to positivist assumptions, and the interpretive paradigm, which is tied to social constructivist assumptions.

The functionalist approach is defined by Burrell and Morgan as being based in a realist ontology, which assumes that the social world consists of structures that are tangible and stable, and that exist independently of
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our observation of them. They further call this a positivist perspective, and tie it to a positivist epistemology where the goal is to find causal relationships between elements and formulating laws to predict how elements similar to the ones studied will behave in similar situations. The methodology relies on using accepted, scientific techniques to test hypotheses. In summary, the functionalist, positivist approach is defined by its assumption of “the existence of concrete, real, objective objects, artefacts and relationships that can be quantified and studied through scientific approaches” (Bowring, 2000, p. 261).

According to Gioia & Pitre (1990), the work of contributing to theory in organization studies has mainly been tied to the functionalist paradigm, studying organizations as objective entities that are “out there” waiting to be analysed by impartial academics employing deductive methods. However, even a sociologist as early as Weber claimed that the objects studied by social sciences are fundamentally different from those studied in natural sciences. Social action is coloured by meaning, and as meaning is not observable, other, interpretive, methods that try to understand a particular action, its context, and the role played by the social scientist’s own values, are necessary in order to explain it. As the view of observation as theory-laden and the realization that simplicity, internal consistency and a theory’s potential for generating further research, not rational logics alone, are mechanisms through which theories are accepted has gained popularity, positivism has “fallen from grace” (Azevedo, 2002).

3.1.2 The interpretive perspective

The interpretive perspective is defined by Burrell and Morgan (1979) as being built on a nominalist ontology, assuming that the external world consists of concepts used to structure reality. The epistemology is defined as anti-positivist, replacing the search for universal laws with a search for understanding phenomena without providing causal connections. The methodology is defined as ideographic, as it centres on
the researcher trying to understand the nature of unfolding, particular events through subjective accounts. The social world is understood as an emergent social process, created by the individuals in it, and social reality is a network of assumptions and inter-subjectively understood meanings.

The origin of this perspective as it is found in social science, and organization studies, today, is attributed to the work of Berger and Luckmann in the late 1960s, although its roots can be traced back to the beginning of social science (Berger & Luckmann, 1966; Bowring, 2000; Gioia & Pitre, 1990; Hacking, 2003; Jenkins, 2013). Constructivists claim that our sense of reality is formed in human interactions, it is socially constructed, and what we know about the world depends on the concepts that are available to us. Unlike natural facts, social facts are not “out there” waiting to be discovered, and we need a different approach to understand them (Hacking, 2003; Jenkins, 2013). The “strong” version of this perspective assumes that human life is in no way determined or explained by biology or nature, that social phenomena are not universal or natural but relative to their historical, cultural and local context (Hacking, 1999), and that phenomena can, and often should, be changed (Hacking, 2003). The “weak” version states that certain phenomena may seem inevitable, but are not. The perspective has a potential for unmasking ideas by revealing social functions that are not evident as long as they are taken for granted (Hacking, 2003), and as such it is claimed to be “among social science’s most enduring contribution to modern thought” (Jenkins, 2013, p. 932). It allows social science to point out that the human world is complex, variable across time, cultures and localities, and that it comes into existence through work and co-ordination (Jenkins, 2013).

3.1.3 Institutional theory and pragmatism

Institutional scholars generally share two views. The first is a scepticism towards undersocialized conceptions of organizational behaviour where
the influence of social forces on decision making and action in organizations is ignored (such as neoclassical economist and rational choice political science accounts). The second is that organizations exist in socially constructed environments, and that organizational decision making and action is caused, or at least influenced, by forces operating in this environment (Heugens & Lander, 2009).

However, this link to what has been described as an interpretative, constructivist perspective above is not a unanimous paradigmatic stance among those studying organizations from an institutional point of view. Bowring (2000) agrees that neo-institutional theory, which is the foundation from which both the institutional logics perspective and Scandinavian institutionalism has developed, originally was a theory of organizations placed within the interpretive paradigm (Burrell & Morgan, 1979), with roots in the social constructivism of Berger and Luckmann (1966). However, the framework of modern scientific rationality, with its ideal of searching for objective knowledge about the world using methods of detached observation and analysis, is the dominant discourse in the field of organization studies (Sandberg & Tsoukas, 2011; Suddaby, Hardy, & Huy, 2011). Bowring (2000) claims that neo-institutional theory also has taken a turn towards the dominant functionalist and positivist paradigm, as it has become a line of research that analyses how the organization responds to its environment, searching for causality and aiming for prediction. The conception of reality as socially constructed has been replaced by a positivistic understanding of reality as objective and independent of human activity. She claims that this has happened because the functionalist perspective is more comfortable for researchers. Following Kuhn (1962), she argues that paradigms become dominant not because they are the best way of getting to the truth, but because they are more politically powerful at a given time. The functionalist turn in neo-institutional theory made it more legitimate in the field of organization studies, where positivist theory is dominant. It has developed into a theory that is concerned with
reactions to, instead of interaction with, the environment. Berger &
 Luckmann (1966) emphasized that institutions are only real if they are
 "ongoingly brought to life in human conduct". According to Lawrence
 and colleagues, the neo-institutional theory working on functionalist,
 positivistic assumptions misses this aspect of the lived experiences of
 organizational actors, as it is not attuned to the connections between lived
 experience and the institutions that structure and are structured by it
 (Lawrence, Suddaby, & Leca, 2011).

 Institutional logics scholars aim to discover the mechanisms by which
 logics shape individual and organizational behaviour, including
 collective identity and identification, political struggles, and
 categorization and classifications” (Thornton et al., 2012). This, to Zilber
 (2013), places them within a post-positivistic paradigm. In this
 paradigm, the social and natural sciences are seen as having fundamental
 similarities as both attempt to develop and test general statements about
 the behaviour of the empirical world (Alexander, 1983). Post-positivism
 rejects both the radical realist view holding that the only reality is the
 physical world, and the radical idealist view holding that the only reality
 exists in the human mind. It does, however, claim that what the social
 sciences examine is distinctive to the subjects of natural science, and that
 the existence of social science subjects are facts only by human
 agreement, and that they are observer-relative (Searle, 1995). As such,
 post-positivism could also be defined as a moderate form of social
 constructivism (Scott, 2014). Translation theory and studies belonging
 to the Scandinavian institutionalist perspective, however, was more
 explicitly built on social constructivism and developed from interpretive
 roots. Nevertheless, research within this perspective is sometimes
 combined with the institutional logics perspective, and has often engaged
 with practice-oriented literatures (Boxenbaum & Pedersen, 2009;
 Wæraas & Nielsen, 2016). This willingness to combine perspectives and
 interest in not only institutional theory but also practice-oriented research
could be interpreted along the lines of the pragmatic approach as described below.

There is a debate regarding whether the lack of Kuhn’s exemplars means that the social sciences are unable to build a cumulative body of empirical knowledge (Sharrock, 2013), and a concern that a multi-paradigmatic science has no consensual way of settling truth claims and therefore is pre-scientific (Azevedo, 2002). The diversity of theory and methods is potentially a weakness if the field becomes overly fragmented (Azevedo, 2002), and there have been calls for the integration of different theoretical tracks into a consensual, coherent conceptualization that will let the social science field develop further (Zilber, 2013). Pfeffer (1993) was worried that a complete lack of paradigmatic consensus was a risk to the social sciences as funding of research is tied to the level of paradigm development, but also claimed that consensus is not a sufficient condition for accumulating knowledge in a given field.

Gioia and Pitre (1990) argue that while traditional approaches to theory building in organization studies have produced valuable views, they have been limited by their grounding in just one, major paradigm or way of understanding organizational phenomena. This leads to narrow views that cannot represent the complex nature of organizational reality. They argue that disparate and irreconcilable theoretical views could be combined to produce more multifaceted perspectives on central subjects and that the choice of paradigm should be considered in relation to the subject under study. They promote a multi-paradigm perspective, claiming that theory building is not to be understood as a search for the truth, but as a process of gaining comprehensive insights by applying different worldviews. Similarly, Kilduff and colleagues (2011) argue that organization studies scholars should make an effort to move beyond knowledge siloes, and employ a broad view of science by promoting and combining different epistemologies.
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The pragmatic approach is not limited to a philosophy of either singular or multiple realities, but accepts that there are both and that both can be studied empirically. Doing research that is useful in terms of solving real-world problems is prioritized above issues of philosophical truth, reality and securing that we as researchers provide answers to how “things are as themselves” (Creswell, 2012; Feilzer, 2010). There is no expectation of finding causal links or truths that will always hold without variation. The focus is on the particular question asked, the studied theory or phenomenon, and on choosing the research methods that are appropriate in the specific situation (Feilzer, 2010). Qualitative and quantitative methods are not seen as mutually exclusive, but as equally valuable tools that can be chosen according to which method is best suited to help the researcher answer the particular question at hand (Hanson, 2008).

The three papers of this thesis combine into a multifaceted, pragmatic approach to the overall research aim. The thesis is philosophically pragmatic in that it combines three studies that differ in their philosophical underpinnings in terms of the traditional interpretive/functionalist divide. It is also distinctly pragmatic in terms of aiming to be useful to practice. This commitment is based in the fact that the larger research project was funded by and executed in cooperation with organizations that wish to gain knowledge of how their change efforts work and how they can be improved. It is also motivated by my own desire to do research that may mean something beyond the publication of papers in academic journals alone. Finally, the approach has been chosen out of respect for the many research participants who have offered their time and effort to share their insight into the two change projects that were studied, and given their answers in the employee survey. I hope that their kind contribution translates into insights that can add to our knowledge of how to handle change processes in hospitals.
3.2 Research setting

This PhD-thesis is part of the larger research project “Leadership in advanced task planning”. The larger project was initially defined as an evaluative trial research project (Lindøe, Mikkelsen, & Olsen, 2002), following the implementation of advanced task planning (ATP) for physicians in four hospitals. The research was designed to employ multiple sources of data (internal audit reports from previous ICT implementation projects in the health region, qualitative data from interviews with individual informants and focus groups, survey data collected by the project group and register data from the RHA). The process of implementing ATP, performed by the RHA HR department and the hospitals, was planned as a step-wise process starting with a few pilot departments in each hospital before moving on to a full-scale roll-out. The proposed research design was therefore a lagged quasi-experimental intervention design of collecting data from three pilot departments in each hospital that had been introduced to ATP (the experiment group), and comparing these to three departments that had not yet been introduced to it (the control group). In the pilot departments, qualitative and quantitative data would be collected before and after the implementation process, and register data were to be used to measure outcomes of the implementation. In addition to this quasi-experiment, an employee survey including all health region employees was planned. My PhD-project had a preliminary research focus on documenting and discussing how formal leadership and distributed leadership interact in change efforts to implement new technology.

However, the process of implementing ATP in the hospitals did not strictly follow the plan that the original research design was constructed to match. Rather, the RHA decided to use an agile project implementation method (Bjaalid, Laudal, & Mikkelsen, 2015). Agile project management is a combination of top-down and bottom-up organizational change styles, prioritizing continuous improvement of the product and processes in question over the traditional project
management style of disciplined and deliberate planning and control methods (Boehm & Turner, 2005; Hass, 2007; Highsmith, 2009). In the process of implementing ATP in the hospitals, this meant that some pilot departments were ahead of schedule, others took longer to include in the project, whereas some departments that were not on the initial list of pilot departments also implemented the system in parallel with the pilots. As the map of the planned change implementation process no longer matched the terrain of the actual change implementation process, there was a need for a revision of the study design. Interview data were continuously collected in two pilot departments in each hospital and from other key informants in the health region and hospitals, the survey of RHA employees was conducted as planned, but the quasi-experimental format was abandoned. There was also a need for a redefinition of the research focus. Following the agile project closely enough and consistently enough to be able to observe and document practices of distributed leadership was not possible.

While the process of implementing ATP was ongoing, the researcher group was invited to also follow the process of implementing a new day-care surgery (DCS) department in one of the regional hospitals. Developing day-care surgical treatment has been a priority at the Norwegian hospital since 1997 and various attempts at establishing a new multidisciplinary department have been made since then. In 2003, a project came as far as designing and constructing a new DCS department in a purpose built facility located outside of the main hospital area due to space constraints. However, the surgeons were not willing to split their tasks between two locations, and the project was cancelled. In 2009, a project aimed at moving patients from overnight stays to DCS was initiated. This became phase one of a project concluded when the department opened in new facilities located externally but close to the existing hospital in 2014 (see Figure 1). The new DCS objectives were to (a) increase operational capacity, (b) reduce waiting lists for surgical patients as measured by average waiting time, (c) convert hospitalized
patients to day-care treatment measured by the percentage increase in DCS annually, (d) reduce number of cancelled surgeries, (e) halt the movement of patients choosing other hospitals with shorter waiting times for their procedures, (f) provide safer treatment and reduce risk of infections, (g) provide flexible patient care, (h) secure satisfied patients, and (i) increase employee satisfaction.

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<tbody>
<tr>
<td>• Day-care surgery defined as hospital priority.</td>
<td>• A new DCS department constructed, but eventually not moved in to.</td>
<td>• Project aimed at moving patients from overnight stays to DCS starts.</td>
<td>• The project group recommends a new, externally located department, initiating Phase 1 of the project concluding in 2014.</td>
<td>• Project re-assessed, foundational documents drawn up defining activities, location, staffing and financing for the new department.</td>
<td>• Project enters Phase 2 in January. Project Manager hired, detailed consultations and planning with professional groups begin.</td>
</tr>
</tbody>
</table>

Figure 1 – Research setting of Paper 2: Establishing a multidisciplinary DCS

### 3.3 Research design

The thesis research has employed an abductive approach and a mixed method design, encompassing two qualitative case studies and one quantitative survey study. The three individual studies have separate foci and specific research questions, coming together under one, common research aim. This approach enables triangulation in aiming for exploration, description and explanation of how divergent changes can be handled by hospital leaders and employees in order to achieve outcomes that contribute towards organizational goals of service quality.
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improvement. A main strength of the research in this thesis, considering the three individual papers as a concurrent triangulation design, is the triangulation of both methods, data sources, methods of analysis and theories and perspectives (Denzin, 1978; Patton, 1999). The methods framework of the thesis and each individual paper is presented in Table 1.

Table 1 – Methods framework

<table>
<thead>
<tr>
<th>THE THESIS: DIVERGENT ORGANIZATIONAL CHANGE IN HOSPITALS. EXPLORING HOW HOSPITAL LEADERS AND EMPLOYEES CAN CONTRIBUTE TO SUCCESSFUL OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESEARCH AIM.</td>
</tr>
<tr>
<td>RESEARCH QUESTIONS.</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>RESEARCH APPROACH AND DESIGN.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAPER 1: CHANGING TO IMPROVE? ORGANIZATIONAL CHANGE AND CHANGE-ORIENTED LEADERSHIP IN HOSPITALS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESEARCH QUESTION.</td>
</tr>
</tbody>
</table>
### Methodology

<table>
<thead>
<tr>
<th>Paper 1: Establishing a Multidisciplinary Day-Care Surgery Department: Challenges for Nursing Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research Approach and Design.</strong></td>
</tr>
<tr>
<td><strong>Data Sources and Collection.</strong></td>
</tr>
<tr>
<td>Survey data (N=556). Survey developed and distributed by the researcher group in cooperation with the RHA and the hospitals.</td>
</tr>
<tr>
<td><strong>Data Analysis.</strong></td>
</tr>
<tr>
<td>Confirmatory factor analysis (CFA) and structural equation modelling (SEM).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paper 2: Establishing a Multidisciplinary Day-Care Surgery Department: Challenges for Nursing Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research Questions.</strong></td>
</tr>
<tr>
<td>What were the arguments for and against the establishment of the multidisciplinary DCS department and how did these relate to professional and business-like logics?</td>
</tr>
<tr>
<td>What was the organizational structure that was eventually put into practice, and how did this structure bridge the challenges encountered in the implementation process?</td>
</tr>
<tr>
<td>What were the challenges embedded in the eventual organizational structure?</td>
</tr>
<tr>
<td><strong>Research Approach and Design.</strong></td>
</tr>
<tr>
<td>Exploratory and descriptive. Inductive and abductive. Qualitative, single within-site case study (Gioia method).</td>
</tr>
<tr>
<td><strong>Data Sources and Collection.</strong></td>
</tr>
<tr>
<td>Semi-structured interviews (16), written input from staff workshops, project documents. Data collected in real-time.</td>
</tr>
<tr>
<td><strong>Data Analysis.</strong></td>
</tr>
<tr>
<td>First-order concepts, second-order themes, aggregate dimensions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paper 3: Readiness for Change and Good Translations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research Questions.</strong></td>
</tr>
<tr>
<td>Initial research question: How can the concept of readiness for change increase our understanding of the translation process and translation outcomes specifically in the context of differing institutional logics?</td>
</tr>
</tbody>
</table>
Methodology

<table>
<thead>
<tr>
<th>Specification of initial research question:</th>
</tr>
</thead>
<tbody>
<tr>
<td>How were the editing practices employed in the strategic translation of ATP related to department level readiness for change?</td>
</tr>
<tr>
<td>How were differences in department level readiness for change related to the use of editing practices and translation rules in operative translations?</td>
</tr>
<tr>
<td>How were different constellations of editing practices and translation rule use in the departments related to the quality of the operative translations?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RESEARCH APPROACH AND DESIGN.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanatory</td>
</tr>
<tr>
<td>Abductive.</td>
</tr>
<tr>
<td>Comparative case study (Eisenhardt method).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DATA SOURCES AND COLLECTION.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semi-structured interviews (31), document data and direct observation (7 meetings).</td>
</tr>
<tr>
<td>Data collected in real-time.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DATA ANALYSIS.</th>
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</thead>
<tbody>
<tr>
<td>Template analysis.</td>
</tr>
</tbody>
</table>

3.3.1 Mixed methods

Mixed methods research combines qualitative and quantitative methods of collecting and analysing data in one study. It is characterized by methodological eclecticism (Teddlie & Tashakkori, 2012). Studies are believed to be stronger when methods with different limitations and benefits are combined to supplement each other and to provide a more complete picture of the studied phenomenon (Creswell, Clark, Gutmann, & Hanson, 2003; Feilzer, 2010). Mixed methods research is also characterized by paradigm pluralism. It is often associated with pragmatism (Denscombe, 2008), as the choice of method is based on which aspect of the studied phenomenon is in question, and as it is often used by researchers who are interested in the consequences of their research (Feilzer, 2010). Finally, mixed methods often have iterative and
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cyclical approaches to research in common, and are executed according to a set of signature research designs (Teddlie & Tashakkori, 2012).

In this thesis, I have aimed to combine insights gained from qualitative and close-up case studies of processes of implementing new, divergent organizational structures and management systems that were intended to further hospital service quality with relationships revealed in the quantitative study of how frequent organizational changes in hospitals and middle manager change-oriented leadership are related to organizational and employee outcomes relevant to hospital service quality. As is described in more detail below, the abductive approach of the study has also entailed iterative and cyclical movement in data collection and analysis, and it is placed mainly within one of the common mixed methods designs (Creswell et al., 2003).

Mixed methods designs vary in terms of the sequence of collecting qualitative and quantitative data, and in terms of the priority given to each data type (Morgan, 1998). Data can be integrated in different research phases (Tashakkori & Teddlie, 1998), and the theoretical orientation can be either implicit or explicit (Creswell et al., 2003). This thesis has employed a concurrent triangulation design, where the different methods are used to confirm findings by combining the strengths of qualitative and quantitative methods (Creswell et al., 2003). The data are typically collected at the same time. The data collection for this thesis was done in a process that did not segment the project into sharply defined and separate research phases (see Figure 2, p.73), although data were collected for three separate papers each with their specific research questions. Triangulation types of mixed methods can be useful to gain insight into multiple levels of organizations (Creswell & Clark, 2007), and in this thesis the intent has been to combine methods in order to gain a fuller picture of how divergent changes play out both at the level of organizations and departments, and of the individual employee. In concurrent triangulation designs, there is no set priority between the quantitative and qualitative data. This thesis has put more
emphasis on qualitative studies (two papers, versus one quantitative paper), but the results from all three papers are seen as equally important. The process of integrating the results from the different methods have, as part of the abductive approach, been ongoing throughout the research, but has been most explicit in the phase of interpreting the results of all three papers against the common, overarching research aim of the thesis. While the resulting thesis has a defined, overarching theoretical orientation of understanding the studied organizational changes as divergent to existing institutional logics in hospitals, the thesis research was not originally designed with this specific theoretical framework in mind. The next section describes an abductive approach of moving between empirical data and theory as it has been employed in the thesis.

### 3.3.2 Abduction and systematic combining

In an attempt to specify the process of abductive research, Dubois and Gadde (2002, 2014) describe a research approach called systematic combining. It is defined as a process of moving continuously between the empirical world (data) and a model world (theory). The researcher aims to match theory and reality, let the two direct each other, and commits to redirecting the research issues and analytical framework as well as the data collection strategy when one is out of step with the other. Dubois and Gadde recommend using multiple sources of data in this process, but highlights that it is necessary to treat these data as “active” in letting the data lead the researcher to discovery. The alternative would be to treat the data as “passive”, and simply let them serve as confirmation of pre-defined analytical frameworks.

Dubois and Gadde (2014) reserve the systematic combining approach for single, non-positivistic studies. Similar descriptions of abduction are also given by other method scholars belonging to the interpretive perspective. Strauss and Corbin (1990) describe it as a constant move between asking questions, generating hypotheses and making comparisons. Gioia and colleagues (2013) recommend continuously exploring which theory
matches the findings best. Feilzer (2010), however, ties pragmatism to being flexible and open to letting unexpected data take the research in new directions. Eisenhardt (1989), whose case study approach is placed closer to the functionalist perspective, also describes an overlap of data analysis with data collection.

In this pragmatic thesis, the research focus and design was first developed based on what the researcher group knew about an empirical change implementation process. It was then redirected as a result of the mismatch between the original design (a lagged quasi-experiment), the theoretical framework of distributed leadership and the actual, agile project management process of implementing ATP. It was further redirected by findings in the case study reported in Paper 2, as described below. The theoretical framework, empirical fieldwork and data collection, and data analysis thus evolved simultaneously through systematic combining.

3.3.3 Paper 1

Paper 1 is a quantitative, deductive study, testing a hypothetical model. The paper was based on data from a cross-sectional survey study that was distributed via an internal web-application to all of the RHA’s 22,883 employees. The survey served a double purpose – as a work environment survey providing the RHA, hospitals and departments with data on issues that were deemed to be useful in their HR efforts, and as a survey collecting data for the research project “Leadership in advanced task planning”. The survey was developed by the research project team, the content was discussed and approved by HR and other managers at the RHA and hospital levels, and the distribution of the survey and collection of responses was also a cooperative effort. The survey was developed in two versions, one for employees in management positions, and one for employees without management responsibilities. The version for managers included 384 questions, some of which were relevant to managers only. The version for non-managerial employees included 281
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questions. The application through which the survey was distributed did not allow for respondents to submit their answers without answering all the questions. It took approximately 40 minutes to complete the full survey, and the overall response rate was 40 per cent (N=9162). Paper 1 includes responses from physicians only (N=556).

The measures included in the survey (see Table 2) were sourced from a range of validated questionnaires that were relevant to either the work environment purpose, the research project, or both. Some questions were developed by the researcher group specifically for the intent of the research project.

Table 2 – Scales and items used in Paper 1

<table>
<thead>
<tr>
<th>SCALE</th>
<th>ITEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORGANIZATIONAL CHANGE</td>
<td>To what extent have the following events affected your organization in the past twelve months:</td>
</tr>
<tr>
<td></td>
<td>- Changes in management</td>
</tr>
<tr>
<td></td>
<td>- Reorganization</td>
</tr>
<tr>
<td></td>
<td>- Establishment of new overall goals and strategies</td>
</tr>
<tr>
<td></td>
<td>(Baron &amp; Neuman, 1996)</td>
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<td></td>
<td>4 point scale, “not at all” (1) to “to a great extent” (4).</td>
</tr>
<tr>
<td></td>
<td>Cronbach’s alpha: 0.75</td>
</tr>
<tr>
<td>CHANGE-ORIENTED LEADERSHIP</td>
<td>To what extent do you agree or disagree with the following statements about your immediate leader:</td>
</tr>
<tr>
<td></td>
<td>- My leader proposes new and creative ideas for improving products, services and processes.</td>
</tr>
<tr>
<td></td>
<td>- My leader suggests changes in a confident and optimistic way.</td>
</tr>
<tr>
<td></td>
<td>- My leader takes a long-term perspective on the problems and opportunities facing the organization.</td>
</tr>
<tr>
<td></td>
<td>- My leader clearly expresses what the organization can achieve or develop into.</td>
</tr>
<tr>
<td></td>
<td>- My leader convincingly interacts with people outside of the department to gain the support necessary for implementing larger changes.</td>
</tr>
</tbody>
</table>
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- My leader investigates how other leaders solve challenges to get ideas for improvements that can be made in the department. (Yukl, 1999)

5 point scale, “I strongly disagree” (1) to “I strongly agree” (5). Cronbach’s alpha: 0.92.

PERFORMANCE OBSTACLES1

Do you sometimes experience that patient problems are not treated because
- the required equipment was not available?
- the right competence was not available?
- the organization of the work prevented it?
- of insufficient staffing?

5 point scale, from “no” (1) to “yes, almost every day” (5). Cronbach’s alpha: 0.80.

JOB SATISFACTION1

How satisfied are you with
- your job opportunities?
- your opportunities to use your skills?
- your job, all things considered?

(Kristensen & Borg, 2001)

4 point scale, from “very dissatisfied” (1) to “very satisfied” (4). Cronbach’s alpha: 0.77.

PARTICIPATION IN DECISION-MAKING

- In my department, we get to influence the standards that constitute good work.
- In my department, we often have the opportunity to influence goals or actions.
- All employees in my department are involved in important decisions that affect them.
- Employees have good opportunities for influence.

(Dye, 1996)

5 point scale, from “I strongly disagree” (1) to “I strongly agree” (5). Cronbach’s alpha: 0.92.

