

Laurentius Hospital Roermond

Perspectives of medical specialists regarding the introduction of a patient portal

Using an institutional work approach

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Abstract

In this study I have analyzed the perspectives of medical specialists about the introduction of a patient portal at the Laurentius Hospital in Roermond. By Dutch law (First chamber votes, 2016) healthcare institutions are required to make patient portals available before the first of January 2020. Patients are then able to look in their medical record on which the Dutch government has decided what should be visible, such as the Basic dataset healthcare (Basic dataset healthcare, 2016), supported with letters of medical specialists, discharge letters, laboratory results, and radiology reports. The Dutch government issued a subsidy program to aid healthcare institutions. This subsidy program named VIPP (Accelerating-program Information-exchange Patient and Professional, 2017). The research question of this study was to find out what the main concerns of medical specialists were at the Laurentius Hospital regarding the introduction of a patient portal, and how might this affect their medical practices. The main discussion in the hospital was whether patients should be able to look in to their medical record in real time or with a maximum delay time of seven days. In this study I identified three themes of concerns from specialists: Patient interaction, Specialist process and Specialist accountability. These themes were identified and reveal how the patient portal could affect the practices of medical specialists. The themes presented are based on meetings with almost all specialties of the Laurentius Hospital and interviews with medical specialists. Following from the work of Lawrence and Suddaby (2016), Currie et al. (2012), and Levay and Waks (2009) regarding institutional work, similar examples of institutional work have been identified.

The theoretical contribution of this study gives perspectives of medical specialists who provide insights for the doctor-patient relationship (Goodyear-Smith and Buetow, 2001; Nictiz, 2015,2016), and providing examples of institutional work in healthcare (Currie et al., 2012; Lawrence and Suddaby, 2016; Levay and Waks, 2009). The term 'Utilizing' has been introduced by me to define professionals who are seeing opportunities to extend their practices, and thereby use both creating and maintain institutions. Practical implications regard the insight of concerns from medical specialists about the patient portal, from which the Laurentius Hospital in Roermond can make decisions regarding showing patient results real time or whether it should be with a delay time.

Table of contents

Abstract.....	2
Introduction	5
Online access to medical records by patients	5
Organization	6
Research question.....	7
Outlook.....	8
Theoretical background.....	10
Specialists concerns	10
Institutional work.....	11
Agency	14
Methodology	16
Research design.....	16
Data collection	17
Data analysis	19
Research quality and ethics.....	21
Results	24
Patient interaction	24
Specialists process	28
Specialist accountability.....	32
Utilizing.....	35
Discussion.....	39
Conclusion.....	39
Theoretical implications	41
Practical implications	42
Reflection, reflexivity and further research	43

References.....	46
Appendix 1: Codebook themes	49
Appendix 2: Codebook institutional work.....	55
Appendix 3: Observations	59

Introduction

In October 2016 a new bill has been passed about the right of patients to digitally view their own medical record by minister Schippers in the Netherlands (First chamber votes, 2016). All healthcare providers (First chamber votes, 2016) have until 2019 to make all medical records digitally available for patients. Most hospitals are currently implementing software, in the form of a patient portal, which allows patients to view their own electronic medical records (EMR) as this is legally required. Introducing a patient portal can stir up discussion amongst medical specialists in the hospital (Nictiz, 2016; Grünloh et al., 2016).

Online access to medical records by patients

Earnest et al. (2004) and Delbanco et al. (2012) mentioned positive effects from medical specialists after an EMR was made accessible for patients in their study. Earnest et al. (2004) have conducted a trial period to give patients access to their EMR through a patient portal in the United States. In the research of Earnest et al. (2004) the following concerns are mentioned by medical specialists about giving patients access to their EMR by physicians: patients will be worried, confused or embarrassed by the results and notes shown in their EMR and that it may increase the workload of the physicians. After the research had been conducted, patients as well as physicians had an overall positive experience regarding using an EMR, even though physicians had some initial concerns about implementing the EMR. Delbanco et al. (2012) continued the research of the effects of patient access to the notes of doctors through patient portals. Results show that only 8% of 5219 patients reported that the notes of doctors caused confusion, worry, or offense, after being digitally accessible to them as patients.

Nictiz is a research facility in the Netherlands where ICT developments in the health sector have been studied. Nictiz started doing research of digital access of an electronic medical record for patients in the report of 2015 (Nictiz, 2015). 49% of general practitioners (n=396) do not want patients to have access to their medical record. Among medical specialists (n=385) also 49% do not want patients to have access to their medical record. Follow up research (Nictiz, 2016) has been done and there has been a slight increase in the percentage of medical specialists that do want

patients to have digital access to their medical record but there is still 40% of general practitioners (n=316) and 33% of medical specialists (n=274) who resist this change. Because the research from Nictiz (2016; 2017) shows that many general practitioners and medical specialists still worry about patients having digital access to their EMR and in contrast the results from Earnest et al. (2004) and Delbanco et al. (2012) show positive effects, it is meaningful to study the perspective of medical specialists about why the concern of specialists still exist on the introduction of a patient portal.

Lawrence and Suddaby (2006) introduce the term institutional work. It represents the “purposive action of individuals and organizations, such as day-to-day adjustments, adaptations and compromises, aimed at creating, maintaining and disrupting institutions” (Currie et al., 2012, p.938). Lawrence and Suddaby (2006) categorize institutional work in creating, maintaining and disrupting institutions. Institutional work is conducted by professionals in response to a change in practices by an external threat. Currie et al. (2012) discovered that medical specialists use types of institutional work intertwined in response to the introduction of new nursing roles which would threaten the power and status of specialists and thereby change the practices of medical specialists. Levay and Waks (2009) found that medical specialists could conduct institutional work even when under strict bureaucratic elements. In this study the implementation of a patient portal is seen as an external threat to the medical practices of medical specialists. To extend theoretical insight on institutional work this study will therefore use an institutional approach to look at the concerns voiced by medical specialists.

Organization

The Laurentius hospital in Roermond is one of many hospitals in the Netherlands that is working on a patient portal for patients to access their EMR. Beside the law that medical records should become available to patients (First chamber votes, 2016), the Dutch government encourages hospitals to take part in a subsidy program named VIPP (Policy framework subsidization (Accelerating-program Information-exchange Patient and Professional), 2017). This is a program that enables healthcare institutions to implement a patient portal within three years. The VIPP program matches the standards set by the upcoming law. The program consists of two parts: data exchange with the patient and data exchange between medical specialists and the patient’s medication.

The first deadline for both program parts is at the first of July 2018, a healthcare institution has to at least be able to have patients download certain medical data. This data consists of elements of the Basic dataset healthcare (Basic dataset healthcare, 2016), supported with letters of medical specialists, discharge letters, laboratory results, and radiology reports. The healthcare institutions also must be able to provide a digital up-to-date summary of medication. The second deadline is on the 31st of December 2019, where hospitals should have a secure digital access point so that patients can access a standardized form of their EMR, a patient portal. This includes the Basic Dataset Care (Basic dataset healthcare, 2016), with correspondence over the patient, type of implant for pacemakers, hip- or knee-prosthesis, breast implants or pelvic floor meshes. For the medication part the health care institutions must offer medication prescriptions digitally.

The Laurentius hospital in Roermond is currently working to make it to the first deadline. This step will be implemented before the portal is accessible to the public, which is in line with the VIPP program. Because of the concerns mentioned in the research of Nictiz (2015, 2016) the people in charge of implementing the patient portal are concerned about how the medical specialists at the Laurentius Hospital will perceive the patient portal and whether there will be resistance.

Research question

Therefore, the subject of this thesis deals with how the implementation of a patient portal, where patients will have access to their personal medical record, affects the practices of medical specialists. This study provides a theoretical insight in the form of identifying types of institutional work during the introduction of a patient portal. As Currie et al. (2012) question the work of Lawrence and Suddaby (2006) by discussing that forms of institutional work overlap and are not strictly categorized. Levay and Waks (2009) found that medical specialists could manage their own outcomes while under a strict bureaucratic procedure where not much leeway was expected. Currie et. al (2012) and Levay and Waks (2009), already show examples of institutional work of medical specialists. This study wants to provide more examples of how institutional work is used within medical healthcare. Besides a theoretical insight, this study provides a practical contribution in the form of feedback of the patient portal from the point of view of medical specialists at the Laurentius hospital in Roermond and aims

to contribute to the implementation of the patient portal. The research question of this thesis is as follows:

“What are the main concerns of medical specialists at the Laurentius Hospital regarding the introduction of a patient portal, and how might this affect their medical practices?”

To answer this research question more specifically, first the main concerns of the specialists were identified to confirm the studies of Nictiz (2015, 2016), Grünloh et al. (2016), Earnest et al. (2004) and Delbanco et al. (2012), to find out which concerns amongst the specialist at the Laurentius Hospital in Roermond are present and how it might change the practices of medical specialists. Secondly institutional work conducted by medical specialists to maintain their medical practices in reaction to the introduction of the patient portal are identified, by using purposive action through day-to-day adjustments, adaptations, and compromises (Currie et al., 2012; Lawrence and Suddaby, 2006; Levay and Waks, 2009; Jepperson, 1991).

