



**CHALMERS**  
UNIVERSITY OF TECHNOLOGY



# **The influences of organizational culture and organizational politics in healthcare transformation**

Case studies of digitalization in the healthcare sector

Master's thesis in Quality and Operations Management

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## Abstract

The healthcare sector in Sweden has been experiencing the emerging trends of digitalization and customer focus. Despite the significant advantages enclosed with these trends, digitalizing healthcare services and co-creating with patients may result in a number of challenges. A paramount challenge is the complexity of the healthcare sector. Whereas this thesis gives a closer look at the matter from the perspectives of organizational culture and organizational politics, as these factors are affecting healthcare far more than stakeholders would like.

As change management as well as digitalization directly links to the change in the way people work, they became the foundation of this thesis. In which, the change management of a digital solution was studied through literature and case studies in three hospitals in western Sweden. Interviews with stakeholders involved with IBD were used as a means to understand the different perspectives.

The results indicate interactions between the four worlds: managers, patients, physicians, and nurses, in which the main difference between the medical managers and regional managers was indicated. While medical managers were interested in clinical activities, the regional team focused on operational efficiency. The local autonomy in hospitals creates cultural distances among hospitals and the regional team. Therefore, regional managers have less legitimate power to drive the change. A collaborative culture between nurses and physicians could be beneficial to facilitate the change. Furthermore, the structure of hospitals was recognized to have a positive correlation with the complexity of organizational culture and organizational politics in hospitals.

This thesis contributes to theory by illustrating grey zones between and within groups of people in the healthcare sector. Each group and subgroup have common interests and conflicts, influencing the change process directly. As concluded, there is no one-solution-fits-all in change management, the change agents should understand and utilize cultural and political instruments to create unique change approaches. The involvement of the hospital's management was raised as a critical factor in facilitating the change. Also, the empowerment of patients was stressed to derive their critical knowledge. Finally, digitalization solutions need to be integrated systematically into an ecosystem, preventing "catch-22" from occurring.

**KEYWORDS:** *emergent change, organizational readiness, change management, change management in healthcare, facilitating change, organizational culture, organizational politics, organizational learning, healthcare, digitalization*

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# Terminology

<b>IBD X</b>	An application aiming towards self-testing and facilitating information transmission between the patient and clinicians involved in their disease.
<b>Quality Registry</b>	A central system where the patients' IBD data are stored. It enables clinicians to monitor the patients over time.
<b>Digitization</b>	The transformation of analog data into digital forms.
<b>Digitalization</b>	Comprehending the changes in, e.g. ways of working and roles that are associated with the implementation of digital technology.
<b>Emergent change</b>	A continuous, open-ended, and unpredictable process of aligning and realigning an organization to its changing environment.
<b>Change agent</b>	An individual who has the skill and power to influence the change effort.
<b>Catch-22</b>	A situation which is based on a paradoxical situation resulting in an endless vicious circle.
<b>Medical manager</b>	A manager with medical expertise. This person is or has been working as a nurse or a physician.
<b>Local manager</b>	A manager located within the top management of a specific hospital.
<b>Regional manager</b>	A manager within the regional team.

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# 1

## Introduction

Glouberman and Mintzberg (2001a) explained that many countries were showing dissatisfaction with their current healthcare system. “The healthcare system is failing,” according to Mintzberg (2012, pp. 4) is a common response towards each individual's healthcare system. The fact that the healthcare system is failing is a deceiving factor as it is a result of the unwillingness from society to pay for medical services (Mintzberg, 2012). However, the author declared it a myth since people are living longer due to e.g. increased medical expertise. In that sense, the healthcare system can be considered successful (Mintzberg, 2012). Even so, reforms and other efforts, as well as more money, are constantly aiming towards gaining control by bringing healthcare together, yet fundamentally it remains the same (Glouberman & Mintzberg, 2001a). In the opinion piece “Vi får mindre vård” (2017), the fact “We get less care for more money” was stressed as apparent in healthcare today. However, Mintzberg (2012) emphasized that the issues were not within the healthcare services, but rather in the context of other complex social connections (Glouberman & Mintzberg, 2001a; Begun & Thygeson, 2015). This complexity is built on the notion of the many involved stakeholders, as well as the organizational structure and the differentiated roles of professional groups (Nikula, 1999). Due to the complex structures, Glouberman and Mintzberg (2001a) mentioned that it was easier to study a narrower scope rather than the entire healthcare at once.

Digitalization has been considered essential in facing the challenges brought by healthcare (Mihailescu, Mihailescu & Schultze, 2015). In fact, it has been a growing phenomenon to increase organizational performance (Marcon et al., 2019). The inherent potential with digital business reaches far beyond traditional business, not the least when it comes to productivity and performance (Gobble, 2018). However, the concept of digitalization is considered as vague as it can have different meanings depending on the context (Kuusisto, 2017). To narrow down the wide definition, it is important to distinguish between digitization and digitalization. While digitization is the process of converting analog data into digital form, digitalization refers to changes in ways of working, roles, and offering to customers by implementing<sup>1</sup> digital technologies (Gobble, 2018). The concept of digitalization goes beyond digital technology. It is defined by the relation between digital technology and socio-technical structures (Osmundsen, Iden & Bygstad, 2018). Although digitalization is directly connected to technology; leadership, culture, and human resources are essential elements. Changing the way people

---

<sup>1</sup> There are different understandings of implementing/implementation. According to the Oxford Learners' Dictionary (n.d.), implementing something was “to make something that has been officially decided start to happen or be used.” Greenhalgh, Robert, Macfarlane, Bate, and Kyriakidou (2004, pp. 582) defined implementation as “active and planned efforts to mainstream an innovation within an organization.” In this thesis, implementing/implementation is used to mention both active and passive actions to make the IBD X project happen.

work requires changes in employees' skills and mindsets. At a higher level, those are the changes in organizational norms and culture, which fosters the digitalization by encouraging risk-taking and organizational learning (Parviainen, Tihinen, Kääriäinen & Teppola, 2017).

### 1.1 Case Description

In the context of this thesis, a digitalization project was implemented in order to support patients with IBD (inflammatory bowel disease). These patients previously had to visit hospitals for testing, but with IBD X they are able to perform the tests by themselves at home and thereafter send the results to physicians and nurses via a mobile application. IBD X is an application that could facilitate the information exchange between the patient and the hospital. It is interconnected with a quality registry, in which clinicians could monitor and track patients' data over extended time horizons. The project became a part of the region's digitalization strategy, in which region corresponds to "Västra Götalands regionen," which is responsible for providing healthcare in Western Sweden. However, challenges appeared when attempting to spread the IBD X to other hospitals. In fact, changing the way clinicians worked could either hinder or improve the way healthcare operates.

### 1.2 Objectives and Research Questions

#### *Objectives*

The research is conducted to enhance the understanding of change management in healthcare. Furthermore, the objective is also to provide implications that could potentially result in improvements in how changes are being implemented for different stakeholders in the healthcare sector. In which interviews will serve as a means to understand the phenomenon from their perspective.

#### *Research questions*

It has been stated that the effects of digitalization have been an area of interest from an academic point of view (Kuusisto, 2017). However, the author further elaborated on the lack of a holistic picture regarding how certain factors jointly were affecting digitalization. To study the complexity inherited with changes in healthcare this thesis attempts to turn back to the foundation of digitalization, meaning the socio-technical aspects of the change. In that sense, Braithwaite (2018) explained that both the local cultures and politics were factors that affected healthcare far more than what stakeholders wanted, making the cultural and political perspectives relevant in this thesis. Furthermore, organizational learning is directly connected to organizational culture (Weick & Westley, 1999) and organizational politics (Buchanan & Huczynski, 2019). Based on the aforementioned reasons, this thesis will aim to answer the following research questions:

**Research question 1:** How do organizational culture and organizational politics influence a change process in healthcare?

**Research question 2:** How is the learning among stakeholders facilitated during the change?

### 1.3 Delimitations

This thesis will use the four-world model presented by Glouberman and Mintzberg (2001a) as a basis for investigating the relations between different stakeholders within healthcare (section 2.1). Based on reviewing previous healthcare research, physicians were seen as more problematic stakeholders.

However, they were also believed to be a paramount part in connecting different worlds together, making them an essential source in studying the healthcare complexity. Prior knowledge regarding the implementation of IBD X also highlighted challenges in collaboration between physicians and other stakeholders. Due to these reasons, this research will stress the physician's perspective, whilst still studying all involved stakeholders highlighted in the four worlds.

## 1.4 Disposition

The disposition for the remainder of the thesis will be organized accordingly. The reader will first engage in the theoretical literature which will present the following theories, organizational culture, organizational learning, organizational politics, and how these can be incorporated into elements of emergent change, such as 'change readiness' and 'facilitation of the change.' Thereafter, the methodology seeks to explain the research approach, followed by the findings where all three case studies will be described in detail. Next in line is the analysis, whose goal is to compare the literature and the case studies. After that, the discussion will extend the comparison from the analysis to see if different theories can be integrated to extend or explain the case studies. The thesis will conclude by answering the research questions, providing theoretical- and practical implications, limitations, and round up with suggestions for further research.

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# 2

## Literature Review

This chapter intends to provide the reader with an understanding of the role of culture and politics in an organizational context. Furthermore, these are also the views from the perspective of emergent change, which have been highlighted to be suitable in the healthcare context. In terms of managing emergent changes, these approaches emphasize the organizational readiness and facilitating the change, which will be further discussed in the essence of culture and politics.

### 2.1 The Healthcare Sector

Processes in healthcare usually require the participation of people from various backgrounds. While Laurenza, Quintano, Schiavone, and Vrontis (2018) described that a challenge of adopting digital technology in healthcare was the lack of understanding between management and physicians, the roles of physicians are still believed to be essential in change management (Chreim, Williams & Coller, 2012). As a closer look, Glouberman and Mintzberg (2001a) introduced a framework to explain the complexity of healthcare. They divided stakeholders in healthcare into four worlds: care (nurses), cure (physicians), control (managers), and community (trustees/politicians). Even though the community (trustees/politicians) encompasses multiple actors, the patient is a large part of it and will be seen as the sole focus in this thesis. Therefore, this thesis excludes trustees in the shape of politicians as a part of a steering committee. Moreover, each world has its own organizational principles and key characteristics, which form up different ways of working and coalitions with each other. The lack of integration and a common culture across worlds poses a significant challenge (Glouberman & Mintzberg, 2001b). Changes initiated from different worlds seem to be bifurcated. However, Glouberman and Mintzberg (2001a) emphasized that the commitment to purpose, the strong desire for knowledge, and the urgency were the forces to bring these worlds together. Similarly, Chreim et al. (2012) also mentioned a principle of “what is the best for the patient” in negotiations and social interaction among these actors.

Healthcare operations have become more and more customer centric with the support of digitalization (Rantala & Karjaluo, 2016). In terms of the concept of value co-creation through digitalization, Rantala, and Karjaluo (2016) suggested that the traditional way of internally creating healthcare values might be changed by adopting a new culture which focuses on patients. The patients should be perceived as the ones who are knowledgeable and have a good understanding of their own conditions. This idea can be supported by the fact that a vast amount of information is now available on the Internet and patients also can interact with each other via digital platforms (Gellerstedt, 2016). As a result, they may be empowered to contribute to initiatives in healthcare (Rantala & Karjaluo, 2016). Sharing the same opinion, Laurenza et al. (2018) believed that the role of the patient became more active in giving feedback to improve the services provided.

### 2.1.1 The Swedish Healthcare Setting

Different healthcare systems may take different shapes, whereas the fundamental parts of the Swedish healthcare system are outlined in *figure 1* below (Swedish Research Council, 2017). In short, the healthcare system is funded on regional- and municipality taxes, as well as grants provided by the Swedish state. The healthcare system contains different levels of care, explained by “the care chain” (Swedish Research Council, 2017). The chain starts with primary care, which is explained as being responsible for basic medical care that does not require the resources found in hospitals. Thereafter the county hospitals are classified as including the required skills and equipment to treat the majority of diseases. There are also smaller county hospitals depicted as “Hospitals” in the picture below. The prime activities performed by these hospitals are in closed care. Finally, the regional hospitals in Sweden, which are defined as large university hospitals, fit to care for more complex diseases, whilst also enter in close collaborations with medical universities.

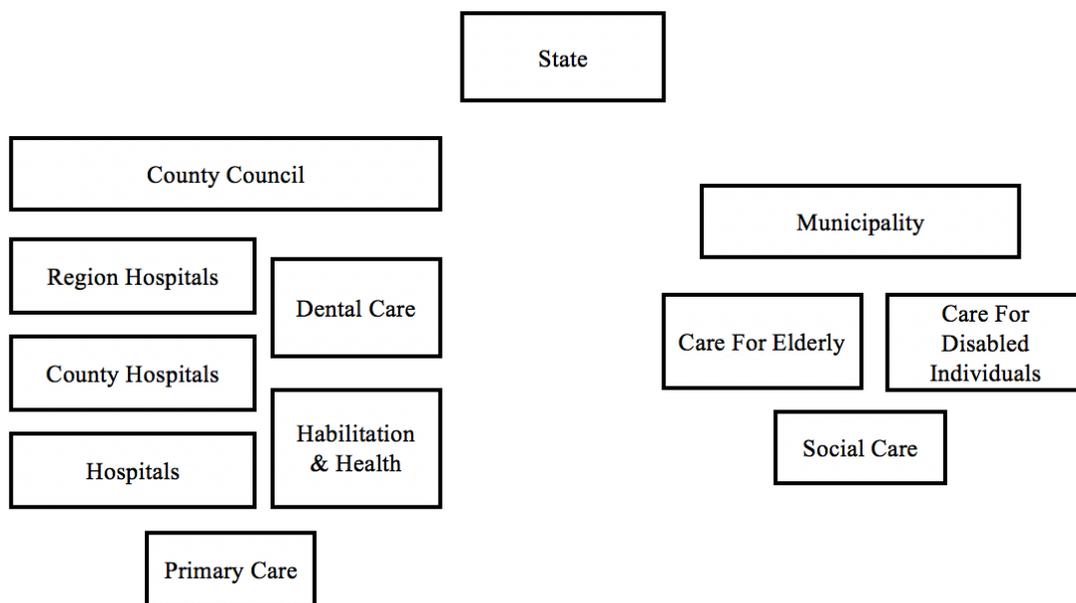


Figure 1: The Swedish healthcare system

## 2.2 Organizational Culture

There are various definitions of organizational culture, depending on the points of view. According to Shani, Chandler, Coget, and Lau (2009), culture is seen as a system of values and beliefs that are shared among a group of people and is transferred from one generation to another generation. From the comparative management perspective, culture and organization are instruments to serve human needs and at the same time to accomplish tasks (Smircich, 1983). Buchanan and Huczynski (2019) categorized organizational culture into three layers: surface manifestations, values, and basic assumptions. Surface manifestations are the most observable parts, while values and basic assumptions are more invisible. At the surface of organizational culture, symbols, rituals, and ceremonials are elements that can be seen during the change. Rituals and ceremonials could benefit organizations by providing meanings and managing anxiety (Smith & Stewart, 2011). Furthermore, Bridges (1993) suggested that the managers should not only have talked but also created symbols and acted to amplify the need for change. In the second layer of culture, Buchanan and Huczynski (2019) emphasized that top management played an important role in creating and delivering cultural values. Besides, cultural values are also a result of

organizational socialization, in which individuals find ways to fit themselves in organizational standards. The third layer of culture includes basic assumptions that are usually not discussed explicitly. However, they can illustrate the relationships between the organization and the environment (Buchanan & Huczynski, 2019).