1 A «not applicable» (0) alternative was included in the performance obstacles and job satisfaction items. These values were treated as missing and replaced by the scale mean (35 missing for job satisfaction, 103 missing for performance obstacles). The measurement and structural models were also tested on the data set without replacement of missing values. A comparison of beta coefficients between the two analyses revealed very overlapping and similar results.
3.3.4 **Paper 2**

Paper 2 is an exploratory and descriptive qualitative case study. The unit of analysis was a single, within-site case (Creswell, 2012). The approach was based on the Gioia-method which has its roots in the grounded theory tradition (Gioia & Chittipeddi, 1991; Glaser & Strauss, 1967; Langley & Abdallah, 2011). Focusing “more on the means by which organizational members go about constructing and understanding their experience and less on the number or frequency of measurable occurrences” (Gioia et al., 2013, p. 16) may allow researchers to gain deeper knowledge of organizational dynamics and processes (Langley, 1999). The design was therefore deemed appropriate for this particular study. The research was initially inductive in order to capture the organizational activities and behaviours, and to link theory to the experience of the practitioners studied (Bansal & Corley, 2012; Gioia & Chittipeddi, 1991). As the conflict over the patient-centred, multidisciplinary structure with unitary management became evident, further analysis was undertaken iteratively going back and forth between data and established theories (Spiggle, 1994). The data analysis is further described below. The institutional logics perspective was identified as a valuable lens to employ in this process. It offered a framework for understanding conflicts related to implementing new organizational structures in hospitals that fitted the empirical data well. The abductive approach allowed for this movement between data and theory in Paper 2, as well as allowing for the overall research aim of the thesis and the aim of the other two papers to be developed and refined in parallel with the analysis of the Paper 2 case study.

3.3.5 **Paper 3**

Paper 3 is an abductive and explanatory comparative case study (Eisenhardt, 1989) that follows the process of implementing ATP and outpatient clinic reorganization as a translation process in three hospitals departments. The implementation processes at the department level are
studied as three qualitative and longitudinal cases, allowing for both within-case and cross-case analysis. Cases were theoretically sampled from the larger study of the program at the regional level. One department was a pilot department in the earliest stages of the task planning sub-project, and was followed by researchers at several points in time over two years. The two other departments were early adopters, and were followed over a period of 6-12 months. The cases were chosen because they differed in how successful the change implementation process was in terms of its reach into transforming the way physician’s work was planned in the respective departments.

We were directed to departments currently involved by the regional HR director. We were further in contact with the leader of the team facilitating the ATP implementation process at the hospital level, who confirmed which departments were taking part in the project, and allowed us to gain access to the department level processes.

3.4 **Data collection, participants and analysis**

Data for the Papers 1 and 2 included in this thesis were collected as a collaborative effort by the researcher group, and the majority of data for Paper 3 were collected by me only. The data collection started in January 2013 and ended in September of 2016. This longitudinal data collection is depicted in Figure 2, and the process of collecting and analysing data is described in detail for each individual paper below.
3.4.1 Paper 1

The data were collected by the researcher group in collaboration with the RHA and the hospitals, from employees in the four RHA hospitals and other associated departments in October 2014. We provided general information about the research project in writing along with the distributed survey, so that employees received necessary information before responding. The aim of Paper 1 relates to employee perceptions of their immediate leaders and leaders higher up in the organization. We therefore excluded respondents holding leadership positions from the analysis. The focus was further on the perceptions of physicians of the relevant concepts, so only responses from this professional group were included. Respondents were informed about the fact that their participation was voluntary, they gave their informed consent by turning in the questionnaire, and all survey responses were anonymous. 556
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physicians not holding management positions responded, and the response rate for this professional group was 24.5 per cent.

Basic descriptive statistics, bivariate correlations and Cronbach’s alpha were analysed using SPSS (2017). AMOS (Arbuckle, 2017) was used for the remaining analysis. Confirmatory factor analysis (CFA) was carried out in order to ensure the validity of measurement concepts. Further, the structural model was estimated using structural equation modelling (SEM). Bootstrap analysis (5000 bootstrapped resamples) was performed to estimate indirect effects and the mediating role of participation in decision-making (Hayes, 2013).

3.4.2 Paper 2

An interpretive approach was adopted, empirically investigating the experience of the participants through data gathered in semi-structured, open-ended interviews, and documents produced by stakeholders. Real time data was collected in the period of October 2013 until May 2015. The stakeholders involved in the implementation process were identified and we collected data from all stakeholder groups, in interviews during the project phase and the first year of operation, and by attending project meetings where representatives from all groups were present. Two group workshops with DCS regular staff were conducted in the new department’s first operative year, where challenges and positive experiences of working in the new organizational structure were discussed in groups and summarised in plenum.

The data consisted of 16 semi-structured interviews written input from the staff workshops, and project documents that provided further insight to the process proceeding the start of the research. Interviews ranged between 30 and 90 minutes in length. The informants came from all relevant hospital departments affected by the new DCS, and from all administrative departments having a role in the process. Informants were selected based on their organizational positions, making sure that those
especially relevant to the project were interviewed. Interviews with informants directly involved in the change process were conducted during the fall and winter of 2013-2014. Department employees and its manager were interviewed starting 5 months after the department had opened. In workshops, all regular staff members were divided into groups and discussed and presented their opinions on what worked, what the challenges were and how challenges could be solved regarding being in a new location, the personnel situation, work flow, potential conflicts, collaborating with the main hospital, and their internal department culture. The interviews took place in the participants’ normal work environment, and the interview guide consisted of open-ended questions, and were adapted to each situation and participant.

The data analysis was done using the qualitative data analysis software NVivo to code and sort the data. There was no pre-defined coding-tree or template at the outset of the analysis, but a broad question of what drove and hindered the implementation of the department was used as a guiding focus. First, a preliminary, mainly inductive analysis of the data noting key issues was undertaken. An exploratory guiding question was inspired by force field analysis (Lewin, 1947) in order to gain an understanding of what was driving and restraining the implementation process.

The difficulty of organizing the different disciplines under one umbrella stood out as particularly challenging, and hence as a theme for further analysis. The second step included a narrative analysis of raw document data and interview data, where the focus was the emerging purpose of the research, trailing the story of why gathering multiple disciplines under one manager was so complicated. A chronological account of the process and the proceeding history up until the opening of the new department was established based on document data. Furthermore, a narrative pulling together accounts provided by each research participant was generated in order to create a thick description of the process and its main issues (Langley, 1999; Lincoln & Guba, 1985).
Further, first order concepts that revealed themes and patterns in the data were identified (Gioia & Chittipeddi, 1991; Van Maanen, 1979). By combining first-order concepts to construct a set of second-order themes, a more abstract and robust description of the arguments was established. Finally, this iterative but largely inductive description was subjected to analysis utilising concepts from the institutional logics perspective (Thornton et al., 2012).

3.4.3 Paper 3

Data were collected between October 2013 and September 2016, through 31 semi-structured interviews with participants at regional, hospital, and department levels, through observing meetings in two of the three case departments, and by examining project documents. The participants belong to different occupations, both in clinical and administrative departments, and are employed at different organizational levels. Meetings were observed and/or interviews conducted at the outset of the change process in each department, and followed up with interviews after the change implementation process had been ongoing for a while (6 months to 2 years). The ATP process facilitation team at the hospital was interviewed about project progress and challenges at several times during the entire process, ensuring data for the overall and department level processes at several points in time.

The first step of the data analysis was to construct a chronological narrative of the change process in each department from the raw data in order to create a thick description of the process and its main issues (Langley, 1999; Lincoln & Guba, 1985). This analysis was useful in creating a chronology for further analysis, and as a step in establishing early analytical themes (Langley, 1999; Pettigrew, 1990). I further analysed the data employing template analysis (King, 2012). The main themes in the template were developed from theory and iteratively developed. More fine-grained categories were developed inductively from the data, going back and forth between theory and data. All
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Template codes were coupled with negative evidence codes, ensuring that potential disconfirming evidence of the emerging explanations was noticed.

3.4.4 A reflection on the research participants included in the case studies

While qualitative studies do not aim for a representative selection of research participants to include in interviews, it is important to consider who is included in terms of voices of power and voices that may often be silenced. This is particularly so in the professionalized context of hospitals, where power structures are deeply embedded in the organizational fabric. In both qualitative studies, efforts were made to include relevant individuals from as many professional groups, parts and levels of the organizations as possible. In the interview situation, myself and the other researchers in the wider group aimed to create a space where the participants felt free to share their honest opinions in order to uncover as many perspectives on the new organizational structure (the DCS department) and the new management system (ATP) as possible. In data analysis, a conscious effort was made to treat all participant voices as equally salient. The data are rich in statements of disagreement on management priorities and critique of the specific solutions that were implemented. The results of data analysis explicitly highlight some of these conflicting views. This is an indication that we managed to bring out a multitude of voices, and hopefully the perspectives of those who are less empowered in the studied context as well as those who hold formally powerful management positions or professionally powerful positions.
3.5 Ethical considerations

The research project was approved by the Norwegian Centre for Research Data\(^3\). All interviewees, meeting participants, workshop attendees and survey respondents were informed about the project intent and extent, and consented to participating. Interview participants signed consent forms. Survey respondents gave their informed consent by turning in the questionnaire. All participants were promised anonymity, and the research data have been stored and analysed according to the guidelines of the Centre for Research Data approval.

Regarding anonymity, I have aimed to write up the case studies without making any individual participant immediately recognisable. However, for readers who already know the health region, hospitals, departments and projects in question, it may be possible to identify some of the participants. This has been considered in the choice of quotes to present in papers, as I have tried to balance the need for clear examples of important points while also protecting the anonymity of those who have offered their time and contributed with valuable insights. I hope and believe that this balance has been struck appropriately.

I acknowledge the funding from and participation of the RHA, the hospital and the university in this project. The funders had no role in the analysis and interpretation of data, the writing or decision to submit the article for publication. However, the pragmatic research aim of contributing useful knowledge to the studied practice field makes it necessary to be reflexive in the research process by asking what the research is for, who it is for, and how the researcher’s values influence the research (Feilzer, 2010).

I have found Merton’s scientific norms of communism and disinterestedness useful in reflecting on how to maintain academic freedom while doing research funded by parties with a stake in the

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\(^3\) Approval number 33311
process and the results (Merton, 1942). The norm of communism, meaning that scientific knowledge belongs to everyone and should not be a product to be individually owned, bought or sold, is upheld when results are published in journals that are publicly accessible, and preferably communicated in as many other channels as possible beyond the organization providing funding. So far, this has been done in selected research and practitioner conferences, and other dissemination work will continue. The norm of disinterestedness requires research to be based on curiosity, altruism and evidence, as opposed to being skewed towards other motives. This is particularly important to keep in mind in a research project such as this one. Research funders may rarely explicitly demand that findings be changed or kept from the public. However, the wish on the part of the researcher to maintain a good relationship with funders in order to secure future possibilities is something to critically consider and reflect on throughout the research process. Being faithful to existing literature and allowing as many stakeholders and other researchers to review findings could be a strategy for ensuring corrections of potentially skewed viewpoints. I have attempted to follow this strategy in the work on this thesis.

Finally, I have attempted to be reflexive about my own values and pre-understandings throughout the project. Academically, I am located in a business school and my work is in in the field of organization studies. This means that in studying the sometimes conflicting institutional logics in the health care field, I have had to be mindful of my own embeddedness in a field where a managerial or business-like logic may be taken for granted. Personally, however, I hold a deep respect for the professional expertise of health care professionals and their knowledge of the organizations in which they work. I have attempted to maintain a balanced view of the contributions of stakeholders embedded in the different institutional logics throughout the phases of research design, theory selection, data collection, analysis and in writing the papers.
3.6 Research quality and limitations

3.6.1 Methodological comments and limitations of the survey study

A first limitation of the study presented in Paper 1 is that it has a cross-sectional design and that the structural modelling with SEM is not proven longitudinally. Also, SEM models cannot be interpreted as models that represent validated causal conclusions, but rather as models conveying causal assumptions. SEM models are, however, considered valuable tools in developing new theoretical models.

Second, the overall response rate of 24.5 per cent suggests that the representativeness of the employees who responded vis-à-vis all hospital physicians may be questioned. Having analysed the respondents against known hospital demographics, I am not aware of any systematic biases in the sample. It should be noted, however, that a survey taking 40 minutes to answer, distributed in a hectic organizational reality, may not be answered by those who are under the greatest amount of job demands, stress or pressure. It may also be that those who did answer skew towards being more loyal to the organization than those who did not. The sample is physicians working in a Norwegian hospital context and more research needs to be conducted to generalize the findings to other cultural settings. However, there are similarities in the development of the health care sector internationally, and we believe the issues discussed in this study will be of importance in other settings as well.

Third, there is also a potential for measurement bias in self-reported measures, and the list of organizational factors investigated in the study is not exhaustive, meaning that other factors could have been included based on different theoretical approaches. While the variable of organizational change is restricted to including changes that are a) typically initiated at levels higher than the department and b) often divergent to a professional logic in the hospital context, the measure does
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not reveal specifics about who initiated the change, or its specific content. There are also limitations to self-reported measures of change specifically, as individuals experience and make sense of changes in different ways (Rafferty & Griffin, 2006).

Finally, although other job demands, engagement or emotions are not included as mediating variables in the theoretical model, the hypothesized relationships it presents have a solid foundation in previous research on these mediators, and serves to complement existing literature on the impact of organizational change on employee and performance outcomes in hospitals. The relationship between participation in decision-making and performance obstacles is among the strongest in the tested model. In order to increase our understanding of how participation in decision-making contributes towards health service quality, both quantitative studies including more mediating variables such as motivation, positive emotions or work engagement, and qualitative studies of participative processes could provide findings valuable both to the literature on medical engagement, and to managerial practice.

3.6.2 Trustworthiness and limitations of the qualitative case studies

Table 3 gives an overview of the techniques used in the qualitative case studies in order to increase the credibility, transferability, dependability and confirmability of the findings. These categories are defined by Lincoln and Guba (1985) as what makes a qualitative study trustworthy. Some of the techniques are recommended by other authors, and are referenced accordingly in the table.

To achieve credibility, or confidence in the “truth” of findings, triangulation of data sources was used in both studies in the form of interviews and project documents produced by organizational or policy maker stakeholders. In Paper 3, observation was also used in two of the three cases studied. Both studies were longitudinal, ensuring a prolonged
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engagement. Data for Paper 2 were collected over a period of 1 year and 7 months, whereas data for Paper 3 were collected over a period of 3 years and 9 months. In the analysis of Paper 3 data, all template codes were coupled with a code specifically for negative evidence, ensuring that potential disconfirming evidence of the emerging explanations was noticed. In Paper 2, conversations with a key informant were used to check whether emerging findings were consistent with experiences in the hospital department. In Paper 3, the recurring interviews with one key informant were used to check whether impressions of the implementation process in the different departments were correct. For both papers, discussions of preliminary perspectives, analytic codes and findings were ongoing among the co-authors and the wider research team throughout the research process. Finally, the technique of constant comparison with both data and existing literature was used to ensure consistency of findings. In sum, I believe the findings of both case studies are credible.

Thick description and comparing findings to existing theory has been used in both case studies to make it possible to evaluate the transferability of findings to other settings, or external validity (Yin, 2003). Paper 3 also employed the replication logic of considering each case as an analytical unit of its own which can be compared to and contrasted with the other cases and emerging explanations. The organizational structures and policy focus is similar across all the Norwegian RHAs and their hospitals. I believe it is reasonable to assume that findings can be transferred to these other settings as well. The consistency of findings with other empirical and theoretical work on institutional logics and divergent organizational change also suggests transferability to other health care organizations, and perhaps to other professionalized and institutionalized organizations.
Table 3 – Trustworthiness of the qualitative case studies reported in Papers 1 and 3

<table>
<thead>
<tr>
<th>Credibility: confidence in the “truth” of findings.</th>
<th>Paper 2</th>
<th>Paper 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triangulation of multiple sources of evidence.</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Prolonged engagement, spending sufficient time in the field.</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Persistent observation in order to identify the most relevant elements of the situation.</td>
<td>(Yes)</td>
<td></td>
</tr>
<tr>
<td>Negative case analysis by searching for disconfirming evidence and rival explanations.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Member checking.</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Peer debriefing (through discussion with co-authors and the research project team (both papers), as well as through the publication peer review process (Paper 2).</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Constant comparison (Glaser &amp; Strauss, 1967).</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Transferability: showing that the findings have applicability in other contexts.

<table>
<thead>
<tr>
<th>Transferability: showing that the findings have applicability in other contexts.</th>
<th>Paper 2</th>
<th>Paper 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thick description.</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Comparing findings to theory (Yin, 2003).</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Replication logic (Yin, 2003).</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

Dependability (or reliability (Yin, 1999)): showing that the findings are consistent and could be repeated.

<table>
<thead>
<tr>
<th>Dependability (or reliability (Yin, 1999)): showing that the findings are consistent and could be repeated.</th>
<th>Paper 2</th>
<th>Paper 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case study database (Yin, 2003).</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Rigorous and transparent research process (Eisenhardt, 1989; Gioia et al., 2013).</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Confirmability: a degree of neutrality of the extent to which the findings of a study are shaped by the respondents and not researcher bias, motivation or interest.

<table>
<thead>
<tr>
<th>Confirmability: a degree of neutrality of the extent to which the findings of a study are shaped by the respondents and not researcher bias, motivation or interest.</th>
<th>Paper 2</th>
<th>Paper 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit trail</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Triangulation</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Reflexivity</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Yin (1999) uses the term reliability in a way that closely resembles Lincoln & Guba’s dependability concept. He recommends developing a case study database to ensure that the research process and findings are transparent and possible to repeat. While longitudinal case studies of real time organizational processes can never be repeated in exactly the same way at a later point in time by other researchers, a rigorous and transparent research process, such as the Gioia (1991) or Eisenhardt (1989) approaches to data analysis and presentation may serve to make
an evaluation of dependability possible. In both case studies, data were
gathered in an NVivo database, the rigor of the data analysis is described
in detail in both papers, and data excerpts are given to allow the reader
to review whether the findings are dependable. An audit trail is a similar
technique to ensure transparency of the research process, and it is
recommended by Lincoln & Guba to ensure confirmability. They also
recommend triangulation, as described above, and reflexivity, as
discussed in section 3.5 above.

The case studies also have some limitations. In Paper 2, the number of
interviews is relatively low. Still, I am confident that the important
themes have been elicited. The number of stakeholders directly involved
in the implementation project was also relatively low. All of the involved
parties and professions have been either interviewed or observed
repeatedly in project meetings by one author. The analysis of project
documents also strengthens confidence in the findings. 190 pages of
project documents including goal, risk analysis and planning documents,
internal information newsletters, e-mail exchanges and project
committee meetings minutes were collated. Finally, the group
workshops including all regular DCS staff as participants allowed for
insight into the experiences of those working in the department. In sum,
I consider the data as appropriately saturated (Glaser & Strauss, 1967)

In Paper 3, a main limitation is the uneven number of data sources
(interviews and observations) across the cases. It is in part a reflection of
a more active change process with more people involved in one case as
opposed to the other two, and in part a result of the difficulty of gaining
access to an agile process on the ground as project implementation
activities were not predictably planned ahead in detail. Attempts have
been made to adjust this imbalance by gaining information about the two
less active departments from other sources, such as the ATP process
facilitation team. Another limitation regards the documentation of
individually held or group level change beliefs. In some instances, it was
possible to gain information about these in real time as the process was
unfolding. In others, however, it was only possible to assemble an understanding of specific beliefs retrospectively, or through data sources other than interviews with or observations of the participants themselves. While I would have ideally liked to have even more first-hand accounts on this particular issue, I believe that the triangulation of data sources still ensures the credibility of findings related to change beliefs.
4 Findings

This chapter briefly presents a summary of the findings of each paper. The research questions specific to each paper are listed in Table 1 (pp.63-65). These findings are further elaborated in relation to the thesis research questions in the following discussion (chapter 5).

4.1 Paper 1

The findings show that the organizational changes in question were positively related to performance obstacles both directly and indirectly through participation in decision-making, meaning that more change was related to a higher prevalence of performance obstacles. Organizational change was also negatively related to job satisfaction, both directly and indirectly. Change-oriented leadership was negatively related to performance obstacles, but only indirectly through participation in decision-making, whereas it was positively related to job satisfaction both directly and indirectly. In the terms of the Job Demands-Resources framework, organizational change appears to be a job demand, whereas change-oriented leadership and participation in decision-making are job resources.

4.2 Paper 2

The division director and the project manager in charge of the DCS implementation process highlighted arguments regarding efficiency and the economic goals of increasing the capacity, efficiency, and volume of day-care surgical activities, reducing waiting times for patients, retrieving patients who were currently going elsewhere causing the hospital to lose reimbursement income, reducing costly overnight stays, and shielding elective services to avoid cancellations. The importance of—and positive valence associated with—efficiency, economic goals, patient centeredness, and multidisciplinarity have been interpreted as
representing a business-like logic (Kristiansen et al., 2015; Lægreid, Opedal, & Stigen, 2005b; Reay & Hinings, 2009).

The decision to create the dedicated DCS with a multidisciplinary organizational structure with unitary management located externally from the main hospital was met with resistance from nurse specialists. The counter-arguments were all associated with a professional logic of letting the organization of health care services be guided by the professionals’ needs and priorities (Reay & Hinings, 2009). These arguments, and the unwillingness to move beyond them, represented a resistance strong enough to necessitate a modification of the intended organizational structure. This issue is referred to in the paper as the implementation challenge.

Both surgical and anaesthesiology nursing specialties were opposed to being managed solely by the DCS manager. The surgical nurse group and its manager in the hospital eventually conformed to the new organizational structure after pressure from the division director. The nurse anaesthesiologist group and its manager, on the other hand, resisted to the point that a compromise had to be reached, and they were able to keep most of their staff in their own department. After time consuming and contentious negotiations between the project manager and the head nurse anaesthesiologist, the resulting structure was a compromise where three nurses would belong to the new department, whereas the rest would be on rotation from the hospital.

In the department’s first year of operation a few challenges stood out. Staff members reported that there was a sense of two teams developing—one consisting of the nursing staff that was employed by the new unit, and one consisting of the nurses who were on rotation from their home department. There were also challenges related to staff shortages in the anaesthesia department, as it was not always able to offer a sufficient number of nurses to the DCS department. This created problems in terms of achieving the efficiency necessary to reach the goals set for the
department. There was also a sense that the conflict over the organizational location of these nurses during the project period had left scars that made the collaboration between the two departments difficult. Nurses belonging to the new department received insufficient assistance in instances when they had to bring patients from the DCS department to the hospital surgical department, and the DCS department manager sometimes experienced the anaesthesiologist manager as less than helpful in staffing issues. This constellation of problems is referred to in the paper as the management challenge.

Paper 2 documents that processes of implementing divergent organizational structures are challenging due to conflicting logics, that this conflict is relevant in relation to nurses as well as to the more commonly studied physicians, and that the outcome of implementation may be a structure that is different from – and less well suited to reach defined organizational goals of service quality improvement than – the original idea held by those initiating the change. It does not, however, go into details of how the implementation process led to that outcome. Paper 3 analyses a specific change implementation process as a process of translation, and aims to explain how these processes may be conducted in order to achieve translation outcomes that contribute constructively towards organizational goals.

4.3 Paper 3

Paper 3 first investigates the translation effort made by the regional HR director who initiated the ATP change project vis-a-vis the hospital departments. This is conceptualized as a strategic translation aimed at convincing organizational members of the merits of ATP, thus potentially fostering readiness for change. Further, the process of translating the ATP idea and practice into the departments’ respective work routines is conceptualized as an operative translation performed by managers and staff in each department. Finally, the “goodness” of the
resulting practices – defined as whether or not they were useful in contributing to organizational goals – is evaluated.

The strategic translation of ATP was performed by the regional HR director in her communication with hospital departments in project kick-off meetings in each department. She employed several editing practices (staging the discussion, reframing the problem, adjusting the vision, taking absent stakeholders into account, rationalizing the change and speaking for the technology) in her communication of the ATP idea and practice to the hospital staff.

Following the strategic translation, the analysis shows that there were varying change beliefs in the three departments, and thus varying levels of readiness for change. Belief in the discrepancy presented by the HR director was generally high in all three departments, whereas belief in the appropriateness of ATP as a solution to this discrepancy, its valence to the departments and its staff, the belief in principal support, and the efficacy of the department to make use of the new system varied. In summary, readiness for change was low in Department 1, medium in Department 2, and high in Department 3.

The operative translation processes differed between the departments. The department which had the highest level of readiness for change (Department 3) staged a more inclusive (i.e. more participative) and thorough operative translation process, employing not only more editing practices than the other two departments but employing them differently. This department also employed the translation rule of adding to the strategically translated version of ATP, while omitting very little. Department 3 operatively translated ATP in a way that was most aligned with the strategically translated version.

The paper identifies the three different versions of ATP as bad, moderately good and good translations. This categorization is based on Røvik’s (2016) definition of good translations as new versions of a managerial idea and practice that contributes towards organizational
goals. The analysis shows the degree to which the translated versions were coherent with a system constructed to enable hospital departments to improve their performance as measured by achieving stated goals. It also shows whether department members experienced the new practice as useful. In Department 1, there were no significant changes in terms of how task planning was performed. Department 2 experienced an improvement in control over the task planning process and an extended planning horizon, while Department 3 thoroughly transformed and improved the way they distributed and planned tasks, and were able to do so more predictably over longer periods of time. This department also saw a decrease in treatment waiting time guarantee breeches, and while it is difficult to measure the effect of improved task planning on this quality indicator due to the complexity of factors influencing it, department management and staff believed that their less chaotic plans played a role in the development, and would increasingly do so in the long run.

Figure 3 is a representation of the overall understanding of how the theoretical concepts used in this paper are related.

Figure 3 – Theoretical concepts and their interrelationships
5 Discussion and implications

This thesis consists of three papers each aiming to increase our understanding of how divergent organizational changes can be handled by hospital leaders and employees in order to achieve outcomes that contribute towards organizational goals of service quality improvement. Financial, social, clinical and professional pressures require attention and new ways of making the most out of professional skills and other resources in order to provide hospital services at the current quality level or beyond. The sustainability of the system hinges on the ability of policymakers, leaders and professionals to find and implement organizational structures and management systems that reasonably balance high quality care with an efficient use of resources. However, previous research has established that turning such initiatives into new practices that contribute towards quality improvement is difficult. This difficulty is often attributed to the incompatibility between the managerial and market, or business-like, logic which the initiatives are often characterized by, and the professional logic which still stands strong in hospitals. In other words, the change initiatives are often divergent to the logic guiding those actors whose active involvement in the initiatives is crucial for successful implementation outcomes. This means that despite decades of health sector reforms and countless change initiatives at the organizational level, traditional organizational designs and practices remain relatively stable.

The three papers each ask and aim to answer research questions related to identified gaps in our knowledge of how such changes may succeed in improving stated, organizational quality improvement goals. The thesis is eclectic both in terms of theoretical perspectives and research methods used in each paper. Together, they form a pragmatic attempt to shed light on the overarching research aim from a variety of angles by asking and answering two individual but related research questions. In combination, the three papers offer a progressively more detailed
empirical and theoretical analysis of the overarching research aim, and include a wide range of hospital actors such as top-level, middle and project managers, as well as both nurses and physicians. The research approach of reconnecting health management studies with wider social science literature is recommended by Ferlie and colleagues as a valuable path to developing a more theoretically informed perspective on health care management (Ferlie et al., 2016). The case studies combine the theory of guiding logics with in depth empirical studies of how key actors actually work out divergent changes on the ground (Reay et al., 2016). In the following paragraphs, the findings from the three individual papers are discussed in relation to the two research questions of the overall thesis.