To be able to answer the main questions healthcare specialties were given a chance for a meeting, where the project leader of the patient portal was accompanied by the researcher. The secretary of healthcare management has invited all healthcare specialties over the course of four months: June, July, August and September. Thirty-one specialties will be visited. During these meetings the project leader informed the medical specialists who attended the meeting of the patient portal and its features. The researcher is involved in participant observation, where medical specialists were asked to elaborate further on the feedback that will be given regarding; what concerns medical specialists have about the patient portal and what actions have been taken amongst medical specialists. Besides the meetings as participant observation, three interviews with four medical specialists have been conducted after the initial meetings to discuss the role of the medical specialists in the patient portal and review their previous feedback in more depth.

Outlook

The structure of this thesis consists of a theoretical framework, methodology, results, and finally a discussion. Within the theoretical framework first the earlier research from Nictiz (2015,2016) will be discussed, secondly the doctor-patient relationship will be discussed briefly, third institutional change and institutional work will be discussed. The

methodology explains how the study is conducted. The results show the answers to the research questions of this study. Finally, the discussion summarizes the results, theoretical implications, practical implications, reflexivity of the study and recommendations for further research.

Theoretical background

This chapter will discuss the theoretical background related to the key concepts of this study. It will start with previous studies about the perspective of medical specialists towards the patient portal (Nictiz, 2015,2016). Following is a study which will give more insight in the dynamics of the doctor-patient relationship over the past years (Goodyear-Smith and Buetow, 2001; McKinstry, 1992) and the impact information technology (IT) can have on healthcare (Otte- Trojel et al., 2015). Afterwards the medical profession is linked to institutional work on how specialists might try to maintain their institution (Lawrence and Suddaby, 2006; Currie et al., 2012).

Specialists concerns

The organization Nictiz has studied the view of medical specialists about patients being able to access their medical record online in the Netherlands (Nictiz, 2015; Nictiz, 2016). As mentioned in the introduction of this study, there has been a slight increase in the percentage of medical specialists that have a positive view of patients having access to their medical record online in 2016 33% was against patients having online access to their medical record, compared to 2015 with 49%. In the research done by Nictiz (2016) they have listed several arguments of medical specialists and general practitioners who do not want digital patient access. The most common argument against online access for patients was that if the information for the patient is not sufficiently clear, it can cause unnecessary confusions and misunderstandings. The most common argument in favor of online access for patients is that it increases the involvement of the patient in the treatment (Nictiz, 2016).

Besides concerns of medical specialists, the role of the patient is also adapting with the patient having access to their medical record through the patient portal, and therefore changing the doctor-patient relationship. Doctors have specialized knowledge and therefore need the power to be advocates for their patients (Goodyear-Smith and Buetow, 2001). This includes being able to share information with patients and being able to understand the patients' wants, help patients to formulate their stories and make informed decisions on treatments, act trustworthy on behalf of the patient and being able to interact with compassion towards patients. These domains require power for doctors to facilitate the healing of patients as persons and maintain

doctors' personality (Goodyear-Smith and Buetow, 2001; Brody, 1993). Otte-Trojel et al. (2015) have found that the patient portal at Kaiser Permanente enhances the doctor-patient interaction. The patient portal permits physicians to send follow-up messages and reminders about screenings and tests to better inform their patients. It also facilitates online messaging between patients and doctors which improves their interaction. Most important is that patient and doctor have the same information which helps streamline discussions and improve the communication (Otte- Trojel et al., 2015).

Patient portals enable the patient to manage and monitor their care according to Otte- Trojel et al. (2015). Patients need power to have their health needs met and to meet their own responsibilities. Research has shown that patients who feel in control of their own lives and are involved in their decision-making about health care have significantly improved health outcomes (Anderson et al., 1995; Lerman et al., 1990). Through storytelling, patients place their experiences in their own context. This offers a framework to understand events, which is the basis of the patients their self-understanding, which “enables them to decide what are health problems to them, and what they tell their doctors “(Goodyear-Smith and Buetow, 2001, p.453).

Institutional work

The institutional theory studies how organizations are determined by norms and practices in their environment (Eriksson, Müllern, and Styhre, 2011). “There are enduring elements in social life – institutions – that have a profound effect on the thoughts, feelings and behavior of individual and collective actors” (Lawrence and Suddaby, 2006, p.216). Lawrence and Suddaby (2006) use the definition of Jepperson (1991, p.143) on institutions, that they are “an organized, established procedure that reflect a set of standardized interaction sequences”. Institutional theory views an institution as something that is given, as actors who participate within an environment are seen as stationary (Lawrence and Suddaby, 2006). Institutional work however recognizes the influence of social actors and conceives institutions as being embedded in collectively shared norms, values and beliefs. Its definitions make institutions a highly abstract object. Eriksson, Müllern, and Styhre (2011) define it as a set of norms or rules that are collectively shared in a specific community. Institutional change happens when theses norms or rules change by certain influences such as political influences or the agents within the institution themselves (Mahoney and Thelen, 2010).

Institutions can change when processes within institutions may leave agents disadvantaged by current practices and they therefore seek to revise, supplement, or reinterpret the rules (Mahoney and Thelen, 2010, p.96). Institutional work is thus formed as criticism on the institutional theory.

In regards of the doctor-patient relationship the typical view was that the doctor should have power over the patient to function effectively, where the doctor decides on the best course of action for the patient, before shifting towards a patient-centered approach, where doctor and patient together decide on the course of treatment (Goodyear-Smith and Buetow, 2001; McKinstry, 1992; Emanuel and Emanuel, 1992). The shift resulted in that the patient has power over his or her decisions regarding healthcare (Goodyear-Smith and Buetow, 2001). Advances in IT, such as media and the internet have contributed to this increase in knowledge, which refers to digital accessible information for the patient and the ability to look up information on healthcare on the internet. The doctor-patient relationship has now matured from: “an ‘adult-child’ relationship to an ‘adult-adult’ relationship involving ... participatory power” (Goodyear-Smith and Buetow, 2001, p.452). According to Goodyear-Smith and Buetow (2001) this shift in power led at times to the disempowerment of doctors. This could have effect on the institutional change of medical professionals as it is a change in practices of medical specialists and has led to medical professionals adapting to this ‘adult-adult’ relationship.

According to Lawrence and Suddaby (2006), forms of institutional work can exist as creating, maintaining and disrupting institutions. Work aimed at creating institutions has received the most attention by organizational scholars (Lawrence and Suddaby, 2006). Its focus is on explaining the role of actors in the formation of institutions. Lawrence and Suddaby (2006) provide a list of specific actions which reflect the creating of institutions, which they split in three sets of practices. ‘Vesting, defining and advocacy’ reflect political work in which the actor reconstructs rules, property rights and boundaries that define access to material resources. ‘Constructing identities, changing norms, and constructing networks’ emphasize actions in which actor’s belief systems are reconfigured. The final set of practices is ‘mimicry, theorizing and educating’, which involve actions to alter abstract categorizations in which boundaries of meaning systems are altered (Lawrence and Suddaby, 2006, p.221). Lawrence and Suddaby (2006) also observed actions which were taken to maintain an institution. Six

types of institutional work on maintaining institutions have been identified and are split between a coercive- and normative dimension. The coercive dimension focuses on the maintenance of institutions through ensuring adherence to rule systems by 'enabling', 'policing', and 'deterring'. Enabling is the creation of rules that facilitate, supplement and support institutions. Policing is ensuring compliance through enforcement, auditing and monitoring. Deterring is establishing coercive barriers to institutional change. The normative dimension focuses efforts to maintain institutions on reproducing existing norms and belief systems by 'valorizing and demonizing', 'mythologizing', and 'embedding and routinizing'. Valorizing and demonizing is providing positive or negative examples that illustrates the normative foundations of an institution. Mythologizing is preserving the normative underpinnings of an institution by creating and sustaining myths regarding its history. Embedding and routinizing is actively infusing the normative foundations of an institution into the participants' daily routines and organizational practices (Lawrence and Suddaby, 2006, p.230). Finally, Lawrence and Suddaby (2006) found activities of actors who intended to disrupt institutions by attacking or undermining mechanisms that lead member to comply with institutions. Three forms of institutional work were found concerning the disruption of institutional work. 'Disconnecting sanctions', which is working to disconnect rewards and sanctions from some set of practices, technologies or rules. 'Disassociating moral foundations' refers to the actor trying to disassociate practice, rules or technology from its moral foundation as appropriate within a specific cultural context. 'Undermining assumptions and beliefs' is the last form of institutional work regarding the disrupting of institutions. This refers to actors decreasing the perceived risk of innovation and differentiation by undermining core assumptions and beliefs.

Currie et al. (2012) explain institutional work as something that is carried out by elite professionals to maintain professional dominance in the face of external threats. Their practices are typically not transparent to non-professionals, because it requires training and experience as well as tacit knowledge. The work that is carried out does not have to be intentional, it is often invisible. It represents the "purposive action of individuals and organizations, such as day-to-day adjustments, adaptations and compromises, aimed at creating, maintaining and disrupting institutions (Currie et al., 2012, p.938). The institutional work in which actors engage is influenced by the actors' position in the field (Currie et al., 2012). Institutions are the product of purposive action,

to change, maintain or disrupt these institutions. One example of how medical specialists use institutional work to maintain and create their institution is given by Currie et al. (2012). In this case new nursing or medical roles have been introduced, that threaten the power and status of specialist doctors. The specialists responded to the threat, which would change the pre-existing model of medical professionalism that privileges specialist doctors. This was done by “the opportunity for them to delegate routine tasks to other actors and maintain existing resource and control arrangements over the delivery of services in a way that enhances elite professionals’ status (Currie et al., 2012, p. 957)”. Currie et al. (2012) extend the studies of institutional work by Lawrence and Suddaby (2006) as they propose that different types of institutional work interact and cross categories of creating and maintaining institutions, whereas Lawrence and Suddaby (2006) identify institutional work in separate forms.