Martin (1992) provided three perspectives of culture: integration, differentiation, and fragmentation. The integration view suggested a unique culture that was believed and shared by most of the employees. Differentiation and fragmentation are more common in social science (Martin, 1992). These approaches are related in terms of subcultures, in which Buchanan and Huczynski (2019) highlighted the difference of interests among different groups of organizational members, resulting in inevitable conflicts. Kunda (2006) also suggested that it was necessary to look at not only the organizational ideologies and actions of management but also the responses of the employees in order to understand the organizational culture. This implies the researcher to view the reality of culture as local and specific.

In the healthcare sector, Andersson (2015) suggested that there were conflicts between cultures of a pure physician and a pure manager, which resulted in challenges for physicians when shifting their role from a professional position to managerial roles. Witman, Smid, Meurs, and Willems (2011) gave a more concrete example that the manager who used to be a physician might have more interest in clinical activities. Still, physicians were believed to have the best position to connect different worlds in healthcare together. Andersson (2015) emphasized that physician managers should have collaborated with non-physician managers, for instance nurse managers, who usually focused on administrative tasks, in order to balance the leadership in the healthcare organizations. Moreover, the differences between subcultures in healthcare organizations also may result in local views. Andersson (2015) mentioned that physicians might prefer to make decisions individually and think about managerial activities as political and not fact-based, while nurses' point of view could support them to move closer to the career path of managers.

### **2.2.1 Organizational Learning**

“The learning organization, an idea which has become popular, combines structures and policies to encourage learning, with individual and corporate benefits” (Buchanan & Huczynski, 2019, pp. 146). Weick and Westley (1999) suggested that organizational culture could be used as an instrument to achieve the learning purpose throughout the organization. Organizational learning is the culture that enables the organization to make itself better systematically and continuously (Shani et al., 2009). In the book *Behavior in Organizations - An Experiential Approach*, Shani et al. (2009) categorized learning in the organizational context into three levels: individual learning, team learning, and organizational learning. Regarding the psychological stance, expectations and self-fulfilling prophecy theories were used to explain the interactions between the employers and employees during the learning process. In which, Shani et al. (2009) mentioned that subordinates' behaviors and an increased possibility that the prophecy is fulfilled are affected by what the employers expect from their subordinates.

Argyris (1991) proposed two models of organizational learning: single-loop learning and double-loop learning, which are illustrated in *figure 2* below. While the former focuses on how people solve a problem, the latter emphasizes the fact that people need to question the underlying assumptions that they made about that problem. According to this way of understanding, there are limited opportunities for learning and changing in single-loop learning. Learning should include the ability of employees to challenge existing assumptions and beliefs to form up a new way of working (Buchanan & Huczynski, 2019).

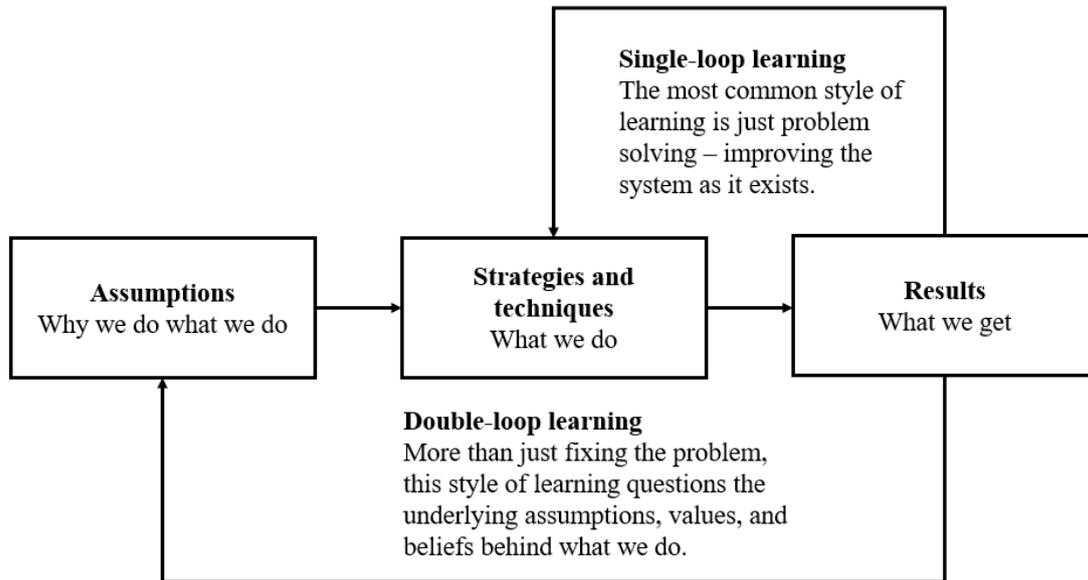


Figure 2: Single- and double-loop learning (Buchanan & Huczynski, 2019)

Nikula (1999) explained that adopting double-loop learning came with a different mind- and skillset, whereas there were multiple barriers blocking its implementation in organizations. For instance, Argyris (1991) stressed that the ones who have higher education might find more challenges to deal with double-loop learning. These professionals are considered to be exceptionally good at what they do rarely experience any failure. “So, whenever their single-loop learning strategies go wrong, they become defensive, screen out criticism, and put the ‘blame’ on anyone and everyone but themselves” (Argyris, 1991, pp. 4). The author further explained that their ability to learn shuts down. In fact, more experienced physicians are often working alone and put in situations where they have to make their own decisions (Bååthe & Norbäck, 2013). The physician’s actions and attitudes have been incorporated through extensive training, but also reinforced through organizational structures, actions from managers, and the culture (Nikula, 1999). In one way, physicians and nurses have adopted double-loop learning as they are constantly reflecting on medical factors, such as diagnosis, treatment, and care. Besides, their training has primarily been focused on medical competence development, leaving little to none margins for outside factors such as the healthcare organization, management, group dynamics, and finances (Bååthe & Norbäck, 2013). Also, Nikula (1999) stressed that the double-loop reflection lacked the organization and management perspective to whether tasks could be organized in a better way. In the end, Argyris (1991) recommended that managers should have been the pioneers to be open and cooperative so that they could build trust and initiate organizational learning culture. In other words, learning culture also means the increase in risk tolerance, which allows the employees to try new things and make mistakes.

In the book *The theory and practice of change management*, Hayes (2014) mentioned some challenges to create organizational learning. Firstly, people in different groups have tendencies to value their own subculture more than the others’ one. Moreover, their points of view are limited in their roles and responsibilities. This explains why people with different subcultures may struggle to find a solution together. Contextual factors such as organizational structures also impact on organizational learning significantly (Hayes, 2014). From another perspective, Burt (2004) discussed the role of “brokers”, who were people in between groups/departments and had the advantage of resolving misunderstandings through communication. At a higher level, these brokers can facilitate cultural exchange and good

practice sharing. They are the ones who have opportunities to realize the similarities in groups' cultures and combine various interests (Burt, 2004).

### 2.3 Organizational Politics

Organizational politics is a part of nature, often happening in competitive situations (Ferris & Kacmar, 1992; Kacmar & Baron, 1999). To some extent, organizational politics may influence organizational culture and organizational learning. For example, while organizational learning encourages transparency and openness (Argyris, 1991), organizational politics happen in the context of information asymmetry. Organizational politics can be seen as actions that someone takes that would be resisted if the actual motivation is known by other people (Frost & Egri, 1990a). According to Pfeffer (2010), when teamwork and informal networks become popular in organizations, skills of using power to influence others are more and more essential. During the change, stakeholders are more engaged in political behaviors due to the possibility of breaking the existing power structure (Nadler, 1987).

Frost and Egri (1990a) also suggested that organizational politics could be on both the surface and the deep structure of organizations. They listed deep structure games as naturalization, neutralization, legitimation, and socialization, which could be used actively to facilitate the change. Naturalization is a way in which forms and privileges are mentioned as natural laws and not open for further discussion while neutralization is a process that "value positions become hidden and value-laden activities are treated as if they were valueless. A singular position is universalized as a position shared by everyone, thus becoming one of fact rather than choice" (Deetz, 1985, pp. 127). Besides, socialization can be used to shape new values and beliefs for some people and gain benefits for others and legitimation is defined as actions taken based on "higher order explanatory devices" in the organizations (Deetz, 1985, pp. 127). Frost and Egri (1990a) also mentioned the delay of deep structure power. That means the current power structure is the result of political activities in the past. This implies changes in organizations may require preparation in advance and take time.

Meanwhile, surface political activities are more visible. They can be among peers, upward, and downward the organization hierarchy (Frost & Egri, 1990a). Farrell and Petersen (1982) categorized organizational behaviors into three dimensions: internal-external, vertical-lateral, and legitimate-illegitimate, depicted in *figure 3*. In the context of internal and legitimate dimensions, for instance, vertical political behaviors such as "direct voice" and "complain to supervisor" are more common in hierarchical organizations, while lateral political behaviors such as "coalition forming" and "exchanging favors" are more common in organizations with less supervision and more positions with equal power.

		LEGITIMATE		ILLEGITIMATE		
		VERTICAL	LATERAL	VERTICAL	LATERAL	
INTERNAL	I	- Direct voice - Complain to supervisor - Bypassing chain of command - Obstructionism	II - Coalition forming - Exchanging favors - Reprisals	INTERNAL	V	- Sabotage - Symbolic protests - Mutinies - Riots
	III	Lawsuits	IV - Talk with counterpart from another organization - Outside professional activity		EXTERNAL	VII
EXTERNAL	VI			EXTERNAL	VIII	- Organizational duplicity - Defections

Figure 3: Organizational behavior categories (Farrell & Petersen, 1982)

According to Buchanan and Badham (1999), many organizations choose to build up their cultures based on the assumptions of managerial humanism, ignoring the political dimensions. This approach potentially causes failures in change management. Specifically, they believed that the change agent who rejects political games might be naive or he/she did not understand organizational politics and would find significant challenges to drive the change. Any actions of the change agent should be viewed under various factors, including the formal authority of the change agent, the organizational culture, the available resources, and the past experiences of change (Buchanan & Badham, 2008). This illustrates a two-way interaction model between the change agent and the existing structure. Kotter (1985) mentioned the power gap between the formal authority of the change agent and the required power he/she needed to have to realize the change.

How to balance between organizational politics and open culture could be a tough question for managers during the change. Briner, Geddes, and Hastings (1996) recommended a model in which a manager should create a psychological safety zone for his/her team for learning and creativity but at the same time, he/she should have been involved in political activities outside the team actively. Organizational politics can facilitate or suppress changes in organizations, depending on the dominant coalition (Frost & Egri, 1990a). Organizational politics are inevitable and should be perceived positively in order to create positive impacts on the change management process (Buchanan & Badham, 1999).

## 2.4 Change Processes

The emphasis allocated to explain how and why organizations change has been immense (Van de Ven & Poole, 1995). Their reasoning is due to the many difficulties inherent in explaining the processes and sequences involved in the changes. In this field, Van de Ven and Sun (2011) indicated that process theories of implementing changes were ahead of practice theories. Four commonly discussed process models are “teleology (planned change), life cycle (regulated change), dialectics (conflictive change), and evolution (competitive change)” (Van de Ven & Sun, 2011, pp. 58). What they all have in common is the perspective of change as containing a series of steps connected by different actions and events (Hayes, 2014). However, the author explained that whether they saw change as a prescribed pattern and if the direction of the change was predetermined were the differentiating factors. Out of the four process models, teleology and dialectic are seen as more emergent while the remaining are viewed as planned (Van de Ven & Sun, 2011). The thesis will hereafter distinguish between emergent and planned change.

### **2.4.1 Emergent Change vs. Planned Change**

The general perspective towards change management is that change is straightforward and can be easily planned and controlled by a change manager (Kickert, 2010). Unfortunately, change tends to unfold in an unexpected way (Burke, 2009). Therefore, Augustsson, Churruca, and Braithwaite (2019) indicated that there was a need for change methods that were more flexible and multifaceted in order to attend to different complexities that were apparent in healthcare. In that context, Burnes (2011) suggested that instead of searching for the optimal change approach, it was important to find a situational model or contingency model that could modify the change approach based on the optimal fit for the environment. Ultimately, when it comes to changes that have a higher degree of complexity, a large number of stakeholders, with differentiated interests, positions, and strategies, the change is of emergent nature (Kickert, 2010).

### **2.4.2 Emergent Change**

Burnes (2009, pp. 372) defined emergent change to be “continuous, open-ended and unpredictable process of aligning and realigning an organization to its changing environment.” In other words, emergent change is illuminated by the view that change is not a linear process (Burnes, 2009). Furthermore, Burnes (2009) explained that emergent change had taken the lead in interest in comparison to planned change.

Todnem (2005) indicated that an emergent approach was based on a bottom-up approach where the change itself occurred too rapidly for top management to identify, plan, and implement any specific management measures. Moreover, a key interest in emergent change is the view of organizations as power systems, whereas change is seen as a political process (Burnes, 2009). In the end, the emergent perspective implies a different conception of change as detailed plans are of less importance while the role of power and politics on initiating and managing change is of greater importance (Burnes, 2009). Besides, Bamford and Forrester (2003) found that culture was the one thing that could help organizations anticipate and adapt to change, acknowledging the importance of culture in emergent change. Todnem (2005) further explained that emergent change was more associated with readiness for change and how to facilitate the change. The remainder of the literature review is constructed based on the aforementioned reasoning that the emergent change approach is influenced by the organizational readiness for change as well as the way it is facilitated. In this context, it seeks to take cultural and political perspectives into account.