5.1 Frequent organizational change, change-oriented leadership and outcomes relevant to hospital service quality.

As hospitals are subjected to increasing demands, reforms and policy changes, they have no option but to continuously change. A crucial question is whether these changes contribute to the improvement of service quality. Former research on the effects of NPM-inspired reforms have identified disappointing results (Braithwaite et al., 2016; Christensen & Lægreid, 2011b). The findings in Paper 1 suggest that more change may actually be related to a higher prevalence of performance obstacles. Organizational changes, which in the current health policy climate are often motivated by cutting costs and increasing control and efficiency, may indeed create more work system performance obstacles in the form of inadequate staffing, insufficient supplies of equipment, and failure to organize the work in optimal ways.

Physician participation in decision-making is included as a mediator in the tested model because of the assumed centrality of autonomy for the profession in question, and because the literature on (institutional)
changes in the health care field has identified that such participation is changing (Byrkjeflot, 2011; Funck, 2012). The results in Paper 1 show a significant and negative relation between organizational changes and the job resource of participation in decision-making. If this is indeed the case in hospital organizations, this development runs in the opposite direction of calls for more medical engagement (Spurgeon et al., 2011). The test of the relationships between participation in decision-making and performance obstacles and job satisfaction resulted in some of the largest effects in the tested model. The findings suggest that physician participation in decision-making on issues of defining success criteria, goals and actions, and influence in decisions affecting the employees as well as having good opportunities for influence in general is important in relation to physician job satisfaction, and performance obstacles.

This finding is an argument for the importance of facilitating physician participation in decision-making in hospitals. The findings further suggest that change-oriented leadership may contribute to boost this job resource for physicians. While there was a relatively small direct relationship between change-oriented leadership and job satisfaction, and a non-significant relationship with performance obstacles, the mediation of participation in decision-making in these relationships suggests that change-oriented leadership effectively influences these outcomes via participation in decision-making. This is a contribution to the leadership literature, as the role of autonomy as a mediator of change-oriented leadership outcomes has not previously been clearly established (Borgmann et al., 2016). The relationship between change-oriented leadership and autonomy in the form of participation in decision-making is in fact the strongest in the model. Different leadership is necessary for different organizational situations, and the findings support an argument for the importance of middle manager change-oriented leadership practices in work environments where demands are high, change is continuous and often divergent, and autonomy is both highly valued by
employees, important to job satisfaction, and a contributor to organizational performance.

The study focuses on outcomes at the department level. This is where middle managers perform their leadership, employees experience their opportunities for participation in decision-making and their job satisfaction, and performance obstacles are encountered. However, this is not the organizational level at which the types of changes measured by the survey items are normally initiated. The tested model did not hypothesize a relationship between change-oriented leadership and organizational change, because it is probably not reasonable to assume that change-oriented middle managers in hospitals meaningfully influence the initiation of changes to management, organizational structures or overall goals and strategies (Edling & Sandberg, 2013). Their responsibility is rather to implement, adapt and translate top management decisions (Williamsson, Eriksson, & Dellve, 2016). There is, however, a significant and negative correlation between organizational change and change-oriented leadership in the data, and it can be interpreted in two ways. First, change-oriented middle managers may be able to buffer their department from changes initiated at higher organizational levels, or able to prioritize which change initiatives to implement in their own department. In this interpretation, change-oriented leadership negatively impacts the frequency of the types of change included in the variable. Second, causation could run in the opposite direction. In this interpretation, frequent organizational changes may reduce the opportunity for middle managers to perform their leadership in a change-oriented manner. Frequent changes, particularly of the kind that stem from NPM-inspired policies, could impose too many demands on these managers for them to be able to prioritize these leadership practices (Wallin, Pousette, & Dellve, 2014). The content of these changes may also impact their decision latitude negatively, leaving them relatively more powerless in shaping a change-oriented leadership practice at the department level. If this is the case, it is problematic based
on what we know from previous research about the positive effects of change-oriented leadership on a variety of outcomes, and based on the constructive relationships with both employee and organizational outcomes identified in this study.

In conclusion of the discussion of the Paper 1 findings, it is relevant to connect them to the identified need for medical engagement in improving the quality of health care services. Medical engagement implies the involvement of physicians in organizational issues as well as in the professional work of treating patients. Participation in decision-making is an aspect of such engagement. Such opportunities for taking part in and influencing organizational decisions further implies a distribution of leadership to a wider group of actors than formal managers only, and a potential for bringing a more diverse set of knowledge and competencies into decisions on issues important to quality outcomes (Denis & Baker, 2015). This is particularly important in highly complex organizations such as hospitals, where different actors are highly specialized within different professional fields (Denis, Langley, & Rouleau, 2010; Fitzgerald, Ferlie, McGivern, & Buchanan, 2013). This constructive relationship between medical engagement and quality outcomes has been documented in previous research (Spurgeon et al., 2011), and the findings in Paper 1 suggest the same effect. It could therefore be argued that in order to increase or at least maintain service quality, organizational changes should be aimed at encouraging physician participation in decision-making rather than serve to impede it. Further, the medical engagement concept as defined by Spurgeon and colleagues (2008) implies not only participation from physicians in organizational issues, but also a recognition of this participation from the organization. The findings suggest that giving hospital middle managers capabilities and opportunities to exercise change-oriented leadership at the department level may be a valuable strategy to fulfilling this recognition.
5.2 Leader and employee contributions to processes of implementing divergent change.

The second research question of the thesis explicitly focuses on exploring how not only managers, be they top or middle level, contribute to the outcomes of organizational change, but also on employees. Citing Kotter’s insight (1995) that organizational change is ultimately composed of changes among the people in the organization, Gadolin (2018) argues that actor level studies are crucial in increasing our understanding of change and its outcomes. Participation in organizational change processes has been found to be positively connected to successful outcomes of organizational change (Lines, 2004; Saksvik et al., 2007), and is emphasized in both prescriptive change management models and change research (Stouten et al., 2018). The findings of the three papers each highlight how the participation of a multitude of actors may impact on how change initiatives turn into new organizational structures and systems that actually affect the ability of hospitals to realize quality related goals. In combination, this forms a contribution towards the identified need for empirical research on professional engagement in organizational change in health care (Denis & Baker, 2015). The findings from particularly one of the departments of Paper 3 offers analysis of a successful case, which has also been identified as rare in the literature on radical, or divergent, organizational change in hospitals (Chreim et al., 2012).

Paper 1 does not study a specific change process and does as such not primarily contribute to our understanding of how specific initiatives may be turned into successful implementation outcomes. It does, however, shed light on processes taking place in continuously changing hospital organizations, and the role of both managers and employees. Top-level management has the power and ability to make decisions regarding a wide variety of changes to structures and systems in hospitals. It seems probable that these changes are made with the intention of at least maintaining service quality. Still, the test of the hypothetical model
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reveals that more of these changes may actually contribute to a deterioration of quality, because they are related to more performance obstacles and lower physician job satisfaction. This is partly mediated by a reduction physician participation in decisions-making. These results confirm previous research findings that physician participation in decision-making is important to service quality, and should be paid attention to as top-level management makes decision on which changes to implement. Further, moving to lower level management actors, change-oriented middle manager practices seem to allow for such participation, and giving middle managers opportunities to perform such leadership could be valuable. Finally, allowing for opportunities for participation is not sufficient unless physicians themselves actually choose to engage in organizational issues.

The findings from the two qualitative case studies on specific change processes offers findings on what such participation from employees, including physicians, may entail. The following discussion focuses on findings from the two case departments which stood most in contrast to each other in Paper 3 in terms of the way employees participated in the operative translation of ATP into department level practice, as well as findings concerning how nurses participated in the implementation of the DCS department.

Department 1 was the first of the three studied departments to join the ATP project, but readiness for change was low following the strategic translation effort made by the regional HR director. The operative translation largely took place in a series of department meetings attended by the department head, the head secretary, a few department physicians and the process facilitation team. However, this space did not constitute an arena for any extensive re-construction of the ATP idea and practice as strategically translated by the HR director into a working, local version. The main actor undertaking the operative translation in Department 1 was exclusively the department head. Thus, while some department actors both at the managerial and employee levels did take
part in the operative translation process, this was a relatively passive, pro-forma form of participation. Relatively few editing practices were used in the operative translation, important elements of ATP were omitted while no department specific elements were added, and there were few signs of combining managerial concerns with professional considerations. The department accepted the invitation from higher level management to take part in shaping the new management system and a select few actors attended meetings, but no active effort was made to engage significantly with the details of the system or transform existing practices. As a result, there were limited changes to how task planning was done in Department 1. The idea and practice that had been presented to the department through the strategic translation was scaled back, diminished and reduced, and the potential for ATP to aid the attainment of stated organizational goals was not realized. The change implementation in this department can be characterized as a process of de-coupling (Meyer & Rowan, 1977), which is an outcome commonly found in studies of implementing managerial logic practices in the professionalized hospital context (see for instance Kitchener, 2002; Mascia, Morandi, & Cicchetti, 2014). The department accepted the change as something that needed to be implemented in some form, and formally participated in the process of doing so, but little changed in terms of actual planning practice.

Many empirical studies from the health care field have highlighted the institutionalized hierarchy in hospitals and the power and ability of physicians to resist divergent changes. The need to somehow bridge the divide between a professional and a business-like logic in order to ensure support for changes from this group is therefore well established in the literature (Reay et al., 2016). Nurses, however, have been paid significantly less attention to in terms of the logics guiding their reactions to divergent change.

In the theory section above, two views on the institutional logic guiding nurses as a professional group were identified. The first view is that they
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are guided by a logic more or less identical with the medical professional logic of physicians. In a study of the introduction of an organizational program aiming for increased efficiency in hospital departments, Van den Broek and colleagues (2014) found that nurses increasingly resisted the program and failed to internalize it into their work when they realized that the program did not yield any of the professional benefits that had been promised in terms of increasing time spent with patients or autonomy to control their own work. They did, however, not outright refuse its implementation.

This lack of forceful resistance is also echoed in a study by Kristiansen and colleagues (2015). They found that nurses in municipal care services adhere to a professional logic similar to the medical professional logic in terms of wanting to be able to make decisions on patient care autonomously and based on their professional knowledge. However, in their sensemaking efforts related to how this logic can co-exist with increasing pressures from a managerial logic focused on documentation and cost control, they did not actively resist new demands. While they were not comfortable with the ways tighter staffing resources and increased documentation demands affected quality of care, they nevertheless accepted the stricter demands and felt responsible for providing sufficiently good care within these constraints. Instead of refusing new management systems, they worked harder and smarter, followed directions they were given despite scepticism and frustrations, remained loyal to their immediate managers and felt obliged to comply with the new ways of working. While they felt guilty for not being able to provide care that met their professional standards, they lacked the power and means to push back against the new demands. Medical professionalism mandates physician dominance over all other health service professionals, and position them as key decision makers both in clinical and administrative matters (Battilana & Casciaro, 2012). These two studies of nurses both imply that while nurses are in fact guided by a logic which holds many of the same elements as the medical
professional logic of physicians, their relatively less powerful position in the professional and organizational hierarchy means that divergent changes are not as forcefully resisted.

In the second view on nursing logics, nurses have been found to be able to move between logics, acting as mediators and knowledge brokers, handling the demands of co-existing and different institutional logics, and to have an ability to effectively coordinate multiprofessional teams (Andersson & Liff, 2018; Burgess & Currie, 2013; Currie & Spyridonidis, 2016; Gadolin & Wikström, 2016; Glouberman & Mintzberg, 2001). They have also been found to be likely initiators of divergent change in hospitals (Battilana, 2011). Both perspectives on the professional logic of nurses – one finding it comparable to the medical professional logic, but that the power to resist divergent changes is restrained by their position in the hierarchy of authority, and the other finding that their logic is in fact better aligned with multidisciplinary work than the medical professional logic is – would suggest that nurses can be expected to support, or at least not to forcefully resist, the introduction of a multidisciplinary department.

The initial inductive analysis of the data in Paper 2 revealed that there was resistance towards the new DCS department among many of the involved professional groups, including nurses, and particularly among the specialized nurses. Their counter arguments were professional, there was a resistance towards being managed by a unitary manager, a scepticism towards being limited to doing just one type of work, and a fear that professional development would suffer in the new department as ties to their own specialty would become weaker. The existence of differing views on the new organizational structure based in differing logics is not a novel finding in a hospital context. However, based on previous research, the powerful professional resistance coming from nurses was surprising. The unitary management principle of the DCS department was met with resistance from nurses similar to the resistance
that the reform sparked in the medical community in 2001 (Johansen & Gjerberg, 2009).

The focus on professional knowledge development has also previously been found to be important to nurse managers (Berg & Pinheiro, 2016). The force put behind the counter-arguments to the DCS structure and the ability of the specialized nurses to refuse the intended structure may be interpreted as a result of the increased professional status of nurses over the past decades (Spehar & Kjekshus, 2012). It may also be an ability specific to the specialized nurses, who are a relatively elite group within the occupational collective (Battilana, 2011; Currie & Spyridonidis, 2016) and perhaps increasingly committed to protecting their own specialized niche within the nursing profession. Similar to previous findings on reactions from physicians to divergent organizational structures that introduce changes to intra-professional relationships (Heldal, 2015), hospital management may therefore increasingly encounter conflict with nurses based not only on a resistance to business-like logics and management actors, but also within the professional community.

Convincing others to change their practices in ways that break with their institutionalized norms is a key challenge in processes of implementing divergent change (Battilana & Casciaro, 2012; Battilana et al., 2009). This was not successfully accomplished in the process of implementing the DCS. The findings of Paper 2 reveal how the implementation outcome was an organizational structure where compromises, defined as an agreement in which the actors involved reduce their demands in order to reach an agreement, had been made on the principle of unitary management. This compromise created challenges for the efficient staff management necessary to reach some of the stated, quality related goals of the new DCS department.

This case study contributes to answering the second research question of this thesis by documenting the importance of engaging all professional
actor groups in processes of divergent change as opposed to focusing on the participation and/or potential resistance from physicians. This point is echoed in the health services management literature by Pannick and colleagues (2016), who applies the term of clinical, as opposed to medical, engagement in order to highlight the need to include other health care professionals such as nurses.

While the specialized nurses did actively participate in the DCS implementation process in a multitude of project meetings and discussions on how the new organizational structure should be set up, their participation was characterized by active and strong opposition and resistance. This was a form of participation different to the passive participation found in Department 1 of Paper 3, but both forms of participation were problematic with respect to contributing to organizational goals of quality improvement. The passive participation of department level management and staff of Department 1 led to decoupling, i.e. very little change to already existing planning practices, whereas the active, but conflictual, participation in the DCS case led to a compromised multidisciplinary structure. Paper 2 offers a case study that reveals the conflicts surrounding the new DCS and the eventual result. It does not, however, analyse that process at a level of detail that enables theoretical explanations as to why they failed, beyond identifying professional resistance and the fact that compromises had to be made on the unitary management principles in order to bring in all the necessary professional staff resources. In Paper 3, where the professional group in focus is physicians, this is done in greater detail. Department 3 is identified as a successful case in which a divergent change initiative, a new management idea and practice, was translated into a new practice that enabled the department to improve their contribution towards organizational quality goals. These findings contribute to answering the second research question of the thesis in two ways. First, the detailed analysis of how department employees contributed to a successful outcome through active participation in the operative translation is an
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empirical and theoretically informed example of how hospital employees can contribute to such outcomes. Second, by focusing on the role played by readiness for change and its underlying change beliefs, and how a top-level leader contributed to fostering these change beliefs through strategic translation, it represents an example of how hospital leaders can contribute.

Translators are situated within institutional settings that may limit their range of choice as to how they make sense of and translate management ideas (Nielsen et al., 2014). These settings may be understood as editing infrastructures (Sahlin & Wedlin, 2008). In the process of operatively translating ATP into department level practice, the translators were situated in an infrastructure considered to be guided by a professional logic. Embracing ATP meant being willing to forego the professional autonomy integral to the existing way of planning work, and to accept more managerial control and monitoring of tasks. Paper 3 finds that department level change beliefs were related to how those taking part in the operative translation employed editing practices and translation rules in transforming the new idea into actual practice. In Department 3, belief in the appropriateness of ATP in solving the challenges it was presented as a solution to was high. Building on the strategic translation, the operative translation performed by department employees reframed the central problem of ATP as one that combined the managerial logic concerns of stricter planning with professional logic concerns of competence building and working conditions. Belief in valence, the potential value of ATP for the department, was also high. The change was rationalized by connecting the ATP solution to both organizational and department level problems, thus maintaining the dual focus of the reframed problem. The new meaning of ATP as defined by the reframed problem and department level rationalization was stabilized throughout the operative translation process. The most convinced translators practiced selling of the change to less convinced working group participants, and spoke for the technology.
The belief in valence was also connected to the editing practices of adjusting the vision and taking absent stakeholders into account. In Department 3, where the belief in valence was high, the operative translation process involved adjustment to a dual vision of solving both organizational and department level problems by implementing a system which would enable the department to improve their contribution to the strategic goals while also strengthening their fulfilment of professional needs. The operative translation process also took a wider diversity of absent stakeholders into account in comparison with the other two departments, extending the belief in the valence of ATP to also include patients and other hospital staff groups. Finally, in Department 3 where there was strong principal support for the strategically translated version of ATP at several organizational levels, the discussions were staged inclusively as the department head allowed for and clearly communicated an expectation for a relatively large group of staff to take part.

The relationships between change beliefs and editing practices identifies a role for readiness in our understanding of how translation is performed. The translators who performed the operative translation of ATP were located in an editing infrastructure guided by a logic which differed from the logic of the new planning practice. Comparing the three departments, Paper 3 argues that readiness for change expanded the possibilities for operative translators to edit the practice in a way that combined the managerial logic elements of the strategically translated idea and practice with elements from department specific practicalities and a professional logic. The ways in which the translators used editing practices to make sense of ATP further impacted on how they transformed the management idea and practice by copying, omitting and/or adding elements.

Good translations are new versions of a managerial idea and practice that contribute towards organizational goals (Røvik, 2016). The analysis in Paper 3 shows the degree to which the translated versions were coherent with an idea and practice constructed to enable hospital departments to
improve their performance as measured by achieving stated goals. It also shows whether department members experienced the new practice as useful. Department 3 thoroughly transformed and improved the way they distributed and planned tasks, and were able to do so more predictably over longer periods of time. This department also saw a decrease in treatment waiting time guarantee breaches. While it is difficult to measure the effect of improved task planning on this quality indicator due to the complexity of factors influencing it, department management and staff believed that their less chaotic plans played a role in the development, and expected it would increasingly do so in the long run.

The most successful translation came out of a process where all the editing practices identified by Teulier and Rouleau were extensively utilized. This was an important factor contributing to the outcome. Importantly, an inclusive staging of the discussions in Department 3 ensured participation from a broad group of actors. This contributed to a process where many suggestions and viewpoints came to light, and to a translation space where problem reframing, vision adjustment, rationalization and meaning stabilization were highly participative practices ensuring a strong grounding of the new idea and practice in the practical realities of department work. It also enabled a combination of the underlying managerial logic of ATP with elements of the professional logic guiding department staff, as seen in the inclusion of professional needs for competence building and more predictable working conditions in the reframed problem and the adjusted vision. In other words, the active participation by an inclusive group of employees was key.

These findings suggest that hospital employees can contribute to processes of implementing divergent changes in order to achieve outcomes that contribute towards organizational goals of service quality improvement by taking an active part in operative translation processes. The inclusive staging of the operative translation process in Department 3 also contributed to increased support for ATP throughout the process,
as a wide group of actors were present when practices of speaking for the technology and selling the change were employed. Further, Department 3 went through the most thorough process of re-constructing ATP for department level use by adding department specific concerns and practices to the strategically translated idea and practice. The outcome was a practice that combined the initial intention by the regional HR department with what the department itself defined as needs, and in the end a more useful practice. This new practice consisted of a combination of elements from the managerial and professional logics.

In addition to the extensive literature on conflicting institutional logics, there is also a stream of research highlighting co-operative relationships between different institutional logics instead of the competitive relationships of separating different logics that exist within the same organizations by compartmentalizing or segmenting them (Goodrick & Reay, 2011; Kraatz & Block, 2008; Reay & Hinings, 2009). Contributions to this stream have shown how compromise and balancing (Kraatz & Block, 2008; Pache & Santos, 2010), hybridization (Choi et al., 2011; McGivern, Currie, Ferlie, Fitzgerald, & Waring, 2015) and selective coupling (Pache & Santos, 2013) contribute to organizations embracing complexity. Smets and colleagues (2015) showed how individual actors are able to segment practices belonging to different logics into different settings, while also bridging the different logics and settings when needed, and maintaining the differences between logics by demarcating where the line should be drawn between logics after the bridging. This results in a balancing of co-existing logics, or hybridization, where the benefits of each are exploited while they also remain distinct from each other. In studies of health care fields and organizations, hybridity is often connected to the way managers are expected, and able, to combine, bridge and mediate between different logics (Byrkjeflot & Kragh Jespersen, 2014; Llewellyn, 2001; Spyridonidis & Currie, 2016). The change process in Department 3 went further than the other two departments in the combination of practices
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stemming from competing institutional logics, and developed an ATP practice which can be understood as a hybridization (Choi et al., 2011) or selective coupling (Pache & Santos, 2013) of elements from the managerial and professional logics. This was a process in which a broad collection of organizational actors took part, pointing to the fact that employees can also be important in facilitating this form of logic combining for the benefit of translating divergent ideas and practices into practices useful for quality improvement.

Leaders are obviously also crucial actors in such processes. Health care middle managers are often responsible for adapting and translating top management decisions (Williamsson et al., 2016). The central role of these managers is evident in the findings of Paper 3, as the clear support for ATP and active participation in work group meetings from the head of Department 3 seemed to be an important factor in fostering continued readiness for change. However, the translation practices of the top-level regional HR director, were also found to be of great importance. The readiness for change literature recommends persuasive communication where the change agent is communicating directly and verbally with the recipients of change as an influence strategy for fostering readiness (Armenakis & Bedeian, 1999; Armenakis & Harris, 2002; Armenakis et al., 1993). The strategic translation performed by the regional HR director can be construed as such an attempt at persuasive communication, and Paper 3 argues that a successful strategic translation is necessary in ensuring the readiness for change which further enables successful operative translations. It served as a way to sell the change to the recipient departments, and was partially successful in persuading department level actors of the merits of ATP.

The HR director particularly managed to present a discrepancy that was believable in the recipient context. This was aided by her explicating the professionals’ needs for less stressful working conditions and more predictability, and by her combining the strategic, managerial logic goals of cutting waiting times and not having any treatment waiting time
guarantee breeches with professional logic goals of securing competence building. By being aware of the differences in logic, and by using this awareness to edit the original idea, the HR director strengthened the translation in terms of achieving readiness for change.

In addition to this, it is important to note that readiness for change was not a static entity throughout the translation processes. The readiness literature highlights that active participation by change recipients in the change effort, enabling enactive mastery, vicarious learning and participation in decision-making, is also important in fostering readiness for change (Armenakis & Harris, 2002; Armenakis et al., 1993). The successful translation of ATP in Department 3 can be thought of as a virtuous circle of fostering change beliefs and readiness through translation. Initial readiness for change fostered by the strategic translation enabled a process that included management as well as professionals. The HR director’s initial editing of professional logic elements into ATP was continued as the idea and practice evolved. Department level change beliefs and readiness was strengthened through this process. The role of readiness for change in translation processes is therefore not as a factor which can be placed precisely as either a result of strategic translation, or as a facilitator of good operative translations. Rather, it is an element that is both fostered by, and contributes to, translation processes and good translations.

Paper 3 argues that readiness for change is indeed a key concept in understanding translation processes and the quality of translation outcomes. Readiness enables inclusive operative translation processes that thoroughly rework a new management idea and practice by further development of problems and visions, and by stabilizing meanings which combine organizational and department, operative level needs, as well as differing institutional logics. This new meaning opens up the possibilities for adding practices that enhances the quality of the resulting practice. Strategic translations may foster readiness for changes that are based in a logic different from the guiding logic of the recipient context.
However, this is challenging if the proposed change does not resonate with a felt need at the operative level. Yet, if initial readiness for change is in fact established, it may further develop through the operative translation.

### 5.3 Implications for leader and employee practice

In conclusion, top-level leaders may contribute to successful quality related outcomes of divergent organizational changes in hospitals by fostering readiness for change through strategic translations that take the professional logic and the needs and priorities of professional employees into account. Paper 3 presents a case in which this was successfully achieved, whereas Paper 2 revealed that nurses should also be considered as hospital professionals who need to be properly consulted and eventually convinced of the merits of divergent changes in order for change efforts to succeed. Further, leaders at lower organizational levels may contribute by signalling principal support for change initiatives by actively taking part in change implementation, or translation, processes themselves. Finally, in the continuously changing hospital context, middle manager change-oriented leadership seems to be an important contributor to quality outcomes. Decisions made by higher level management regarding what type and frequency of organizational change hospitals are subjected to may, however, be an important contextual factor setting the frames for whether middle managers are able to perform their leadership in a change-oriented manner.

The thesis also contributes with implications for hospital employee practice. Regarding how hospital employees may handle divergent changes in order to enhance service quality, previous research has highlighted that their engagement in organizational issues is crucial (Pannick et al., 2016; Spurgeon et al., 2011). The findings of Paper 1 supports this by identifying physician participation in decision-making as a contributor to positive quality outcomes. It also shows, however, that frequent organizational changes initiated at higher levels of the
organizations may limit their possibility to do so. Leaders should therefore be conscious of how current changes may curtail participation in decision-making, and consider designing changes in ways that put less pressure on such participation.

In Paper 3, the active participation from employees in operative translation was found to be key in the continuous process of fostering and strengthening readiness for change, and in achieving a good translation of ATP. This highlights that the common readiness for change literature dichotomy of change agents and change recipients (Armenakis & Harris, 2002), and the identification of managers as the actors responsible for translating new ideas and practices (Williamsson et al., 2016), needs to be nuanced by emphasizing the important role played by multiple actors at different organizational levels in translation and change implementation processes. Paper 3 also shows, however, that professional participation needs to be guided by a willingness to consider and evaluate whether solutions and priorities grounded in a managerial logic may actually be valid and useful. In the DCS department case of Paper 2, as well as in particularly Department 1 in Paper 3, some employees did in fact participate in the change and/or translation processes, but the outcomes did not contribute as positively to organizational goals as in Department 3 where a good translation of ATP was achieved. This draws attention to the fact that engagement and participation appear in a wide variety of change processes and come in different forms, some of which are either passive or conflictual and detrimental to achieving service quality improvement, whereas other forms work in the opposite direction. Further, it is not given that opportunities for active participation are at all taken by employees, in which case employees miss out on opportunities to influence the way hospitals are changing to accommodate new demands, and the organizations miss out on perspectives that could contribute to achieving good translations of new organizational structures and management systems.