Levay and Waks (2009) define elite professionals as a group of organized experts who have the autonomy to decide on their own principles and procedures. In their research they found an example of how medical specialists use institutional work. The trend of medical specialists is that they are “increasingly required to make their work more transparent by accounting for the quality of services to outside audiences” (Levay and Waks, 2009, p.509). Specialists eventually became involved in transparency technologies through entering in negotiations with external actors. They shaped evaluation criteria by using arguments that were acceptable to these external actors, so that their own priorities gained attention and support (Levay and Waks, 2009). Levay and Waks (2009) extend the studies of institutional work by introducing the term of ‘soft’ autonomy. The medical specialists who have been studied were expected to be powerless or robbed from their autonomy, however that was not the case. They still managed to control many of the premises and criteria of evaluation. A ‘soft’ autonomy is appropriate to denote as a professional autonomy which is mitigated by continuous external monitoring but still leaves considerable freedom for professionals to decide on assessment criteria and procedures.

Agency

The reason why this theoretical framework is important lies with the introduction of agency. Institutional work is rooted from initial articles of DiMaggio (1988) about agency and institutional theory. Institutional theory viewed actors as passive in understanding how institutions arise (Lawrence and Suddaby, 2006). DiMaggio (1998)

focusses his studies on “the way interested actors work to influence their institutional contexts through strategies as technical and market leadership, or lobbying for regulatory change” (Lawrence and Suddaby, 2006, p.217). Lawrence and Suddaby (2006) further improved the concept of institutional work by identifying three categories of institutional work; creating, maintaining, and disrupting. Currie et al. (2012) argued that these three categories of institutional work interact, and cross categories. Thus, an actor could be both creating and maintaining at the same time. Finally, the study of Levay and Waks (2009) provided the term of ‘soft’ autonomy. Which referred to the possibility of actors to use institutional work even when faced with a ‘highly bureaucratized’ system, in which the actors were initially thought to have little headway in terms of adapting to the system. These studies combined form the theoretical framework for this study. This study aims to test the study of Currie et al. (2012) by reviewing what kind of institutional work is conducted by medical specialists, during the introduction of a patient portal. And as the patient portal is lawfully required to be available (First chamber votes, 2016) it has similarities with the study of Levay and Waks (2009) as a bureaucratic element of introducing a patient portal might show an ‘soft’ autonomy.

Methodology

This chapter clarifies the methodology used in this study. It will start with the research design, following with the data collection and after the data analysis. It concludes with research quality and ethics.

Research design

This study is conducted using an interpretivist approach. Interpretivism takes “human interpretation as the starting point for developing knowledge about the social world (Symon and Cassel, 2012, p.21)”. The subject of ‘verstehen’ is of particular importance within the interpretivist approach, which involves “accessing and understanding the actual meanings and interpretations actors subjectively ascribe to phenomena to describe and explain their behavior (Symon and Cassel, 2012, p.21)”. This is done by investigating how actors experience, sustain and articulate social constructed realities (Symon and Cassel, 2012). Qualitative research is called for by Nicolini (2010) which entails more attention to the process when writing about innovation in organizations. The patient portal can be seen as an innovation in this research as it introduces new functionalities and opportunities towards for the hospital. This study uses a qualitative research method to gain an understanding of the perspectives of medical specialists. As in the interpretivist approach realities are socially constructed, qualitative methods like interviews and observations fit better to gain an understanding of medical specialists’ perspectives on the introduction of a patient portal. Quantitative research in contrast focusses more on quantifying data and generalizing results to make precise statements about a small set of causal relationships (Bleijenbergh, 2013). Therefore, qualitative research would fit better.

This study consists of a case study. According to Yin’s (2009) a case study is an: “empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (p.18). The focus in this study is on how the implementation of a patient portal where patients will have access to their personal medical record might affect medical specialists their practices at the Laurentius Hospital in Roermond. The study requires in depth information gathering to learn about

how the patient portal affects medical specialists. Because of the exploratory nature of the research question a case study is the appropriate research strategy.

Research in advance of the study from Nictiz (2015, 2016) and Lawrence and Suddaby (2006) has provided this study with some themes of importance: patient contact, interpretability for patients, doctor-patient relationship, workload of medical specialists, accountability, legal claims and institutional work. These are the sensitizing concepts of this study. Sensitizing concepts “draw attention to important features of social interaction and provide guidelines for research in specific settings (Bowen, 2006, p.3)”. Bowen (2006) states that theory generation might require sensitizing concepts but no hypotheses, because qualitative research involves the researcher’s attempts to discover, understand and interpret what is happening in the research context.

Data collection

Data collection consisted of a variation of participant observation where notes have been taken and open-ended interviews which are recorded and transcribed. During the meetings unobtrusive notes were taken followed by accurate notes after the interviews. The goal of the data collection was to gather feedback from the medical specialists to get some insight in how their work process might change with the introduction of the patient portal. Patients themselves are not considered in this study as I am focused on the medical specialists’ point of view. The patient portal is being introduced in the Laurentius Hospital in Roermond. which exists of thirty-one specialties. I was asked to take place in a project group who is facilitating the introduction of the patient portal before the meetings with medical specialists have taken place. I attended two meetings where specialists, general practitioners, project leaders and people from the patient council were present. During these meetings, information was given on the VIPP program and how the introduction of the patient portal went in the university hospital of Utrecht. There it was decided that the meetings with specialists could start after an introduction has taken place to inform the staff. On the 24th of May 2017 this presentation has taken place to inform all staff of the upcoming patient portal. From that moment on thirty-one meetings have been set up to inform all specialties separately where questions were asked and concerns were voiced. After these meetings three interviews have taken place with four medical specialists so that these medical specialists were able to give feedback one-on-one in a private setting and more in-depth data could be gathered.

Observation has occurred during meetings and were a variation on participant observation data collection called 'complete observer'. This is characterized by: "the complete observer does not engage with other participants. In this mode of engagement, the researcher plays no active role in the social situation, merely observing events as they unfold. It is assumed that the observational role and intent of the observer are communicated to research participants." (Symon and Cassel, 2012, p.298). I have accompanied the project leader during 29 out of 31 of these meetings, who facilitated the introduction of the patient portal towards the specialists. During these meetings the project leader informs the specialist of the option of the patient portal. As I have attended meetings with the project group I had some knowledge on the VIPP program and what the concerns were at the university hospital of Utrecht. This together with the research of Nictiz (2015, 2016) allowed me to help the project leader and explain concepts of the VIPP program to medical specialists. Furthermore, I have interrupted the project leader to let medical specialists elaborate further on: feedback that was given regarding, what concerns medical specialists had about the patient portal, how medical specialists interpret the implementation of the patient portal, and what actions have been taken amongst medical specialists. Questions I have asked specialists to elaborate on during the observations were why they had concerns. These questions were tied to the sensitizing concepts mentioned in the research design: patient contact, interpretability for patients, doctor-patient relationship, workload of medical specialists, accountability, legal claims and institutional work. These questions had no interview format and were asked open-ended when the opportunity of asking about one of these concepts arose. At the end of the meetings the notes I took were summarized for the specialists and they were asked if anything was missing from what was discussed. In Appendix 3 is an overview of all the specialties I have seen and the number of attendees.

The interviews were held with open-ended questions. This was done so that specialists voiced their own concerns and were not misguided by this studies' sensitizing concepts. However, the sensitizing concepts were kept in mind during the interviews so that specialists were asked to explain their thoughts on these concepts more in depth. For example, when specialists voiced concerns about patient contact or the interpretability for patients, specialists were asked to explain their thoughts on the consequences of the patient portal further regarding patient contact and the

interpretability for patients. Interviews are deemed reliable gateways into what goes on in organizations (Symon and Cassel, 2012). By not having a structured interview, the researcher can ask further about topics previously not mentioned. From the topics which came about from meetings I could ask additional questions besides the concerns uttered from the medical specialists. The first interview was planned and held with a medical manager of a surgical specialty and took 30 minutes. After a general idea was formed about what the concerns were from medical specialists. This interview was held after a meeting took place. During this meeting the specialists were called for and the meeting was postponed. It was agreed upon to hold an interview instead of another meeting, because the specialists would have time during this period to mutually discuss their feelings about the portal. The second interview that took place was with a medical specialist from a non-surgical specialty who the project leader and I visited for the first. This interview also took thirty minutes. More knowledge about the general consensus about the patient portal was now known to me. The third interview took place with two specialists and lasted for one hour. During the initial meeting with these specialists they were so voiced in their concerns I asked them for an interview so that more data could be extracted.

Data analysis

In this research template data analysis was used to analyze the data. "Template analysis is a style of thematic analysis that balances a relatively high degree of structure in the process of analyzing textual data with the flexibility to adapt it to the needs of a particular study (Symon and Cassel, 2012, p. 426)". Template analysis starts with defining a priori themes. I chose to select the sensitizing concepts of this study as the a priori themes which results in an initial template. These are defined by the researcher in advance of the study. This initial template will be applied to the rest of the data as an iterative process of applying, modifying and re-applying (Symon and Cassel, 2012). A key feature of template analysis is the hierarchical organization of codes. Coding is the process of "attaching labels to a section of text to index it as relating to as theme (Symon and Cassel, 2012, p.431)".