## **2.5 Organizational Readiness**

Readiness for change in healthcare is described to be a critical component to successful implementation and approximately half of the large-scale organizational changes fail due to inadequate change readiness (Weiner, 2009). “Organizational readiness differs from individual readiness as it contains social phenomena, which means that individuals’ readiness may be affected by the readiness of others” (Armenakis, Harris & Mossholder, 1993, pp. 683). Jones, Jimmieson, and Griffiths (2005) extended to include not only the individual differences but also the culture, which emphasized the beliefs, attitudes, and intentions of the organizational members.

In order to create a common definition regarding organizational readiness for this report, two perspectives will serve as the foundation. Firstly, organizational readiness can be considered as “the extent to which organizational members are psychologically and behaviorally prepared to implement organizational change” (Weiner, Amick & Lee, 2008, pp. 381). Secondly, “Readiness is a state of

knowledge about the willingness or unwillingness to accept the change by employees in the healthcare organization” (Vaishnavi, Suresh & Dutta, 2019, pp. 1291). Even though definitions of change readiness are of a wide variety, they still encompass common key factors (Ober et al., 2017). The authors further addressed these factors to be the culture and climate, and if these were ready to adopt new changes, the organization was more likely to support the implementation of new ways of working. To illustrate the outcome of organizational readiness, in high levels, healthcare staff in an example were more persistent and had more appropriate skills to put a diabetes registry into practice and used it more consistently with high quality. On the contrary, when it is low, “Community health center providers and staff will resist initiating change, put less effort into implementation, persevere less in the face of implementation challenges, and exhibit compliant registry use, at best” (Weiner, 2009, pp. 5).

In the following section, two readiness models will be reviewed to understand possible correlations between contextual factors and change readiness. The content of the change, which is also essential to the change output, will not be discussed. Therefore, the below factors can be understood as “possible determinants of readiness rather than readiness itself” (Weiner, 2009, pp. 3).

### **2.5.2 Organizational readiness models**

#### *Readiness model one*

There are various factors that can account for the difficulties in implementing improved healthcare practices. The authors Augustsson et al. (2019) mentioned that specifically contextual factors had a major influence on the implementation of improved healthcare practices. Contextual factors are seen as broader concepts that are affecting organizational readiness (Weiner, 2009).

According to Weiner (2009), organizational culture was one of those broader contextual factors that were affecting the organizational readiness for change. That could be validated by Jones et al. (2005) where they stated that organizational culture affects how ready employees felt about implementing a change. A noticeable fact is that organizational culture can either strengthen or weaken the organizational readiness, based on whether the change fits with cultural values (Weiner, 2009). Furthermore, the author mentioned that the organizational culture would impact the common information assessment, resulting in an impacted readiness for change. Weiner (2009) extended by stating that the relationship between readiness and culture was specifically true for a culture that encompasses learning. In that sense, Al-Hussami, Hammad, and Alsoleihat (2018) stressed that employees and the healthcare organization itself had to be in constant readiness to become a learning organization.

A variable that was closely related to organizational culture was the organizational structure (Khalghani, Reshadatjoo & Iran-nejad-parizi, 2013). Weiner (2009) elaborated that organizational structure was an important variable to consider as different structures may result in different levels of readiness for change. Jones et al. (2005) explained that organizational structures that inherited flexible cultures were perceived to be more successful with the implementation of advanced technology rather than mechanistic organizations founded on inflexibility and control. In that context, flexible cultures are said to be more organic, whereas both organic and mechanistic encompass both organizational structure and culture (Reigle, 2001). The author elaborated by stating that mechanistic organizations are built on top-down decision making and a specialized task distinction, while organic ones are surrounded by great employee commitment to perform organizational tasks.

*Readiness model two*

Vaishnavi et al. (2019) described another model regarding organizational readiness for change, whereas this thesis focuses on factors that can be connected to culture and/or politics. The suitable elements from their readiness model will be further discussed hereafter. For example, Vaishnavi et al. (2019) mentioned “state of affairs” as a factor that can impact the change readiness. Specifically, the political and economic changes can create more pressure on the healthcare sector, change human resource practices as well as increase competition, suggesting a positive relation to organizational politics (Vaishnavi et al., 2019; Poon, 2003).

Vaishnavi et al. (2019) also emphasized the “interdependence among departments.” In the four-world model previously mentioned by Glouberman and Mintzberg (2001a), these can be the culture of trust among physicians, nurses, managers, and patients. Poon (2003) argued that organizational politics was negatively related to the culture of trust. Lack of trust may happen in the change and the management should allow space for employees to change their values and beliefs because the decision-making process relies not only on facts but also on stakeholders’ values and preferences (Vaishnavi et al., 2019; Buchanan & Badham, 2008). This is aligned with the opinion of Frost and Egri (1990a) that changes in the deep structure power can take time.

Vaishnavi et al. (2019), explained that “resource availability” was affecting the readiness for change in terms of whether management provides the required amount of support to make employees ready. According to Poon (2003), scarcity of resources was positively related to organizational politics, however, Laurenza, Quintano, Schiavone, and Vrontis (2018) suggested that digital technology could help healthcare systems become more effective and efficient. Furthermore, Vaishnavi et al. (2019) stressed that “technology advancement” can increase organizational readiness whereas the organizational culture itself has a seemingly large impact on the implementation of advanced technology (Dhingra & Punia, 2016). In this area, Vaishnavi et al. (2019) also mentioned that the “trends in the healthcare sector” posed an important variable for organizational readiness.

Finally, Vaishnavi et al. (2019) described “skills and training” to be essential when adopting new technology. According to Gordon and Pollack (2018), the organizational change in healthcare required project management as well as change management knowledge. At the lower level, the organizational members need to have both good practical knowledge and communication skills, which support them to interact with not only the patients but also other stakeholders (Konttila et al., 2019). Besides, new skills and knowledge should be practiced through hands-on daily tasks. On top of it, management should allow time for their employees to master these skills, which can be facilitated by a supportive culture and teamwork (Konttila et al., 2019).

## 2.6 Facilitating the Change

Pettigrew and Whipp (1993) stated their opinion that there was no common agreement about how the emergent change should be implemented. However, Todnem (2005) suggested some guidance developed to support change agents, for example, *the Kotter’s Eight-Stage Process for Successful Organizational Transformation* (1995). In terms of organizational culture, Kotter (1995) emphasized in his model the importance of using culture as a tool to anchor the new way of working, values, and beliefs. Moreover, creating short wins was also another cultural recommendation. This approach was also believed to be “the best approach for overcoming deep structure political opposition to change” (Frost & Egri, 1990b, pp. 11).

Although Kotter's eight-stage process has become quite popular, Buchanan and Badham (2008) still criticized that this theoretical change model was rational-linear based on the assumptions of ideal situations and could not be applied. Change management should be a complex process involving organizational politics. It requires the change agent to have creative, reflective, and unique approaches (Buchanan & Badham, 2008). In the context of change agents, they were defined as "anyone who has the skill and power to stimulate, facilitate, and coordinate the change effort" (Lunenburg, 2010, pp. 1). The author elaborated by stating that the change agent can be both internal and external. Todnem (2005) explained further that emergent change was related to the belief of the unpredictable surrounding environments, resulting in the situational approach. However, the situational approach, which highlighted the dependency on situational variables, may also neglect the essential influence of the change agent or managers.

From a case study in the healthcare sector, Essén and Lindblad (2013) believed that emergent change was a continuous process and could last in a long period. The project to build up the Rheumatology Quality Registry in Sweden which lasted 19 years can be an example. Besides, the emergent change should be from inside, facilitated by self-organizing and co-evolving with the environment (Essén & Lindblad, 2013). Dickens (2013), in another study, suggested other cultural factors that facilitate emergent change, including executive engagement, "safe-fail" culture, shared purposes, intentional learning process, and collaboration. Chreim et al. (2012) also believed that it was important to allow more dialogues and cross-functional collaboration in digital changes. However, due to the nature of complexity, again, there is no guarantee for success (Dickens, 2013).

### **2.6.1 Motivating People to Change**

#### *Enhancing the commitment*

At the individual and group levels, Yukl (2005) mentioned that some influencing tactics could be more effective than others. For example, rational persuasion, inspirational appeal, and collaboration were considered to be preferred rather than pressure, coalitions, and legitimating. In a similar recommendation, Hayes (2014) suggested education and persuasion should have been used to gain organizational members' buy-in. In which, education is considered as relatively unbiased and fact-based. It is formed up by the assumption that individuals are rational thinkers. On the opposite, persuasion is usually emotional and biased communication that is a more effective option in case the level of commitment is low (Zaltman & Duncan, 1977; Hayes, 2014).

#### *Tactics to influence people to change*

Pugh (1993) mentioned that many individuals might emphasize more on their own benefits/impacts rather than organizational ones, implying complex organizational political actions during the change. Motivational actions can be categorized from bottom-up to top-down approaches. For some managers, it is ideal that involvement, facilitation, and support are preferred methods. Still, they may take more time and resources than what was allocated for projects. As a result, manipulation, coercion, and goal setting are necessary to deliver the change in the context of limited resources or lack of organizational consensus (Hayes, 2014). When individuals' gain/loss is obvious during the change, negotiation can be applied to avoid resistance, however, this approach also can lead to higher cost and longer implementation time as an effect in the long run (Kotter & Schlesinger, 1979; Hayes, 2014).

# 3

## Methodology

This chapter will describe how the researchers came about to conduct the research. In other words, the reasoning behind the research strategy and the research methods will be provided. Thereafter, the thesis will provide an argumentation showing the fact of how this research can prove to aid with trustworthy outcomes. This chapter will conclude by stating why ethical considerations are specifically important in this research.

### 3.1 Research Strategy

Performing research in hospitals is not like any other place. As stated in the introduction, Glouberman and Mintzberg (2001a) described hospitals as unique complicated organizations that have to be broken down into single elements to establish a feeling of sensemaking. Whereas the previously explained the four-world model will serve as a foundation to derive conclusions regarding the different stakeholders. This research was not restricted to a specific truth but rather aimed to describe the differences between the four worlds. To understand the different worlds, the research was constructed through case studies based on qualitative data. In terms of a constructivist case study Merriam (1998) indicated the importance of specifying the phenomenon in focus. However, the constructivist case study allows for a much broader definition (Merriam, 1998), whereas this research is based on three case studies, all with a single hospital in focus. Furthermore, the context of the phenomenon was to explain what different worlds acknowledge about digitalization changes in healthcare.

The main characteristic of case studies is their unique contribution towards the development of theory, by combining empirical insights and their contexts (Dubois & Gadde, 2002). With what being said, this thesis adopted the systematic combining approach described by Dubois and Gadde (2002). This type of approach has roots in abduction, which essentially is a combination of induction and deduction. Continuously matching theory with reality was according to Dubois and Gadde (2002), a fundamental piece of the approach that ultimately resulted in the constructed research design shown in *figure 4* in the following section.

### 3.2 Research Design

The main objective of qualitative researchers is to understand how people experience and think about their world (Merriam, 1998). In order to adequately understand the different worlds, the right data must be obtained. Due to that reason, *figure 4* depicted below, indicates an iterative research process that continuously allows the researchers to adapt literature review, research questions, data collection, and data analysis based on new knowledge. Performing the data collection iteratively in this research was essential in order to get more reliable and valid data, which was also confirmed by Merriam (1998). Furthermore, the abductive approach to this research contributed to a process where the theoretical

literature, empirical data, and the analysis, jointly evolved in order for the development of new theories (Dubois & Gadde, 2002), making the iterative layout suitable.

The research design was elaborated further through the model of Maxwell (2012), in which goals, research questions, methods, and literature are interconnected to each other. Validity is not considered as a complete process in this thesis and the explanation will be discussed in the research quality section. After the goals and the research questions were formed, the methodology and literature part were developed simultaneously. In the beginning, the methodology included both qualitative and quantitative approaches. However, due to the lack of quantitative data, the methodology was revised, updating goals, research questions, and literature accordingly. Similarly, findings in interviews later required the second update for research questions and further adjustment of the theoretical framework.

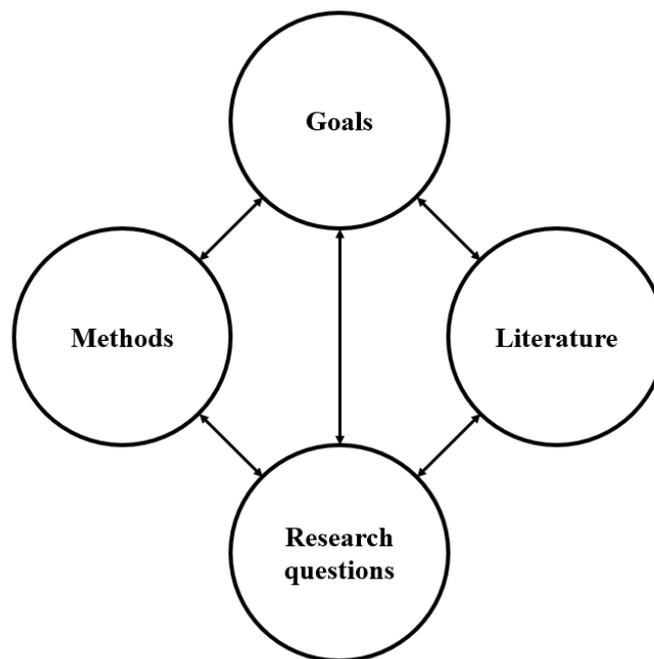


Figure 4: Research Design

### 3.3 Research Methods

The research was executed through a literature review that aimed to provide a basis for gathering additional data as a means to answer the research questions. Through the usage of specific keywords, such as *emergent change*, *organizational readiness*, *change management*, *change management in healthcare*, *facilitating change*, *organizational culture*, *organizational politics*, *organizational learning*, healthcare, and digitalization, a thorough understanding was obtained. Qualitative sources of evidence were used to build on the literature review. These were in the shape of interviews, documentation reviews as well as asynchronous email interviews, whereas the two latter mentioned were used in order to corroborate the data received from the interviews.

#### *Data Collection*

Semi-structured interviews as described by Bryman and Bell (2011) were performed with physicians, nurses, managers, and patients regarding IBD X. The reasoning behind semi-structured interviews was derived from Waller, Farquharson, and Dempsey's (2015) statement that the more exploratory research the less structured interview format. The data was gathered from three hospitals, namely called A, B,

and C, whereas A indicated a county hospital, and B, and C illustrated a larger university hospital. The reason for targeting a low number of hospitals was to generate a deeper understanding as well as to set up a time horizon feasible for conducting qualitative research. The participating interviewees amounted to a number of 10 in total, which are depicted in *table 1* below. Due to confidentiality agreements their names are not mentioned, which will be discussed further under ethical considerations.