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5.4 Research implications

The findings of this thesis also points to opportunities for future research. First, Paper 1 identifies that change-oriented leadership indirectly contributes positively to service quality and job satisfaction through strengthening physician participation in decision-making. Further research could shed light on what the most important aspects of what change-oriented middle managers do to contribute in this way are. Further, more research is needed in order to establish how higher-level management can create a middle management space conducive to change-oriented leadership, and how middle managers can develop the skills necessary to perform such leadership.

Second, Paper 2 points to a need for further research on the institutional logics of nurses, their bases of power in the professional and organizational hierarchy, and their role in contributing to processes of implementing divergent changes to organizational structures in order to achieve outcomes that contribute towards organizational goals of service quality improvement.

Third, the identified process of strategic translations fostering readiness for change which further contributes to operative translations that may result in good translations offers several opportunities for further research. Two avenues for extending our knowledge of how good translations may be achieved stand out. One would be exploring what the most important elements of strategic translator competence for fostering readiness are, beyond having an awareness of operating in an environment of conflicting logics and being able to manoeuvre in this context. Another would be to go deeper into what the most important elements of operative translation competence are, which organizational actors need this competence, and how it can be fostered.

Finally, professional participation in both decision-making on organizational issues and translation of new management ideas and practices stand out as important elements in achieving outcomes that
contribute towards organizational goals of quality improvement. However, not all forms of participation are constructive. Future research could contribute to nuancing the concepts of participation and clinical engagement and eliciting what forms of participation from employees a hospital organization needs in order to reap the benefits of including employees more fully in processes of divergent organizational change.
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Paper 1

Changing to improve? Organizational change and change-oriented leadership in hospitals.

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Authors
Olaug Øygarden, Doctoral Research Fellow, University of Stavanger
Espen Olsen, Professor, University of Stavanger
Aslaug Mikkelsen, Professor, University of Stavanger

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Abstract

This paper is concerned with the relationship between frequent organizational changes, change-oriented leadership and two outcome variables vital to hospital service quality, namely performance obstacles and the job satisfaction of physicians. The study aims to contribute to our knowledge of the impact of organizational change in hospitals by shedding light on three specific relationships. First, the resources and organizational structures surrounding patient treatment and the job satisfaction of those providing treatment are important contributors to quality of care. We therefore explore the relationship between frequent organizational changes and the two outcome variables of a) performance obstacles and b) physician job satisfaction. Second, good management matters in achieving high quality hospital care. We explore the relationship between change-oriented leadership practices performed by middle managers and the two outcome variables. Third, NPM-inspired reforms in the health care field have transformed and possibly diminished the power and influence of the medical profession. We are therefore interested in how physician participation in decision-making mediates the relationships between frequency of organizational change and change-oriented leadership, and performance obstacles and job satisfaction. The study is based on survey data collected from 556 hospital physicians, and a structural model was estimated using structural equation modelling. We found that the organizational changes in question were positively related to performance obstacles both directly and indirectly through participation in decision-making, meaning that more change was related to a higher prevalence of performance obstacles. Organizational change was also negatively related to job satisfaction, both directly and indirectly. Change-oriented leadership was negatively related to performance obstacles, but only indirectly through participation in decision-making, whereas it was positively related to job satisfaction both directly and indirectly.
Introduction

Over the past four decades, hospitals internationally have undergone dramatic changes in their funding, organization, management, service delivery and regulation as a result of a multitude of public sector reforms. These reforms have largely been categorized as inspired by New Public Management (NPM), meaning that they have been motivated by a desire to improve service efficiency and effectiveness, responsiveness to the public and managerial accountability, and to reduce public spending (Christensen & Lægreid, 2011b). A common theme in the understanding of NPM reforms is that managerial and economic principles have gained in importance vis-a-vis bureaucratic and professional principles (Byrkjeflot & Kragh Jespersen, 2014; Hood, 1991). While the content of the most recent public sector reforms and policies are sometimes labelled as post-NPM, implying a focus on re-integration of systems which have become fragmented as a result of NPM efforts, these more current initiatives have not diminished the importance of managerial and economic principles (Christensen & Lægreid, 2011a).

This paper is concerned with the relationship between frequent organizational changes, change-oriented leadership and two outcome variables vital to hospital service quality, namely performance obstacles and the job satisfaction of physicians. Norwegian hospitals have been the target of several NPM- and post-NPM inspired reforms and policies. Examples of these are the introduction of activity based funding (1997), unitary management of hospital departments (2001), free choice of hospitals for patients (2001), centralization of hospital ownership (2002), coordination reform of the cooperation between primary care and hospitals (2012) and quality based funding (2014). These reforms and policies have introduced stronger management functions, market instruments and increased transparency (Byrkjeflot, 2011). As hospitals strive to meet new demands posed by reforms and societal expectations, organizational changes of different magnitude and at different
organizational levels have become the normal situation (Bernstrøm & Kjekshus, 2015; Brekke & Straume, 2017; Rohde & Torvatn, 2017). Some of these changes have been introduced as large-scale and often top-down initiatives, while others may be smaller scale efforts aimed at specific, existing practices in order to meet new demands (Weick & Quinn, 1999). Hospitals and departments are merged, divided or otherwise restructured, and there is a continuous influx of new overall goals, strategies and management systems related to a variety of hospital activities such as quality monitoring, treatment pathways and treatment waiting time guarantees. The totality is a situation in which hospital employees constantly have to adapt to new organizational structures and work arrangements.

We assume that organizational changes are initiated with the intention of improving, or at least maintaining, the quality of services that hospitals provide. This paper aims to contribute to our knowledge of the impact of organizational change in hospitals by shedding light on three specific relationships. First, the resources and organizational structures surrounding patient treatment and the job satisfaction of those providing treatment are important contributors to quality of care (Carayon et al., 2006; Casalino & Crosson, 2015; Powell, Dawson, Topakas, Durose, & Fewtrell, 2014). We therefore explore the relationship between frequent organizational changes and the two outcome variables of a) performance obstacles and b) physician job satisfaction. Existing research on the relationship between organizational change and physician job satisfaction in hospitals is ambiguous (Westgaard & Winkel, 2011), and it has been difficult to identify clear and positive performance effects of the organizational changes that flow from new policies and reforms (Braithwaite et al., 2016). Thus, these relationships warrant further exploration.

Second, good management matters in achieving high quality hospital care (Firth-Cozens & Mowbray, 2001; Lega, Prenestini, & Spurgeon, 2013; West, 2001). In a context of continuous organizational change,
we are particularly interested in exploring the relationship between change-oriented leadership practices performed by middle managers (Yukl, 1999) and the two outcome variables. Management is consistently called for as a solution to improving health care organizations and delivery, but knowledge regarding which practices work to what ends and how they work is still incomplete (Lega et al., 2013).

Third, NPM-inspired reforms in the health care field have transformed and possibly diminished the power and influence of the medical profession (Byrkjeflot, 2011; Noordegraaf & Steijn, 2014; Reay & Hinings, 2005; Scott, Ruef, Mendel, & Caronna, 2000). In the Norwegian hospital system, research following the major reforms has shown that physicians as a professional group have increasingly had to compete with other groups for influence in decision-making at the policy level as well as in the management of hospitals (Byrkjeflot, 2011; Jespersen & Wrede, 2009; Spehar & Kjekshus, 2012). However, the impact of current organizational changes on the opportunities for hospital physicians who are not in management positions to influence decisions regarding success criteria, goals, actions and other aspects of their work has received less attention. Professional autonomy and control is a central aspect of the medical professional logic believed to guide physicians (Freidson, 1988). The literature on health system improvement highlights a need for physicians to be engaged in organizational decisions in order for positive change to materialize, as well as a need for more empirical research on how such engagement is fostered and how it contributes to improvements (Denis & Baker, 2015). We are therefore interested in how physician participation in decision-making mediates the relationships between frequency of organizational change and change-oriented leadership, and performance obstacles and job satisfaction.
Theoretical framework

Performance obstacles

Our theoretical model contains two outcome variables, one representing the well-being of hospital physicians, and the other the organization of patient treatment. We begin by defining and explicating the importance of the latter variable.

Developments in medical science and technology have tremendously increased the possibilities for hospitals to cure patients. However, the skills and knowledge of the medical community and individual practitioners is not sufficient to deliver high quality care. The quality of care provided by hospitals is also dependent on a work system that enhances and facilitates the work performed by health care professionals (Dekker & Leveson, 2015). Work systems in hospitals, as modelled by Carayon and colleagues (2006), consist of persons, tasks, tools and technologies, the physical environment and organizational conditions. If crucial elements of the system are missing or inadequately designed, service quality may therefore suffer as the system hinders rather than helps physicians perform their job.

Sufficient and functioning medical, ICT and other types of equipment, sufficient and competent staff and an organization of work that ensures coordination, collaboration and communication are system elements referred to as structural quality indicators in the national system of quality indicators (NDH, 2019). Accessibility of supplies and technology is vital to modern medicine (Carayon et al., 2006). There is also wide support in health services research for the importance of staffing adequacy in terms of both numbers and competence for quality of care (Aiken, Clarke, & Sloane, 2002; Amiri & Solankallio-Vahteri, 2019; Griffiths, Ball, Murrells, Jones, & Rafferty, 2016; Pronovost et al., 2002; West et al., 2014). The work system perspective considers the absence or sub-optimal functioning of these elements as performance obstacles,
defined as “the work system design characteristics that inhibit performance and are closely associated with the immediate work setting” (Peters & O'Connor, 1988, p. 106). In line with the national quality indicator system and the work system perspective, we consider performance obstacles to be a relevant measure of the service quality that a hospital is able to offer, and believe it is important to understand how the frequency of organizational change is related to their prevalence. Changing management, reorganizing or introducing new overall goals and strategies may reduce the prevalence of obstacles if the new organizational structures, management systems and practices are wisely designed and implementation processes are successful. However, many of the ongoing changes in hospitals are motivated fully or partially by increasing resource efficiency (i.e. cut costs), and may therefore increase the prevalence of performance obstacles as resources diminish.

**Job satisfaction**

Job satisfaction is an attitude defined as “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences” (Locke, 1976, p. 1304). It is widely documented as an aspect of subjective well-being and is as such an important outcome in and of itself. Further, the direction of the relationship between job satisfaction and job performance has been difficult to identify (Judge, Thoresen, Bono, & Patton, 2001), but a recent high quality panel study supports the hypothesis that the direction of causation runs from job satisfaction to workplace performance (Bryson, Forth, & Stokes, 2017). This relationship may be explained by mechanisms such as increased energy and effort due to better general health following positive emotions, or increased problem-solving skills due to improved cognitive abilities (Diener & Chan, 2011; Fredrickson, 2001; Isen, Daubman, & Nowicki, 1987). Conversely, job dissatisfaction is linked to job quits (Green, 2010) and to occupational health outcomes such as burnout (Alarcon, 2011).
For physicians specifically, earlier research indicates that dissatisfaction has a negative impact on patients and service quality. Several mechanisms are suggested in this literature, including reduced cognitive capacity, concentration, effort, empathy and professionalism (Casalino & Crosson, 2015; Firth-Cozens, 2001; Wallace, Lemaire, & Ghali, 2009; Williams & Skinner, 2003). Based on the evidence of job satisfaction’s importance to employees and their performance in general, and for physicians specifically, we believe it is indeed a vital element in ensuring that hospitals are able to provide the high quality and efficient care that health policies, reforms and changes at the organizational level aim to achieve. Our aim is to add to the knowledge of how such changes actually relate to physician job satisfaction.

Building on and expanding theories such as the Job Characteristics Model (Hackman & Oldham, 1976) and the Demand-Control Model (Karasek, 1979), the Job Demands-Resources (JD-R) Model proposes that a wide variety of job characteristics are determinants of employee well-being and performance (Bakker & Demerouti, 2007; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). The JD-R model posits that job demands, such as high work pressure, emotional demands or role ambiguity, negatively impact employee health and well-being, whereas job resources such as social support, performance feedback and autonomy may spark a motivational process leading to job-related learning, work engagement and organizational commitment. Research testing the JD-R model has found that as job demands increase and job resources decrease, job satisfaction decreases as a result of maladaptive coping (Alarcon, 2011; Lewig & Dollard, 2003). Job resources, on the other hand, may fuel job satisfaction (Sousa-Poza & Sousa-Poza, 2000; Tims, Bakker, & Derks, 2013).

**Organizational change and job demands**

Job demands are defined as “those physical, social or organizational aspects of the job that require sustained physical or mental effort and are
therefore associated with certain physiological and psychological costs” (Demerouti et al., 2001, p. 501). Different work settings or occupations may be unique in terms of the demands that are most important to that particular setting (Bakker & Demerouti, 2007), and studies testing the relationships of the model have included a wide variety of specific demands. Regarding the impact of frequent organizational change on employee job satisfaction, change can both increase existing and introduce new demands (Smollan, 2017), as well as represent a demand in and of itself.

Schaufeli (2015) clusters job demands into categories of qualitative, quantitative and organizational demands. Among the individual demands in this categorization, several can arguably be introduced or increased by organizational change. The qualitative category includes mental job demands, meaning the attention and concentration that the work requires. Frequent change in for instance organizational structures stemming from reorganizations requires constantly adapting to new ways of working, which may increase these mental demands. Learning is generally considered as an opportunity and a job resource in JD-R research (Bakker, Schaufeli, Leiter, & Taris, 2008; Schaufeli, 2015; Schaufeli, Bakker, & Van Rhenen, 2009). It can, however, also be experienced as a demand if the requirements of constantly adapting exceed the capacity of employees or there is insufficient time to process and adapt to new structures (Mikkelsen & Olsen, 2019). The category of quantitative demands include work overload and perceptions of the pace of change. In the hospital context, where many change efforts aim for increased efficiency, it is reasonable to assume that work overload may become more prevalent as a result of organizational change. Perceiving that changes are happening too fast, as may be the case if the frequency of change is high, is also regarded as a job demand.

Finally, the category of organizational demands includes not agreeing with changes. If employees do not agree with a certain change effort, the organizational change itself is a demand. Many of the organizational
changes introduced in hospitals are guided by a business-like logic as opposed to the previously dominant professional logic (Byrkjeflot, 2011). The traditionally dominant professional logic in hospitals highlights the autonomy and trust-based authority of the professional, and prioritizes professional judgment in, ideally de-centralized, decision-making (Andersson & Liff, 2018; Freidson, 2001; Noordegraaf, 2015). The introduction of business-like logic organizational structures and management systems has resulted in increases in managerial control, a focus on accountability, efficient use of resources, quantification of patient throughput, cost reduction, performance management, standardization of care, quality and customer-orientation and customer satisfaction (Arman, Liff, & Wikström, 2014; Doolin, 2002; Lægreid, Opedal, & Stigen, 2005; Reay & Hinings, 2009; Scott, 2008). Organizational changes that break with existing institutions in a field of activity are referred to as divergent, and involve transformation of organizational goals, beliefs and norms (Battilana, Leca, & Boxenbaum, 2009). Such divergent changes to management, organizational structures and overall goals and strategies in hospitals are often conflictual, and physicians are particularly prone to disagree with and oppose them (Martinussen & Magnussen, 2011). We know from previous research that Norwegian physicians have resisted NPM-inspired reforms, and that they do not believe stated goals such as equality of access to care, medical quality and hospital productivity have been furthered by them. This belief is most strongly held by physicians who are not in management positions (Martinussen, Frich, Vrangbæk, & Magnussen, 2017; Martinussen & Magnussen, 2011). Divergent changes to management, organizational structures and overall goals and strategies may therefore be considered as organizational job demands for this group, thus possibly contributing to lower job satisfaction.

Organizational change may of course also bring positive emotions and opportunities for employee development and growth (Huy, 2002; Kiefer, 2005). There is, however, empirical support in the literature on
organizational change in health care for expecting change to impact employees negatively in terms of physical and mental health (Bernstrøm & Kjekshus, 2015; Hansson, Vingård, Arnetz, & Anderzén, 2008; Ingelsrud, 2014; Westgaard & Winkel, 2011). This is particularly true when the changes are related to management, organizational structures, overall goals and strategies as opposed to merely technological or related to new modes of patient treatment. Regarding job satisfaction, a systematic review of previous studies conclude that the results are mixed (Westgaard & Winkel, 2011). The majority of studies included in this review focused on nurses. Given our focus in the present study on physicians, and our understanding of the changes included in our data as often divergent to their medical professional logic, we believe that higher frequencies of organizational change will be a job demand related to lower job satisfaction.

We also argue that the organizational changes measured in this study are a demand which, in line with the JD-R model, may lead to lower work engagement, defined as “a positive and fulfilling work-related state of mind characterized by vigour, dedication and absorption” (Bakker et al., 2008, p. 187). Work engagement fosters extra-role performance (Schaufeli & Salanova, 2014). It may therefore contribute to reducing the prevalence of performance obstacles, as engaged employees are more likely to go the extra mile and contribute to finding workarounds that enable patient treatment despite the existence of performance obstacles (Debono et al., 2013) or solutions to eliminate performance obstacles. Reduced work engagement as a result of frequent organizational change may, conversely, lead to less such extra-role performance, and to the persistence of performance obstacles. If organizational change is indeed a job demand, it may also contribute to negative emotions for employees, which narrows cognitive skills and the employees’ ability to come up with workarounds and solutions (Fredrickson, 2001).
Participation in decision-making

Based on the centrality of autonomy and control in the logic traditionally inherent to the medical profession, and the divergent nature of organizational changes inspired by NPM, we are particularly interested in the role played by physician participation in decision-making in mediating the impact of frequent organizational change. Job resources are defined as those physical, psychological, social, or organizational aspects of the job that may be functional in achieving work goals, reduce job demands and their associated costs, or stimulate personal growth and development (Demerouti et al., 2001, p. 501). They are important tools in dealing with job demands and have a motivational potential, but are also important in and of themselves (Bakker & Demerouti, 2007).

Autonomy is considered a basic human need, and different conceptualizations of control as a positive job characteristic are central to several theories of the relationship between work and attitudinal employee outcomes such as job satisfaction as well as performance outcomes (Boselie, Dietz, & Boon, 2005; Evans & Davis, 2005; Karasek, 1979; Ryan & Deci, 2000). In the JD-R framework specifically, job control is included as a job resource located at the level of the organization of work (Bakker & Demerouti, 2007), and it includes not only autonomy over immediate tasks and time constrains but also participation in decision-making (Alarcon, 2011). Job control has consistently been found to be an important job resource for fostering motivation and engagement.

Participation in decision-making is a highly valued resource for physicians. This means that we can expect it to be positively related to job satisfaction particularly for this group, and it also points to the importance of exploring how frequent organizational change experienced by physicians is related to this specific job resource. According to the Conservation of Resources (COR) theory of stress, which is a foundation of the JD-R model, “individuals strive to obtain,
retain, foster, and protect those things they centrally value” (Hobfoll, Halbesleben, Neveu, & Westman, 2018, p. 104). COR theory defines resources as “those objects, personal characteristics, conditions, or energies that are valued in their own right, or that are valued because they act as conduits to the achievement or protection of valued resources” (Hobfoll, 2001, p. 339), and human motivation is fundamentally understood as driven by the accumulation and maintenance of these resources. If key resources are either threatened with loss, actually lost or significant effort fails to deliver expected resources, individuals will experience stress. Generally speaking, organizational change can be experienced as a threat since it poses a risk of losing valued resources such as status, income, or comfort (Dent & Goldberg, 1999; Hobfoll, 2001; van den Heuvel, Demerouti, Bakker, & Schaufeli, 2013). Organizational changes that take place in the wider context of a shift away from physician autonomy and self-regulation may lead to actual loss of the resource of participation in decision-making, or at least be perceived as a threat to this valued resource, leading to lower levels of well-being at work, lower engagement and negative emotions.

In addition to being a job resource which may contribute to reducing the prevalence of performance obstacles via employee motivation, work engagement and positive emotions as explicated above, physician participation in decision-making is also an aspect of what is referred to as medical engagement (Spurgeon, Barwell, & Mazelan, 2008). This form of engagement is conceptually distinct from work engagement and implies, among other things, the “active and positive contribution of doctors within their normal working roles to maintaining and enhancing the performance of the organization (…)” (Spurgeon et al., 2008, p. 214). Medical engagement may serve to distribute decision-making to a wider set of actors, thereby allowing a more diverse set of expertise and skills to contribute to problem-solving (Denis & Baker, 2015). Allowing decision latitude for physicians who are not in formal management
positions may therefore serve to decrease the prevalence of performance obstacles.

**Change-oriented leadership**

Leadership can be defined as “the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives” (Yukl, 2013, p. 7). The leadership practices of interest in this study are performed by hospital middle managers. These managers are hospital employees who are supervised by top management, and who themselves supervise frontline employees (Noble, 1999). They are responsible for organizing staff and patient treatment in individual departments. This leadership role is considered as particularly challenging, due to the high complexity of actors, competencies, interests and authority relations that characterize hospitals (Denis, Langley, & Rouleau, 2010).

Hospital middle managers are usually not the instigators of changes to management, organizational structures or overall goals and strategies, as these types of changes more often stem from the levels above the departments, such as hospital top leadership, regional health authorities or national health policy. Their leadership role is therefore largely to act as mediators between these higher levels and department level employees (Birken, Lee, & Weiner, 2012). In continuously changing contexts, leader behaviour and attitudes may be crucial to the way in which employees perceive, accept and are affected by change (Sanchez-Burks & Huy, 2009).

Many theories on leadership styles make a distinction between leaders who primarily focus on production and work tasks, and leaders who focus on staff relationships (Borgmann, Rowold, & Bormann, 2016). Recognising a need to further elaborate the task-relations dichotomy of leadership behaviours, Yukl argues that it is important to distinguish
between task-, relations- and change-oriented behaviours, because all of these three categories contribute to understanding effective leadership (1999; Yukl, Gordon, & Taber, 2002). Task-oriented behaviours are primarily concerned with the efficient and reliable accomplishment of tasks, and relations-oriented behaviours with increasing mutual trust, cooperation and employee identification with the team or organization. Change-oriented leadership behaviours include monitoring and interpreting the environment, envisioning new possibilities for the organization, explaining the need for change, suggesting new and creative solutions and experimenting with new approaches for achieving objectives, taking a long-term perspective on problems and opportunities, and negotiating for support from other actors on behalf of the department.

Change-oriented leadership may intuitively be associated mainly with leader initiation of a large number of changes. However, it is rather a leadership style characterized by being attuned and adaptive to the environment, explaining the need for change, and being skilled at processes of implementing changes. It is found to be related to leader effectiveness, and compared with task-oriented and relations-oriented leadership, it has the largest (and a positive) influence on job satisfaction (Borgmann et al., 2016). The source of stress related to rapidly changing work environments (in addition to the increased job demands outlined above) has also been found to be uncertainty and perceptions of poor change processes characterized by lack of consultation, information and management support (Brown, Zijlstra, & Lyons, 2006; Kiefer, 2005; Smollan, 2017), and affective resistance to change (Rafferty & Jimmieson, 2016). A change-oriented leader, who clearly communicates the reason for and content of change, may buffer the negative effects of continuously changing hospital environments by providing information in a convincing manner, thereby contributing to the employees’ individual sensemaking (Jimmieson, Terry, & Callan, 2004; Rouleau,
2005; Saksvik et al., 2007) and increased understanding of why new demands are introduced (Bakker & Demerouti, 2007).

Change-oriented leadership has also been found to have a significant, although small, effect on performance (Borgmann et al., 2016). In the case of performance obstacles, change-oriented leaders may be effective in reducing their prevalence due to their ability to search for and suggest new solutions to department level problems. The literature on change-oriented leadership outcomes does not, however, clearly define the role of employee autonomy as a mediator (Borgmann et al., 2016). Change-oriented leadership may be positively related to autonomy because change-oriented leaders solicit the advice of employees in finding new solutions, and facilitate participatory change processes leading to more employee involvement (Bryson, Barth, & Dale-Olsen, 2013; Greubel & Kecklund, 2011; Teo, Pick, Newton, Yeung, & Chang, 2013). This can lead to an experience of participation in decision-making in the work setting for employees.

**Conceptual framework**

Assuming that current organizational changes to management, organizational structures and overall goals and strategies are often divergent to the professional logic of physicians, and that hospitals are continuously changing organizations, this study asks the following research question:

*How are frequent organizational changes in hospitals and middle manager change-oriented leadership related to organizational and employee outcomes relevant to hospital service quality?*
Our study hypothesizes the following:

H1. Organizational change will be positively related to performance obstacles.
H2. Organizational change will be negatively related to job satisfaction.
H3. Change-oriented leadership will be negatively related to performance obstacles.
H4: Change-oriented leadership will be positively related to job satisfaction.
H5: Employee participation in decision-making will mediate the influence organizational change and change-oriented leadership has on performance obstacles and job satisfaction.

H5a. Organizational change will be negatively related to participation in decision-making.
H5b. Change-oriented leadership will be positively related to participation in decision-making.
H5c. Participation in decision-making will be negatively related to performance obstacles.
H5d. Participation in decision-making will be positively related to job satisfaction.
Methods

Research design, survey and participants

We collected the data for this study from four Norwegian hospitals in October 2014. The study adopted a cross-sectional web based survey design distributed via an internal web-application to all of the health authority’s 22,883 employees. The survey consisted of a range of validated questions tailored to a) carrying out a work environment survey commissioned by the regional health authority, and b) collect research data. We provided information about the research project in writing via the same application, so that employees received necessary information before responding. The aim of the present paper was to study physicians, and only physicians who do not hold management positions were
therefore included (N=556). The response rate for physicians was 24.5 per cent. Respondents gave their informed consent by turning in the questionnaire, and all survey responses were anonymous. The Norwegian Centre for Research Data and the relevant hospital committees approved the research.

**Measures**

*Organizational change* was measured using three items asking respondents to rate the extent to which various events (changes) had affected their organization within the past twelve months (Baron & Neuman, 1996). The events included were 1) changes to management, 2) reorganization and 3) establishment of new overall goals and strategies. The items were measured on a four-point scale ranging from “not at all” (1) to “to a great extent” (4). Cronbach’s alpha for the organizational change scale items was 0.75.