As stated before notes have been taken during the meetings and after the meetings took place a full report was written. Interviews have been recorded and transcribed. These notes and transcripts served for the base for further data analysis. The a priori themes, which are similar to the sensitizing concepts have been altered

during the study as it was an iterative process. These were patient contact, interpretability for patients, doctor-patient relationship, workload of medical specialists, accountability, legal claims and institutional work. The table below gives an overview how these have been grouped.

A priori themes	Second level themes	Final themes of concerns	Institutional work	
Patient contact	Patient interaction	Patient interaction	Institutional work in the form of creating and maintaining institutions	Utilizing
Interpretability for patients				
Doctor-patient relationship				
Workload of medical specialists	Time pressure	Specialist process		
	Financial compensation			
	Logistic concerns			
Accountability	Specialist accountability	Specialist accountability		
legal claims				

An institutional approach was taken to analyze the concerns of medical specialists. From the meetings and interviews three themes of concerns can be grouped. These themes are 'Patient interaction', 'Specialist process' and 'Specialist accountability'. Patient interaction, which includes the interpretation of results by patients, concern for increasing patient contact, and a change in the doctor-patient relationship, is one of the most talked about themes in this study. Specialists process entails time pressure, financial compensation and logistic concerns. Specialist accountability is about concerns of legal issues and having to account for tasks which specialists do have responsibility over but can't directly influence themselves. For example, responses of secretaries to patients. From these concerns one dimension has been identified regarding institutional work. This is called utilizing. Utilizing is defined as medical specialists working with the patient portal as tool to extend their medical practices. They are essentially making a virtue of the inevitability of the introduction of the patient portal.

To demonstrate how the data was coupled to institutional work one quote is shown and the thought process explained. In Appendix 1 an overview of all quotes is

given and where they are categorized within the themes of concerns. In Appendix 2 an overview of all quotes regarding institutional work are summarized.

“This way the patient gets shared responsibility for keeping the medicine list up-to-date.” “This is great for patient safety.” ... “Yes, there are possibilities with surveys, you can do a lot of great things with them.”—Notes from meeting with quotes from medical specialist, non-surgical specialty

The specialist in this quote is embedding patient care with the possibility of making the patient portal about shared responsibility. Embedding comes from maintaining institutions from Lawrence and Suddaby (2006). The specialist spoke of using the patient portal as something that could possibly aid him in his work by expressing that he sees opportunity in sharing the responsibility of medication. This is a form of institutional work (Currie et al. 2012), where specialists creatively adapt to a threat, which could change their practice, to ensure their norms and values are embedded in their medical practices. By addressing patient safety, the specialist exposes his norms for wanting to provide care for the patient. Besides providing patient safety he briefly touches the subject of surveys. Both shared responsibility and surveys can be seen as ways to decrease the workload for the medical specialist once implemented.

Research quality and ethics

Research quality in this study was assessed through Guba and Lincoln's (1989) assessment criteria. As this study is based on qualitative research, quantitative terms were inappropriate for the assessment of quality of a research. Instead of internal validity, generalizability, reliability, and objectivity, Guba and Lincoln (1989) provide alternative criteria respectively, credibility, transferability, dependability and confirmability.

Credibility is trying to demonstrate a good fit between constructed realities of respondents and the reconstructions attributed to them (Symon and Cassel, 2012). Which is provided by the following points. I spend close to four months, the end of May, June, July, August and the beginning of September on the premises of the hospital and had observations, meetings and spent a lot of time with the project leader over the course of these months. Therefore, I can claim to go beyond superficial observations and to have immersion in the issues of the hospital. The ongoing research in the field

was often discussed with my supervisor from the Radboud University in Nijmegen who attended one of the meetings and with the project leader of the patient portal. My supervisor and I have discussed on how certain codes could fit under institutional work. By explaining my thought process in the data analysis, the original constructions of this study have been challenged and changed through the participants' constructions of their perspectives. The notes which were taken were summarized at the end of the meetings and transcripts were sent to the interviewees to make sure the participants' views have been accurately captured.

Transferability is providing enough detail about the specific research case that the reader can judge what other context might be informed by the findings (Symon and Cassel, 2012). Transferability was provided for in this study by having a thick description about the context of the meetings and interviews so that in future research the reader can judge how this study can be used in their situation.

Dependability refers to demonstrating how methodological changes and shifts in constructions have been captured and made available for evaluation (Symon and Cassel, 2012). As explained with the criteria of credibility, my thought process has been explained in the data analysis the original constructions of this study have been challenged. Therefore, the reader can judge why certain decisions were made and how the eventual understanding of the research was achieved.

The final criterium is confirmability which refers to making clear where the data came from and how such data were transformed into the presented findings (Symon and Cassel, 2012). By having thoroughly explained in the methodology how the data has been collected and analyzed, and that every healthcare department, except for two, have been taken into account in this study, the confirmability can be assured. Moreover, the quotes have been referred to as medical specialists with the category of healthcare department attached. These categories are surgical, non-surgical and supporting.

As for research ethics this study tried to ensure ethical treatment of their enclosed data. During the data collection the participants were being aware that they were being observed and their feedback is being written down. The interviewees were asked in advance to record the conversations. In the results all participants remain nameless and are referred by means of their occupation. For the sake of anonymity,

the precise healthcare department has not been included. An overview of what specialties have been visited and with how many specialists can be found in Appendix 3. As stated in the paragraph above, quotes were categorized in surgical, non-surgical and supporting specialties for the sake of anonymity of the participants. A confidentiality document has been signed between researcher and the organization so that the results will stay confined. No incentives are given to the participants or researcher to comply with the study. All participants involved are doing so on voluntary basis to provide feedback.

Results

In this chapter the results of the study are discussed. First the chapter starts with an introduction, to help the reader gain insight in the main discussions which are present at the Laurentius hospital. Secondly the three themes of concerns of specialists towards the introduction of the patient portal will be discussed. Third, institutional work from medical specialists in the form of utilizing will be discussed.

During observations and interviews one of the most commonly talked about subject, and its consequences, was the discussion between showing patients their information real time, or whether the results should be shown after a delay. The requirements for the maximum delay time are seven days for delaying the patient's results from the moment they are accredited (First chamber votes, 2016). This discussion was fueled when a study about the issues of showing results real time was shared between specialists (Smulders and Metselaar, 2017). Smulders and Metselaar are both professors at the Vrije Universiteit medical center of Amsterdam and have conducted a study about the delay time of revealing a patients' medical record. They state that real time access of patients to their medical record is not in favor of the patient. This might have changed the medical specialists' opinion about this discussion. Based on the themes mentioned we can make some assumptions how the patient portal could lead to the change of practices of specialists. These practices could lead to an institutional change, as following from the concerns the specialists have about the patient portal which may leave them disadvantaged. Institutional work is referring to the purposive actions of individuals, such as day-to-day adjustments, adaptations and compromises, aimed at creating, maintaining and disrupting institutions (Currie et al., 2012). It is carried out by elite professionals to maintain professional dominance in the face of external threats (Currie et al., 2012). In this study the patient portal might potentially be an external threat to the professional dominance of medical specialists, which will follow from examples in the next paragraphs.

Patient interaction

From the interviews and observations, the most common told concern was the unrest the patient portal would bring to patients. The reason some specialists gave was that patients are not capable enough to interpret results on their own. Some specialists

were concerned about how the patient would interpret and react on their results if a medical specialist has not interpreted and explained the results to them first. An observation from medical specialists from the outpatient clinic, 'polikliniek' in Dutch, summarizes this concern and reveals motives behind his reasoning.

*(Patients are going to) “ask questions, become worried and can surf on the internet”.
“The patient can see their ‘death sentence.’ (The main concern is) “that patients don’t know how to handle it, can it be treated or is it really a death sentence?” Another specialist says: “They can’t interpret it, and if there is a negative outcome, I’d rather tell it myself”. –Observation with quotes of medical specialists, non-surgical specialty*

During this observation both specialists who were present expressed their concern for the unrest it could cause amongst their patients. The quote shows that medical specialists care greatly for their patients as it is assumed that patients are not capable of interpreting results, or are going to self-diagnose diseases on the internet. The specialists do not want that the patient must go through what they might interpret as something 'incurable', while it might totally be harmless. In contrast it is also possible for the patient to think he or she is fine, while the result, after that it has been interpreted by a specialist, may have a very negative outcome. Because the specialists have such strong feelings against having a misinformed patient they show great care for them. This quote fits within the theme of patient interaction as the specialist involved assumes questions from the patient who can see his results. The specialist prefers personal contact instead of the patient portal or online searches being the source of information. From this quote can be interpreted that through the introduction of the patient portal, specialists expect change in medical practices. Patients might be informed prior to the consultation, correct or incorrectly. This depends on how the patient is 'steered' in the right direction to look up information on the subject. Another expected change in medical practices is that patients are going to contact medical specialists more often. The next quote is from an observation with a different outpatient clinic from the hospital. The subject of the meeting was about the discussion of showing results real time or with delay.