Table 1: Interviewee outline

<b>Codes</b>	<b>Descriptions</b>
ADoc1	The senior physician in hospital A
ANur1	The senior nurse in hospital A
BNur1	The first nurse (manager) in hospital B
BNur2	The second nurse in hospital B
BNur3	The third nurse in hospital B
BDoc1	The physician in hospital B
CDoc1	The physician in hospital C
CPat1	The patient in Hospital C
ReMa1	The first regional manager
ReMa2	The second regional manager

As the interviews attempted to capture certain subjective feelings, emotions, and behaviors they were performed with the critical incident technique suggested by Flanagan (1954). This type of technique has according to Kemppainen (2000) been frequently applied to healthcare research seeking to study patients' opinions or other experiences within healthcare, making it a good fit for this research. A critical incident itself is "understood to be an incident either contributing to or detracting from the general aim of certain activity in a significant way" (Engen, Fransson, Quist & Skálén, 2020, pp. 7). Whereas the advocacy for using the critical incident technique, comes with allowing researchers to capture descriptions of actual events rather than how respondents perceive that things should be (Bradbury-Jones & Tranter, 2008). Something to bear in mind when using the critical incident technique in healthcare research is that sometimes it can be unclear what an actual critical incident is, as respondents' answers may be too general (Kemppainen, 2000). That was also seen in the interviews, especially regarding sensitive topics. For instance, when the interviewees were asked about organizational politics or culture and their answer could affect the relationship with their coworkers, their answer was unclear.

The interviews were mostly conducted in a physical setting with two interviewers and one interviewee. However, due to the emergent pandemic of COVID-19, the interviews had to be adjusted to another medium, which in this case was Skype. Firstly, a face-to-face interview for the regional team was conducted, followed by face-to-face interviews in hospitals A and B in the same period, and the latest ones were for hospital C and the patient via Skype. All interviews were recorded for analysis purposes after their approval was granted. Even though not all interviews were conducted in English, they were all transcribed to English, in order for both researchers to give the same focus towards each one of them. Interviews lasted from 30 to 45 minutes for each, depending on the available time from the interviewees. Five interview guides were initially created, however, as a part of the systematic combining described by Dubois and Gadde (2002), the interview guides were modified based on raised concerns and key

points from previous interviews as well as new theoretical findings. The common parts from the interview guides were regarding the effects of IBD X, opportunities and challenges in the project, hospital/clinic strategy, and organizational culture in the hospital/clinic.

*Sampling*

Since the number of people with any experience of IBD X was relatively low, purposive as well as snowball sampling were combined in order to get as many participants as possible and to find those that can help the researchers answer the research questions (Waller et al., 2015). A concern regarding snowball sampling was raised by the authors, saying that the sampling would only involve people from the same social networks. However, as one interviewee for each of the different worlds were initially confirmed through purposive sampling, the research got access to multiple social networks, which could thereafter snowball. The initial contact points were through the regional managers, which further supported in spreading the interviewee network through contacting nurses and doctors in the hospitals. The newly achieved participants thereafter assisted in extending the participant base by referring the researchers to other candidates. Finally, the patient participated through a personal connection, which was complied with the current regulations.

3.4 Data Analysis

To make sense out of the data it is important to establish clear categories for coding (Merriam, 1998). First of all, the interviews were coded through the process recommended by Gioia, Corley, and Hamilton (2013). This method implied that the data were categorized into first-order concepts, second-order themes, and aggregate dimensions. This way of analyzing data from the interviews can assist in interpreting what critical incidents leads up to value co-destruction, which is one of the goals with the method (Gioia et al., 2013). Moreover, as the e-mails and documents were only used to validate the information in the interviews, no separate analyzing procedure was established. To illustrate how the data was coded, an example is depicted in *table 2* below.

Table 2: An example of the coding procedure (Gioia et al., 2013)

1st Order Concepts	2nd Order Themes	Aggregate Dimensions
- Pressure from the the regional team and politicians	States of affairs	Change readiness
- More team work culture in hospital A - Specialization and complexity in hospital B and C	Culture in different hospitals	
- Small scale in hospital A and large scale in hospital B and C	Organizational structure	
- CDoc1 had time to allocated for the IBD X project - ADoc1 informed that he did not have time for extra works	Ability of resources in different hospitals	
- Nurses and physicians in hospital A are more dependent to each other rather than in hospital B and C	Interdependence across departments in hospitals	
- The same technology was applied to all hospitals	Advancement of technology	
- Digitalization was mentioned as a trend in healthcare	Trends in the healthcare sector	

3.5 Research Quality

Qualitative research is often criticized due to its inability to be objective, reliable, or valid (Waller et al., 2015). The authors further explain that the reason a qualitative study might not be reliable is due to

the intended meaning of the study. This study emphasizes that a collective truth is a myth, which leaves room for different partial perspectives making reliability a non-critical factor (Waller et al., 2015). The same reasoning goes for objectivity, which was reliant on the perspective in focus (Waller et al., 2015). Whereas, in this constructivist research there are multiple truths, one for every single individual located inside the four-world model. In order to measure the quality of qualitative research, the authors suggested trustworthiness rather than reliability. However, this implied that the process of coding the data was following a consistent approach, which was established through predetermined ways of handling every source of data. This research had predetermined ways of setting up the interviews through the critical incident technique and analyzing the data through the coding procedure described above.

According to Waller et al. (2015, pp. 24) validity was defined, "It actually measures what it intends to measure." As for the aforementioned objectivity and reliability, also validity becomes less straightforward in qualitative research. Waller et al. (2015) explained that it was a matter of how the data was generated as well as interpreted. In that case, to validate the interpretation of data the researcher needed to pay attention to cultural meanings to ensure what was important to the participants, which were captured through the critical incident technique presented by Flanagan (1954). In the end, documents that could not be used for quantitative analysis were instead used to validate qualitative facts. Furthermore, validation for interviews was performed partially per requests from interviewees.

An important part of validity is the reflexivity of the researchers' involvement in the study. It was described as being aware of how the power relations between the researcher and the researched may affect the quality of the study (Waller et al., 2015). An apparent factor in this study was the academic pressure of having findings within a short time frame. This could in fact impact the accuracy and quality of the data gathered as well as the data analysis. By being aware of this impact at an early stage the researchers were able to bear that fact in mind when performing the interviews and analyzing the data. Furthermore, politics often arose as a notion of something bad, where Hayes (2014) mentioned that collecting data regarding organizational politics could imply a misinterpretation of organizational functioning. That could in fact have affected the quality of the collected data. Also, the fact that politics is apparent in organizations was obvious, but how people think of it shifted a lot, potentially resulting in biased data.

### 3.6 Ethical Considerations

As research in healthcare typically involves human subjects there are a number of ethical considerations that researchers must take into consideration (Aita & Richer, 2005). Taking ethical considerations into account can alleviate the difficulties apparent in qualitative research through especially autonomy, beneficence, and justice (Orb, Eisenhauer & Wynaden, 2001). The three ways of reducing difficulties in qualitative research and how these are put into context for this study will be described below.

#### *Autonomy*

The protection of human rights has been argued to be essential in healthcare research whereas they stress the importance of seeing every participant as an autonomous person, free to accept or decline their participation (Orb et al., 2001). In this research, participants could resign at any time, skip any sensitive question, and even omit their provided answers. As a part of the interview, procedure participants were asked for confirmation to record the interviews.

### *Beneficence*

The second ethical consideration, beneficence was explained by Orb et al. (2001, pp. 95) as “doing good for others and preventing harm.” Researchers are often unable to predict how participants will be affected as they are unaware of issues that were not initially apparent (Dempsey, Dowling, Larkin & Murphy, 2016). To mitigate the risk of putting the participants in an exposed position, trust and anonymity were two factors specifically mentioned. Linking back to Aita and Richer (2005), where they emphasized the high involvement of people in healthcare, making trust and anonymity especially important for this research. In line with the critical incident technique, the interview was formed to capture feelings, and other personal opinions, resulting in a possibility to end up in an uncomfortable situation with their colleagues. Therefore, keeping any personal as well as hospital-related information about the participant confidential was important in this research. The things that were kept for comparison purposes, were the professions, as well as the sizes of the hospitals. Trust was also maintained by mentioning how the participant’s data would be used as well as respecting if the participants wanted to be phrased in a specific way. In that context, a part of transcription was sent to an interviewee for validation.

### *Justice*

Finally, Orb et al. (2001) described that justice had to do with equality and fairness. Whereas a key part of justice was to avoid exploiting and abusing participants. This ethical consideration was very relevant in this research as participants were located in a variety of different hierarchical levels in the hospitals. As aware of this fact was raised before conducting the interviews it allowed for a neutral stance towards all participants, no matter the hierarchical level.

# 4

## Findings

This chapter will present the findings that were derived from this research. Three case studies were conducted in order to grasp the cultural and political differences. The outline for the interviewees and their respective hierarchical position is depicted in figure 5. However, it is important to acknowledge the hierarchical differences between the county hospital (hospital A) and university hospitals (hospital B, C). This constitutes key differences in terms of the structure of the organization, the roles of the professionals as well as how they interact and communicate. The interviews included regional managers, nurses, physicians, and patients. Only existent in hospital B was an interview with local management. The description of the different words can be found in table 1 in the methodology chapter. Hereafter the highlighted information from the interviewees will be presented.

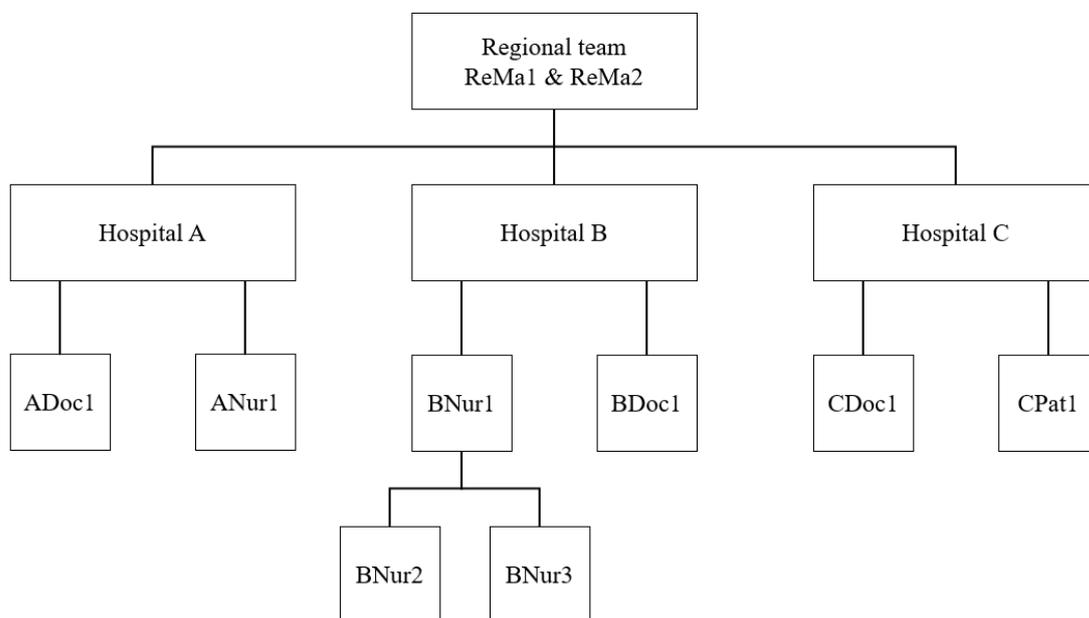


Figure 5: Case study outline

### 4.1 The Regional Team

#### *Background*

In the interview with two regional managers (ReMa1 and ReMa2), the interview guide was prepared to build up a holistic understanding of the project IBD X including the background, expectations from regional managers, and their current strategy. ReMa1 and ReMa2 are both experienced organizational

members. While ReMa1 is in charge of the regional digitalization strategy, ReMa2 has more specific responsibilities to lead the IBD X project.

### *Change approach*

ReMa2 emphasized the importance of trust among people and the trust of the technology. The manager implied that it could be more challenging to convince the physician rather than the nurses in change. Also, it is essential to have support from local management to create a culture for people to “climb over the mountain.” ReMa2 indicated, “The culture of the hospital and management form the way people work.”

From another point of view, ReMa1 believed that data were necessary to show hard facts to make the adoption easier. Using hard facts is a way to create pressure from professionals to improve the progress of the change. ReMa1 also would have liked to study a model to implement the project successfully in other regions. Besides, the manager thought that top management’s involvement was needed, including hospital director decisions, political decisions, or professional decisions from the regional board. However, they have not yet been able to unify into a final decision regarding the regional strategy. Lastly, ReMa1 agreed that customer satisfaction had to be the common purpose for everyone to stand up for the patients.

### *Implementation*

The project IBD X was planned to last in two years from June 2017. It was expected to support 500-1000 patients at completion. Although the current number of beneficiaries has not yet reached the target. ReMa1 emphasized that change was a continuous process, even after the project was closed. The manager pointed out:

“Even though we sound a little pessimistic about some aspects and we are not happy about them. At the same time, we are very happy and proud about what we have reached when we know the potential is much more.”

“We have to be positive that we have plenty of patients using this, we know it is working, we are the best in Sweden.”

At that moment, ReMa1 and ReMa2 also planned to have some further support from a consulting firm regarding the IBD X project.

### *Expectations*

ReMa1 expected to speed up the progress of the change and spread IBD X to all hospitals and all relevant patients. ReMa1 further described, “Adding a new thing is usually quite complex but now we have to change the way of working as well, as the second level of digitalization.” Furthermore, both managers believed in the benefits of standardization, “a brighter future.” At this point, the healthcare processes will become more similar among hospitals and the patients will be treated better when they move from one hospital to another. ReMa1 thought that the project could create more values for individuals and save costs for hospitals.

ReMa2 mentioned the high level of autonomy in hospitals, “Every hospital can decide on their own. They don’t have to follow just something that we think is good.” ReMa1 also mentioned the two-side attribute of local autonomy. On the one hand, the high level of local autonomy can be good if there are

individuals who are interested and become the key driver for the change. On the other hand, it can take longer to involve everyone.