*Change-oriented leadership* was measured using six items that are part of Yukl’s (1999) framework of leadership styles. Examples of items are “my leader proposes new and creative ideas for improving products, services or processes” and “my leader clearly expresses what the organization can achieve or develop into”. The items were measured using a five-point scale ranging from “I strongly disagree” (1) to “I strongly agree” (5). Cronbach’s alpha for the change-oriented leadership scale items was 0.92.

*Performance obstacles* was measured using items developed from the structural quality indicators included in the national system of hospital quality indicators (NDH, 2019). The following four items were included in our survey: “Do you sometimes experience that patient problems are not treated because 1) the required equipment was not available? 2) the right competence was not available? 3) the organization of the work prevented it? 4) of insufficient staffing? The items were measured using

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4 Project number 33311.
a five-point scale ranging from “no” (1) to “yes, almost every day” (5). Cronbach’s alpha for the performance obstacles scale items was 0.80.

Job satisfaction was measured using three items from the Copenhagen Psychosocial Questionnaire (COPSOQ) (Kristensen & Borg, 2001). The items included were “How satisfied are you with 1) your job opportunities? 2) your opportunities to use your skills? 3) your job, all things considered?” The items were measured using a four-point scale ranging from “very dissatisfied” (1) to “very satisfied” (4). Cronbach’s alpha for the job satisfaction scale items was 0.77.

Participation in decision-making was measured using the autonomy scale of the Organization Assessment Survey (Dye, 1996). The following four items were included: 1) In my department, we get to influence the standards that constitute good work. 2) In my department, we often have the opportunity to influence goals or actions. 3) All employees in my department are involved in important decisions that affect them. 4) Employees have good opportunities for influence. The items were measured using a five-point scale ranging from “I strongly disagree” (1) to “I strongly agree” (5). Cronbach’s alpha for the participation in decision-making scale items was 0.92.

Data analysis

Basic descriptive statistics, bivariate correlations and Cronbach’s alpha were analysed using SPSS (2017). Bivariate correlations were used to analyse relations between variables. Cronbach’s alpha was used to assess internal consistency of factorial dimensions. AMOS (Arbuckle, 2017) was used for the remaining analysis. Confirmatory factor analysis (CFA) was carried out in order to ensure the validity of measurement concepts. CFA ensures concept validity by demonstrating that the overlap between each factor is acceptable. Further, the structural model was estimated using structural equation modelling (SEM). Using SEM allowed us to evaluate the relationships between the latent factors in the hypothesized
theoretical model. Bootstrap analysis (5000 bootstrapped resamples) was performed to estimate indirect effects and the mediating role of participation in decision-making (Hayes, 2013).

We used the following indicators to evaluate model fit in relation to CFA and assessment of the structural model: the root mean square error of approximation (RMSEA), the Tucker-Lewis index (TLI), incremental fit index (IFI), relative fit index (RFI), normed fit index (NFI) and comparative fit index (CFI). We defined RMSEA scores of less than 0.08 (Browne & Cudeck, 1992) and values of 0.90 or more for the other indicators (Hoyle, 1995) as indicating good fit.

Results

Descriptive statistics

Descriptive statistics are presented in Table 1. Statistical variation was considered to be satisfactory for all dimensions.

Table 1 – Descriptive statistics

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Scale</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational change</td>
<td>1-4</td>
<td>2.19</td>
<td>0.71</td>
</tr>
<tr>
<td>Change-oriented leadership</td>
<td>1-5</td>
<td>3.30</td>
<td>0.93</td>
</tr>
<tr>
<td>Performance obstacles</td>
<td>1-5</td>
<td>2.36</td>
<td>0.82</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>1-4</td>
<td>3.01</td>
<td>0.56</td>
</tr>
<tr>
<td>Participation in decision-making</td>
<td>1-5</td>
<td>3.07</td>
<td>0.87</td>
</tr>
</tbody>
</table>

Correlations

Correlations between the five latent factors, which were between −0.38 and 0.56 were low to moderate (Table 2). Organizational change was negatively correlated with job satisfaction (-0.19) and participation in
decision-making (-0.13). Organizational change was positively correlated with performance obstacles (0.22). Organizational change was weakly and negatively correlated (-0.10) with change-oriented leadership. Change-oriented leadership was negatively correlated with performance obstacles (-0.27), and positively correlated with job satisfaction (0.43) and participation in decision-making (0.56). Job satisfaction and participation in decision-making were negatively correlated with performance obstacles (-0.27 and -0.38 respectively), whereas participation in decision-making and job satisfaction were positively correlated (0.54). The correlations between job satisfaction and performance obstacles, and between organizational change and change-oriented leadership were not hypothesized in our theoretical model. All other correlations were consistent with our theoretical model.

Table 2 – Correlations among variables and Cronbach’s alpha in diagonal

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Organizational change</td>
<td>(0.75)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Change-oriented leadership</td>
<td>-.10*</td>
<td>(0.92)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Performance obstacles</td>
<td>.22**</td>
<td>-.27**</td>
<td>(0.81)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Job satisfaction</td>
<td>-.19**</td>
<td>.43**</td>
<td>-.27**</td>
<td>(0.77)</td>
<td></td>
</tr>
<tr>
<td>5. Participation in decision-making</td>
<td>-.13**</td>
<td>.56**</td>
<td>-.38**</td>
<td>.54**</td>
<td>(0.92)</td>
</tr>
</tbody>
</table>

Notes: ** Correlations are significant at the 0.01 level (2-tailed). * Correlations are significant at the 0.05 level (2-tailed).

Construct validity and internal consistency

CFA was carried out for the five latent factors and their respective indicators before testing the structural model. The latent factors were allowed to correlate in the model. The analysis indicated acceptable model fit (RMSEA=0.06, NFI=0.93, RFI=0.91, IFI=0.95, TLI=0.94,
CFI=0.95) (Table 3). Standardized factor loadings were satisfactory, ranging from 0.59 to 0.90. The internal consistency analysis show Cronbach’s alpha values ranging from 0.75 to 0.92 (Table 2). The homogeneity of factors was considered to be good.

Table 3 – Model fit descriptions related to the measurement and structural model

<table>
<thead>
<tr>
<th></th>
<th>RMSEA</th>
<th>NFI</th>
<th>RFI</th>
<th>IFI</th>
<th>TLI</th>
<th>CFI</th>
<th>Chi-square</th>
</tr>
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<tbody>
<tr>
<td>Measurement model</td>
<td>0.06</td>
<td>0.93</td>
<td>0.91</td>
<td>0.95</td>
<td>0.94</td>
<td>0.95</td>
<td>453.46</td>
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<tr>
<td>Structural model</td>
<td>0.06</td>
<td>0.93</td>
<td>0.92</td>
<td>0.95</td>
<td>0.94</td>
<td>0.95</td>
<td>454.71</td>
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**Test of the structural model**

All fit indicators were estimated within recommended thresholds supporting that the hypothesized structural model fit the data (RMSEA=0.06, NFI=0.93, RFI=0.92, IFI=0.95, TLI=0.94, CFI=0.95) (Table 3). Moreover, estimated beta coefficients generally support the underlying theoretical model and hypotheses (Figure 2), except for the relationship between change-oriented leadership and performance obstacles (H3) which was found not to be significant. Organizational change was directly and positively related to performance obstacles ($\beta=0.21$), supporting H1. Organizational change was directly and negatively related to job satisfaction ($\beta=-0.15$), supporting H2. Change-oriented leadership was directly and positively related to job satisfaction ($\beta=0.18$), supporting H4. Organizational change was negatively related to participation in decision-making ($\beta=-0.09$), and change-oriented leadership was positively related to participation in decision-making ($\beta=0.60$). Participation in decision-making was further negatively related to performance obstacles ($\beta=-0.39$) and positively related to job satisfaction ($\beta=0.47$).
Results from 5000 bootstrap replications showed that the hypothesized indirect effects were supported (H5): organizational change $\rightarrow$ participation in decision-making $\rightarrow$ job satisfaction (standardized indirect effect = -0.04; 95 per cent CI = -0.088, -0.003), change-oriented leadership $\rightarrow$ participation in decision-making $\rightarrow$ job satisfaction (standardized indirect effect = 0.28; 95 per cent CI = 0.197, 0.373), organizational change $\rightarrow$ participation in decision-making $\rightarrow$ performance obstacles (standardized indirect effect = 0.03; 95 per cent CI = 0.003, 0.077), change-oriented leadership $\rightarrow$ participation in decision-making $\rightarrow$ performance obstacles (standardized indirect effect = -0.23; 95 per cent CI = -0.317, -0.161).

Notes: NS=not significant beta coefficient ($p$>0.05). *Path is significant at the 0.05 level. Remaining paths are significant at minimum $p$<0.01 level.

Figure 2 – Estimated standardized path coefficients
Discussion and implications for practice

This paper aimed to answer the research question of how frequent organizational changes in hospitals and middle manager change-oriented leadership are related to organizational and employee outcomes relevant to hospital service quality. It explored the relationship between changes to management, organizational structures and overall goals and strategies, change-oriented leadership and the outcome variables of performance obstacles and the job satisfaction of physicians. Further, we were interested in how physician participation in decision-making mediated these relationships. We developed a theoretical model based on existing theory, but to our knowledge no other studies have tested these exact relationships within one model.

In summary, we found that the organizational changes in question were positively related to performance obstacles both directly and indirectly through participation in decision-making, meaning that more change was related to a higher prevalence of performance obstacles. Organizational change was also negatively related to job satisfaction, both directly and indirectly. Change-oriented leadership was negatively related to performance obstacles, but only indirectly through participation in decision-making, whereas it was positively related to job satisfaction both directly and indirectly. In the terms of the JD-R framework, organizational change appears to be a job demand, whereas change-oriented leadership and participation in decision-making are job resources. These findings offer insights relevant to current and ongoing developments in the health care field, and to the question of how hospitals may deal with continuous changes in ways that could contribute positively towards outcomes relevant to service quality.

As hospitals are subjected to increasing demands, reforms and policy changes, they have no option but to continuously change. A crucial question is whether these changes contribute to the improvement of
service quality. Former research on the effects of NPM-inspired reforms have identified disappointing results (Braithwaite et al., 2016; Christensen & Lægreid, 2011b). In our study, which is located at the department level, findings suggest that more change is actually related to a higher prevalence of performance obstacles. There is reason to comment on the direction of causality in this relationship. It could conceivably be true that hospital departments that have a high prevalence of performance obstacles are subjected to more change in order to solve these issues. We would argue that the changes we have included in the data – which are changes to management, organizational structures and overall goals and strategies – are not the type of changes decided on at the level of the individual departments where our respondents perform their work. We therefore believe it is more reasonable to interpret our finding as an indication that organizational changes, which in the current health policy climate are often motivated by cutting costs and increasing control and efficiency, may indeed create more work system performance obstacles in the form of inadequate staffing, insufficient supplies of equipment, and failure to organize the work in optimal ways. This interpretation of the causal direction is also supported by the argument of change as contributing to increased job demands as well as being a job demand in and of itself, and consistent with previous research which has shown that high-demand work environments for physicians have a negative impact on service quality (Krämer, Schneider, Spieß, Angerer, & Weigl, 2016).

A second, and equally crucial, question is how employees are affected by organizational change. Adding to an existing literature which has reported mixed results on the question of how organizational change in health care organizations impacts physician job satisfaction (Westgaard & Winkel, 2011), our study finds a significant and negative relationship, although the effect size is relatively small. Previous research has been criticized for not specifying the type of change it is concerned with, because different changes may cause different employee outcomes.
(Bernstrøm & Kjekshus, 2015). We have attempted to meet this criticism by including changes related only to management, organizational structures, overall goals and strategies, and related these changes to the wider literature on health care reform, the professional logic and physician reactions to reforms. Our findings suggest that these particular changes do negatively affect physician job satisfaction.

Our study is not a test of a comprehensive JD-R model, but we included the job resource of participation in decision-making as a meditator because of its assumed centrality to the profession in question, and because the literature on (institutional) changes in the health care field has been concerned with how such participation is changing in health care systems (Byrkjeflot, 2011; Funck, 2012). The test of the relationships between participation in decision-making and performance obstacles and job satisfaction resulted in some of the largest effects in our model. Regarding the negative relationship with job satisfaction, this finding stands somewhat in contrast to Mastekaasa’s (2011) study of the importance of autonomy to professional workers’ job satisfaction, including physicians. The autonomy measure in that study included being allowed to make a lot of decisions on one’s own, having freedom to decide how to do one’s job, and having a lot of say about what happens on one’s job. It was found to be no more important to physicians than to the general population, and less important than other job resources such as interesting work and social support. Our findings suggest that job control defined as participation in decision-making on issues of defining success criteria, goals and actions, and influence in decisions affecting the employees as well as having good opportunities for influence in general is actually quite important in relation to job satisfaction, and performance obstacles. We believe this is an argument for not underestimating the importance of facilitating physician participation in decision-making in hospitals.

Job resources are particularly important in fostering motivation and work engagement when job demands are high (Bakker & Demerouti, 2007;
Hobfoll, 2001). This point should be noted in the case of physicians, as their work is characterized by high demands in several different categories. In the survey on which this study is based, an analysis comparing the reported level of job demands (quantitative, learning and decision-making demands) for physicians and all other professional groups in the studied hospitals found that the score for physicians was highest among the groups in all three demand categories (HelseVest, 2015). This means that while we found a rather weak relation between organizational changes and the job resource of participation in decision-making in the present study, the fact that a significant and negative relation was indeed found could nevertheless have substantial negative effects for the well-being and performance of physicians due to their overall high demand work situation.

It should also be noted that our survey only asked respondents to report changes in the past 12 months. If the negative relationship between changes and participation in decision-making has been persistent over longer periods of time prior to our study, and continues beyond the year respondents reported on, the total effect on the job resource of participation in decision-making could be larger in a long term perspective. If this is the case, this development runs in the opposite direction of current calls for more medical engagement in hospitals (Spurgeon, Mazelan, & Barwell, 2011).

On the contrary side, however, boosting the job resource of participation in decision-making in a high demand context is also important, and our findings suggest that change-oriented leadership may contribute to do so. We believe this is an important finding in relation to existing literature on change-oriented leadership, as well as to managerial practice. Based on previous research, we expected change-oriented leadership to be positively related to job satisfaction, and negatively related to performance obstacles. While we found a relatively small direct relationship between change-oriented leadership and job satisfaction, and a non-significant relationship with performance obstacles, the
mediation of participation in decision-making in these relationships suggests that change-oriented leadership effectively influences these outcomes via participation in decision-making. This is a contribution to the leadership literature, as the role of autonomy as a mediator of change-oriented leadership outcomes has not previously been clearly established (Borgmann et al., 2016). The relationship between change-oriented leadership and autonomy in the form of participation in decision-making is in fact the strongest in our model. Different leadership is necessary for different organizational situations, and our findings support an argument for the importance of change-oriented leadership practices in work environments where demands are high, change is continuous and often divergent, and autonomy is both highly valued by employees, important to job satisfaction, and a contributor to organizational performance.

Our study focuses on outcomes at the department level, this is where middle managers perform their leadership, employees experience their opportunities for participation in decision-making and their job satisfaction, and performance obstacles are encountered. However, this is not the organizational level at which the types of changes we have measured are normally initiated. We did not hypothesize a relationship between change-oriented leadership and organizational change, because we do not believe it is reasonable to assume that change-oriented middle managers in hospitals meaningfully influence the initiation of changes to management, organizational structures or overall goals and strategies (Edling & Sandberg, 2013). Their responsibility is rather to implement, adapt and translate top management decisions (Williamsson, Eriksson, & Dellve, 2016). There is, however, a significant and negative correlation between organizational change and change-oriented leadership in our data, and it can be interpreted in two ways. First, change-oriented middle managers may be able to buffer their department from changes initiated at higher organizational levels, or able to prioritize which change initiatives to implement in their own department. In this interpretation, change-oriented leadership negatively impacts the
frequency of the types of change included in our variable. Second, causation could run in the opposite direction. In this interpretation, frequent organizational changes may reduce the opportunity for middle managers to perform their leadership in a change-oriented manner. Frequent changes, particularly of the kind that stem from NPM inspired policies, could impose too many demands on these managers for them to be able to prioritize these leadership practices (Wallin, Pousette, & Dellve, 2014). The content of these changes may also impact their decision latitude negatively, leaving them relatively more powerless in shaping a change-oriented leadership at the department level. If this is the case, it is problematic based on what we know from previous research about the positive effects of change-oriented leadership on a variety of outcomes, and based on the constructive relationships with both organizational and employee outcomes identified in this study.

In conclusion, we believe it is relevant to connect our findings to the identified need for medical engagement in improving health care quality. Medical engagement implies the involvement of physicians in organizational issues as well as in the professional work of treating patients. We have argued that participation in decision-making is an aspect of such engagement. Such opportunities for taking part in and influencing organizational decisions further implies a distribution of leadership to a wider group of actors than formal managers only, and a potential for bringing a more diverse set of knowledge and competencies into decisions on issues important to quality outcomes (Denis & Baker, 2015). This is particularly important in highly complex organizations such as hospitals, where different actors are highly specialized within different professional fields (Denis et al., 2010; Fitzgerald, Ferlie, McGivern, & Buchanan, 2013). This constructive relationship between medical engagement and quality outcomes has been documented in previous research (Spurgeon et al., 2011), and our findings suggest the same effect. It could therefore be argued that in order to increase or at least maintain service quality, organizational changes should be aimed at
encouraging physician participation in decision-making rather than serve to impede it. Further, the medical engagement concept as defined by Spurgeon and colleagues (2008) implies not only participation from physicians in organizational issues, but also a recognition of this participation from the organization. Our findings suggest that giving hospital middle managers capabilities and opportunities to exercise change-oriented leadership at the department level may be a valuable strategy to fulfilling this recognition.

**Limitations and implications for future research**

Our study has certain limitations. First, the cross-sectional nature of the design does not allow us to offer conclusive results as to the causal direction of the tested relationships. While the theoretical framework we have used to build our hypothetical model and previous research support our arguments, a longitudinal design testing developments over time could offer more certain findings. Second, the overall response rate of 24.5 per cent suggests that we cannot be sure that the selection of employees who responded are completely representative of all hospital physicians. Having analysed the respondents against known hospital demographics, we are not aware of any systematic biases in the sample. It should be noted, however, that a survey taking 40 minutes to answer, distributed in a hectic organizational reality, may not be answered by those who are under the greatest amount of job demands, stress or pressure. It may also be that those who did answer skew towards being more loyal to the organization than those who did not. The sample is physicians working in a Norwegian hospital context and more research needs to be conducted to generalize the findings to other cultural settings. However, there are similarities in the development of the health care sector internationally, and we believe the issues discussed in this study will be of importance in other settings as well.
Third, while the variable of organizational change is restricted to including changes that are a) typically initiated at levels higher than the department and b) often divergent in nature vis-à-vis a professional logic in the hospital context, the measure does not reveal specifics about who initiated the change, or its specific content. There are also limitations to self-reported measures of change, as individuals experience and make sense of changes in different ways (Rafferty & Griffin, 2006). Future studies including a more content-specific and objective measure of organizational change could offer valuable and more refined insights into the relationships tested in our model.

Finally, although we do not include other job demands, engagement or emotions as mediating variables in our model, the hypothesized relationships we present have a solid foundation in previous research on these mediators, and serves to complement existing literature on the impact of organizational change on employee and performance outcomes in hospitals. The relationship between participation in decision-making and performance obstacles is among the strongest in our tested model. In order to increase our understanding of how participation in decision-making contributes towards health service quality, both quantitative studies including more mediating variables such as motivation, positive emotions or work engagement, and qualitative studies of participatory processes could provide findings valuable both to the literature on medical engagement, and to managerial practice.

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Paper 1 – Changing to improve? Organizational change and change-oriented leadership in hospitals


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Paper 1 – Changing to improve? Organizational change and change-oriented leadership in hospitals

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Paper 2

Establishing a multidisciplinary day-care surgery department: Challenges for nursing management.

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Authors
Olaug Øygarden, Doctoral Research Fellow, University of Stavanger
Rune Todnem By, Professor, Staffordshire University
Gunhild Bjaalid, Doctoral Research Fellow, University of Stavanger
Aslaug Mikkelsen, Professor, University of Stavanger

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Establishing a multidisciplinary day-care surgery department: Challenges for nursing management

Olaug Øygarden1, Rune Todnem By2, Gunhild Bjaalid1, Aslaug Mikkelsen1

1University of Stavanger, Stavanger, Norway
2Salford University, Salford, UK

Abstract

Aim: To increase our understanding of challenges in implementing multidisciplinary organisational models in hospitals.

Background: Health-service policies internationally are pushing for multidisciplinary and patient-centred organisational models but there are challenges involved in moving from profession- and discipline-based organising to the new solutions.

Method: Qualitative case study, interview and document data collected in real time following the implementation process.

Results: It was possible to argue for and against the new department applying either a business-like logic or a professional logic. The respective logics gave different prescriptions for how a hospital department should be organised.

Conclusion and Implications for Nursing Management: The institutional logics perspective enables managers to understand resistance to new ways of organising work and may be useful in trying to foresee and handle challenges in implementing new organisation models. Managers need to analyse models carefully in terms of which parts may be seen as problematic in their own organisation and invite all relevant stakeholders into participatory change processes. If the goal is to gather multiple professions and disciplines under one manager in order to increase patient centredness, arrangements must be made for professionals to stay connected to the wider community of practice centred around their specialised knowledge and skills.

Keywords:
health service professionals, hospital departments, institutional logics, multidisciplinary nursing management, organisational change

1 INTRODUCTION

This case study follows the establishment of a day-care surgery (DCS) department at a Norwegian hospital. The hospital leadership set out to create a multidisciplinary, patient-centred department where elective surgery was shielded from emergency operations in order to increase effectiveness and efficiency. The study explores challenges for nursing management in implementing and managing such a department.

The hospital setting has been described as a particularly “messy” world where multiple groups representing a wide range of values, interests, and expertise compete for influence (Denis, Langley, & Roffeis, 2010). An important differentiation runs along the divide between medical and managerial staff and cultures, representing what is often described as distinct, opposing, and mutually exclusive logics (Lewelyn, 2011). The business-like logic is presented as a driver in the current search for more cost-efficient and patient-centred ways of organising health services.

While health-service policies internationally are pushing for multidisciplinary and patient-centred organising models, there are challenges involved in moving away from professional and discipline-based organisating. Traditionally, the most powerful professional...
group in hospitals, the physicians, have been able to successfully resist changes that break with profession-controlled organising models (Currie, Lockett, & Finn, 2012). This case study focuses on challenges for nursing management by documenting reactions from nursing disciplines to the new organising model of the DCS department, describing the organising model that was eventually implemented, and highlighting the challenges embedded in this model. We use concepts from institutional theory to understand the case studied.

2 | RESEARCH SETTING

The list below presents the objectives of the new department:

- Increase operational capacity;
- Reduce waiting lists for surgical patients as measured by average waiting time;
- Correct hospitalised patients to day-care treatment measured by the percentage increase in DCS annually;
- Reduce number of cancelled surgeries;
- Halve the movement of patients choosing other hospitals with shorter waiting times for their procedures;
- Provide faster treatment and reduce risk of infections;
- Provide efficient patient care;
- Secure satisfied patients;
- Increase employee satisfaction.

The DCS had higher productivity targets and more professional groups gathered under one manager than was the case in the existing model in the hospital. However, conflicts regarding the intended multidisciplinary organisating model in which all professional groups were to be gathered under one manager made it necessary to adjust the intended model.

3 | THEORY

Traditionally, hospitals operate as an intricate web of role divisions between physicians, nurses, specialists, support staff, and managers. There are also subgroups within each group based on seniority, expertise levels, and disciplinary specialties, each of which may operate in a distinct community of practice (Currie et al., 2012; Ferlie, 2001).

Institutional theory is one of the leading perspectives in organisational studies (Heugens & Lander, 2009). Institutions are defined as "those (more or less) enduring elements of social life that affect the behaviour and beliefs of individuals and collective actors by providing templates for action, cognition and emotion, non-conformity with which is associated with some kind of costs." (Lawrence, Suddaby, & Leca, 2011, p. 33). Institutional logics guide the behaviour of actors through assumptions, values, beliefs, and taken-for-granted rules (Friedland & Alford, 1991; Roney & Hinings, 2009).

Thornton & Ocasio (1999). The logics link social-level institutions with organisations and individual action, and form the basis for a sense of common purpose and unity within an organisational field (Roney & Hinings, 2009; Thornton & Ocasio, 2008). When individuals or organisations identify with an institutionalised group, such as a profession, they are more likely to cooperate with the group by following its norms and prescriptions (Thornton & Ocasio, 2008).

The professional, market, and corporate logics are three, distinct ideal-type institutional logics (Thornton, Ocasio, & Lawrence, 2012). The market and corporate logics are sometimes combined in descriptions of the health care field as business-like (Roney & Hinings, 2009). Nurses have been identified as adhering to a professional logic (Kristiansen, Obstfelder, & Lackenbring, 2015; Van den Broek, Basile, & Peaure, 2014). Traditionally, the medical professional logic has entailed autonomy and authority over the clinical context and organisation of medical practice (Martin, Currie, Weaver, Finn, & McConnel, 2017; Roney & Hinings, 2009). Consideration of costs has been secondary to autonomy and time spent directly on patients, providing the best possible care (Kitchener, 2002).

To move towards a more business-like health care field has challenged this logic. The market logic represents competition among service providers and the use of market signals to improve services and contain costs, whereas the corporate logic represents the managerial control of professional activities through performance management regimes. Standardisation, surveillance, and audit (Molare et al., 2017). The move towards a corporate logic has been more prominent than the market logic influences in Norwegian health care (Kristiansen et al., 2015), but while standard competition plays a very limited role in this national health system, policies for patient choice, activity-based funding, and private providers contracting indirectly introduce competition (Brokke & Jønne, 2017).

The cultural rules and cognitive structures associated with each logic shape organisational structures by focusing the attention of decision makers on issues and solutions, such as alternative organisational forms that are consistent with the prevailing logic (Friedland & Alford, 1991; Thornton & Ocasio, 2008). A professional logic will influence not only decisions about clinical patient treatment and care but also opinions and decisions about how to organise services, most probably according to the principle of multidisciplinary departments. Decision makers influenced by a business-like logic will strive to organise professionals for maximum efficiency as defined by the number and measured quality of treatments, and put customer demands in the centre when organising services.

The health care field is influenced by competing logics (Roney & Hinings, 2009; Thornton & Ocasio, 2008). The actions of physicians and nurses tend to be based on professional logic, whereas managers and directors adhere to the business-like logic (Ruet & Scott, 1998). It is challenging and often conflictual for organisations to operate in fields where several logics compete for influence (Piache & Sonnac, 2015). When rivalry is caused by the implementation of a new organising model, as in the case of attempting to reorganise health care professionals into multidisciplinary departments, professionals may also work to maintain or strengthen their positions.
by maintaining their existing organisng model (Carrie et al., 2012). Physicists, the only traditionally most powerful professional group (Battilana, 2011; Mancarew & Borthwick, 2003), have proven able to fend off attempts at introducing new logos to their field (Resy & Hinnings, 2009). However, actors who do not hold traditional elite positions are also active in shaping the organisational outcomes of change (Battilana, 2011; Kristensen et al., 2015).