The conversation continuous about the real-time discussion. The specialists clearly state that they only want the patient to open the medical record “after a consult with the specialist.” “Otherwise they will see they have cancer!” Specialist state that even general practitioner cannot interpret results “then how should a patient be able to do

it?”. In reaction to this a specialist says: “That’s why we interpret the results and pass them on to the patient, that is why we have an outpatient clinic.” –Notes from meeting with quotes from medical specialists, non-surgical specialty

In this meeting the specialists would prefer that the patient gets access to the patient portal after a consult has taken place between the patient and the specialist. This is said because the specialist is afraid of the possible consequences to their medical practice. The consequence according to the specialist is that patients would contact the specialist after the patient is not able to interpret it or because of worry. The reason for worry that they gave was that patients would be able to see they have cancer. Besides the worry the specialist stated that even general practitioners cannot always comprehend the results from text without having spoken to the specialist first. The quote also gives some explanation why specialists are showing signs of this as they do not want for the patient to feel confused or helpless at home. The specialists see this as reason for even having an outpatient clinic where patients can come to get informed by their treating specialist. The possible change of practice could happen after the introduction of the patient portal, is that patients do not always have to visit the outpatient anymore. In a different meeting the specialist is concerned of the patients’ urge to contact his treating specialist.

“It will only give unrest for the patient” (showing the results before its discussed among specialists). “Currently a call is made after one week to make an appointment, if it’s (the results) online within two days, then they will contact us, why should they wait for another week to contact us? –Notes from meeting with quotes from medical specialists, non-surgical specialty

The specialist is questioning why a patient would wait for his or her appointment, when it’s just as easy to call for them if the results are available to the patient after two days. Especially when there is a negative outcome for the patient. The quote also shows that there is an assumed connection between patient unrest and patient contact. The next quote shows the point of view of some specialists in the doctor-patient relationship which is part within the theme of patient interaction.

The project leader asks a question if the medical specialists can understand that patients can benefit from showing their results in real time: “On one hand, you have the “fat stupid diabetic” (all specialists are laughing about this term, they look like they all have had a patient like that by their eye contact) but on the other hand, you have

chronical patients, they have been in hospitals for the most parts of their lives, they surely know what laboratory values mean. Or even me as patient, who actively wants to be involved with his own healthcare process.” A specialist reacts that he shows empathy for patients who would want their results as soon as they have been accredited, but they remain skeptical about the benefits by repeating concerns about the assumed increase in patient contact. –Notes from meeting with quote from project leader

This quote shows the range of patients who specialists encounter. On one hand the patient that listens to his doctor and takes the advice for granted, and on the other hand the patient that actively wants to manage its care. The specialists laughed when the project leader spoke about the ‘fat stupid diabetic’. In Dutch this type of patient could be referred to as the 3D patient, as the Dutch words all start with the letter ‘D’. The laughing could suggest that in the specialists mind the ‘ordinary’ patients are not capable of interpreting their results alone, of course they would need a specialist to let them interpret it for them. The fact that all specialists were laughing at the what was being said suggest they all had a patient who is not able to comprehend their results. The notion that there are patients who would want or benefit from knowing these results was eventually dismissed by the specialists shows that the view of the patients and specialists do not align. By laughing at the ‘fat stupid diabetic’, a difference in social status is also made apparent. Fat, stupid and diabetic can be coupled to people who have lower I.Q.’s and educational levels. The dismissal of the possibility that some patients could benefit from the patient portal shows that specialists might be afraid of the change the patient portal might bring about within the doctor-patient relationship and thus change their medical practices. The specialists refer again to an increase in patient contact after patients can look into their patient portal. This seems to be the general consensus of the specialists of the Laurentius Hospital.

To summarize, this suggest that with the introduction of a patient portal the contact with the patient is assumed change. The possibility exist that patients can read their results before specialists and therefore is already partially informed regarding the results during a consult and might even have searched for answers themselves. This could bring about changes in the doctor-patient relation (Goodyear-Smith and Buetow, 2001) where interaction between doctor and patient may be even more important to guide patients into correct sources of data. In essence it becomes clear that specialists

are afraid of the increase in patient contact when patients become restless from the results or not being able to interpret them.

Specialists process

Based on the concerns of specialists some assumptions have been made on how the patient portal could lead to the change in the process of specialist's practices. In an interview with two specialists they voiced their perspectives on what the impact of the patient portal could be on their medical practice. When a specialist was asked what plans of action they would like to take he explained his thoughts on the patient portal.

"Yes, but look, that's the big problem. We are completely detached from the introduction of the patient portal, is wasn't our idea. It was the idea of a few government officials. They have not discussed that idea with us. Maybe they have with a few specialists and specialties (in the Netherlands), but there hasn't been a single conversation. And now things have to be imposed and then the tables are turned. And that's what I think you are doing now: to ask what are your ideas, what are your ideas.. none! Why do we have to come up with ideas on the moment things have to change? And that is a trick that's been done before, as in that's the way it's supposed to be. Then project groups are formed and committees, and in half a year it seems that the committees and project groups came up with the idea and also have to implement it themselves. While the person who has imposed the patient portal secludes himself. And that is not the way it's supposed to be." –Quote from interview with medical specialists, non-surgical specialty

The specialist here is talking with some frustration that they have not asked for the patient portal. He confronted me with me asking about how they as specialist would start to think about taking actions on how this portal could be implemented. That was in his eyes a trick which management in general, thus not referring to the specific management of the Laurentius Hospital. Management often makes these appointed committees responsible for the implementation of a form of change. The possible change to medical practices can be extracted from this quote. If the specialists get approached by management to ask for ideas, even though they have not asked for it, this will be time consuming on the specialist's part. Further along the conversation the specialist explained his thoughts on why the patient portal is being introduced and more about what practices might change.

“That indicates that the department will be smaller, that indicates that secretaries have to be let go. And then I can come back to the point, what is the goal of all this? Transparency fit in another jacket is not the problem, but what’s stuck to it, that eventually has as goal to make the hospital as small as possible. To become more efficient, with less people. That’s coupled to reducing employment and cost reduction. I think that’s the final goal.” –Quote from interview with medical specialists, non-surgical specialty

The specialist assumes that the patient portal is not introduced in order to improve the healthcare of patients, but to cut costs and improve efficiency. During meetings other specialists have also made remarks, asking if secretaries will be replaced through the introduction of the patient portal. Specialists also mention time pressure as concern of the introduction. Because of the possibility that patients can read their results before specialists and might have done some research themselves, specialists are coupling this to more work. Thus, the expected change is that secretaries will be let go in the future, and therefore specialists must do their tasks. This would in their mind result in specialists having to do more actions themselves which is time consuming. In another meeting that’s been observed specialists were asked about how the patient portal might change their practices.

“You simply don’t have time for it anymore (answering questions about the functionality of the portal), you need more time than 10 minutes to examine a patient. If you have to answer all kinds of questions in the meantime, that just doesn’t work anymore.” “I don’t mind to cooperate with the patient portal, but the bottom line is that it should not cost more time.” ... “It has to be a benefit for the patient.” “It is deemed that every time we should do something extra, ‘oh just a click here, just a minute there’, that still is a minute extra, where’s that time supposed to come from?!” In the meeting it was also said that they do not have “co-assistants or interns walking about who can fix some problems”. – Notes from meeting and quote from medical specialist, surgical specialty

The specialist here is concerned about all the assumed extras one has to do when something new is introduced while he primarily wants to provide patient care, which is the normative foundation of the specialist. In reaction, the specialist was showing a lot of frustration when he said this. When asked further about how one could deal with the consequences, for example explaining to the patient that the results in the patient portal are not final and are subject to change, I was confronted with more frustration. The specialist said that even that example is time consuming. His

frustration came from that every time something new is introduced it just adds up to extra work and the number of patients he has to see does not decrease. Specialists are thus concerned that changes caused by the patient portal could bring about extra work which do not add to healthcare of patients. In the meeting specialist also stated that they don't have co-assistants or interns walking about, this was heard from multiple specialties. This might be referring to an already existing source of work pressure or referring to the fact that the Laurentius Hospital is just a general hospital and not an University Hospital who do have these co-assistants or interns. These specialists do thus not believe the patient portal might cause secretaries to be let go in contrast to the previous quote, as they have just enough secretaries in the current situation. From a different meeting a specialist made the following remark when asked their opinion about what they thought of the possibility that the patient portal would be able to show results to the patient before it's discussed with the patient.

*"A secretary isn't even allowed to show results of blood tests, but the portal may do it?"
–Quote from meeting with medical specialist, surgical specialty*

This specialist is worried that the possibility might arise that patients have seen the results without support. He thus expects the patient portal to take over some of the practice of informing the patient. This change worries him because a secretary can support the patient or act on the instructions of the specialist. A specialist from another meeting has a concern on how patients could behave and therefore cause a change in medical practice.

"Patients could possibly ask for second opinions, and then just cancel appointments or not even show up at all. " –Notes taken from meeting with medical specialists, non-surgical specialty

Specialists here worry about how the patient portal could affect the behavior of patient. As the patient portal is a source of information in itself, the patient could take these results and show them to a different hospital, clinic or even family friend. This could result in having to deal with an increase in 'no shows', when patients don't turn up for a consult. In a different meeting, specialists responded with some concerns of possibility of an e-consult feature within the patient portal.

"That (e-consult) will become too easy to access, it will not be feasible for our large outpatient clinic." ... "Imagine if we have to do it (answering an e-consult) in our spare

time, how will that be compensated? –Notes from meeting with quote from medical specialists, non-surgical specialty

Specialists worry about how they are expected to answer patients' emails and about how such consults will be compensated. At the time me nor the project leader were aware that a financial compensation is available for e-consults. In the current situation there is no time available for specialists to answer these emails. This would require specialists to answer these emails in their spare time if nothing changed. It would require specialists to change their practice so that they can respond to emails in a regular pattern. The notion that their outpatient clinic might be too large could suggest that more 'hands' are required to be effectively use the possibilities of the e-consult. In an interview a medical specialist was asked if he was already thinking about how the patient portal might affect his medical practice. He replied that he was not actively involved. He explained his reasoning afterwards.