## 4.2 Hospital A Case Study

### *Background*

In hospital A, two interviews were conducted for ADoc1 and ANur1. They are a senior physician and a senior nurse, who has been in the steering committee to develop the IBD X for more than 10 years, facilitating digital reporting. ADoc1 used to work in hospital B before moving to hospital A, and together with ANur1, implemented the pilot of IBD X in hospital A. IBD X was coincident with the digitalization strategy and became a part of it in 2017.

Many have considered hospital A to be a successful case in terms of implementing IBD X and the quality registry. ReMa2 indicated that it could be the result of having two people that are really committed to the implementation in their hospital. Regarding the two people driving for change, ReMa2 commented:

“ADoc1 was an “enthusiast” to make a change. The physician really has this commitment. We need to see how we can make a change without that person, without the fighting spirit of one person. Because the physician in hospital A said at an early stage in the process that he did not want to be unfriendly with his colleagues.”

“ANur1 has been like a change agent, trying to convince the nurses to change the way they work, which has been successful in some hospitals. However, it is the culture about how people are doing things that determine. Just because you can do it at A, it does not mean that we can do it at C.”

### *Change approach*

ADoc1 and ANur1 emphasized that physicians and nurses in hospital A worked like a team. “We discuss the patients together with the nurses,” ADoc1 said. Besides, they showed their trust in technology. ANur1 believed that digitalization can result in higher patient participation. “I really believe in digitalization. The participation of patients is something that really inspires me, as a part of the team and not a guest,” ANur1 said. Furthermore, this manager expected that by collecting patients’ data from IBD X, they could look at different groups of patients and optimize the medication and dosages in order to save costs.

“I think it is very important to look at what kind of patient groups that we have and what we have to measure in order to change our routines for the better.”

ANur1 usually used their spare time to work with the project. In the long term, ADoc1 expressed their vision to see IBD X as a part of a larger system that can be used nationwide. IBD X is a way for them to deal with patients’ data in a standardized way. Both ADoc1 and ANur1 are in networks with other physicians and nurses in the regions. They have been presenting the typical case in Hospital A to their colleagues in other hospitals, spreading the IBD X.

### *Implementation*

Regarding the implementation, ANur1 advised that they started by inviting a group of patients to join the project. Moreover, ANur1 reported that there was a culture that allowed employees to try new things

in hospital A. ADoc1 mentioned the support from local management to pay for medical students during summer to input data into the quality registry.

“They have encouraged us to start up with this system. The huge work is to put all the patients into the system. The longer the patients are with us, the more data we need to put into the system [...]. We had medical students that worked with us for two summers. They supported putting all data [...]. And the management paid for the salaries.”

This quality registry’s readiness was a must to start using IBD X. During the project, ADoc1 kept communicating with other physicians. The physician used IBD X to illustrate what they were discussing.

“You have a very good picture of the patients, with all disease history. I showed the graphs when we discussed the patients, whether they are going to have surgery or not. We have good statistics in a very easy way.”

To facilitate this project, ADoc1 also mentioned their approach to empower nurses. More specifically ADoc1 explained, “Our nurses are experienced, and they can make their own decisions.” The physician elaborated to say that the work of the nurses will be more interesting if they are more involved in this project. The physician found it suitable to involve the nurses to a greater extent when conducting quality improvements, due to their daily experience with monitoring. The way of working was also emphasized by ANur1. “Here we work a lot in teams, of course, we are still physicians and nurses but we try to overlap each other with respect for each other's roles. There is no hierarchy. There is no one who says, do this or do that.”

When it comes to convincing others to adopt IBD X, the physician argued that it was more challenging to convince other physicians. The reason for that was as ADoc1 stated, “I do not know. They are more conservative.” ANur1 also confirmed the fact that some nurses are conservative because they are afraid of new technology. Furthermore, ANur1 added that there was no training to smoothen the process.

### *Expectations*

ADoc1 expected the IBD X to be successful at a large scale. He elaborated by saying, “It was not like I kept nagging every day, but I spoke about the opportunities with it. We try to emphasize the opportunities with digitalization, and hopefully, we can go through the regional level to enforce implementation.” Furthermore, both ADoc1 and ANur1 were participating in workshops to introduce the IBD X project to other hospitals in the region.

### *The output of the change*

About the output, ANur1 believed that they had increased patient participation and the patients who were using IBD X were very happy with it. The nurse also thought that patients had enough competence to use the application of IBD X. From another view, ADoc1 thought that it would take more time to realize the benefits of this project. The physician explained, “We only can see the benefits after 1-2 years. We need to have an understanding from managers so that they do not demand the result immediately.”

In order to scale up the IBD X in other hospitals, ADoc1 recommended to start with a small scope first, and use communication to gain more commitment from organizational members. ADoc1 was in a network with other physicians that gave them chances to sell their idea. However, “They sometimes get a bit ashamed when I mention it. They want to do it but do not have the power to do it, yet.” ADoc1

stated that there was resistance towards changes that was obvious in the world. Whereas the physician explained, “Carrot and stick is the ideal way. Do not be too pushy, where you will be unfriendly against colleagues.”

Moreover, a top-down approach was recommended by ADoc1, “In the region now, they want to implement this and say that all clinics have to use the system.” However, this was not the case in hospital A since everyone worked together as a team.

### 4.3 Hospital B Case Study

#### *Background*

The case study of hospital B consisted of the following interviewees: physician (BDoc1), nurses (BNur2 and BNur3), and local manager (BNur1). Hospital B is a large university hospital with many IBD patients. However, the IBD X implementation was reported not as good as the one in hospital A. This case study is inherited with challenges and obstacles that prohibit different professions from adopting IBD X.

#### *Change approach*

One thing that truly existed was a constant pressure to do more with less, whereas the local hospital tried to accommodate that without cutting down in personnel. BNur1 further stressed the huge focus on the economy all the way down in the organization, whereas they were constantly trying to find cost-saving activities. However, it was acknowledged by BNur1 that there was a missing engagement to coordinate the implementation of the project. To elaborate on the lack of involvement, BNur1 stressed the lack of awareness about the implementation of IBD X in the hospital. Another perspective was given by BNur1, where it was mentioned that information seldom made its way to the boss, but rather reached the nurses and physicians with the diagnosis in focus.

#### *Implementation*

The actual implementation of IBD X in hospital B was initiated in 2018 where they chose to include 30 patients. The initiative was according to BNur3 coming from the regional level. BNur1 explained that when a new project was implemented, they almost never had more resources to accommodate the new objectives, which was in fact also true in this case. Therefore, the project was implemented slowly. For any issues, nurses in hospital B would discuss together and then reach out to the manager when it came to making go/no-go decisions. Even the IBD X could be attractive to young patients and people who loved technology, BNur2 explained that the implementation of IBD X faced several obstacles. Some happened within their clinic, some with the app, some with the patients, and even the test itself.

In hospital B, there were only nurses actively involved with IBD X as well as the related quality registry. The reason for that was as BNur2 was pinpointing, “Our physicians do not want to work with the quality registry, it is an additional task for them.” This reasoning was not confirmed by BDoc1 as he expressed a genuine positivity towards using IBD X and the quality registry. However, the system was not integrated with the hospital system, which indicated it as an additional task. The nurses’ implementation approach in order to get the physicians involved was to excessively repeat IBD X in their context. However, BDoc1 stated that the two reasons that explained physicians’ difficulty in committing were time and clinic management support. Furthermore, BDoc1 explained that the uncertainty between the two professions contributed to the fact that physicians were seen as more conservative and harder to change. To elaborate on that statement, BNur1 said that the organizational structure was a key factor

that prevented physicians from committing to the project. In other words, in a large hospital such as hospital B physicians shifted positions almost every two weeks, making it difficult to adopt a sense of commitment to long term changes. In fact, BDoc1 stated that physicians rotated between around five different positions, whereas only one of those was to treat IBD patients in the inpatient clinic. BNur1 stated that at any given time, around 50% of the physicians were doing something else rather than helping IBD patients. Also, BDoc1 emphasized the lack of IBD dedicated physicians.

BNur1 gave another perspective saying that it was easier to implement in smaller hospitals since everyone knew each other and worked continuously in the same place. When the question “How should implementation be configured to become successful?” was asked, BNur1 said that it was important to firstly target a small scale and successively increase the number of patients. On the other hand, BNur2 and BNur3 indicated that they faced a lot of technical obstacles as well as trust issues which prevented them from scaling up. Another concern indicated by all the interviewees in hospital B was the fact that their basic task was primarily firefighting, which meant that this project would receive little to no attention and was at the bottom of the priority to implement. In terms of skills and knowledge, BNur2 and BNur3 mentioned that they got some technical training from the supplier and they were confident to communicate with patients via phone or Skype. However, BNur1 also explained that it could be challenging to arrange more time for nurses to learn new skills and knowledge.

A key concern was raised in how physicians could be convinced to adopt IBD X. In this context, BNur3 acknowledged that the encompassed benefits were not as easily achievable for the physicians as for nurses, meaning that for nurses the benefits from IBD X went directly. From the nurse perspective, they repeatedly tried to nag on the physicians in order to convince them that this solution was something worthwhile. Also, BNur1 confirmed that they had been searching for a motivator to get the physicians on board, but without any success.

### *Expectations*

All professions gave an indication that the patient’s perspective was the most important outcome of the project. However, BNur2 and BNur3 argued in line with BDoc1, saying that the importance of a functioning system where patients could rely on trustworthy data was the key to this project. BNur1 added both the patient’s experience as well as process efficiencies as key determinants, whereas the primary focus was on the patient’s experience in the project.

### *The output of the change*

What has been seen so far regarding the output is that even though the project was implemented to 30 patients, only five regularly used it. As only the nurses were involved and received the direct benefits, it has not resulted in changed ways of working for the involved stakeholders, rather it has opened for interpretation. In other words, it has created alternative ways of performing the same task. To explain the aforementioned concern, BNur1 stressed the situation to be at a “catch-22.”

In terms of the project in hospital B, ADoc1 believed that colleagues needed to overcome the initial failures. The lack of involvement from senior physicians was also a reason. The first challenge is the data readiness, “We need to put some data into the system. It’s inevitable. Moreover, the physicians still have the choice not to use IBD X at present.”

## 4.4 Hospital C Case Study

### *Background*

This case study consists of two perspectives, the physician's and the patient's, whereas the patient's perspective has been depicted in section 4.5 below. Both of these regard to a university hospital. The physician has been a part of an improvement project, which seeks to evaluate the implementation of IBD X in hospital C.

#### *Change approach*

CDoc1 explained that there was an existent change approach in hospital C. There was time allocated towards working with specific improvement projects. For instance, the physician got the time set aside to update patients' profiles in the quality registry which was a time-consuming task early on in the project. CDoc1 indicated that there was a certain amount of freedom to make decisions. Furthermore, the actual project was executed to see if the IBD X could reduce the numbers of resources necessary to use the quality registry. This illustrated the evidence-based mindset of CDoc1, that there was a "need for a proper medical paper where you show that you could decrease the number of outpatients visits or maybe that extra follow up of the symptoms and feces calprotectin would show that you could spot active inflammation before the patient gets any more symptoms and it would be possible to treat earlier with other medicines than those you have to use in the late stages."

#### *Implementation*

The project was implemented onto 20 patients with an aim to evaluate whether expanding into a rather large scale could be a possibility. CDoc1 further described that in the case of hospital C it was an open-ended study, without any major pressure to realize benefits. However, there is always the pressure from above, meaning that politicians want to see results, in which they can say that digitalization has been more integrated into healthcare. CDoc1 explained that there was an ongoing process of evaluating IBD X in order to motivate the implementation. Due to the evidence-based approach, there was not much to be said about how different professions can be convinced.

#### *Expectations*

Regarding the expectations for the project, CDoc1 stressed it is too soon to acknowledge. However, from the theoretical perspective, the service would improve self-control for the patients. CDoc1 raised the concern that there was a different need among different patients, some wanted to control their disease, and others did not want anything to do with it. Therefore, IBD X would be a good tool for the patient categories who wanted to use it. The primary interest, in the long run, was that the service would seek to reduce patient visits in order to free up resources for other tasks.

#### *The output of the change*

As far as the output of the change was concerned, CDoc1 believed that some sort of evaluation could be performed, for instance, whether the registered patients actually used the IBD X when they were signed up as well as what types of patients that were prone to using the service. It was also highlighted that in order for the IBD X to be useful, it had to be integrated as a package with the quality registry, which increased the workload heavily. A noticeable fact was that the physician had not been considering any collected data from the patients. Also, there were several questions in the IBD X questionnaire that were only for healthcare's benefit. In the end, CDoc1 believed that healthcare had to be digitalized to a greater extent in order to be more effective. However, CDoc1 stressed that enough background information was essential before changing from traditional ways. The physician indicated that sometimes digitalization was just implemented for the sake of it, without evaluating the effect.

## 4.5 The Patient

### *Background*

The patient CPat1 has been using the IBD X for two years in Hospital C. The patient is well educated and also doing some work about digital healthcare for one of Sweden's larger hospitals. The patient is the representative of the patients. By chance, CPat1 read an article about IBD X and contacted CDoc1 to become one of the first patients using the service in Hospital C. When starting to use IBD X, CPat1 had some training with the supplier. However, the patient themselves later figured out some errors that were not noticed by the supplier in advance. For instance, the light in the room might have some impact on the test results.

### *Expectations*

CPat1 emphasized their desire that the IBD X could support the patient to manage themselves. The patient further described, "Not only the patient experience is important for the success of IBD but also the patient's knowledge and competence." The patient admitted the benefit that they did not have to come to the hospital to leave the sample. Apart from it, CPat1 also wanted the results from the IBD X application to be accurate.

"Right now, I think that the test they are using to investigate whether I have a flare or any disease activity is very "weird," it is not valid. It is not valid enough; it is a lot of work to be done in understanding disease activity."

CPat1 suggested an ideal application with more functions to support the patients. In that case, IBD X is a part of an ecosystem of digitalization. The patient appreciated the use of technology to highly customize the healthcare service, rather than standardize it. However, CPat1 agreed that the patient was "a bit on the extreme side" and the current functions of IBD X could make mass patients happy. CPat1 elaborated by saying that some are happy because they are told to be happy about it. "Nurses and physicians were saying 'This was a great thing for you!' and it made patients realize that it was a great thing for them", CPat1 said. The rationale for this understanding is explained below.

"They are trying to get as many patients involved as possible. I think that if you are starting with that, this app is good for every patient. I think that pushing the app to this homogeneous group makes sense. But as patients are a heterogeneous group the app would be good for some patients but not for every patient. Therefore, we need healthcare solutions that take heterogeneity into account. So we have some customizability. A marvelous thing would be to have the IBD X inside an ecosystem. It would help a lot of people."