This study focuses on challenges for nursing management in introducing new organisng models, the role of nursing staff reactions in shaping change outcomes, and the challenges embedded in the organisng model that resulted from conflicts and compromises on the intended, multidisciplinary model. We ask what were the arguments for and against the establishment of the multidisciplinary DCS department, and how did these relate to the professional and business-like institutional logics? This first research question regards the challenges, and their underlying rationales. In our second research question we ask how did the resulting organisng model bridge the challenges, and what were the challenges embedded in it?

4 | METHODS

4.1 | Research design and data collection

This was a qualitative case study with the unit of analysis being a single, within-site case (Creswell, 2012). An interpretive approach has been adopted, empirically investigating the experience of the participants through semi-structured interviews and documents produced by stakeholders. The research approach was initially inductive, to capture the organisational activities and to link theory to the experience of the practitioners (Bansal & Coohey, 2012; Giddens & Hotipred, 1991). Further analysis was undertaken iteratively going back and forth between data and established theories (Bryman, 1994).

Real-time data were collected from October 2013 until May 2015. The stakeholders involved in the implementation process were identified as the regional health authority as hospital owner; the director of the surgical division in a capacity as project owner; a project manager in charge of the process; the director of the medical division; physicians representing endocrine, orthopaedic, urology, gynaecology and anaesthesiology specialties; registered nurses and nurses with specialties in surgery and anaesthesiology; and secretarial staff. The existing DCS department, as well as the home departments of the professional groups were heavily involved in the process. We collected data from all stakeholder groups in interviews during the project phase and the first year of operation and by attending project meetings where representatives from all groups were present. Interviews were performed by the lead author, who is a trained clinical and organisational psychologist and a PhD student in management studies at the time of the data collection. She had specific experience with interviewing hospital management and staff about issues of organisational change from previous data collection in the same health region, and was also the person who attended project meetings in the DCS implementation process. Two group workshops with DCS regular staff were conducted in the new department’s first operational year, where challenges and positive experiences of working in the new organisng model were discussed in groups and summarized in plenum. These workshops were facilitated by the first and third authors.

The data consisted of 15 semi-structured interviews, written input from the staff workshops, and project documents that provided further insight into the process preceding the start of the research. Interviews ranged between 30 and 70 min in length. The informants were chosen after a stakeholder analysis and came from all relevant hospital departments affected by the new DCS, and from all administrative departments having a role in the process. Informants were selected based on their organisational positions, making sure that those especially relevant to the project were interviewed. Interviews with informants directly involved in the change process were conducted during the fall and winter of 2013–2014. The male goals identified in project documents were implemented in the interview guide. The informants were asked about the background for implementing the new department, they were asked to share their arguments in favour of or against the chosen model and their thoughts about the department goals, to describe their experience of the change process, what had worked, what the challenges were, and how the challenges had been handled. Department employees and the department manager were interviewed starting 5 months after the department had opened. They were asked about the background of the new department, the multidisciplinary model, and what the successes and challenges were so far. In workshops, all regular staff members were divided into groups and discussed and presented their opinions on what worked, what the challenges were, and how challenges could be solved regarding being in a new location, the personnel situation, work flow, potential conflicts, collaborating with the main hospital, and their internal culture. The interviews took place in the participants’ normal work environment; the interview guide consisted of open-ended questions, and the interviews were adapted to each situation and participant.

Although the number of interviews was low, we are confident that the important themes were captured. The number of stakeholders directly involved in the implementation project was also relatively low. All of the parties and professionals involved were either interviewed or observed repeatedly in project meetings by one author. The analysis of project documents also strengthens our confidence in the findings: 190 pages of project documents including goal, risk analysis and planning documents, internal information newsletters, e-mail exchanges and project committee meeting minutes were collated. Finally, the group workshops, including all regular DCS staff as participants, allowed us to gain insight into the experiences of those working in the department. In sum, we consider the data to be appropriately saturated (Glaser & Strauss, 1967).

The research project was approved by the Norwegian Centre for Research Data. All interviewees, meeting participants and workshop attendees were informed about the project intent and extent, and consented to participating.
Paper 2 – Establishing a multidisciplinary day-care surgery department: Challenges for nursing management

4.2 Data analysis

The data analysis was performed by the first author. The qualitative data analysis software NVivo was used to code and sort the data, but none of the automated coding functions were used. Hence, all of the data were carefully considered by the first author. There was no pre-defined coding tree or template at the outset of the analysis but, instead, the broad question of what drove and hindered the implementation of the department was used as a guiding focus. First, a preliminary, mainly inductive analysis of the data was undertaken noting key issues. The difficulty of organising the different disciplines under one umbrella stood out as particularly challenging, and hence as a theme for further analysis. The second step included a narrative analysis of raw document data and interview data, where the focus was the emerging purpose of the research, tracing the story of why gathering multiple disciplines under one manager was so complicated. A chronological account of the process and the preceding history up until the opening of the new department was established based on document data. Furthermore, a narrative pulling together accounts provided by each of the research participants was generated to create a thick description of the process and its main issues (Langley, 1999; Lincoln & Guba, 1985).

Further, first-order concepts that revealed themes and patterns in the data were identified (Kock & Chitwood, 1995; Van Maanen, 1979). The trustworthiness of the specification of issues was ensured by discussion with a key informant, triangulation of data, and constant comparison within the data set (Glaser & Strauss, 1967). By combining first-order concepts to construct a set of second-order themes, a more abstract and robust description of the arguments was established. Firstly, this iterative but largely inductive description was subjected to analysis using concepts from institutional theory. In sum, this method of analysis resulted in a data tree that was constructed inductively from the data (see Tables 1 and 2).

Data collection was performed by the third author and the analysis was done by the first author but concepts, issues, and themes were discussed among the authors throughout the whole research process. The longitudinal design, and the repeated contact with a key informant, enabled us to compare emerging issues of interest constantly. In instances of disagreements on how to interpret the analysed data, the first author would go back to the data and to related literature to consider the evidence arena. In this way, we sought to admit an awareness of potentially disconfirming evidence throughout the research process from data collection until we reached our conclusions.

5 FINDINGS

5.1 What are the challenges? Arguments and their underlying logics

Medical and technological developments make it possible to organise surgical treatment in a location external to the main hospital with a multidisciplinary organisational model. The existing department was too small and not functional, and the hospital building itself had no available space for a new department. Resources had been added in terms of a temporary increase in rates that the hospital received for performing DCS treatments, and some extra staff positions.

In addition to this, increasing patient demands regarding receiving efficient treatment without having to wait long were considered as driving the hospital towards the new DCS model.

There are trends related to organisating everyone knows that, and all these directors they travel and see other places. And it’s something that you read about. And this idea for organising in centres has come as a result of patients feeling like they are being shuffled around the system between different professions. So there needs to be a holistic, you need to see the patient holistically and not just as an organ, and not send them to one department after another. (Nurse anaesthesiologist)

The division director and the project manager highlighted arguments regarding efficiency and the economic goals of increasing the capacity, efficiency, and volume of day-care surgical activities, reducing waiting times for patients, retrieving patients who were currently going elsewhere causing the hospital to lose reimbursement income, reducing costly overnight stays, and shielding elective services to avoid cancellations.

We need to become more efficient, and streamline our processes. That way we can reduce the waiting times for patients’ surgeries. (Project manager)

They also perceived the organisation of professionals around the patient as a way of moving the focus to patient needs. By gathering multiple professional groups in one department under one manager, there would be clear lines of leadership and communication, increased levels of collaboration, and unnecessary divisions between the groupings in terms of task distribution.

We will contribute with our specialties in a community around a patient. That’s the department I wanted to create. (Project manager)

The importance of—and positive influence associated with—efficiency, economic goals, patient centredness, and multidisciplinary represents a business logic (Kristiansen et al., 2015; Løgstrup, Oppedal, & Stigen, 2005; Reay & Hingins, 2009). Table 1 provides a full presentation of the arguments in favour of the new organisational model.

The decision to create the dedicated DCS with a multidisciplinary organisational model at a location separate from the main hospital was met with resistance from nurse specialists. Some were hesitant about the attractiveness of working exclusively with DCS, as it was considered less diverse and exciting than the work in...
**TABLE 1** Arguments in favour of the new department: first-order concepts, second-order themes and aggregate dimensions

<table>
<thead>
<tr>
<th>First-order concepts and example quotes</th>
<th>Second-order themes</th>
<th>Aggregate dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical developments... It really is developing so fast. From when they begin to plan this more and more consumers can be handled by day care surgery, you know. You know that... a few years ago, I would not have even thought that you could have breast cancer surgery and go home that same day. I would have thought “oh... awful”. I would have thought that cannot cope. But, you know, development moves along. So I’m thinking that they... that this idea has grown over time. (Project manager)</td>
<td>Progress in methods</td>
<td>Technology and resource factors in organisational field</td>
</tr>
<tr>
<td><strong>Technological developments</strong></td>
<td></td>
<td></td>
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<tr>
<td>It’s made me think also about that type of centre and positioning. They make it work in other places. In radiology, with one intervention technology, radiologists and medical specialists are sitting together, working. Where the patient is. And that’s a bit of the idea around the centre. So it’s really the technology which is also driving the ways to think. (Project manager)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in funding for DCS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When they started this process, there was a lot of money put in increasing the rates paid for day care surgery in order to free up space in the hospital. (Project manager)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in DCS staff in order to go through with this (the new DCS department). (Project manager)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing department too small and not functional</td>
<td>Space constraints</td>
<td>Resource factors in organisation</td>
</tr>
<tr>
<td>In my line, the existing DCS department has been re-built and expanded, but it quickly became too small again. (Senior consultant, existing DCS department)</td>
<td>In existing department</td>
<td></td>
</tr>
<tr>
<td>Not possible to find new space inside the hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It’s too small here, there’s no space (The project manager)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other hospitals building up their DCS departments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>So, the hospital of the future will be more directed towards DCS! Yes, that’s right. And where is that future serving? In other countries, it’s already there. (Head nurse, existing DCS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private hospitals are more efficient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I believe that when public hospitals have visited private providers, and heard how good they are at getting a lot of patients through, the public now say “well, there’s a lot of money to be made here for us”. Or small. (Senior consultant, existing DCS department)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A trend towards shifting/planing activity from acute care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There’s been this trend that they want to shift what is planned activities, you know? (Project manager)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managers travel to study other hospitals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All these directors, they tried to around to see other places. (Project manager)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient demands</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most patients think it’s wonderful to have to stay in the hospital - they get to go home. (Project manager)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner and hospital board demands</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elderly is project documents</td>
<td>Clear signals from top management</td>
<td>Address the logical arguments</td>
</tr>
<tr>
<td>Director of surgical division determined to deliver on demands</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thus it succeeded. And the results target set are incredibly tough, and the number of patients treated has to be delivered. And it has to increase. (Director of surgical division)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Continued)
TABLE 1 (Continued)

<table>
<thead>
<tr>
<th>First-order concepts and example quotes</th>
<th>Second-order themes</th>
<th>Aggregate dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased capacity, efficiency systems of DCS activities</td>
<td>Efficiency and economic goals</td>
<td></td>
</tr>
</tbody>
</table>

We had to do something because the capacity was too low. (Director of surgical division)

It’s easier to use resources more efficiently than what is currently happening in the hospital; that’s part of the point. (Project manager)

Reduce waiting times

Efficiency is not just something that is supposed to make money for the hospital; it’s also in order to provide treatment to patients without them having to wait long. (Project manager)

Relieve patients who are currently going elsewhere

We have a lot of patients who are travelling out of the county in order to receive DCS treatment. (Director of surgical division)

Reduce overnight stays in the hospital

That way, it’s possible to save a lot of overnight stays in hospital which is – at least in our case, probably in a lot of other places too – overburdened by patients just staying and staying there, taking up a lot of space and resources. (Senior consultant, existing DCS department)

Shift elective services

So, it’s in order to shift that activity, get through more procedures, get it to become efficient, yes – stream line the treatment pathways. (Project manager)

Organising professionals around the patient

We should organise our staff according to the services they are responsible to our population. (Director of surgical division)

Increased patient contact

Focusing on patient needs

Here, the patients will get smart solutions, efficient solutions and feel like they’re taken well cared of, get a top-quality treatment service. (Project manager)

Clear lines of leadership and communication

They [in existing DCS] want a clearer line of communication because that’s partly what they are struggling with today; they have three or four managers and no one can point to who’s in charge there. (Project manager)

Professionals will be working as one, unified team

Avoiding separate groupings

We are going to work together; the different professional groups. New disciplines are coming in, and we have a new building; we are going to think in a way where we’re not like those people eat their lunch over here, those people are over there and those people are over there. We are going to be an “us.” (Project manager)

Increased collaboration and multidisciplinary teamwork

We’ve come a long way, because now how much to create a unit that includes all professional groups except the physicians. If it had been any other hospital at one site, you would need one manager for the surgical nurses, one manager for the registered nurses, one manager for the nurse anaesthetists, one manager for draw-up, and one manager for secretarial staff. If you asked them who’s in charge of the DCS? all the would say “It’s me.” you know? Because it seems like this is overall. It’s actually a plant level. (Director of surgical division)

Less strict task division among separate professional groups

...having a common manager in order to establish a new centre with new ways of working and efficiency cooperation and great solutions for the patients – it’s an advantage to be organised in the same department. Pulling the weight together, having everyone as part of the same team. (Project manager)

nurses, and we work closely with them, but we have a different profession. (Anaesthesia department head nurse)

And I think there is an honest fear that their professional competency will be reduced. That their opportunity to do structured competency building and always secure that they can perform their services in the best possible way, that will weaken. I think that’s a real fear. (Director of the surgical division)

The anaesthesia staff is spread all over the hospital. They are not tied to surgical work exclusively. In order for that whole puzzle to work, it would be good to keep them as one group. Because that means less strain. People are very happy with working in different places. (Nurse anaesthetist manager)

These arguments were all associated with a professional logic of letting the organising of health care services be guided by the professionals’ needs and priorities (Riley & Hargreaves, 2009). Table 2
TABLE 2 Arguments against the new department: first-order concepts, second-order themes, and aggregate dimensions

<table>
<thead>
<tr>
<th>First-order concepts</th>
<th>Second-order themes</th>
<th>Aggregate dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCS work is not attractive</td>
<td>DCS work not attractive</td>
<td>Professional logic arguments</td>
</tr>
<tr>
<td>DCS work seems more action</td>
<td>DCS work not attractive</td>
<td>Professional logic arguments</td>
</tr>
<tr>
<td>[Note: will say that in the new DCS there will be too few challenges, not enough excitement, not enough action, not enough pressure]</td>
<td>DCS work not attractive</td>
<td>Professional logic arguments</td>
</tr>
<tr>
<td>DCS work tasks are demanding</td>
<td>DCS work not attractive</td>
<td>Professional logic arguments</td>
</tr>
<tr>
<td>Anaesthesia is an art. Doing it just right, up there at central operations, you can bring medication into each patient. And then they live. And after it doesn't matter if they're a little green out in the post-op department. They can come back slowly. Whereas down there (the new DCS department), you have to control it so that they (nurses) are awake after the surgery is over. [Senior consultant existing DCS department]</td>
<td>DCS work not attractive</td>
<td>Professional logic arguments</td>
</tr>
<tr>
<td>A small and too diverse working environment. What's really important about working in a hospital [is the] the enormous diversity. You encounter it on your way to the cafeteria. You'll lose that part of the job. Meeting people that you haven't seen in a very long time and all that. So, you'll have some of that. [Project manager]</td>
<td>DCS work not attractive</td>
<td>Professional logic arguments</td>
</tr>
<tr>
<td>Risk to patient safety. Discussed repeatedly in project meetings.</td>
<td>DCS work not attractive</td>
<td>Professional logic arguments</td>
</tr>
<tr>
<td>Identity and a sense of belonging to “another departments”</td>
<td>Identity and a sense of belonging to “another departments”</td>
<td>Resistance against external location</td>
</tr>
<tr>
<td>It's about a threat to identity. And that's dangerous, in the sense that such a strong feeling of identity is also an important value and a transitional pill in the health service. [Director of surgical division]</td>
<td>Identity and a sense of belonging to “another departments”</td>
<td>Resistance against the multidisciplinary organising model</td>
</tr>
<tr>
<td>Traditionally each discipline controls its own staff resource</td>
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<td>Resistance against the multidisciplinary organising model</td>
</tr>
<tr>
<td>The anaesthetics staff is spread all over the hospital. They are not tied to surgical work exclusively. broader for that whole puzzle to work, it would become hard to keep them as one group. Because that might mean less strain. People are very happy with working in different places. [Anaesthetics manager]</td>
<td>Traditionally each discipline controls its own staff resource</td>
<td>Resistance against the multidisciplinary organising model</td>
</tr>
<tr>
<td>Suspicion towards being managed by other disciplines</td>
<td>Suspicion towards being managed by other disciplines</td>
<td>Resistance against the multidisciplinary organising model</td>
</tr>
<tr>
<td>[They said] We cannot be managed by a medical group. And they actually can't. It's as simple as that. And it has nothing to do with... we like surgical nurses, and we work closely with them, but we have a different profession. [Anaesthetics manager]</td>
<td>Suspicion towards being managed by other disciplines</td>
<td>Resistance against the multidisciplinary organising model</td>
</tr>
<tr>
<td>Fear of reduced competency building. And then there is an honest fear that this professional competency will be reduced. That their opportunity to do a multidisciplinary building, and always ensure that they can perform these services in the best possible way that it will weaken. I think that's a real fear. [Director of surgical division]</td>
<td>Fear of reduced competency building. And then there is an honest fear that this professional competency will be reduced. That their opportunity to do a multidisciplinary building, and always ensure that they can perform these services in the best possible way that it will weaken. I think that's a real fear. [Director of surgical division]</td>
<td>Resistance against the multidisciplinary organising model</td>
</tr>
</tbody>
</table>

Provides a full presentation of the arguments against the new organising model.

5.2 The resulting model: compromise and challenges

With regards to line management, it was considered impossible to suggest that physicians be managed by the new department manager. Hence, this was not attempted. Physicians were not to be included in the department's regular staff but, rather, they would be on rotation from their home departments. The remaining staff, including registered nurses, nurses with specialties in surgery and anaesthesiology, and secretarial staff, were to be brought together as one multidisciplinary department staff reporting to one department manager in the new DCS.

Both surgical and anaesthesiology nursing specialists were opposed to being managed solely by the DCS manager. The surgical nurse group and its manager in the hospital eventually conformed to the new model after pressure from the division director. The nurses anaesthesiologist group and its manager, on the other hand, resisted to the point that a compromise had to be reached, and they were able to keep most of their staff in their own department. After time-consuming and contentious negotiations between the project manager and the head nurse anaesthesiologist, the resulting model was a compromise where three nurses would belong to the new department, whereas the rest would be on rotation from the hospital. For the nurses who would belong to the new department, they would stay linked to their professional community in the hospital and follow the same procedures, guidelines, and competency building processes as the nurses based at the main hospital.

In the department's first year of operation a few challenges stood out. Staff members reported that there was a sense of turf wars developing—one consisting of the nursing staff that was employed by the new unit, and one consisting of the nurses who were on rotation from their home department. There were also challenges related to staff shortages in the anaesthesia department, as it was not always able to offer a sufficient number of nurses to the DCS department. There was also a sense that the
conflict over the organizing of these nurses during the project period had left scar that made the collaboration between the two departments difficult. Nurses belonging to the new department received insufficient assistance in instances when they had to bring patients from the DCS department to the hospital surgical department, and the DCS department manager sometimes experienced the anesthesiologist manager as less than helpful in staffing issues.

6 | DISCUSSION

After attempts had been made for several years to strengthen the hospital's DCS activities, and after previous attempts to put a new department into effect had failed, the new multidisciplinary organizing model was finally implemented. Interprofessional collaboration is a key element in achieving greater integration between the different parts of health care services. Several studies find that such collaboration fails short of achieving the intended level of information and knowledge sharing. Disciplinary roles and boundaries, professional autonomy, and the disproportionate power relations between physicians and other health service professional groups have been pointed out as an important reason for this (Auwul & Calewel, 2002; 2006; Gaddell & Wikström, 2016; Kamin, Brault, Van Durme, & Maes, 2018; Ohm & Dowse, 2010). The literature on interprofessional collaboration is largely based on studies of multiprofessional teams bringing together individuals from a wide range of health and social care professions that may be employed by different departments or organisations in order to translate knowledge across professional boundaries and avoid fragmentation of services for particular groups of patients or clients (Gaddell & Wikström, 2016; Ljrp & Andersson, 2011; Ohm & Dowse, 2010). Our study, however, highlights challenges for nursing management in implementing and managing a department where several disciplines within the single profession of nursing were to be combined under common management.

6.1 | The Implementation challenge: conflicting logics—both of which make powerful arguments

In primary health care, shifting towards multidisciplinary models for organizing care has been found to be agreed upon as a good idea by both managers and health professionals but adoption is slow (Bey, Goodrick, Casebeer, & Mings, 2013). This case study is illustrative of how agreement on general goals of strengthening certain aspects of hospital services, such as a more patient-oriented DCS service is challenged by the realities of actually having to adopt new organizational structures.

Analyzing arguments for and against the new organizing model illustrates how institutional logics impacted on the implementation process. It was possible to place arguments within either a business-like logic or a professional logic. In studies of institutional logics in healthcare a division is sometimes drawn between physicians who base their actions on a logic of care and nurses who base theirs on a logic of care (Andersson & Ljrp, 2018). In this study, however, we found that managers and directors argued on the basis of a business-like logic whereas physicians and nurses both argued similarly on the basis of a professional logic which foregrounded the organizational and competence needs of their professional group. This similarity between physicians and nurse arguments may be an indication of the move towards a higher nursing professional status (Currie, Fins, & Martin, 2016; Fins, 2014). The business-like and professional logic arguments gave different prescriptions for how a hospital department should be organized.

Motivated by a professional logic of organizing work based on what is seen as appropriate from the perspective of professional judgment, it was unlikely that the physicians would agree with a model that opposed the working arrangements that they deemed most efficient according to their needs. This phenomenon has also been identified in studying the non-implementation of evidence-based best medical practice. Adoption is more likely to happen if the benefits and risks of new practices are compatible with the interests, values, and power of the actors involved in implementation (Dennis, Høkken, Løvås, & Tønseth, 2003). Another recent study from the Norwegian hospital context found that a management-initiated restructuring process of moving three clinics into one building sparked boundary conflicts between different physician specialties (Heidt, 2013). Our study highlights the fact that nurses can also oppose new organizing models as the basis of similar professional logic arguments and that they may be powerful enough to take part in shaping the outcome of organizational change.

Management perceived multidisciplinarity as a necessary development in order to create a more modern and patient-centered department prioritizing the needs of patients rather than the needs of any individual professional group. Being perceived as an improvement in the coherence of managing a surgical department, their arguments were in line with a business-like logic and drive towards delivering on targets. Their positions within the organization shaped what they saw as favourable, and the effort they made to implement a department consistent with business-like logic principles.

Both of the nursing specialties involved were opposed to being managed solely by the DCS manager. The nurse anesthetists’ arguments against having full employment status in the new department were both professional and organizational. They worried that they would not have proper professional guidance and development in the new department and felt that it was more efficient to have all nurse anesthetists as part of the same staff resource planning throughout the hospital. Motivated by professional logic principles of unidisciplinarity as the most convenient organizational model, they strongly resisted the proposed model.

Management attempted to enforce the new model with the nurses, stakeholders who, even when specialists, traditionally have a lower level of recognition and protection than medical specialists (Nancarrow & Bartwells, 2003). This strategy worked as intended in relation to the registered nurses but sparked counter-strategies from the relatively more elite groups within the nursing profession. The collective role of nurses is changing from being
regarded as doctor's assistants to more independent practitioners (Godfrie & Reay, 2010). There is also a move towards a more technical, specialized, and fragmented nursing profession identified in the literature (Bingwall & Allen, 2005; While, 2005). The division director successfully employed the power vested in her formal position to include the surgical nurses in the multidisciplinary model. The nurse anesthetists, however, proved to be more resistant and more powerful than the management initially expected.

6.2 The management challenge: dealing with challenges caused by compromise

The outcome of the negotiations was that actors adhering both to the business-like and the professional logic partially won. Management was able to implement the new model, which was more multidisciplinary, if not to the extent they had hoped. The compromises to the model resulted in some challenges at the organizational level. Managing the new OCS department required continuous adaptations regarding issues of staffing and collaboration with the stakeholders still affiliated with the main hospital. The problems experienced in the first year of operations were caused at least partly by the compromises that were necessary in order to bring everyone on board. Other studies have found that interprofessional collaboration is difficult to achieve unless there is a real commitment to open communication, information sharing, collaborative goal setting, and understanding of the values of other professional groups (Awal & Caldwell, 2005). Our study adds to this point by illustrating how the collaboration between multiple nursing disciplines is challenged when the process of joining the groups in a multidisciplinary department creates conflicts between the groups.

7 | CONCLUSION AND IMPLICATIONS FOR NURSING MANAGEMENT

Having reported on an organizational change initiative of establishing a multidisciplinary day care surgery department, this article provides a number of contributions and recommendations. Implementing a model associated with business logic in a hospital organization resulted in a collision of logics that sparked conflicts. The negotiated solutions and their consequences for the operation of the department demonstrate how conflicts of institutional logic manifest at the organizational level as forces impacting the working arrangements on the ground. The study offers perspectives on why the re-organization of professional groups is challenging and anything but a straightforward task, the potential complications required, and insight into how the implementation process may create arrangements that remain as challenges in the foreseeable future.

The institutional logics perspective is valuable for managers in organizations where professional groups, such as nurses, are guided by other logics than the logic represented by proposed new organization models. The perspective enables managers to understand resistance to new ways of organizing work and may be useful in trying to foresee and handle challenges in implementing new models. Health service professionals are able to recognize new models as threats to their preferred ways of organizing work, to identify potential future challenges embedded in new models, and they are in a position to seriously procrastinate or even veto the proposed changes. This ability and position may be held by more groups than expected from a traditional understanding of power relations in organizations, as illustrated in this case by the nurse anesthetists.

Managers need to analyze organization models carefully in terms of which parts may be seen as problematic in their own organization, and invite all relevant stakeholders into participatory change processes. If the goal is to gather multiple professions and disciplines under one manager in order to increase patient centeredness, arrangements must be made for professionals to stay connected to the wider community of practice centered around their specialized knowledge and skills. At the same time, managers need to pay attention to developing department staff into one, coherent team.