"To be honest? I don't have time for it now. I'm busy with, yea, everyday tasks. To put it this way, you are busy from 8 till 6 with patient care. Lots of meetings come in between and to be honest, you don't have enough energy left at the end of the day. It's not in the nearby future. That's where it comes down to. I understand that it actually should be done." –Quote from interview with medical specialist, non-surgical specialty

The specialist states that he currently does not have enough time for it because the actual implementation of the patient portal has not started yet. As the specialist said in an interview, it might be that the patient portal is too far in the future and that therefore the medical specialists do not have it as priority on their agenda. This does not conclude that medical specialists are not open for the patient portal. This is a concern for the implementation of the patient portal because if specialists are expected to change or alter their practices to be in line with the patient portal, time is required for them to be able to do this. The patient portal could also lead to a logistic change according to some specialists.

"The patient portal, even though there exist a buffer of seven days, would still require a logistical change for the outpatient clinic, because it is not feasible to see patients within one week." (after the results are known) –Notes from meeting with quote from medical specialist, surgical specialty

According to the specialist the maximum delay time of seven days would result in specialists having to see their patients within these seven days after the results are known. Otherwise the patient would be able to see the results before the specialist, which would result in more contact moments and patient unrest according to specialists. The logistical change would require a change in how patients are seen if specialists don't want patients to look into their medical record. In the next quote the specialists who are present make comments on how their practice is drastically changing over the past years.

"The world looks like a reversed place" "We are on the wrong path" Another specialist mentioned later during the meeting that you have to see the patient in person to understand where the problem lies. -Notes taken from meeting with medical specialists, non-surgical specialty

In this quote the specialist is referring to the fact that patients and healthcare is growing towards e-health. The problem which the specialist in this case has with e-health is that it could increase patient contact. The other specialist also worries about the future of e-health and refers to the need to see patients in person. The change in medical practice which according to these specialists may come about is that patients are going to be seen 'digitally', this concerns them as they need to have a consult in person where they can actually see and touch the person to be able to diagnose the condition.

In this section it became apparent that the working day of a medical specialists might change with the introduction of a patient portal. Specialist assume that the introduction of the patient portal is time consuming and an increase in work. Thoughts about changing the work which secretaries fulfill differ, some specialists expect them to be let go, which assumedly cause more work. Others don't mention this as in their eyes the secretaries are still necessary for current practices. The introduction of the patient portal might also change how patients are informed, as the patient portal might be the initial source of results instead of the specialists themselves. This could also lead to patients not showing up at appointments, as they already have the results.

Specialist accountability

Another theme that was found amongst concerns of medical specialists was accountability. This refers to specialists feeling that they have to account for their

actions which was not present. This includes legal concerns. Some specialists do not mind that patients have access to their notes, but others are opposing it because of the possible consequences.

A specialist mentions that there “are a lot of catches” with the introduction of the patient portal. In response I asked to explain himself. He proceeds to give an example of the possibility that a patient could be offended when two different results are displayed. As a radiologist could judge and describe scans differently compared to himself as specialist. “What are the legal consequences?” –Notes from meeting with quotes from medical specialist, non-surgical specialty

The specialist here is referring to the discrepancy which can occur between two different specialties, especially when the outcome is subjective. The specialist is afraid of the effects patient access can have on his specialization. Who is held to be accountable if something is looked over. The specialist is not only afraid of the legal concerns, but also for having to account for actions of someone else. When a professional is accountable for his own tasks and responsibilities, he can choose whether or not to explain discrepancies from other specialists. In the current state, where patients do not have knowledge of what a supporting specialty wrote down, specialists may choose to withhold differences in opinions to prevent confusion amongst patients. This would not only prevent confusion, but also save time. With the introduction of the patient portal, patients have power themselves in being able to see what is written down by supporting specialties. Therefor specialists lose the power to withhold knowledge from patients which would not harm the patient and only cost time. The specialists are thus afraid of having to account for tasks and responsibilities of someone else. This can be seen in the next quote from an interview with another specialist about the option of adding a disclaimer to prevent legal claims from occurring.

“I think a disclaimer could help with a certain category of people, but with other categories it won’t (people who will contact specialists on the smallest of details). But I do think it has value, to build it in.” ... “The problems just are that, uh.. that specialists can look skeptical towards to patient portal as, mainly due to the translation of diagnostics which can occur with pathology results (as examining pathology results can be subjective). We don’t have to worry as much on this topic on our specialty, but it could occur that patients would like to know like, is this benign or malignant? You could put that on a disclaimer, but if it states malign, people

will search for it on Google and then it's too late. The questions remains how to deal with it as group. How can we prevent a claim from happening. Like these American conditions. That is hard, and I don't think I can answer that now. –Quote from interview with medical specialist, non-surgical specialty

The specialist is voicing concerns about the discrepancy which can occur between two specialties, like in the previous quote patient portal causes the specialists to lose power of being able to choose to inform the patient. Besides this the specialist also mentions American conditions. From my understanding this is referred to as it is more common to sue in the United States than here in the Netherlands. This could be a result of how patients will behave in an online environment as the patient portal. The question remains if a disclaimer would be sufficient to prevent legal issues from occurring. In the next quote a specialist explains the consequences of giving patient access to their medical record.

*"It feels like as if you were a journalist, and would have to show all your sources" ...
"This leads to practicing defensive medicine" –Quotes from medical specialist during meeting, surgical-specialty*

The specialist from this quote feels controlled and losing autonomy by assuming he is having to account for his decisions regarding the patients' healthcare. His reaction is that it might lead to practicing defensive medicine, which could be being more guarded in writing some patients report but also requesting another examination to be sure everything is done. The specialist worries about how something is written down in a medical record and how what he wrote down could be legally used against him. This could have an impact on their medical practices and healthcare if more specialists feel this way.

Changing practices caused through accountability can be that specialists lose the possibility to withhold information which is not relevant for the conversation from the patient. The patient can see how certain things are written down in letters and reports and might ask question about this, which costs time and specialists might have to account for these. Some specialists worry about the way they should document their reports. While some specialists state that caution in how reports are written should be already present, because the patient already has a right to look in to their medical records. The legal concerns of the patient portal are that patients might see partial

results of medical examinations and then could accuse their attending specialist for different diagnoses who may be held accountable. This could lead to defensive medicine. The question remains if disclaimer would be sufficient to prevent legal issues from occurring.

Utilizing

This category entails examples of specialists actively infusing their norms and values in the options that the patient portal has to offer which could enhance their medical practices. These are examples where specialists see the patient portal as opportunity to make a virtue out of the inevitable. This is considered institutional work which is a combination between creating and maintaining institutions (Lawrence and Suddaby, 2006). This will become more apparent in the following quotes. Currie et al., (2012) found that professionals in the face of external threats use institutional work to maintain their current practices. As the patient portal is not yet introduced, most of these examples are assumptions or opportunities on how specialists see their work processes. The specialists in the following quote are actively thinking about how the patient portal could change their interaction with the patient, and thereby also their practice.

“We ask ourselves the question, how can we clearly inform the patient, informed consent is what I’m talking about. On an e-health conference one specialist from another hospital said that he used to log in together with the patient on his portal (to help them and inform them about the results). Besides informing the patient you could include the discharge letter or walk through the surveys.” –Quote from medical specialist during a meeting, non-surgical specialty

The specialists here were discussing how by using the patient portal informed consent can be given. Informed consent meant that the patient is able to understand what the procedure entails and the possible consequences of the procedure. The specialists here are thereby actively trying to embed their norms and values of providing the best care for the patient. The specialists see the opportunity to give better care towards the patient and save time explaining the information of a procedure with the use of the patient portal. This is a typical example of maintaining institutions through ‘embedding’ from Lawrence and Suddaby (2006). Yet the quote also provides information on how a practice can be used to alter the scope of an institution. As in the current situation informed consent is only given through mouth-to-mouth

communication, a dimension is added by having the option to inform patients digitally. This is an example of creating institutions (Lawrence and Suddaby, 2006). It comes close to 'changing normative associations' which is about re-making the connections between sets and practices and the moral and cultural foundations for those practices. A noteworthy change that is introduced in the patient portal is patients being able to see their medication. Specialists have the possibility to keep medicine up-to-date in the patient portal. The following quote entails a discussion where one specialist's initial reaction is that of concern. In turn another specialist tries to embed it in his medical practice.

"I can't live up to that requirement." The specialist is referring to keeping the medicine within the patient portal up-to-date by asking during the consult for verification. "Too much time will be lost here, you need at least 5 minutes to verify one's medication." Another specialist states: "I'm verifying medicine, this already is a requirement." He explains that he sees the advantage of patients having access to their medicine list, and should therefore change his practice. Another specialist provides an advantage for patients having access to medicine: "this way patients themselves can contribute to healthcare, they can correct doctors when something is not entered correctly." –Notes from meeting with quotes from medical specialists, non-surgical specialty

One specialist expects keeping the medication up-to-date is too much work to do within a consult. A discussion ensues between specialists where it is stated that during a consult the specialist is already required to verify the medication, except it can now be done digitally. This specialist is using institutional work to embed verifying medicine to his practice. Currie et al. (2012) provides examples of specialists who respond to external threats by creatively maintaining work. This is an example of embedding as the specialist is shifting the responsibility towards the patient, this would cost him less time in a consult. Therefore, a contribution in the healthcare could arise by patients being able to check whether their medicine is up to date. By utilizing the possible change in practice to share a patient's responsibility, new norms and values can be established about what is expected from a patient. This therefore can also be seen as creating a new institution, as norms of patient contact are altered yet it also contributes to the primary norms and values of patient care. Another specialist reacts similarly to the addition of patients having access to their medicine list.