### *The output of the change*

About the competence to use IBD X, CPat1 raised concerns about some special situations that might affect the test results. Surprisingly, the patient figured them out by themselves and believed that it was missed in the training for patients. Related to the incentive scheme, there was also no obvious difference in terms of the fee that CPat1 needed to pay for annual healthcare services with or without IBD X. Regarding the patient's involvement, CPat1 argued that IBD X did not facilitate themselves to make decisions about how they would be treated. The result only indicated whether the patient needed to contact the physician. Furthermore, CPat1 did not trust the new method as much as the traditional one. CPat1 believed that IBD X was a good start and there was room to make it even better.

“It was for the physicians and the nurses. So, they can get my data and keep track of it. This was the main purpose of the app, not to improve my health but rather to improve their collection of data.”

### *Implications*

CPat1 also showed their critical opinion about digitalization. “I think it is the future for sure. But I think there is a big question to answer first, ‘why digitization?’” We need to have digitalization to improve healthcare not to have digitalization to digitize healthcare. It has to be a valued added digitalization process.”

To improve IBD X, the patient emphasized the role of patients to involve in the early stages of the project. In that case, the patients’ experience and knowledge were significant concerns, affecting how much they could contribute to the solution. CPat1 expected the IBD X should have been “something that the patients request rather than the physicians sell.” Moreover, from the role of a patient, CPat1 was aware of challenges to selling their ideas to other stakeholders.

“The politics is obviously very interesting. I mean this is happening in every healthcare organization. This is why you have to be constructive in your criticism and deliver it in a manner, so it is not taken in the wrong way. This is a good thing for patients like me. My feeling of being in a room, some people respected others very much and the healthcare sector is known for having this hierarchy. As a patient, you are in some way on the top of that hierarchy even though you’re the least knowledgeable person in that group. It is a very weird feeling.”

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# 5

## Analysis

The structure for this chapter is outlined in *figure 6* below. In this chapter, the information from findings will be re-arranged, according to the emergent change concept. Two areas of ‘change readiness’ and ‘facilitating the change’ will be used to draw a holistic picture of the IBD X project in three hospitals. Eight factors that are selected from two change readiness models in the literature chapter will be used to assess the change readiness for the IBD X. Since these are conceptual models, the evaluation in this part will focus on quality evaluation. In the following sections, organizational culture and organizational politics across hospitals will be mentioned at a more detailed level. The cultures in four worlds of healthcare will be analyzed separately before the mutual interactions between groups and their interests are mentioned in organizational politics. The last part of the analysis focuses on skills and knowledge which are related to the change. Each of the aforementioned parts is analyzed with its relevance to the literature review.



*Figure 6:* The analysis outline

### 5.1 Change readiness in general

#### *State of affairs*

Politicians expected healthcare operations to be more digitalized. Among actions to address the pressure coming from above, the IBD X project became a part of the regional digitalization strategy. Through the established pressure, this project was also expected to spread in the region. Furthermore, BNur1 indicated that economic pressure was existent in the organizations at all times, and there was an endless

circle of cutting down, whereas these kinds of improvement efforts were used to avoid cutting down in personnel.

### *Culture in different hospitals*

Cultural differences were found in the case studies. Hospital A was enlightened by a culture where physicians and nurses worked as a team. In contrast, hospital B had a high level of specialization between physicians and nurses, due to a more complicated organizational structure, containing more complex processes. These findings are similar to the opinions of Andersson (2015) and Witman et al. (2011). Furthermore, hospital C was reported to have a culture that emphasized freedom for the physicians to try new things but also allowed resources to generate improvements, suggesting a good culture for learning (Argyris, 1991).

### *Organizational structure*

Concerning the organizational structure, there is an apparent complexity gap between the county and the university hospitals. Hospitals B and C inherit a larger complexity in the organization due to being large university hospitals. The complexity was partially derived from the size and the many different levels in the organization. It was also raised that in all three hospitals the physicians were involved in a rotation where they had to shift positions quite often. Especially in hospital B, physicians were expected to have up to five different positions, whereas one of them involved caring for IBD patients in the inpatient clinic. The number of physicians that were available at the inpatient clinic at any given time was also different. In hospitals B and C, almost 50% of the physicians were doing something else, while in hospital A around 20% was the estimate. Regarding the physician-nurse relation, it was addressed as being much easier to maintain in a smaller hospital such as hospital A.

Another structural concern raised by BDoc1 was the multiple levels of leadership in hospital B that had to be convinced in order to change the ways of working. Another perspective was given by BNur2 and BNur3 as top management only was involved when it came to making the actual go/no go decisions. The reasoning provided by BDoc2, BNur2, and BNur3 could be related to what Reigle (2001) defined as a mechanistic organization.

### *Availability of resources in different hospitals*

The resources put into the project was almost nonexistent in hospital A, whereas most works had to be done in the clinicians' spare time. The only highlighted resource was the recruitment of people to start up the quality registry and to input data. The same can be said for hospital B, whereas it was also clarified that resources were usually nonexistent for all improvement projects. On the contrary, in hospital C, the physician could have the resources required to conduct improvement efforts.

### *Skills and training*

The training for nurses, physicians, and patients who used the IBD X application was delivered by the supplier. Further analysis regarding skills and knowledge will be discussed in section 5.5 below.

### *Interdependence across departments in hospitals*

The interdependence between physicians and nurses was emphasized in hospital A, where nurses usually were the ones performing the actual monitoring of the patients, making them a perfect contributor to decision making. This allowed them to perform tasks as a team without hierarchy. In hospital B, the interdependence was seen very differently between nurses and physicians. Their relation

was more separated with each profession performing specific tasks and often nurses handling the initial stages in the process and thereafter leaving the responsibility onto the physician. The interdependence between local management and the regional level was also touched upon. For instance, ANur1 mentioned that there was a continuous dialogue between the change agents and the regional level to assess the progress of the project.

#### *Advancement of technology*

The advancement of technology coming with IBD X indicated changes to the status quo. For instance, all the interviewees raised the concern that in order to utilize the benefits for IBD X and the quality registry, additional tasks had to be performed. Furthermore, different stakeholders were not initially aware of how the advancement of technology would result in changes for them. The perspective of ANur1 was that digitalization is an ongoing process, in which clinicians together contribute by improving it continuously. In that sense, ADoc1 stated that challenges were facts that people needed to acknowledge and accept in order to overcome failures. On the contrary, in hospital B, BNur3 stressed that if a new technological solution was being implemented, then all parts have to be functioning from the start. In line with that, challenges were seen more as obstacles, which could reduce the quality of care for the patients and prevent further advancement.

#### *Trends in the healthcare sector*

According to CDoc1 and ADoc1, digitalization is a trend within healthcare, whereas it can be viewed as a concept to increase effectiveness. Even though it was viewed as the current trend, the importance of not digitalizing just for the sake of it was raised by CDoc1, CPat1. Also, BNur3 emphasized that there were a lot of changes that people did not understand the reason for. CPat1 mentioned digitalization as a concept that could be used to reduce the distance to the patients, since CPat1 argued that the patient was the most underutilized resource in the management of IBD X.

### **5.1.1 Organizational readiness analysis**

The thesis will in this section attempt to evaluate the change management process, viewed from the different hospitals. The implication that it is of emergent change nature will serve as the foundation. However, the intended goal is not to pinpoint a certain level of readiness or to rattle off the best solution to facilitate the change. The goal is rather to state how culture and politics can impact the different worlds in terms of readiness and facilitating.

Three hospitals A, B, and C experienced different and common situations in terms of change readiness. In particular, all hospitals were in the same regions and led by one regional management. All of them might experience similar advancement of technology, training, state of affairs, and the trends in the healthcare sector. Firstly, the technology of IBD X was similar in all hospitals, there were no issues of the IBD X reported due to any specific process or system in some hospital. However, the advancement of technology was debatable among stakeholders. While the physician and the nurse in hospital A seemed to be happy with the status, other people such as nurses in hospital B or the patient emphasized that there was much room for improvement. Secondly, digitalization was viewed as a trend, but also pressure from the regional level. The digitalization strategy was developed not only to provide better healthcare to patients but also to make the healthcare operations to become more efficient, which is aligned with the study by Laurenza et al. (2018).

Besides, different hospitals had different cultures, structures, and different levels of interdependence among departments, suggesting different reactions toward the digital pressure from the top. The hospital

A was known as smaller than hospitals B and C. In addition, hospital A promoted a teamwork culture between nurses and physicians while the cultures in B and C were more complicated. Physicians in hospitals A and B were more independent in decision making. As a result, the level of trust for long term collaboration may also differ. Another difference was related to the availability of resources. While the physician and the nurse in hospital A were volunteering to do extra work for their own initiative, the physician in hospital B did not show a willingness to perform extra tasks. The hospital C can be an interesting case where the physician had time allocated for the IBD X officially.

## 5.2 Facilitating the Change

In this section, facilitating the change is understood as the actions taken by change agents (ADoc1, ANur1, and ReMa2) to drive the change. According to the collected data, the IBD X had been started in hospital A at the beginning by the core team, including ADoc1 and ANur1 before it became a part of the regional digitalization strategy. ADoc1 and ANur1 were the two most active members who were promoting the benefits of the project not only within hospital A but also in workshops about IBD X in other hospitals. ADoc1 kept nagging other physicians in hospital A about IBD X to convince them.

In hospital B, nurses also confirmed that they nagged the physicians, however, the result in hospital B was not as expected. The actual number of patients using IBD X was kept at five in hospital B, suggesting more challenges. Firstly, there were no official roles of change agents in hospital B. Nurses usually contacted directly to ReMa2 or suppliers to coordinate technical issues. Secondly, hospital B was reported to be larger and more complex in terms of structure. Therefore, physicians might be busy and have less commitment. Thirdly, nurses showed a high expectation for the test results. BDoc1 instead expressed concerns regarding the additional time for administrative tasks. BNur1 referred to this as a “catch-22” situation, which is based on a paradoxical situation leading up to an endless vicious circle.

The hospital C showed another case study where there was only one physician involved in the project. CDoc1 reported that he had allocated time for this project. However, CDoc1 also preferred to keep the project in a minor scope since there was a lack of facts showing the benefits of IBD X on a large scale.

From the management perspective, ReMa1 and ReMa2, on the one hand, considered hospital A as a successful example. On the other hand, they believed that there were things to be improved. For instance, BNur1 stressed the importance of finding something that would motivate physicians and nurses to commit to IBD X. Although the official IBD X project lasted in two years 2017 and 2018, different stakeholders were engaged in different stages of a broader process, in which they have been interacting and influencing each other for 10 years.

### 5.2.1 Facilitating the change analysis

Both ADoc1 and BNur1 explained that it was important to firstly target a small scale, and then successively increase the number of patients, which has also been the change procedure for two hospitals A and B. ADoc1 said that it was important for managers to not demand an immediate result. The aforementioned reasoning is in line with how Hayes (2014) argued, that when dealing with emergent change it is important to implement it in small steps, in order for the stakeholders to perform double-loop reflection where they reflect and challenge the changes in the status quo. Furthermore, a part of the culture in hospital A was according to ANur1 that it allowed for permission to fail, which according to Dickens (2013) is essential when facilitating emergent change. Furthermore, BNur1 explained that, in hospital B, the project has been in the beginning for almost two years without progressing, due to not overcoming initial challenges causing demotivated nurses, which was also

confirmed by BNur2, and BNur3. In this context, ADoc1 suggested to involve nurses to a greater extent and have them making more decisions, as that would make their job more interesting.

In order to succeed with the IBD X and the quality registry, BNur1 explained that it was vital to find something that motivates nurses and physicians to do the work. That was the matter to facilitate the change. Managers could contribute to increased motivation depending on how they phrase their messages. Hayes (2014) stated that this varied depending on the available resources and the organizational consensus. Looking at the more complex university hospital it was seen that these factors were not fully apparent in the context of IBD X. Suitable motivation approaches would, therefore, be those who sought to tweak the message by not providing the whole truth. Thus, making manipulation, coercion, and goal setting ideal parts of a case such as hospital B. However, the differences in professions were found to be vital in how motivation approaches should be used. To get the buy-in from physicians, both BDoc1 and CDoc1 stated that it was important to focus on evidence-based facts. Therefore, a suitable motivation approach would be educational, as it provides unbiased facts (Hayes, 2014).

## 5.3 Organizational Culture

### 5.3.1 The culture in the different worlds

To explain the cultural differences that were found in the case studies, the focus will hereafter be to look at the culture of each world. As the different worlds further are divided in terms of hierarchy and roles, these factors will be addressed.

#### a. Managers

What has been stated is that multiple managers were in one way or another involved in the digitalization project. In this thesis, they are distinguished between regional managers, medical managers, and local managers.

#### *Regional managers*

The fact that the way people work will be formed through the culture and the management was enlightened by ReMa2. The regional managers' values and beliefs stressed the importance of trusting people and technology. To achieve improved healthcare practices, their ideology was founded on showing hard facts. ReMa2 also stressed the importance of working in the same way across hospitals and to not have the possibility to choose. Although the individual variation between hospitals was a known factor, it was still expected to have standardization to a greater extent later. The autonomous ability of each hospital was currently emphasized, whereas ReMa2 stated that the region had to make a statement about how things should have been done. The attitude of ReMa1 and ReMa2 towards the project could be seen as neutral where they had concerns in a sense that they raised negative aspects and the challenges they had faced. However, ReMa1 stated that they were happy about their efforts so far, and they see a lot of learning potential with this project.

#### *Medical managers*

The medical managers, ADoc1 and ANur1 showed their strong belief in the IBD X project as well as technology in general. While ADoc1 showed how IBD X could facilitate their medical discussions, ANur1 was optimistic that IBD X could involve the patients in their own treatment much more than before. The participative patient was according to ANur1 important in order to make the patient become

more interested in their disease. Both of the medical managers gave a positive perspective to standardization, where it was mentioned that IBD X allowed for a more standardized way of getting the data from the patients. ADoc1 and ANur1 communicated IBD X's benefits to their colleagues within hospital A and through their networks to other nurses and physicians in other hospitals. Also, periodic meetings with suppliers and other hospitals were a way for them to spread the knowledge of IBD X. However, none of the events were mandatory, which meant that only the most enthusiastic people participated according to ANur1. In the end, they emphasized a vision to see IBD X as a part of a much larger ecosystem.

#### *Local managers*

According to ReMa2, the management took an important role in forming up the culture in the hospitals. In that sense, ReMa2 stated the importance of the local management to support every department and every team. However, within the scope of this digitization project, local management in some hospitals were not involved as needed, which implied more challenges to deal with local cultures in various hospitals.