ETHICAL APPROVAL

The research was approved by the Norwegian Centre for Research Data (Approval number 33311).

ORCID

Claes Ogarde @ https://orcid.org/0000-0001-8820-7931

REFERENCES

Paper 2 – Establishing a multidisciplinary day-care surgery department: Challenges for nursing management
Paper 3

Readiness for change and good translations.

Status
Submitted, revised and resubmitted to Journal of Change Management. Currently under revision following the receipt of a second “revise and resubmit” decision.

Authors
Olaug Øygarden, Doctoral Research Fellow, University of Stavanger
Aslaug Mikkelsen, Professor, University of Stavanger

Declaration of interest
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Abstract

Translation studies have shown that management ideas change as they travel between contexts, and that there are regularities to how concepts are translated through editing. However, we know relatively less about what facilitates good translations, i.e. translations of new ideas, models and practices into working practices or routines that contribute to the attainment of organizational goals. This study investigates how the concept of readiness for change can increase our understanding of translation processes and translation outcomes, specifically in the context of differing institutional logics. It follows an intra-organizational translation of a management idea in a hospital, aiming to identify how readiness for change was impacted by a strategic translation process, and influenced the use of editing rules and translation practices in an operative translation process, resulting in differences in the quality of the translation outcomes. It finds that strategic translations may foster readiness for change. Readiness enables inclusive operative translation processes that thoroughly rework a new management id by further development of problems and visions, and by stabilizing meanings which combine organizational and department, operative level needs, as well as differing institutional logics. This new meaning opens up possibilities for adding practices that enhance the quality of the resulting practice.
Introduction

Scandinavian institutionalism has contributed with valuable knowledge about how management ideas, models and practices travel and are translated into new geographical locations, organizational fields and between organizations (Boxenbaum & Pedersen, 2009; Wedlin & Sahlin, 2017). This work has pointed out how ideas and practices are disembedded from their source context in order to travel to and be reembedded in a new one, and that the travelling object inevitably changes through this process (Czarniawska & Joerges, 1996; Czarniawska & Sevón, 2005). Empirical research has identified that translations occur according to certain translation or editing rules and practices (Sahlin-Andersson, 1996; Kirkpatrick, Bullinger, Lega & Dent, 2013; Morris & Lancaster, 2006; Wæraas & Sataøen, 2014; Teulier & Rouleau, 2013; Røvik, 2016). In other words, we know that ideas, models and practices change as they travel, and we know something about how they are changed through translation. However, we know relatively less about what facilitates good translations, i.e. translations of new ideas, models and practices into working practices or routines that contribute to the attainment of organizational goals (Wæraas & Nielsen, 2016; Røvik, 2011; Røvik, 2016).

This study contributes to translation research by investigating how the concept of readiness for change can increase our understanding of the translation process and translation outcomes specifically in the context of differing institutional logics. It follows the process of implementing an ICT-supported task planning system for hospital physicians and analyses the process as an intra-organizational translation of a management idea and practice from the source context of a regional HR department to the recipient contexts of three hospital departments. In Norway, four state owned corporations, Regional Health Authorities (RHAs), supervise all public hospitals according to aims and priorities set by the Ministry of Health. The new advanced task planning (ATP)
system was part of a change program initiated by an RHA HR department as part of the effort to reach strategic goals of providing high quality services and timely patient pathways within mandated maximum treatment waiting time guarantees.

Hospitals are institutionally complex in that their operation is guided by more than one institutional logic (Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011; Thornton, Ocasio & Lounsbury, 2012). Despite decades of managerial logic initiatives, hospitals and particularly the work of physicians are still heavily influenced by a professional logic (Currie, Lockett, Finn, Martin, & Waring, 2012; Heldal, 2015; Kitchener, 2002; Reay & Hinings, 2009; Andersson & Liff, 2018). Physicians are often able to resist change initiatives imposed by other actors than the professionals themselves. In such a context, translating managerial logic ideas into material practices that actually become part of daily work routines among professionals and a contribution to the attainment of organizational goals is challenging. The differing institutional logics represent a distance over which the idea has to travel (Lillrank, 1995), and the sometimes conflictual relationship between the logics means that the idea may be actively resisted. The ATP project and its translation within the hospital organization is therefore an interesting setting for attempting to uncover factors that can contribute to good translations.

Employee support for new management ideas and practices can be operationalized as readiness for change (Armenakis & Harris, 2002; Armenakis, Harris, & Mossholder, 1993; Holt, Armenakis, Harris, & Feild, 2007). By combining the theoretical concepts of translation and editing rules and practices from Scandinavian institutionalism with the concept of readiness for change, we aim to shed light on the role of readiness in facilitating good translations. Translation is a continuous editing process involving a variety of different actors as a concept moves from setting to setting (Sahlin-Andersson, 1996). Our case study follows the translation of ATP from the managerial logic setting of a regional HR
department to the professional logic settings of three different hospital departments. We first investigate the translation effort made by the RHA HR director who initiated the change project vis-a-vis the hospital departments. We conceptualize this as a strategic translation aimed at convincing organizational members of the merits of ATP, thus potentially fostering readiness for change. We further analyse the process of translating the ATP idea and practice into the departments’ respective work routines, which we conceptualize as an operative translation performed by managers and staff in each department. We aim to identify how department level readiness for the change of moving from existing planning practices to ATP was impacted by the strategic translation, and how the level of readiness influenced the use of editing rules and translation practices in the operative translation process, resulting in differences in the actual planning practices that eventually materialized in the departments.

**Theoretical background**

In the following, we first present our understanding of translation in this paper as an intra-organizational process across institutional logics. Further, we introduce readiness for change, which is the cognitive precursor of either resisting an organizational change effort, or accepting, embracing and adopting it (Armenakis et al., 1993; Holt et al., 2007), and the change beliefs involved in readiness. Finally, we present the theoretical framework of editing practices (Teulier & Rouleau, 2013) and translation rules (Røvik, 2016) which we later use as tools for analysing both the strategic and operative translation processes.

**Intra-organizational translation across institutional logics**

Empirical implementation studies in health care settings have found that ideas, models and practices travel into and are translated into new versions in the health care organizational field as well as in every single organization, or even departments (Kirkpatrick et al., 2013; Nielsen,
This is consistent with the foundational insights of translation theory (Czarniawska & Sevón, 2005). Considering the source and recipient contexts of management ideas and practices, most empirical translation studies have focused on travels between geographical locations such as countries or regions, or across different organizational fields or organizations. Andersen & Røvik’s study of the translation of LEAN in a hospital (2015) is an exception, as they find that there are different translations of the same concept within the same organization. This present study of ATP translation zooms in on such an intra-organizational process. We analyse the translation of a specific idea and practice that was developed within the organization, but that nevertheless needed to travel from an RHA department to clinical frontline hospital departments and which was transformed along the way. There has been little exploration of how actors within organizations carry and translate management knowledge across boundaries within Scandinavian institutionalist translation studies (Wæraas & Nielsen, 2016). In our study, we conceptualize these boundaries between parts of the organization not simply as structural, but also as consisting of a difference in the dominant institutional logic of the source and recipient contexts.

Research on institutional logics (Thornton et.al., 2012) in the health care field has often focused on the relationship between the medical professional logic and the managerial logic (Andersson & Liff, 2018). The professional logic highlights the autonomy and trust-based authority of the professional, in our case the physician, and prioritizes professional judgment in, ideally de-centralized, decision-making about clinical as well as organizational issues (Andersson & Liff, 2018; Freidson, 2001; Noordegraaf, 2015; Martin, Currie, Weaver, Finn, & McDonald, 2017; Reay & Hinings, 2005; Scott, Ruef, Mendel & Caronna, 2000).

However, since the early 1990s, NPM-inspired policies have
increasingly challenged the organizing principles of this logic in decisions regarding hospital organizational structures and management systems (Christensen & Lægreid, 2002). A managerial logic, inspired by the private sector and emphasizing stronger, more efficient, business-like and hierarchical management with clear accountabilities has gained influence in health care systems internationally (Ackroyd, Kirkpatrick, & Walker, 2007; Arman, Liff, & Wikström, 2014; Byrkjeflot & Kragh Jespersen, 2014; Reay & Hinings, 2005; Scott et al., 2000). Managerialism does not treat physicians as autonomous professionals, but as employees who are responsible for transforming organizational resources into tangible results for their customers through efficient and controlled processes in which managers are influential (Kitchener, 2002; Noordegraaf, 2015).

Some recent translation studies have focused on the implications of translator embeddedness in logics or professional values. These studies tell us that institutional logics have an impact on the outcome of translation processes (Waldorff, 2013), and that different intra-organizational groups translate ideas and practices in different ways (Pallas, Fredriksson & Wedlin, 2016). In line with this, we not only see the different logic guiding the source and recipient contexts of ATP as a relevant distance for idea and practice travel (Lillrank, 1995), but also as an aspect that shapes the way different actors translate it. Institutional logics are central to our understanding of the context within which the translation of ATP happens, the source and recipient of the idea, and also the (changed) content of the idea.

**Readiness for change**

The relationship between co-existing logics in fields or organizations has often been described as conflictual or competitive (Greenwood & Suddaby, 2006; Reay & Hinings, 2005; Scott et al., 2000). Knowing this, we believe the readiness for change theory is particularly interesting as a factor in understanding good translations in our context. Failing to gain
the support of those who are to use a new idea such as ATP would mean risking that it never materializes into a practice that could contribute towards the attainment of organizational goals – i.e., a good translation.

In a broad sense, readiness seems to be an important success factor in the implementation of change (Jones, Jimmieson & Griffiths, 2005). Readiness for change is most commonly studied as an individual factor. This present study is concerned with readiness at the department level, assuming that the change beliefs of individuals may become shared in such groups as a result of social interaction processes (Rafferty, Jimmieson & Armenakis, 2013). Readiness consists of five key change beliefs (Armenakis & Harris, 2002). Discrepancy refers to the belief that there is a gap between the current state and what it should be. Believing in the appropriateness of the suggested change means believing that a specific change designed to address a discrepancy is correct for that particular situation. Believing in efficacy means that the change recipients believe they and the organization can successfully implement a change. Believing in principal support means trusting that both formal leaders (vertical change agents) and horizontal change agents (opinion leaders) are committed to the change, and believing in valence means believing that the change is beneficial to the change recipients themselves.

**Editing and translation rules and practices**

In order to study the details of both the strategic and operative translation processes, we employ the concepts of editing rules and practices (Sahlin-Andersson, 1996; Teulier & Rouleau, 2013) and translation rules (Røvik, 2016). Sahlin-Andersson (1996) studied translations of abstract organizational concepts into practice in new settings and found that there are regularities to how actors perform translations. She coined the translating actors as editors and the regularities as editing rules. She identified how there are rules concerning context, formulation and logic. Contextual rules concern the fact that a concept has to be dis-embedded
from a source context before it can travel to and be re-embedded in a new one. Rules of formulation concern the way concepts are labelled and how their story is told, often in dramatized ways. Rules concerning logic concern how new ideas and practices are presented according to a certain plot adhering to a rationalistic logic of causes (the new idea or practice) and effects (positive results).

Teulier and Rouleau (2013) expanded on this framework of contextual, formulation and logic rules by identifying a set of editing practices that translators use. They found that middle managers performed translation in several translation spaces, using several editing practices. The middle managers de-contextualized the technology by reframing problems and staging their discussions, worked on formulation by readjusting the vision of and rationalizing the change, and worked out issues of logic by stabilizing their shared understanding of the new technology and taking absent stakeholders into account. Teulier and Rouleau further argue for the existence of a fourth set of rules in addition to Sahlin’s three categories. These rules specifically concern the re-embedding of a new idea, and include editing practices of speaking for the technology and selling the change.

In our study, we use these editing practices as analytic tools for identifying how different actors translated ATP into new practices. We understand these editing practices as mainly concerning how a change is discursively constructed and communicated. In order to also uncover how the content of the ATP practice changes through operative translation, we also utilize the translation rules identified by Røvik (2016). He argues that a translation process can reproduce management practices as elements of it are simply copied, or modify practices as elements are added or omitted.

Røvik (2007) has also called for attention to the role of translation competence, and his distinction between “good” and “bad” translations. New, translated versions of a management idea and practice can
contribute more or less positively to organizational performance. However, little research has been done on translation quality and effectiveness within Scandinavian institutionalism (Wæraas & Nielsen, 2016).

This present study contributes with an analysis of how the use of editing practices and translation rules connects with translation outcomes that represent better or worse versions of an initially identical idea and practice, and investigates the role of readiness for change in this process. While maintaining the significance of the context of differing institutional logics, we specify our initial research question by asking:

*How were the editing practices employed in the strategic translation of ATP related to department level readiness for change?*

*How were differences in department level readiness for change related to the use of editing practices and translation rules in operative translations?*

*How were different constellations of editing practices and translation rule use in the departments related to the quality of the operative translations?*

**Method**

**Research setting**

The new, advanced task planning system was intended to assign detailed tasks to specific individual physicians, replacing a system of largely planning for their presence or absence at work only. It also intended to extend the period of time for which detailed planning was done. Plans would be moved from a diverse variety of ICT or paper-based tools into GAT, an ICT application for HR management. The planning module within this ICT application was developed specifically for the ATP project by the RHA in collaboration with the ICT system provider.
Finally, and importantly, this ICT application was to be integrated with other relevant ICT tools so as to ensure a more holistic overview of tasks and plans both in a long term view, and as day-to-day changes to plans would come up. Hospital task planning had mostly been done by means of multiple and separate ICT applications. The existing planning system was not well suited to distribute information across professional and departmental boundaries, or to handle changes to long and short term plans. This created problems for the delivery of services, because it limited the possibility for an optimal match between available resources, competencies and tasks. Program strategic goals and sub-project content are presented in Table 1.

Table 1 – The Turn Up program – goals and relevant sub-project

<table>
<thead>
<tr>
<th>Relevant strategic goals</th>
<th>Project content:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing high quality patient pathways. This is aided by providing patients with time-specific appointments at first point of contact providing continuity in the individual health care workers treating patients throughout treatment pathways upholding 20 day deadlines for receiving treatment at suspicion of cancer diagnosis.</td>
<td></td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Sub-project: ATP for physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project content: Implement planning method that assigns detailed tasks to specific individuals instead of planning only for presence or absence, based on a thorough evaluation of the totality of department physician tasks and available physician resources.</td>
</tr>
</tbody>
</table>

Extend the period of time for which detailed task planning is done, ideally to four months. Move plans from a diverse variety of ICT or paper-based tools into GAT, an ICT application for HR management.

Integrate GAT with other relevant ICT tools (staff Outlook calendars, intranet, patient appointment and record application, and surgery planning application).
Research design and data collection

We compare the program introduction and the translation process in three departments as three qualitative and longitudinal cases (Eisenhardt, 1989). Cases were theoretically sampled from a larger study of the program at the regional level. One case department was a pilot department in the earliest stages of the task planning sub-project, and was followed by researchers at several points in time over two years. The two other case departments were early adopters, and were followed over a period of 6-12 months. The cases were chosen because they differed in how successful the change process was in terms of its reach into transforming the way physician’s work was planned in the respective departments.

We gained access by being commissioned to do a study trailing the program in all the RHA hospitals. The research was approved by the Norwegian Centre for Research Data. Data were collected between October 2013 and September 2016, through 31 semi-structured interviews with participants at regional, hospital, and department levels, and through direct, non-participant observation meetings (each lasting between 1 and 1.5 hours) in two of the three case departments (see Table 2). Interview guides were adjusted to elicit relevant data from each individual participant, but all centred on two main themes – details on what was being done, by who, in the practical process of implementing ATP, and questions related specifically to the five change beliefs of which readiness for change consists. Participants were asked to elaborate on their own change beliefs, as well as to share their experience of how others in the department(s) were currently interpreting ATP. Interviews were taped and transcribed, and field notes were transcribed directly following observations. Both types of data were subjected to analysis as described below.

Interview participants signed consent forms, and meeting participants were informed about the observing researcher and the research intent.
Participants at the regional and hospital levels identified participants in the departments, these further advised us about who else to interview, and the observing of meetings led us to identify other participants who stood out as relevant. The participants belong to different occupations, both in clinical and administrative departments, and are employed at different organizational levels. We observed meetings and/or conducted interviews at the outset of the change process in each department, and followed up with interviews after the change process had been ongoing for a while (6 months to 2 years). A process facilitation team was interviewed about project progress and challenges at several times during the entire process, ensuring that we have data for the overall change program and department level processes at several points in time.

Table 2 – Interviews and observations

<table>
<thead>
<tr>
<th></th>
<th>Overall process</th>
<th>Dept1</th>
<th>Dept2</th>
<th>Dept3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviews</td>
<td>17</td>
<td>2</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Observation of meetings</td>
<td>N/A</td>
<td>-</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

The uneven number of data points across the cases is a limitation. It is a reflection of a more active change process in one case as opposed to the other two, and of the difficulty of gaining access as project implementation activities were not predictably planned ahead in detail. Attempts have been made to adjust this imbalance by gaining information about the two less active departments from other sources, such as the process facilitation team. Another limitation regards the documentation of individually held or group level change beliefs. In some instances, it was possible to gain information about these in real time as the process was unfolding. In others, however, it was only possible to assemble an understanding of specific beliefs retrospectively, or through data sources other than interviews with or observations of the
participants themselves. We believe that the triangulation of data sources still ensures the credibility of findings related to change beliefs.

**Data analysis and research quality**

First, a chronological narrative of the change process in each department was constructed from the raw data in order to create a thick description of the process and its main issues (Langley, 1999; Lincoln & Guba, 1985). This analysis was useful in creating a chronology for further analysis, and as a step in establishing early analytical themes (Langley, 1999; Pettigrew, 1990). The first author then analysed the data employing template analysis (King, 2012). The main themes in the template (such as change beliefs, editing practices and translation rules, changes to and quality of resulting planning practices) were selected from theory and iteratively developed. More fine-grained categories were developed inductively from the data, going back and forth between theory and data. All template codes were coupled with negative evidence codes, ensuring that potential disconfirming evidence of the emerging explanations was noticed. Credibility (Lincoln & Guba, 1985) was also strengthened by triangulation (several sources of data), prolonged engagement and persistent observation, the use of member checking, peer debriefing and constant comparison. Employing thick description, comparing findings to theory and using a replication logic between cases strengthens the transferability of the study, while dependability and confirmability was strengthened by maintaining a case database and an audit trail, employing a rigorous and transparent research process, and to the best of our ability remaining reflexive about emerging findings throughout the process.

**Findings**

In this section, we first present findings on the strategic translation of ATP and the editing practices employed by the regional HR director. We then present our analysis of the level of readiness for change in each
department, before going on to present findings on editing practices and translation rules employed by translators in each department as ATP was moulded into actual working practices. We finally evaluate the “goodness” of each of these new practices, as defined by whether or not they were useful in contributing to organizational goals.

**Strategic translation of ATP**

The strategic translation of ATP was performed by the regional HR director in her communication with hospital departments. It largely took place in the translation space of project kick-off meetings that she held with each department. The aim of the meetings was to convince department managers and staff members to come on board with the new way of managing task planning. In this strategic translation process, we found that she employed several editing practices in her communication of the ATP idea and practice to the hospital staff.

The kick-off meetings in each department was a way of staging the translation process. The meetings included the HR director herself, department managers and staff, as well as a process facilitation team from the hospital resource department. This facilitation team would be responsible for guiding the departments through the following process of implementing ATP, and were competent in the existing planning methods in each department as well as in the idea and technicalities of the new system. There were also arrangements put in place ensuring that departments could rely on additional ICT personnel if needed.

In her presentation of ATP in these meetings, the HR director reframed the problems that ATP would solve. She insisted that the benefits of using ATP would not only be achievement of organizational goals and more timely services to patients (shorter waiting lists, fewer treatment waiting time guarantee breeches), but that professional needs would also be better served as their working situation would become more predictable. She specifically highlighted the burden on medical and nursing staff caused by working in a chaotic situation. A lack of
predictability meant that plans for physician competence building, leaves of absence and even regular breaks during a work day were often not carried out. She identified with their very hectic workdays, always being behind schedule, not knowing what tasks they would be doing the following week or day, not knowing where other staff members that needed to be reached were, not being able to predictably plan absences needed for competence building or holidays, and not being able to maintain a sustainable work-life balance. She also explicitly refused to put the blame for long waiting lists on department staff members by stating that she was aware of how hard they were working and that she did not expect the problems to be resolved by them working even harder. This concern was not part of the official program goals, but was made explicit as a main selling point in the HR director’s contact with the recipients as she attempted to bring them on board with ATP.

A similar reframing took place through an adjustment of the vision of the Turn Up change program. The overall vision was for long waiting times and treatment waiting time guarantee breeches to be eliminated for patients. In the meetings with departments, however, the benefits for those working in the hospitals were highlighted as equally important.

There was, however, very little focus on the potential loss of physician autonomy in planning their work, as well as little focus on the increased control and increased and more detailed monitoring by the regional HR department of how tasks such as patient appointments were planned. This increase in control and monitoring was inherent to the idea and practice, as the new ICT solution allowed for such monitoring and data were collected and monitored in a data bank constructed by the regional HR department as part of the Turn Up program. These data were, however, rarely presented to recipients, and their existence had less focus in the presentation of the ATP vision to recipients than did the highlighting of professional needs that would be fulfilled if there was less chaos.
The needs of patients and the general public that the hospitals serve were also present in her presentations, and as such she also employed the editing practice of taking absent stakeholders into account by communicating how using ATP would affect patients and their impression of and relationship with the hospital.

The HR director also rationalized the change by linking the inadequate attainment of organizational goals and the chaotic situation for staff to the ATP solution, arguing that better planning was indeed key to improving these issues. She spoke for the technology by highlighting the possibilities of the software integration and the real-time communication of changes to plans, and by comparing it favourably to previous ICT solutions.

**Readiness for change**

**Discrepancy**

The discrepancy communicated by the regional HR director was that the current treatment waiting times for patients were too long and that there were too many treatment waiting time guarantee breaches. She also highlighted the burden on staff caused by working in a chaotic situation, with little predictability. The desired situation was defined as one where the strategic goals of cutting waiting times and not having any guarantee breaches were realized, and where physicians and other staff could have a more stable and less stressful work situation, in which needs such as attending courses and maintaining a sustainable work-life balance were covered.

This discrepancy was largely deemed as legitimate and accurate by the informants in all departments. No one were happy with the situation as it was in terms of not being able to provide timely treatment. If, in some cases, physicians did not believe patients waiting was necessarily a problem medically, they all felt the repercussions of breeching treatment
waiting time guarantees as it is one of the most important targets that department performance is measured on.

**Appropriateness**

There was less agreement on the appropriateness of the intended intervention of solving the identified problem by means of planning work in a more detailed manner over extended periods of time, and by re-organizing work. In all three departments, the heads of department and physicians initially attributed the problems to an insufficient number of qualified physicians.

In Department 1 (Dep1), all physician positions were filled, but the department head had for a long time tried to convince hospital leadership that they needed more physician positions to cover their tasks, and continued to argue that this was the only solution to their problem throughout the two year change implementation period.

“When we met with Dep1, they were (...) quite aggressive, “so – you think you are going to come here and save our operation by the help of...”, it was a little bit like “you are not going to cut waiting times or make guarantee breeches disappear through advanced task planning. Do you – is that what you think?”

“What could they make of the resources they have in order to get more (patients) in? But Dep1 have sort of not gone along with that reflection.” (Process facilitation team leader.)

In Department 2 (Dep2), the department head and physician who were interviewed argued that the planning and organization of work was already sufficiently systematic and orderly, but that the workload was too heavy for them to cover without accumulating waiting lists. They did, however, acknowledge that a stricter enforcement of an orderly system, earlier deadline for physicians requesting leave and shift swaps
and a longer planning horizon could improve the department’s ability to plan patient appointments and to uphold these appointments as planned.

«And those who think that we are going to sort of solve all waiting list problems and guarantee breeches with this system are really mistaken. They are building on an assumption that the reason (for the problems) is that we have had poor control. And I strongly resist that. (...) it’s that we have a much bigger burden than we are staffed to cope with. (...) So I don’t think this will be a revolution, but, of course: the fact that this application communicates with (other applications) so that if you do something in one place you will be notified in another (...) will perhaps visualize to those in question that if I request a leave of absence in two weeks I will automatically see that in GAT. That, watch out, you actually have a full schedule in the outpatient clinic. And it will possibly, to an extent make individuals (feel more) responsible.”  (Department head in Dep2.)

In Department 3 (Dep3), there were unfilled physician positions, and the problem of waiting times and treatment waiting time guarantee breeches was attributed to this lack of staff resources. However, the hospital had attempted to find specialists to fill the vacant positions for an extended period of time, without being able to recruit qualified candidates, as the specialty in question was a scarce resource throughout the Scandinavian health care system. Therefore, they were willing to consider an intervention in the way work was planned and organized as an appropriate, if not ideal, way of trying to solve a situation of constantly being behind schedule in providing patients with the right treatment and follow-up at the right time.

“I thought, ok, we have tried so many things. And we...we’re actually not managing, and it’s because we don’t have enough physicians. If we had enough physicians we would be much more able to get into balance. But, with the challenges we had, with
even less physician resources and people still in training (...), that goal was so far ahead, that it... we saw it as difficult, really, the way we had it.” (Head nurse of outpatient clinic in Dep3.)

Valence

In Dep1, following from the lack of believing in the appropriateness of the suggested intervention, the new planning system was regarded as extra workload without any significant benefits to those involved. In Dep2, the department head thought there might be some benefits to gain by getting a more reliable and unchanging picture of the matching of resources and tasks. The physicians, however, experienced it as yet another ICT application to learn and spend time on:

“(sighs)... Yet another administrative task forced upon us. This is not how we should be spending our time. It’s an eternal discussion. I expect that this will take up a lot of time.” (Dep2 physician.)

In Dep3, physicians, nurses and secretaries were experiencing a very demanding work situation, as they were constantly trying to catch up with ever-increasing waiting lists and having to re-plan work on a day-to-day basis because their plans were insufficiently attuned to the demands of the work in the department. Therefore, they were willing take on the burden of time-consuming work to re-shape their planning practices and re-organize their work, so that they could potentially experience a less strenuous work situation. This belief in valence, the potential for them to improve their work situation, increased throughout the project implementation process, as they discovered new solutions and experienced how the changes resulted in less chaotic workdays.

Principal support

All informants had the understanding that the regional HR director, the highest level manager in charge of the program, supported the process
that she had initiated. The support of department heads differed greatly between the departments.