“This way the patient gets shared responsibility for keeping the medicine list up-to-date.” “This is great for patient safety.” ... “Yes there are possibilities with surveys, you can do a lot of great things with them.” —Notes from meeting with quotes from medical specialist, non-surgical specialty

This specialist is embedding patient care with the possibility of making the patient portal about shared responsibility. He does not want to deal with the ‘bureaucratic’ element of the patient portal, and therefore is expressing that he is sharing the responsibility of the medication as in the previous quote. This is a form of institutional work (Currie et al. 2012), where specialists creatively adapt to a threat to ensure their norms and values are embedded in their medical practices. Levay and Waks (2009) studies described how specialists, even when they were under pressure of bureaucratic elements managed to control many premises and criteria of evaluation. This quote shows that the specialist is searching for ideas on how something what in his eyes might become a burden can be used so that it decreases work. In the next example of how specialists use institutional work two specialists initially looked negatively towards the possibility that patients could see results before the specialists have spoken with patients.

(The project leader is talking about the possibilities the patient portal could offer in a conversation with a patient.) “If patients could sit at home with their family and loved ones and read the result together. The patient might be more addressable if the first shock has already come.” The specialist who entered last in the room agrees with the project leader: “A patient could pick himself up after this initial shock. This is much better than having to tell a patient who’s initial response is to fall into this state where he is just gazing into nowhere. Now everything that is said after giving a negative result is not absorbed anymore.” —Notes from meeting with quotes from medical specialist, surgical specialty

The specialist in this example sees an opportunity of the patient portal to alter conversations with patients. In current consultations the possibility may arise that a specialist has to deliver bad news. The specialist loses the ability to inform the patient about possible treatments because the patient is still in an unstable emotional state. The specialist recognizes an opportunity the patient portal may provide as the initial shock could already be over and the conversation can become more about the treatment instead. A combination of maintaining and creating institutions can be seen

in this example as the specialist extends her norms and values about patient treatment in this opportunity and thereby creating a new possible practice on how patients can be seen. In the next quote the project leader has just explained that the patients will have access to their medical record. A specialist answers with:

“I don’t have any objection to patients getting access to their medical records. I don’t have problems with it. People are naturally allowed to look into their record, because well.. you should not write anything.. (the specialist laughs and looks towards us if we understand what he meant), yea that’s not so clever.” In response I asked for clarification on what he actually meant. He stated that you shouldn’t note down your feelings about the patient. “Only when it’s of added value for the treatment. Then it’s possible to account for yourself.” –Notes from meeting with quote from medical specialist, surgical-specialty

This specialist is of the opinion that as long as no subjective remarks are made that are not contributing to the treatment, specialists should not have to worry about having to account for their practice. If something about the patient is written in the medical record that the specialist does not want the patient to see, you can wonder why it is in the medical record in the first place. There are separate options available for specialists to write down their thought process or remarks of patients for other specialists to see. The specialist has fully embedded his current practices in the patient portal by not having objection to patients getting access to their medical records. He simply stated you should not write something in the medical record if it does not add value for the treatment.

Discussion

This chapter will start with answering the main research question and summarizing the study. Secondly the theoretical implications are discussed. Third the practical relevance of this study shall be provided. Finally, the limitations, reflection on the research process and suggestions for further research will be discussed.

Conclusion

The aim of this study was to gain more insight in how the patient portal affects medical specialists. The research question of this study is the following:

“What are the main concerns of medical specialists at the Laurentius Hospital regarding the introduction of a patient portal, and how might this affect their medical practices?”

In order to answer this question of this study first three themes of concerns were grouped. The themes of concerns were Patient interaction, Specialists process and Specialist accountability. These themes were all discussed and how they could affect medical practices of specialists. It is important to note that these are all assumptions from specialists on the possible outcomes of changes in practice, not the actual one as the patient portal is not implemented yet. During the meetings and interviews some specialists were thinking about opportunities on how they could make a virtue out of the inevitability that a patient portal would come and change their practices. This gave insight in how medical specialists use institutional work. Institutional work was defined by the purposive actions of individuals, such as day-to-day adjustments, adaptations, and compromises, aimed at creating, maintaining, and disrupting institutions (Currie et al., 2012), which is carried out by elite professionals to maintain professional dominance in the face of external threats. The patient portal is seen as the external threat in this case and therefore a perspective on institutional work was taken.

Concerns of specialists regarding patient interaction entailed the interpretation of results by patients, concerns for increasing patient contact and a change in the doctor-patient relationship. Specialists gave certain examples on how the patient portal could affect their medical practices. With the introduction of the patient portal the possibility exist that patients can read their results before specialists. Specialists indicated that this could lead to an increase in patient contact as patients were most

likely not able to interpret the results on their own. It was expressed that some patients might abuse contacting specialists if patients have access to their results before a consult has taken place. In essence it becomes clear that specialists are afraid of the increase in patient contact when patients become restless from the results or not being able to interpret them, these are the changes in practice.

Specialist process includes concerns of specialists regarding time pressure of, financial compensation and logistic concerns. Specialists indicate that they primarily want to provide patient care, and not having to explain rules around the patient portal or discrepancies which occur about how reports are written between. According to specialists the possible implementation of an e-consult requires financial compensation and time in their schedule to answer these questions. Because specialists want to avoid the increase in patient contact they mention they want to have the maximum delay time of seven days. It would be beneficial if the patient could have his or her consult within seven days to patient unrest according to specialists. Thoughts about changing the work which secretaries fulfill differ between specialists. Some specialists expect them to be let go, which assumedly cause more work. Others don't mention this as in their eyes the secretaries are still necessary for current practices. The introduction of the patient portal might also change how patients are informed, as the patient portal might be the initial source of results instead of the specialists themselves. This could also lead to patients not showing up at appointments, as they already have the results.

Specialist accountability was the final theme and was about concerns about legal issues and having to account for the tasks which specialists do have responsibility over but can't influence themselves. Some specialists worry about who is becoming accountable with the introduction of the patient portal, while other do not mind to account for themselves as patient already have access to their medical record. Nonetheless this may cause the practice of defensive medicine by some specialists, this entails being more mindful of writing reports or requesting additional examinations to ensure the patient everything is done. Specialists point out that it is important to avoid subjective remarks or notes which are not contributing to the patients care.

Utilizing entails examples of specialists actively infusing their norms and values in the options that the patient portal has to offer. As the patient portal was not yet

introduced at the time of this study, most of these examples are assumptions on how the patient portal could influence the work process of medical specialists. Specialists were giving examples on how patient care can be used for informed consent, by showing and discussing the portal with the patient. They are maintaining their institution by infusing the patient care within options of the patient portal. In this way they are 'embedding' their current practices by seeing the opportunities which the patient portal could offer.

Theoretical implications

As this was an explorative study in the insight of medical specialists regarding the introduction of a patient portal, the results give examples of perspectives of medical specialists which provides insights for the doctor-patient relationship (Goodyear-Smith and Buetow, 2001; Nictiz, 2015,2016) and institutional work in healthcare (Currie et al., 2012; Lawrence and Suddaby, 2016; Levay and Waks, 2009).

First, the study contributes to insights in healthcare care by showing the possible change in the doctor-patient relationship (Goodyear-Smith and Buetow, 2001) with the introduction of the patient portal. It shows that medical specialists anticipate different conversation with patients if they have seen their results before a consultation has taken place. Specialists also expect to have more contact with patients through the addition of e-consults. This study also found similar concerns that were mentioned in the study of Nictiz (2015, 2016) as most concerns are comparable.

Secondly, insight in institutional work of healthcare professionals (Currie et al., 2012; Lawrence and Suddaby, 2016; Levay and Waks, 2009) is given by providing examples in this study. Currie et al. (2012) question the work of Lawrence and Suddaby (2006) by discussing that forms of institutional work overlap and are not strictly categorized. This study has found similar examples of institutional work being attempted by medical specialists as found in Currie et al. (2012). Medical specialists have been found to use both maintaining and creating institutions. This study has provided the term utilizing for professionals who made a virtue out of something inevitable, an opportunity to extend their medical practices in this case. By specialists being able to maneuver while under something as inevitable as a government law, this study also found similar examples from the work of Levay and Waks (2009). In the study of Levay and Waks (2009) specialists were able to manage their own outcomes

while under a strict bureaucratic procedure where not much leeway was expected. This study found medical specialist using institutional work, even though the Dutch government (First chamber votes, 2016) made the introduction of the patient portal required by 2020, where a healthcare institution has to meet strict requirements. It thereby extends the studies of Lawrence and Suddaby (2006, Currie et al. (2012), and Levay and Waks (2009).