#### **b. Nurses**

In the scope of this master thesis, most of the nurses who participated in the interviews were from hospital B. Even though seeing the benefits with technology, the nurses in hospital B described a reduced trust for technology as they had faced several challenges when facilitating new changes. BNur1 explained that these changes were enlightened to usually be a cause of economics, whereas BNur2 and BNur3 said that sometimes people did not understand why the changes were implemented. All the responding nurses put the patient's priority at top and were willing to do extra work if they were convinced that the IBD X would prove to enhance the patient's situation. BNurs1 and BNurs2 focused much on the validation of IBD X's results, which was considered as a significant obstacle for them. From a higher level's point of view, BNurs1 expressed the concerns of standardization in healthcare since healthcare operations were complex, especially in large hospitals like hospital B. The hierarchical structure and complicated processes might influence nurses' culture. They reported being busy with daily tasks. As a result, IBD X was not a priority in their to-do list.

#### **c. Physicians**

The physicians' perspective was based on the two physicians, BDoc1 and CDoc1. The values of digitalization were emphasized by both CDoc1 and BDoc1, they stated that healthcare had to be digitalized to a greater extent. On the contrary, CDoc1 mentioned that sometimes it felt like there was digitalization just for the sake of it. A part of the physicians' values seemed to lie in the evidence-based mindset, as CDoc1 stressed that a proper medical paper would be required in order to fully adopt the IBD X and the quality registry. Even though BDoc1 was fond of the technology, the key concern of continuous usage was raised in order to get meaningful data.

Being a physician usually comes with doing a very wide range of tasks and being in many different places. This was proven to be even more critical in university hospitals such as B and C, making it harder to have a team-based culture. The ways of working are therefore more specialized for the physicians, where they have their own responsible tasks. BDoc1 raised the fact that in some hospitals there were IBD specialists that only focused on treating IBD patients. However, in hospital B, there were no IBD specialists, which was seen as a barrier to adopting IBD X. Compared to hospital A, the medical manager ADoc1 did not spend full time for clinical tasks where it enabled the additional time

for the project IBD X. In hospital C, CDoc1, had a similar concept as there was time set aside to work with improvement projects.

#### **d. Patients**

The patient perspective was derived from CPat1, a patient in hospital C. CPat1 forwarded the opinion that the initiative with IBD X was good, but it would require modification to reach its end state. The patient estimated the IBD X to have taken the first step but had plenty left before it would be aligned with the expectation from the patient. The patient's values should be considered according to CPat1, to make the app customizable for the patient and each patient's needs. CPat1 mentioned that this project was not a good example of digitalization. However, it was stressed that many patients are easily convinced without questioning why. According to the patient, the expectation was that IBD X would increase the self-care of the disease. CPat1 stressed that IBD X was rather a tool for healthcare to manage patients, but not the other way around as the project did not increase the patient's potential to manage themselves.

### **5.3.2 Organizational culture analysis**

The beliefs and cultures were different between worlds, which is aligned with the previous studies by Glouberman and Mintzberg (2001a). The patient focus was mentioned as the common goal in the interviews, however, different people still had different interpretations about what was believed to be good for the patients. For example, nurses in hospital B showed high expectations for the accuracy of the test and they were pessimistic about increasing the scale of IBD X in their hospital. Meanwhile, the physicians and nurses from hospital A suggested a more optimistic view and a higher tolerance for technical issues that they encountered during implementation.

Regarding the physicians' point of view, the physician in hospital B challenged the goodness of IBD X to pull participants naturally, while the physician in hospital C argued that they needed further information to make any conclusion. This finding confirmed the fact-based culture of the physicians (Andersson, 2015), while a similar culture was not emphasized by nurses. Also, the fact-based approach was also pursued by the regional managers even though it became a challenge to digitalization in some case studies, where benefits could not be realized, at least in the short term.

To encourage the digitalization in hospitals, ReMa2, ADoc1, and ANur1 took the roles of the change agents and they are also the symbols for the "IBD X" culture through formal and informal meetings with their colleagues. However, management in hospitals, who are usually considered as the key people to create the cultural climate in hospitals, seemed not to be engaged properly during the change (Buchanan & Huczynski, 2019). This dilemma was also acknowledged by ReMa1 as local autonomy in hospitals.

From the patients' side, the understanding of mass patients' cultures is ambiguous in this study. Still, the feedback from CPat1 suggested that patients' culture may depend on their own beliefs, backgrounds, and awareness, hence, resulting in a heterogeneous theme of the patient's culture. Some interviewees believed that IBD X was more suitable for young patients and patients who were interested in using technology. Nevertheless, there was limited effort reported to have a deeper insight into patients' culture.

In summary, the organizational culture in this analysis can be seen as more differentiation and fragmentation than integration (Martin, 1992; Kunda, 2006). Healthcare's culture contains multiple subcultures and inevitable conflicts.

## 5.4 Organizational Politics

### 5.4.1 Groups' interests

There were not only sub-cultures from each world, which seemed to be conflicted with each other in terms of resources and ideologies, but different groups also reported different interests. Apart from the benefit that patients could save time from not coming to the hospital for IBD tests, each group of stakeholders mentioned additional advantages or disadvantages of IBD X from their perspectives.

Firstly, the regional managers expected to realize how the hospitals could use their resources in a better way. On the opposite, ADoc1 argued that they needed more time to realize it. Moreover, regional managers emphasized on the ideal situation of standardization, but BNur1 believed that healthcare operations in hospital B were complicated and required a high level of specialization.

From the clinical point of view, medical managers showed more interest in the medical knowledge that they might have from patients' data in the future when the number of patients using IBD X increased much more. The IBD X was believed to support the new core system storing medical data so that clinical members could develop better IBD treatments. However, CPat1 said that results from medical research might not benefit him. CPat1 also disagreed that the patient had more opportunities to make decisions for their own treatment, which was suggested before by ANur1. Instead, the patient expected the IBD X application to be a part of an ecosystem, hence supporting patients to take care of themselves.

In hospital B, physicians and nurses, who might work directly with IBD X, also expressed concerns such as additional workload, missing thorough testing before implementation, and additional technical tasks that were not supposed to be theirs. Even this was the case in hospital A, ADoc1 and ANur1 considered those issues as more acceptable. Besides, although IBD X could be good for patients, nurses in hospital B still expected more from digitalization that could help them to deal with their daily tasks easier.

### 5.4.2 Interactions between groups

#### *Regional managers - Medical managers*

Medical managers initiated the IBD X project about 10 years ago. After that, the regional managers selected the IBD X project as a part of the digitalization strategy. Both regional managers and medical managers preferred to replicate the project in as many hospitals as possible. However, the aforementioned difference in their visions was a challenge. ADoc1 said that the physician wanted to be nice and friendly with colleagues, suggesting that ADoc1 would have limited influence tactics during the change. That could be the approach to create a psychological safety zone for ADoc1's colleagues so that they could be more open for change (Briner et al., 1996). Nevertheless, ADoc1 recommended that a top-down approach was necessary, which might require the involvement of management in other hospitals.

#### *Regional managers - Local management*

It was unclear from the interviews how ReMa1 and ReMa2 could influence local management, especially when hospitals were highly autonomous, and the regional strategy was not finalized. Hospitals' management might not be aware of the IBD X project (hospital B) or aware but considered it as an experiment without creating any pressure (hospital C). In hospital A, the management's support was mentioned as "encourage" and "paid for the (students') salaries."

*Medical managers - Other nurses and physicians in hospital A*

ADoc1 reported that the physician needed to nag others and use data from IBD X in discussions about treatments. Regarding nurses, they were empowered in the team and delegated important tasks to handle in the IBD X system. However, there was no further interview conducted to study further the team culture in hospital A.

*Regional manager - Nurses and physicians in hospital B*

ReMa2 had direct communication with nurses in hospital B when they implemented the project. Concerns regarding the IBD X were discussed among BNur1, BNur2, and BNur3 before making go/no-go decisions. Additionally, there was no physician participating in the project in hospital B. The daily collaboration between physicians and nurses was reported to be good, however, the physicians needed to shift for other activities outside of the clinic every few weeks. Nurses BNur2 and BNur3 advised that they did nag physicians about IBD X but it was not easy to convince the physicians from their perspective.

*The patient - The physician - Local management*

CDoc1 confirmed that the physician had the time and resources to spend on this project. Furthermore, the physician said that there was no pressure from management regarding the output of IBD X. CDoc1 and CPat1 had a conversation about IBD X before CPat1 officially used it. Besides, they both shared critical opinions about the benefits of IBD X.

**5.4.3 Organizational politics analysis**

The difference in interests and limited resources implied the need for organizational politics. Although change agents seemed not to be politically active enough nor received proper support from key stakeholders, there was some organizational politics that could be noted from the interviews.

Firstly, a coalition was formed between a senior physician and a senior nurse in hospital A. They both joined the IBD X project at the beginning and shared similar opinions. This suggested the fact that it might need time and common interests for people to form up coalitions in organizations. Coalition forming was also observed in hospital B among the nurses, who discussed, made decisions together, and shared similar views about IBD X.

Besides, the relationships between regional managers and medical managers were a mix of “coalition forming” and “exchanging favors” when both had common and different interests. The regional team and ADoc1 have not reached an agreement about when and how the project could be evaluated. As a result, the regional team may have more challenges to prove how an example of digitalization can release economic pressure from the politicians’ view. Both “coalition forming” and “exchanging favors” happened in the context with less supervision and stakeholders are likely equally powerful, which is aligned with findings by Farrell and Petersen (1982).

The participation of an external consulting firm to support the regional strategy can be viewed as an “outside professional activity.” With limited involvement of local hospitals, this is a good option for the regional managers, who may be at the low power in the context (Farrell & Petersen, 1982). Another group of outsiders, the patients, showed that they also could have a specific influence on digitization projects. However, the role of patients was not utilized as a great force for the change in this project. Overall, there was no illegitimate political action recorded in case studies. This can be explained by the

fact that political actions were not taken “by those who feel they have little to lose” (Farrell & Petersen, 1982).

A number of deep structure games were mentioned by some interviewees. For example, ADoc1 suggested a more top-down approach so that IBD X should be considered as a must rather than an alternative. This can be linked to the legitimate and neutralization approaches mentioned by Frost and Egri (1990a). However, these were commented as recommendations rather than what actually happened in the hospitals. According to the findings, the need for IBD X was not dramatized in hospitals, resulting in a lack of cultural effects on the change (Bridges, 1993). Informal knowledge sharing about IBD X between physicians can be seen as socialization; still, it can be early to conclude how this can influence the organizational culture at large. Without the active participation of hospitals’ management, the socialization approach, which contributes to creating a new culture in organizations, is likely not to happen.

## 5.5 Skills and Knowledge

Referring to literature by Gordon, Pollack (2018) and Konttila et al. (2019), the skills and knowledge that the physicians, nurses, and managers needed to work with the IBD X are divided into four groups. The first group includes hands-on skills to function and resolve issues related to the IBD X application. The second group of skills is more related to how doctors can realize the benefits of the collected data. The third skills were communication skills between the clinic employees and the patients, as well as between the organizational members. The fourth group was the change management knowledge.

In terms of the first skill group, there were some technical training sessions from the supplier. However, this training was not enough according to feedback from nurses in hospital B and CPat1. For example, CPat1 said that there were exceptional cases that the test results were impacted by room light and were not noticed in the training. BNur1 and BNur2 also reported that they sometimes needed to figure out technical issues by themselves, suggesting the lack of technical training.

Regarding the second group of skills, the knowledge was shared through meetings between ADoc1 and other physicians in the hospital A or presentations with physicians from other hospitals in the region. Through socialization, ADoc1 transferred not only the knowledge but also his opinions and beliefs about IBD X and digitalization (Buchanan & Huczynski, 2019). From another view, ADoc1 can be seen as a broker who facilitated the culture exchange and practice sharing among physicians’ groups (Burt, 2004). Still, this approach is limited in discussion in hospital A and cross-hospital meetings. In hospitals B and C, there was no such role to communicate with physicians and nurses.

Regarding the third and fourth groups, communication with patients, nurses in hospital B confirmed that they could handle conversations with patients via phone or Skype normally. However, they were not confident of increasing the scope of IBD X at that moment. Communication skills, including the communication between physicians/nurses with patients and between physicians and nurses, were not emphasized. From the internal view, the effect of collaboration between nurses and physicians might depend on the current collaboration status in the hospital, which was reported to be better in hospital A compared to others. The low priority for the IBD X project and the existence of “catch 22” in hospital B implies the lack of open communication across departments, vertical levels, and hospitals in order to assess underlying assumptions and enable double-loop learning for this project. As a result, the organizations themselves may have fewer opportunities for self-learning and improve their approach to change management and digitalization, which is essential for management levels.

# 6

## Discussion

This chapter will seek to provide the reader with a more extensive comparison of the literature and the findings. It will further seek to elaborate on how the literature can extend the findings derived from the case studies in the primary areas of culture and politics. The chapter will also discuss the role of the change agent and the patient in emergent change.

### 6.1 Skills, Knowledge, and Organizational Learning

According to the interviews, the skills and knowledge which were equipped for organizational members were focused much on practical skills in both formal method (training) and informal method (socialization). Besides, communication skills and change management knowledge were neglected areas, creating potential challenges for the change.

Organizational learning is a way for hospitals to enhance their knowledge and skills. It should be supported by the organizational culture and structure (Hayes, 2014; Argyris, 1991). For example, the technical skills to use the IBD X application were surprisingly not the largest concern for stakeholders who were involved in the IBD X project. However, if the new software bugs found by nurses and patients had been collected as lessons learnt for continuous learning, repeated errors would not have affected patients. In the IBD X project, local management was not fully involved. Consequently, there was no expectation from line managers to their staff that they needed to change the way they worked. According to the expectations and self-fulfilling prophecy theories by Shani et al. (2009), the staff might not believe that they could adjust their behaviors to adapt to the change. Therefore, the learning process also could not be activated.

At a higher level, double-loop learning can do much more (Argyris, 1991). Specifically, the openness and collaboration of different worlds will not only improve things but also challenge why people are doing the things they are asked to do. Why do we use the IBD X and why do we use the quality registry? The focus may move from nagging people to use IBD X to “catch-22s,” which requires the effort and resources from multiple parties to resolve. From the change management perspective, double learning is a way for change agents to challenge the initial change methodology. For example, the shift of the assumptions about the surrounding environment and the role of the leader can result in the shift of the change agent’s approach to changes. However, medical managers, who also have higher education, may spend more time improving medical knowledge rather than communication skills or change management knowledge. The double-loop learning, as a result, may occur for some knowledge areas and skip for others (Bååthe & Norbäck, 2013; Argyris, 1991).