In Dep1, the department head never became fully convinced of the benefits of the project, and did not offer meaningful support to the process. Coupled with a division director who did not prioritize showing support for the process by attending work group meetings, this meant for few signals of principal support. In Dep2, the department head was also clear on his support for the program, if for the more limited version he chose to implement in his departments. In Dep3, the department head and his sub-ordinate, the section head, committed to the process and took part in the participative work group process. All informants in this department highlighted that they had interpreted this as a leadership signal that they were expected and allowed to put their time and effort in as resources to make the process successful.

**Efficacy**

Belief in efficacy was initially low in all departments. The experience of introducing new ICT applications was largely one of not being proficient enough in the use of them to be able to reap the full benefit of their potential. In Dep1, the competence of department members was considered to be especially low by the process facilitation team. They did not want to use smartphones to have easy access to the most updated versions of plans, and the general proficiency in ICT tools was low.

In Dep2, all section lead physicians were trained in how to do their part of the planning in GAT. During this training, they expressed low belief in their own efficacy to handle this new planning. The department head, however, believed that he and other department members would reach a sufficient level of proficiency in a relatively short period of time. In Dep3, the belief in efficacy was also low at the outset. This was, however, greatly strengthened through the participative process where department members gained experience with using GAT and continuously consider potential new ways of organizing services.
Department level readiness for change

Table 3 summarizes our findings on change beliefs in each department. On the basis of these findings, we conclude that department level readiness for change was low in Dep1, medium in Dep2 and high in Dep3.

Table 3 – Department level change beliefs and readiness for change

<table>
<thead>
<tr>
<th>CHANGE BELIEF</th>
<th>Dep1</th>
<th>Dep2</th>
<th>Dep3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discrepancy</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Appropriateness</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Valence</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Principal support</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Efficacy</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Readiness for change</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
</tbody>
</table>

Operative department level translation of ATP and resulting practices

Department 1

Dep1 was the first of the three departments to join the ATP project. The operative translation largely took place in a space consisting of a series of department meetings attended by the department head, the head secretary, a few department physicians and the process facilitation team. However, this space did not constitute an arena for any extensive reconstruction of the ATP idea and practice as strategically translated by the HR director into a working, local version. The main actor undertaking the operative translation in Dep1 was exclusively the department head, and only a limited selection of editing practices and translation rules were employed.
We found that a reframing of the problem took place, but in the sense that the department head maintained that the only relevant planning related problems in the department was related to a lack of enough physician positions. The staging of the discussion was quite exclusive, in that it did not involve a broad range of participants from the department or beyond. Hospital division management from the organizational level above the department head rarely took part or offered support to the process, and few staff members were involved in discussing ATP. There was adjustment of the vision, but along the same lines as the reframing of the problem, this adjustment did not build further on the vision from the strategic translation.

In terms of translation rules concerning changes to the strategically translated ATP concept into department level practice, we found that the element of planning work in the new software system was copied as a basic scheme for planning in the new system was developed. However, several elements were omitted. The existing systems of planning in other software or paper-based solutions were not removed, but were kept as shadow systems, thus the element of having all plans gathered in one system was omitted. So was the element of limiting all changes to task plans to be performed in the new system, as alternative ways for physicians to change shifts or swap tasks were kept available. There was no significant evaluation of the way tasks were currently distributed and planned. Finally, the failure to extend the time period for which detailed task plans were made was also an instance of omitting from the ATP idea and practice as it had been presented to the department.

In this department, where readiness for change was low, relatively few editing practices were used in the operative translation, important elements of ATP were omitted while no department specific elements were added, and there were few signs of combining managerial concerns with professional considerations. As a result, there were limited changes to how task planning was done in Dep1. The idea and practice that had been presented to the department through the strategic translation was
scaled back, diminished and reduced, and the potential for ATP to aid the attainment of stated organizational goals was not realized. Based on these findings, we have identified the resulting translation of ATP in Dep1 as a bad translation.

Department 2

In Dep2, the translation took place in a less defined space. The department head met sporadically with the process facilitation team who offered technical support on how to set up the new system, but mainly developed the department specific solutions with input from the department lead secretary. The main translators were thus the department head and the lead secretary. There was little wider staging of the discussion. Other senior physicians responsible for planning in department sub-sections took part in software training, but not in shaping the way planning was to be done.

The problem was framed differently from both the strategically translated version, and the version found in Dep1. The department head argued that the department’s main planning related problem was one of planning discipline among physician staff. Shift changes among physicians were not consistently communicated to the department head and colleagues, and requests for leaves and other changes to plans were often last minute. The vision was adjusted to one focused on department needs of a clearer overview of physician resources, and less on the organizational goals of cutting waiting times and treatment waiting time guarantee breeches. The change of implementing ATP was not rationalized as one that would solve all problems presented in the strategic translation, but rather as a change that could potentially lead to benefits at the department level. The department head stabilized the meaning of implementing ATP by maintaining the ATP system as useful, although as a solution to fewer problems. Regarding absent stakeholders, secretaries and patients were taken into account as the department head highlighted the need for secretaries to access real-time updated plans in
order to avoid rescheduling of patient appointments. During software training, the department head and the process facilitation team spoke for the technology by showing attendees the way that the new system would offer real time overviews of plans, and explaining how different software applications would be integrated so that they were all up to date with the same information. Beyond this, there was less selling of the change than clear communication of the fact that a decision had already been made to implement ATP.

Several elements of the strategically translated version of ATP were copied. The department head and lead secretary developed a basic scheme for planning tasks in the new system. After a short initial trial period, they terminated the former Excel-based planning system ensuring that there would be no shadow systems. Strict rules were put in place demanding that all shift changes be done well ahead of time and within the new software instead of verbally or otherwise among the physicians themselves. The department’s planning horizon was also extended to become more long term. No significant elements were added, while the elements of evaluating task planning and distribution and extending detailed planning to four months were omitted.

In Dep2, where readiness for change was medium, more editing practices were used and fewer elements of ATP were omitted than in Dep1. However, no department specific elements were added and there was no merging of managerial and professional needs. The result of the operative translation in Dep2 was an implementation of a version of ATP that was quite similar to the version presented in the strategic translation. Yet, as there was no thorough process of evaluating all tasks performed by physicians in the department, and no consideration of whether distributing these tasks differently could aid the department in achieving the organizational goals at the heart of the project, the operative translation did not unleash the full potential of ATP. In light of this, we have identified the Dep2 operative translation of ATP as moderately good.
Department 3

In Dep3, the operative translation mainly took place in the space of a series of eight working group meetings. The working group included the department head, the head of the organizational level above the department, members of the process facilitation team, the head nurses of the department’s outpatient and bed wards, several junior and senior physicians, and secretaries. These actors all took on translator roles in the meetings and between meetings as they worked on implementing ATP at the department level.

The working group served as an inclusive staging of the discussion as the broad assembly of managers, staff and facilitators all participated in shaping ATP practice. Throughout their discussions, the problem at hand was reframed as group participants brought up issues of heavy workloads, unpredictable schedules and insufficient opportunities for competence building, while also acknowledging underperformance regarding waiting times and treatment waiting time guarantee breeches as problematic. The vision of the ATP project was adjusted to a vision that maintained a focus on contributing to reaching organizational goals by improving how the department planned their tasks, while also envisioning better working conditions in the department. The change was rationalized as a solution connected to both organizational and professional, department level problems. The combination of organizational and professional benefits at the department level were continuously upheld as goals throughout the working group meetings, serving to stabilize the meaning attributed to ATP in Dep3. Working group participants brought up absent stakeholders such as patients and other hospital departments and hospitals who relied on services from Dep3 physicians discussing how better planning practices would benefit them. They also discussed how improved planning might mean having to rely less on private providers that were currently contracted to handle tasks the department itself were unable to perform. Throughout the meetings, working group members who had been given the opportunity
to test the ATP system spoke for the technology to other group members. Those who were most convinced of the benefits of ATP also argued on behalf of it to members who aired disbelief, thus contributing to selling the change.

Similar to Dep2, Dep3 also copied elements of the content presented in the strategic translation. Their task planning was transferred to the new system, there were no shadow systems for planning after the implementation, all requests for changes in work plans were to be made in the new software solution, and their planning horizon was extended although the four month horizon was omitted. In contrast to Dep1 and Dep2, however, the Dep3 working group also discussed the totality of necessary tasks and available physician resources in detail during their meetings and new solutions to solving mismatches that became apparent were discussed, decided on, and implemented. In addition to maintaining all these elements of the strategic translation in their operative translation, Dep3 added new elements. After the series of working group meetings was over, a smaller group continued to collaborate with the process facilitation team on improving planning processes and ICT solutions in the months following ATP implementation. The department also combined the ATP project with another Turn Up sub-project aimed at re-organizing hospital outpatient clinics, attempting to achieve synergies from considering their activities in a more holistic way. Further, Dep3 was struggling to fill vacant physician positions, and the Turn Up projects were used to solve problems regarding the lack of qualified staff. One physician was moved from daily planning and maintenance of the plans to clinical work as the ATP system itself could handle more of this work. More comprehensively, junior physicians were moved to tasks where they would build competence faster, enabling them to take on more tasks without senior support. Finally, the department used the system to highlight mismatches between tasks and resources to higher level management, and to argue for a re-negotiation of task distribution between the department and private providers.
This department, where readiness for change was high, employed editing rules more extensively than the two other departments, added several of their own elements to ATP and combined the managerial content of the planning practice with professional needs. Dep3 was highlighted as the department where the ATP project had produced the most noticeable changes in results. The department head reported that ATP had resulted in a much less chaotic way of working as everyone now knew what to do at what time, and a more predictable picture for those planning patient appointments, meaning that waiting lists were handled better and fewer patients experienced breeches in their treatment waiting time guarantees.

The findings on the operative translation process in each department are summarized in Table 4.
Table 4 – Department level operative translation processes and translation outcomes

<table>
<thead>
<tr>
<th></th>
<th>Dep1</th>
<th>Dep2</th>
<th>Dep3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Readiness for change following strategic translation</strong></td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td><strong>Translation space</strong></td>
<td>Department meets with facilitation team in working group discussing the new system and potential solutions to implementing it in a series of 8 meetings.</td>
<td>Department head meeting with members of facilitation team, and working with lead secretary.</td>
<td>Department meets with facilitation team in working group discussing the new system and potential solutions to implementing it in a series of 8 meetings.</td>
</tr>
<tr>
<td><strong>Translator(s)</strong></td>
<td>Department head (Facilitation team)</td>
<td>Department head Secretary (Facilitation team)</td>
<td>Heads of the department and the organizational level above the department, Head nurses, Junior and senior physicians, Secretaries, Facilitation team</td>
</tr>
<tr>
<td><strong>Editing practices (idea)</strong></td>
<td>Re-framing problems</td>
<td>Reversal of strategically translated problem framing.</td>
<td>Shifting focus to a problem of existing plans not being honoured.</td>
</tr>
<tr>
<td></td>
<td>Staging the discussions</td>
<td>Exclusive</td>
<td>Exclusive</td>
</tr>
<tr>
<td></td>
<td>Adjusting the vision</td>
<td>Downsizing the translated vision.</td>
<td>Shifting focus to department needs.</td>
</tr>
<tr>
<td>Rationalizing the change</td>
<td>Connecting the solution to department problems.</td>
<td>Connecting the solution to organizational and professional, department level problems.</td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>------------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Stabilizing meaning</td>
<td>Arguing for ATP usefulness.</td>
<td>Repeating the two-fold vision.</td>
<td></td>
</tr>
<tr>
<td>Taking absent stakeholders into account</td>
<td>Focusing on staff other than physicians and patients.</td>
<td>Focusing on patients, private service providers, others departments and hospitals.</td>
<td></td>
</tr>
<tr>
<td>Speaking for the technology</td>
<td>Demonstrating system to section heads.</td>
<td>Sharing experiences in working group.</td>
<td></td>
</tr>
<tr>
<td>Selling the change</td>
<td>Working group members who were most convinced of the benefits of ATP arguing on behalf of it vis a vis members who aired disbelief.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Translation rules (practice)</th>
<th>Copying</th>
<th>Yes</th>
<th>Yes</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adding</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Omitting</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>(Yes)</td>
</tr>
</tbody>
</table>

| Resulting practice | Bad translation | Moderately good translation | Good translation |
Discussion

This article examines the implementation of an ICT-supported task planning system for hospital physicians, ATP, as an intra-organizational translation process. Our findings are consistent with Andersen & Røvik’s (2015) identification of how a concept is translated several times as it travels through the organization, and in line with the basic assumption of translation theory that spreading management concepts do not necessarily cause identical organizational practices, even within the same organization. Figure 1 is a representation of our overall understanding of how the theoretical concepts used in this paper are related.

Figure 1 – Theoretical concepts and their interrelationships

We studied two consecutive translation processes and identified how ATP was first subjected to a strategic translation at the organizational level before it was subjected to an operative translation within each department. This offers a contribution to translation literature by shedding light on how actors at different organizational levels contribute to idea variation (Radaelli & Sitton-Kent, 2016).

Beyond this, our study contributes to the understanding of translation by combining the concept of readiness for change with the frameworks of editing practices and translation rules in an attempt to understand what facilitates good translations. We combined Teulier and Rouleau’s editing
practices, which are valuable tools in understanding how translators make sense of and change the meaning of an idea, with Røvik’s translation rules focused on how proposed practices change during translation. In the following, we first discuss the finding that different levels of readiness for change and specific change beliefs in the three departments were related to different uses of editing practices and translation rules. By linking practices and rules used in translation with the quality of the outcome of translation, this study also contributes to our understanding of the process of successful and unsuccessful translation activities and editing practices (Teulier & Rouleau, 2013). Finally, we discuss how department level readiness for change was fostered by the strategic translation, and how it developed further during the operative translation, identifying potentials for and limitations to readiness for change as a management tool for facilitating successful translations.

**Readiness for change, editing practices and translation rules in the context of differing institutional logics**

Readiness for change is “a comprehensive attitude that (…) collectively reflects the extent to which an individual or a collection of individuals is cognitively and emotionally inclined to accept, embrace, and adopt a particular plan to purposefully alter the status quo” (Holt et al., 2007:235). We found that the department which had the highest level of readiness for change (Dep3) staged a more inclusive and thorough operative translation process, employing not only more editing practices than the other two departments but employing them differently. This department also employed the translation rule of adding to the strategically translated version of ATP, while omitting very little. Dep3 operatively translated ATP in a way that was most aligned with the strategically translated version.

Translators actively modify ideas and practices, and are clearly not “cultural dopes” without agency (Fligstein, 2001). However, they are
situated within institutional settings that may limit their range of choice as to how they make sense of and translate management ideas (Nielsen, Mathiassen & Newell, 2016). These settings may be understood as editing infrastructures (Sahlin & Wedlin, 2008). In the case of operatively translating ATP into department level practice, the translators were situated in an infrastructure considered to be guided by a professional logic. The combination of the professional logic emphasis on trust in professional judgment and the managerial logic emphasis on controlling professional behaviour and output is often described as conflictual (Andersson & Liff, 2018), and the ATP project touched on precisely this issue. Embracing ATP meant being willing to forego the autonomy integral to the existing way of planning work, and to accept more managerial control and monitoring of tasks. In professionalized organizations, staff such as physicians often have the power to resist and curtail efforts by other organizational actors to change their practices. Failing to convince them of the importance of a defined discrepancy, the appropriateness of the suggested new practice, and the gain for them as a professional group in implementing the new practice could therefore be fatal to the translation process.

We believe our findings show how different levels of specific change beliefs in the departments impacted on whether and how editing practices were used to make sense of ATP. Belief in the discrepancy, i.e. the organization level, strategic goals of reducing waiting times for patients and breeches to treatment waiting time guarantees, was high in all three departments. The other beliefs, however, varied. In Dep1, belief in the appropriateness of ATP as a way of achieving the strategic goals was low. The operative translation reframed the central problem of ATP not as a further development of the problem framed by the strategic translation (long waits for treatment and guarantee breeches were a problem of insufficiently detailed, predictable and transparent planning), but as a reversal to or maintenance of the problem definition that the department head believed was the most salient one from the very
beginning – a lack of enough physicians. In Dep2, where the belief in appropriateness was medium, the reframing of the problem constituted a shift in focus to a lack of planning discipline. In Dep3 where belief in appropriateness was high the problem was reframed as one that combined the managerial logic concerns of stricter planning with professional logic concerns of competence building and working conditions.

Belief in appropriateness in combination with belief in the positive valence of ATP for staff impacted on how the strategically translated idea and practice was rationalized and how meaning was stabilized during the operative translation, as well as whether translators engaged in selling the change. In Dep1, where belief in both was lacking, there were no signs of rationalizing the change or stabilizing of new meaning beyond sticking to the pre-existing understanding of the problem. In Dep2, where belief in both were medium, the change was rationalized in relation to department specific planning issues (a need for more control over physician resources). In Dep3, belief in both appropriateness and valence was high. Here, the change was rationalized by connecting the ATP solution to both organizational and department level problems, thus maintaining the dual focus of the reframed problem. In both Dep2 and Dep3, the new meaning of ATP as defined by the reframed problem and department level rationalization was stabilized throughout the operative translation process. In Dep3, where both beliefs were high, we found that the most convinced translators practiced selling of the change to less convinced working group participants. Similarly, in the departments where we found medium or high belief in appropriateness, valence and efficacy (Dep2 and Dep3), we observed how translators spoke for the technology.

The belief in valence was connected to the editing practices of adjusting the vision and taking absent stakeholders into account. In Dep1, where belief in valence was low, vision adjustment consisted of a downscaling to a plan for moving existing planning practices in to the new software
without any changes to how planning was actually done in terms of level of detail or extension of the time horizon for task plans. In Dep2, where belief in valence was medium, the vision adjustment shifted the focus from solving organizational problems to solving department specific problems. In Dep3, belief in valence was high, and the operative translation process involved adjustment to a dual vision of solving both organizational and department level problems by implementing a system which would enable the department to improve their contribution to the strategic goals while also strengthening their fulfilment of professional needs. The Dep2 and Dep3 translation processes also took a wider diversity of absent stakeholders into account, extending the belief in the valence of ATP to also include patients and other hospital staff groups.

Finally, in Dep3 where there was strong principal support for the strategically translated version of ATP at several organizational levels, the discussions were staged inclusively, a factor which we elaborate the importance of in the discussion of the quality of the translations below.

The relationships between change beliefs and editing practices identifies a role for readiness in our understanding of how translation is performed. The translators who performed the operative translation of ATP were located in an editing infrastructure guided by a logic which differed from the logic of the new planning practice. Comparing the three departments, we argue that readiness for change expanded the possibilities for operative translators to edit the practice in a way that combined the managerial logic elements of the strategically translated idea and practice with elements from department specific practicalities and a professional logic. The ways in which the translators used editing practices to make sense of ATP further impacted on how they transformed the practice by copying, omitting and/or adding elements, a point which is elaborated in the following discussion of translation quality.


**Good translations**

Our study is a contribution to the knowledge on translation quality as it identifies the three different versions of ATP as bad, moderately good and good translations. We base this categorization on Røvik’s (2016) definition of good translations as new versions of a managerial idea and practice that contributes towards organizational goals. Our analysis shows the degree to which the translated versions were coherent with implementing a system constructed to enable hospital departments to improve their performance as measured by achieving stated goals. It also shows whether department members experienced the new practice as useful. In Dep1, there were no improvements in terms of how task planning was performed. Dep2 experienced an improvement in control over the task planning process and an extended planning horizon, while Dep3 thoroughly transformed and improved the way they distributed and planned tasks, and were able to do so more predictably over longer periods of time. This department also saw a decrease in treatment waiting time guarantee breeches, and while it is difficult to measure the effect of improved task planning on this quality indicator due to the complexity of factors influencing it, department management and staff believed that their less chaotic plans played a role in the development, and would increasingly do so in the long run.

The most successful translation came out of a process where all the editing practices identified by Teulier and Rouleau were extensively utilized. We argue that this was an important factor contributing to the outcome. First of all, an inclusive staging of the discussions in Dep3 ensured participation from a broad group of actors. This contributed to a process where many suggestions and viewpoints came to light, and to a translation space where problem reframing, vision adjustment, rationalization and meaning stabilization were highly participative practices ensuring a strong grounding of the new idea and practice in the practical realities of department work. It also enabled a combination of the underlying managerial logic of ATP with elements of the
professional logic guiding department staff, as seen in the inclusion of professional needs for competence building and more predictable working conditions in the reframed problem and the adjusted vision.

Inclusive staging also contributed to increased support for ATP throughout the process, as a wide group of actors were present when practices of speaking for the technology and selling the change were employed. Further, Dep3 went through the most thorough process of reconstructing ATP for department level use by adding department specific concerns and practices to the strategically translated concept (Røvik, 2016). The outcome was a practice that combined the initial intention by the regional HR department with what the department itself defined as needs, and in the end a more useful practice. Again, this constituted a combination of elements from the managerial and professional logics.

This result stands in contrast to the outcome in the two other departments, where translators used fewer editing practices and where the practices were used in a less extensive way. The staging of discussions in these departments were exclusive, and reframing of the problem and adjustment of the vision was either a reversal and downscaling of the strategic translation, or a shift away from its focus. These two departments noticeably also neglected to use the translation rule of adding their own elements to ATP. In Dep1, the change implementation can be characterized as a process of de-coupling (Meyer & Rowan, 1977), a reaction commonly found in studies of implementing managerial logic practices in the professionalized hospital context (see for instance Kitchener, 2002; Mascia, Morandi, & Cicchetti, 2014). The department accepted the change as something that needed to be implemented in some form, but little changed in terms of actual planning practice. In Dep2, adopting the changes meant compromising between or balancing institutional logics by partially attending to demands from both logics (Kraatz & Block, 2008; Pache & Santos, 2013; Smets, Jarzabkowski, Burke & Spec, 2015). Dep2 implemented practices of a stricter, managerial logic planning method in order to solve department
specific problems related to planning, but did not engage in a process of exploring whether the new managerial practice could contribute towards meeting professional needs. The change process in Dep3 went further than the other two departments in the combination of practices stemming from competing institutional logics, and developed an ATP practice which can be understood as a hybridization (Choi, Holmberg, Löwstedt, & Brommels, 2011) or selective coupling (Pache & Santos, 2013) of elements from the managerial and professional logics.

These findings are a contribution to translation theory as they empirically show how a variation in the use of editing practices and translation rules in “real time” translation work is connected with translation outcomes (Wæraas & Sataøen, 2014), specifically in the context of differing institutional logics. The best translation of ATP resulted from an operative translation process in which all editing practices were used. The practices specifically related to the content of the idea (reframing the problem and adjusting the vision) were used in a way that combined the content of the strategically translated managerial idea with a professional logic, and the translation rule of adding elements to the strategically translated ATP practice was used to enable achievement of the adjusted vision.

**Fostering readiness for change through strategic translation**

The readiness for change literature recommends persuasive communication where the change agent is communicating directly and verbally with the recipients of change as an influence strategy for fostering readiness (Armenakis & Harris, 2002; Armenakis et al., 1993). The strategic translation performed by the regional HR director can be construed as such an attempt at persuasive communication, and we believe a successful strategic translation is necessary in ensuring the readiness for change which further enables successful operative translations. It served as a way to sell the change to the recipient
departments, and was partially successful in persuading department level actors of the merits of ATP.

The HR director particularly managed to present a discrepancy that was believable in the recipient context. This was aided by her explicating the professionals’ needs for less stressful working conditions and more predictability, and by her combining the strategic, managerial logic goals of cutting waiting times and not having any treatment waiting time guarantee breeches with professional logic goals of securing competence building. By being aware of the differences in logic, and by using this awareness to edit the original idea, the HR director strengthened the translation in terms of achieving readiness for change. Further change beliefs, however, were less uniformly fostered by her translation across the departments.

In Dep3, the message of the strategic translation communicated well with recipients in the sense that it related to a “felt need” of improving a chaotic working situation in a way that enabled agreement especially on what the discrepancy was, whether the suggested new practice was appropriate, and whether there was anything “in it for them”. In Dep1 and Dep 2, where the communicated message did not resonate as well, there were powerful alternative explanations as to what would be appropriate measures, and the gain for recipients in putting their efforts into successfully implementing the new practice was therefore less certain. In these departments, the belief that adding more staff would be the only way to resolve the problems that ATP were meant to alleviate persisted. This illustrates that more practical, “felt need” elements are also important in considering how a management idea and practice should be translated in order to foster the change beliefs necessary for achieving a good translation. While fostering readiness through convincing strategic translations is a potentially valuable management tool, it may be limited by practical realities that undercut otherwise persuasive communication.
In addition to this, it is important to note that readiness for change is not a static entity throughout change and translation processes. The readiness literature highlights that active participation by change recipients in the change effort, enabling enactive mastery, vicarious learning and participation in decision-making, is also important in fostering readiness for change (Armenakis & Harris, 2002; Armenakis et al., 1993). The successful translation of ATP in Dep3 can be thought of as a virtuous circle of fostering change beliefs and readiness through translation. Initial readiness for change fostered by the strategic translation enabled a process that included management as well as professionals. The HR director’s initial editing of professional logic elements into ATP was continued as the idea and practice evolved. We observed how department level change beliefs and readiness was strengthened through this process, and how ATP was implemented in a way that contributed towards organizational goals. The role of readiness for change in translation processes is therefore not as a factor which can be placed precisely as either a result of strategic translation, or as a facilitator of good operative translations only. Rather, it is an element that is both fostered by, and contributes to, translation processes and good translations.

**Conclusion, limitations and research implications**

We argue that readiness for change is indeed a key concept in understanding translation processes and the quality of translation outcomes. Readiness enables inclusive operative translation processes that thoroughly rework a new management idea and practice by further development of problems and visions, and by stabilizing meanings which combine organizational and department, operative level needs, as well as differing institutional logics. This new meaning opens up the possibilities for adding practices that enhances the quality of the resulting practice. Strategic translations may foster readiness for changes that are based in a logic different from the guiding logic of the recipient context.
However, this is challenging if the proposed change does not resonate with a felt need at the operative level. Yet, if initial readiness for change is in fact established, it may further develop through the operative translation.

This study is limited by the fact that we have not measured and compared the attainment of organizational goals before and after the implementation of the three different versions of ATP. Rather, our identification of bad, moderately good and good translations is based on whether or not we observed changes in planning practices consistent with the principles of the ATP project, and the experiences of improvements as reported by our informants. Further research could benefit from including organization level data on goal achievement. We also believe that future research could build on, or challenge, the findings of this study by conducting longitudinal, mixed method studies using existing quantitative instruments measuring readiness for change before and after strategic and operative translation processes in order to more clearly establish the effect of strategic translation on readiness. Finally, extending research similar to this study to other contexts, such as contexts where differing institutional logics are less relevant, could increase our understanding of the role played by readiness in translation.

References


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