Moreover, double-loop learning and organizational learning, in general, should also be viewed in the context of organizational culture and organizational politics. The learning, in the case of IBD X, can only be realized if it is facilitated across organizations. That means cultures in all hospitals and the

regional team should be open to their employees and open to each other. Making all hospitals' cultures to be aligned with the aforementioned values can be a challenge for inter-organizational learning. People in subcultures may value their own culture rather than the others, preventing knowledge exchange (Hayes, 2014). Connecting this to the opinion mentioned by Briner et al. (1996), a massive learning environment can be impossible to achieve. In other words, individual learning and team learning are more realistic than organizational learning and inter-organizational learning, suggesting a challenge with learning at a high level.

Finally, even people in different worlds may be eager to learn new things, for example, through research activities for nurses and physicians according to Glouberman and Mintzberg (2001a), they also may have different learning styles and different interest areas. For example, physicians are more into clinical activities and to learn things through facts (Andersson, 2015; Witman et al., 2011). This implies that different learning strategies should be applied in different worlds in order to bridge the gaps in knowledge and cultures among them.

### 6.2 The Relations between Organizational Culture, Organizational Politics and Change Management

The organizational culture and organizational politics are closely connected. Both can be overlapped and used for similar purposes. While organizational culture and organizational politics are quite different on the surface, organizational culture can be seen as organizational politics at the deep structure (Frost & Egri, 1990a).

At the clinic level, interviewees in hospital A reported that the hospital's teamwork culture supported them to facilitate the change. However, Pfeffer (2010) had a different opinion by stating that teamwork and informal networks could have a positive correlation with the skills of using power to influence other people. This implies the possibility that the data collection process may miss identifying some other political activities within the teamwork culture of hospital A. For example, there can be sub-coalitions or other political actions at the deep structure. In other hospitals, the difference between the nurses' culture and physicians' culture as well as the lack of hard facts were considered as challenges, requiring more political actions from the change agents (Ferris & Kacmar, 1992; Kacmar & Baron, 1999; Hayes, 2014). The hospital's culture can be the answer to facilitate the collaboration between physicians and nurses. Nevertheless, the complexity of organizational culture and organizational politics are also related to the scale of the hospital. As a result, what worked in hospital A may not be suitable in hospital B and vice versa.

At the management level, Andersson (2015) suggested that physician managers should have collaborated with non-physician managers, however, collected data implies challenges to achieve it. The medical managers in hospital A focused more on medical activities, aligned with what was mentioned by Witman et al. (2011), while regional managers focused on operational efficiency. The local autonomy also creates more cultural distance between these groups, giving the regional team less legitimate power to drive the change. In addition, compared to the four-world model of Glouberman and Mintzberg (2001a) at the management level, the reality of healthcare's world is even more complicated due to the hierarchical structure and the hybrid roles of medical managers. In the IBD X project, the regional managers showed their possibility to involve other internal and external actors to mobilize resources for change. However, the lack of participation from local management in hospitals was still one of the reasons that some cultural and political instruments could not be activated. The ignorance from local management can also be a political action in order to maintain the existing power

structure (Nadler, 1987). Organizational politics can support or become a resistance to change, depending on the dominant coalition (Frost & Egri, 1990a). In this context, none of the regional managers, medical managers, or local hospital managers have a full spectrum of competencies to deliver the change. What may be missed in the IBD X project is a mechanism in which these three groups of managers can collaborate and drive the healthcare sector in a certain direction. In order to find such a complex solution for organizations may require the double-loop learning.

Change management is a continuous process, along with the transformation in the deep structure, which may take time. That also means that now it is too early to draw any conclusion about the success of the IBD X project. The IBD X was just a part of the digital strategy, connected to the quality registry and other IT systems in the hospitals. Still, there may be other actors and interests that were not identified properly in the scope of this master thesis. Furthermore, the success of the change can depend on the stakeholders' interests, their expectations, and the change agent's flexible approaches, suggesting the fact that there should not be any fixed model for change management. Besides, any combination of organizational culture and organizational politics will not guarantee the output of the change since they are only two among many possible determinants of the output.

### 6.3 The Role of the Change Agent in Change Management

#### *The correlation between change readiness and facilitating the change*

The change readiness differed from hospital to hospital. Although the cultures were more open for learning and the availability of resources was likely to be better in hospital A and hospital C, it still depended on how the change was facilitated in different hospitals in order to achieve the expected outputs.

For instance, the significant difference between the case studies of hospital A and hospital C was the interests of the change agents. CDoc1 perceived their role toward the IBD X project as an observer and tester rather than an owner. This explained why the IBD X was facilitated differently in hospital C. There was neither pressure from management nor CDoc1's personal motivation to involve more colleagues. Similarly, in hospital B, the lack of change agents as well as the culture with a heavy focus on daily operations limited efforts to drive the change for ReMa2.

Moreover, the misalignment between the change agents ADoc1, ANur1, and ReMa2 was also a concern. Short wins regarding resource allocation were not created. Therefore, facts and numbers could not be used to pursue the education approach, which was supposed to be used to facilitate the change at a larger scale. As a result, it may become more challenging for the change agents later (Frost & Egri, 1990b; Kotter, 1995).

#### *The role of the change agent in emergent change*

Compared to ANur1, ADoc1 emphasized on a more realistic view of change management. Both collaborated and expressed their importance as the change agents in hospital A, which is similar to the finding of Chreim et al. (2012). However, how to create similar change agents in hospitals B and C, or how to enhance the influence of ADoc1 and ANur1 in other hospitals can be a topic for future research, which can be influenced by multiple factors such as culture, available resources, and experiences of change (Buchanan & Badham, 2008).

The analysis framework of emergent change was selected to assess the IBD X project due to its long-lasting, the complexity of the healthcare sector's environment, and the view of change as a political

process (Burnes, 2009). According to Todnem (2005), Essén, and Lindblad (2013), the emergent change should be from bottom-up and driven by a self-organizing team. In the case of IBD X, the aforementioned conditions could be met for hospital A, where both ADoc1 and ANur1 participated from the beginning. Nevertheless, there were difficulties in attracting more physicians and nurses to become the core team members. Due to this reason, the emergent change approach seemed to not work in hospitals B and C. The matter of less commitment from organizational members can also be related to the content of change, which will not be discussed within the scope of this thesis. Still, the content of change is as important as the context of change (Weiner, 2009).

In another 'formula' for emergent change, (Dickens, 2013) suggested that the change needed facilitating by hospitals' cultures where employees could take risks and collaborate with each other. However, hospitals' cultures were proved not to be the same in the three case studies. Moreover, proposing a fixed and ideal environment for change can lead to an unrealistic situation and even against the initial idea of being situational in emergent change. Todnem (2005) argued that too much focus on the situational approach might neglect the ability of the change agent and the management. That means the change agent should not only be situational within the concept of emergent change but also flexible between the planned change and the emergent change approaches. In other words, a more top-down approach can always be another option for hospitals B and C as long as the local management support is mobilized.

In conclusion, there is no secret recipe for management change in the healthcare sector, but it is important that the change agent needs to have an insight of the existing structure in the hospital so that he/she can utilize cultural and political instruments to deliver the change (Kotter, 1985). Since this is a non-linear and complicated process, change agents need to be more creative and reflective in order to develop unique approaches (Buchanan & Badham, 2008).

## 6.4 The Patient as a Co-creator

Even though there have been instances where clinicians have involved patients in improving IBD X, there is a lack of evidence of showing whether patients have participated as well as what they bring in terms of value. However, what has been established is the great benefits derived from customer involvement, not the least by Rantala and Karjaluo (2016) where they stressed the patient as the prime source of knowledge regarding their own disease and condition. In order to utilize the patient's expertise, they have to be genuinely interested or convinced to participate. Suggested by Rantala and Karjaluo (2016) was that in order to adopt value co-creation with patients in digitalization projects the culture has to be shifted towards a culture that focuses on the patient. As already witnessed in the three conducted case studies, what is already in place is very hard to change. Therefore, it poses a tough challenge in changing the culture in such a complex environment.

What has been established by this thesis is that it is not just about changing the culture. In terms of co-creation, patients will face a difficult task in changing the opinions of highly educated physicians. It may also be a challenging task for physicians to involve the patients in the decision-making process since according to Andersson (2015), they prefer to make decisions by themselves. Bååthe and Norbäck (2013) gave another perspective as they emphasized physicians' focus on medical development, whereas the patients would most likely have an impact on areas outside of the medical services, which did not get as much importance for the physicians. Therefore, the physicians might have a more difficult time taking the patient perspective into account. In this case, Argyris (1991) mentioned the importance of managers' role in building trust that could be further used to get the patient on board. A similar

situation was most likely the case between physicians and nurses prior to IBD X. One way of bridging the experience or knowledge gaps is through brokerage as suggested by Burt (2004) where it can facilitate cultural exchange potentially resulting in a more team-based culture. In the end, it is important to acknowledge the fact that co-creation is quite a new concept and therefore there is ambiguity considering how it should be integrated into healthcare management. Also, the importance is known, but it will require the patient to become empowered in the sense that they can provide active feedback to improve the healthcare services (Rantala & Karjaluo, 2016; Laurenza et al. 2018).

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# 7

## Conclusion

This chapter will start by concisely answering the constructed research questions. It will thereafter provide the reader with theoretical and managerial implications. As there may be endless angles to researching how changes affect humans, the limitations of this research will be stated. The final section seeks to provide suggestions for further research areas that have been derived during this project.

### 7.1 Summary

*The influence of organizational culture and organizational politics on a change process in healthcare*

Organizational culture and organizational politics are factors that influence both the change readiness and change facilitation. These factors vary from case to case, creating complex interactions of stakeholders on the surface and deep structure of the organizations. The effects organizational culture and organizational politics on the deep structure may take time, therefore change management is likely to be a long-lasting and continuous process.

Furthermore, there is no one-solution-fits-all in change management. The emergent change model is more suitable for change projects which last in a long time and experience a high level of uncertainty from the environments. The change agents play an important role to drive the change by cultural and political instruments in a flexible and creative way. Finally, the patients can become a greater force of change if they are engaged properly. This is aligned with the trend of digitalization and customer co-creation in healthcare.

*Facilitating the learning among stakeholders during the change*

The learning environment was closely connected with organizational culture and organizational politics. It also directly impacts the skills needed for the change, supporting people to change the way they work. However, there was less focus on learning for communication and change management skills from the case studies in three Swedish hospitals. Moreover, the learning process at the organizational and inter-organizational levels faced challenges due to differences in cultures between four worlds in the healthcare sectors and organizational politics.

### 7.2 Theoretical Implications

The thesis validated the four-world model (Glouberman & Mintzberg, 2001a). Besides, additional theories were integrated to understand the complexity of each world as well as the blurred boundaries between them. For example, the world ‘managers’ in the model can be elaborated further into three ‘sub-worlds’: regional managers, local managers, and medical managers. Medical managers in the case

studies could be seen as the change agents to drive the change and the brokers who facilitate the culture and knowledge exchange between worlds.

The model of Glouberman and Mintzberg (2001a) illustrated a holistic picture of the healthcare sector. Additionally, this master thesis contributes to the literature by acknowledging the grey zones between and within worlds, in which common interests and conflicts of sub-groups challenge the change management even more.

### 7.3 Managerial Implications

Firstly, hospitals' management involvement is important in change management, in both cultural and political dimensions. Without support from hospitals' management, the change agents may have less power to drive the change and should be more tactical and politically active, for example, supporting an existing digitalization project or mobilizing external resources. As discussed in the previous part, finding a suitable mechanism to facilitate collaboration across various manager' groups can be a sustainable approach in the long term.

Secondly, a greater focus on training regarding communication skills and change management skills can motivate more people, especially nurses, and empower them to support the change. Management can also apply different learning approaches regarding what to learn and how to learn to different groups of organizational members.

Thirdly, the content of the change and a good plan for fact-based short-term wins are essential for the education approach and aligned with the physicians' culture. Otherwise, persuasion and top-down influence tactics can be considered (Hayes, 2014).

Fourthly, projects in digitalization should not be viewed as stand-alone projects, but as a part of an ecosystem, where things are connected and synchronized systematically. This is to prevent "catch-22" during the change, or good reasons to resist the change.

### 7.4 Limitations

There are a number of limitations to this thesis. Due to the current situation of the pandemic of COVID-19, not all planned interviews were conducted. Therefore, the thesis did not provide a deep understanding of the team culture in hospital A, nor further case studies in some other hospitals. The time-consuming procedure to acquire patients' interviews also impacted on the number of patients participating in this research. As a result, the patient's view of this thesis is individual and there was a lack of interactions that were reported between patients and people in other worlds. Moreover, the methodology was mainly based on interviews in a short period of time, restricting the ability to gain deep knowledge related to organizational culture and organizational politics.

In terms of literature, there are more existing studies focusing on physicians, which potentially creates biases throughout the thesis. At the same time, this study reinforces the physician's dominant role in the healthcare system. The theoretical framework also showed some disadvantages. In particular, current change management models put more emphasis on internal organizational members and may neglect the importance of external stakeholders, who belong to the worlds of patients and politicians. Additionally, the lack of content factors in the change readiness models can result in an incomplete picture of the change readiness. Therefore, connections between content factors, organizational culture,

and politics were not identified. Finally, the thesis can be biased by the researchers' assumption that organizational politics is a fact and human beings are both cooperative and competitive.

## 7.5 Future Research

The role of patients has become more important in change projects in healthcare. However, current change models focus more on internal stakeholders to be the objects of change, rather than external ones while digitalization requires people to change the way they work, including patients as value co-creators. Therefore, what and how a healthcare organization can influence their patients' behaviors and beliefs can be seen as an interesting research area.

Another topic is related to change agents. In this thesis, the more successful change in hospital A was led by experienced change agents who had intrinsic motivation toward IBD X. However, mechanisms to build up similar change agents in different cultural contexts were not fully understood. Moreover, how change agents could acquire strong support from various groups of managers is still a major issue. Therefore, a more focus on the role of change agents or the practice of using external change agents in emergent change management can be directions for future research.

Finally, further validation for the theoretical implication from this thesis may be needed. There is still a lack of understanding about the grey zones in other worlds, especially the trustee, involving a variety of different stakeholders such as patients or politicians. As a result, a more practical four world model can be useful for change agents, minimizing the gaps between theories and reality.

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