Practical implications

The practical implications of this study first and foremost regard the insight of concerns from medical specialists about the patient portal. The Laurentius Hospital in Roermond can use this information to decide on how to implement the patient portal. This study showed the main concerns rested in the assumptions that the patient portal would cause more interaction, unnecessary changes in the work process or could lead to being held accountable for how reports were written down. It showed that most of the medical specialists would be relieved if patients were able to look into their medical record after a consult has taken place. Because of the law (First chamber votes, 2016) the maximum delay time will be seven work days, the Laurentius Hospital in Roermond can take into account the concerns of increased patient contact by the misinterpretation of results in order to make a choice regarding the discussion of real time versus delay time. Specialists mentioned having concerns for the reasons behind the introduction of the patient portal as a way to reduce costs through letting secretaries go. If this would happen, specialists' opinion would only be validated that the patient portal is not to increase healthcare capabilities for the patient and would be in disadvantage of the integration of the patient portal in practices. If cost have to be reduced, it could be beneficial to engage a conversation with medical specialist on what the crucial practices of secretaries are, so that with the introduction of the patient portal some concerns could be avoided by implementing certain implications within the patient portal. More practical implications are mentioned by specialists who had ideas on how certain options could add value are promptly added below.

- *Don't show colors when showing lab results.* By not showing red colors in the lab results, numbers which are below the appropriate level would not cause patients to contact their specialist because they are worried. One important note to make is that if this is being done, the data is being altered. And the reason

why the patient portal was launched is to increase transparency. This is thus an ethical debate on how

- *Add the possibility that specialists can see if the patient has looked into his medical record.* Adding this possibility could benefit the specialists by knowing beforehand how to engage the conversation. As the 'initial shock' might be gone and more time is left for discussing treatment.
- *Adding a disclaimer upon opening the patient portal and beneath reports of supporting specialties.* Specialists opted for a disclaimer which could prevent patients from contacting their specialist by stating the report which a patient is about to see, is part of a larger inquiry. Thus, the results which are presented are not final.

Reflection, reflexivity and further research

As stated in the methodology chapter, during this study I have taken an interpretivist perspective and used template analysis. When I started to conduct the study, I had no prior knowledge on the patient portal or the specific characteristics only that it had to be introduced. During the initial meetings by knowledge on the subject improved and I was able to ask more specific questions on the subject of the introduction of the patient portal. The project leader helped me with gaining a better perspective of the hospital itself. My discussing my knowledge with my thesis supervisor I eventually came to address institutional work. As I was learning about institutional work, meetings and interviews were still being arranged. During these last meetings and interviews the subject therefore were more extensive than the initial meetings. At the start of the study I was mainly focused on the concerns of the medical specialists about the patient portal. Eventually I was trying to recognize institutional work in these meetings. In those last meetings I was able to get a good understanding of what the concerns were throughout the hospital. These concerns were eventually almost the same across specialties. In the last meetings more focus was on institutional work, which if it was recognized earlier could have caused more specific questions on how institutional work took place. Earlier data is still viable without the initial focus on institutional work as the data that was gathered could still be analyzed with an institutional approach.

During this study the project leader joined me in all meetings that have taken place. This was primarily so that he could inform the medical specialists about the details of the VIPP program. Therefore, it is possible that medical specialists reacted

differently when in presence of the project leader. The specialists who were interviewed were all seen in meetings before the interview was held. The interviews have been conducted without the presence of the project leader and in my opinion no notable change in behavior occurred.

Only three interviews have been conducted. This had several reasons. First medical specialists have a busy schedule in which not much time is available. The first two interviews were scheduled during lunch breaks and the last interview was on a Friday afternoon after patient visits. Besides a busy schedule, this study was conducted mostly in the summer, not all specialties were full on capacity in terms of specialists being present due to holidays. Therefore, less time was available for interviews to be conducted. Secondly, I have been to all specialties except for one, thus most impressions have already been captured regarding the concerns of specialists. Third, after almost meeting with all specialties in the hospital, most conversation started to get repetitive and therefore data saturation occurred.

As for reflexivity I had hoped for being able to start earlier with data gathering. The relatively late 'kick-off' meeting for all the staff took place on the 24th of May. This caused meetings with specialties to be planned from late May to the beginning of September. During this period specialists also had holiday and therefore some perspectives might not have been captured. In this period of three months I have been many times on the location of the hospital, not only to attend meetings and conduct interviews, but also to write my thesis. I hope this study might have some positive effect on other studies, researchers and people who read this. As in this study it became apparent that some specialists acknowledge the concerns of introducing the patient portal, but react with a pro-active stance on how certain inevitable things that come your way still have opportunities to enhance one's practices.

This study formed an explorative study on how the introduction of a patient portal affects medical specialists. As in the upcoming years (First chamber votes, 2016) more patient portals will be introduced in general hospitals and healthcare institutions, further research is necessary on what the actual impact of these portals are on practice. As in this study the patient portal was not fully implemented yet. It would also be very interesting to study how the patient portal affects the staff, because specialists mention impact on secretaries and how it might affect their work. This could give more insight

in the notion on what secretaries actually do and if the patient portal can really replace them. A next recommendation for further research is in terms of how institutional work is being done while under pressure of government laws, which allows for less maneuverability for implementing practices. Levay and Waks (2009) use the term 'soft autonomy' for being able to maneuver while under bureaucratic pressure. It would be interesting to have more studies focus on the opportunities which are present during a change of organizational design, and thereby using the term "utilizing" as form of institutional work to describe this.

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Appendix 1: Codebook themes

Translated quote	Final themes
<p><i>(Patients are going to) “ask questions, become worried and can surf on the internet”. “The patient can see their ‘death sentence.’ (The main concern is) “that patients don’t know how to handle it, can it be treated or is it really a death sentence?” Another specialists says: “They can’t interpret it, and if there is a negative outcome, I’d rather tell it myself”. –Observation with quotes of medical specialists, non-surgical specialty</i></p>	
<p><i>The conversation continuous about the real time discussion. The specialists clearly state that they only want the patient to open the medical record “after a consult with the specialist.” “Otherwise they will see they have cancer!” Specialist state that even general practitioner cannot interpret results “then how should a patient be able to do it?”. In reaction to this a specialist says: “That’s why we interpret the results and pass them on to the patient, that is why we have an outpatient clinic.” –Notes from meeting with quotes from medical specialists, non-surgical specialty</i></p>	<p>Patient interaction</p>
<p><i>“It will only give unrest for the patient” (showing the results before its discussed among specialists). “Currently <u>a call is made after one week to make an appointment, if it’s (the results) online within two days, then they will contact us, why should they wait for another week to contact us?</u> –Notes from meeting with quotes from medical specialists, non-surgical specialty</i></p>	

The project leader asks a question if the medical specialists can understand that patients can benefit from showing their results in real time: “On one hand, you have the “fat stupid diabetic” (all specialists are laughing about this term, they look like they all have had a patient like that by their eye contact) but on the other hand, you have chronic patients, they have been in hospitals for the most parts of their lives, they surely know what laboratory values mean. Or even me as patient, who actively wants to be involved with his own healthcare process.” A specialist reacts that he shows empathy for patients who would want their results as soon as they have been accredited, but they remain skeptical about the benefits by repeating concerns about the assumed increase in patient contact. –Notes from meeting with quote from project leader

Patient interaction

“Yes but look, that’s the big problem. We are completely detached from the introduction of the patient portal, is wasn’t our idea. It was the idea of a few government officials. They have not discussed that idea with us. Maybe they have with a few specialists and specialties (in the Netherlands), but there hasn’t been a single conversation. And now things have to be imposed and then the tables are turned. And that’s what I think you are doing now: to ask what are your ideas, what are your ideas.. none! Why do we have to come up with ideas on the moment things have to change? And that is a trick that’s been done before, as in that’s the way it’s supposed to be. Then project groups are formed and committees, and in half a year it seems that the committees and project groups came up with the idea and also have to implement it themselves. While the person who has imposed the patient portal secludes himself. And that is not the way it’s supposed to be.” – Quote from interview with medical specialists, non-surgical specialty

Specialist process

“That indicates that the department will be smaller, that indicates that secretaries have to be let go. And then I can come back to the point, what is the goal of all this? Transparency fit in another jacket is not the problem, but what’s stuck to it, that eventually has as goal to make the hospital as small as possible. To become more efficient, with less people. That’s coupled to reducing employment and cost reduction. I think that’s the final goal.” –Quote from interview with medical specialists, non-surgical specialty

"You simply don't have time for it anymore (answering questions about the functionality of the portal), you need more time than 10 minutes to examine a patient. If you have to answer all kinds of questions in the meantime, that just doesn't work anymore." "I don't mind to cooperate with the patient portal, but the bottom line is that it should not cost more time." ... "It has to be a benefit for the patient." "It is deemed that every time we should do something extra, 'oh just a click here, just a minute there', that still is a minute extra, where's that time supposed to come from?!" In the meeting it was also said that they do not have "co-assistants or interns walking about who can fix some problems". – Notes from meeting and quote from medical specialist, surgical specialty

Specialist process

"A secretary isn't even allowed to show results of blood tests, but the portal may do it?" –Quote from meeting with medical specialist, surgical specialty

"Patients could possibly ask for second opinions, and then just cancel appointments or not even show up at all. " –Notes taken from meeting with medical specialists, non-surgical specialty

"That (e-consult) will become too easy to access, it will not be feasible for our large outpatient clinic." ... "Imagine if we have to do it (answering an e-consult) in our spare time, how will that be compensated?" –Notes from meeting with quote from medical specialists, non-surgical specialty

<p><i>“To be honest? I don’t have time for it now. I’m busy with, yea, everyday tasks. To put it this way, you are busy from 8 till 6 with patient care. Lots of meetings come in between and to be honest, you don’t have enough energy left at the end of the day. It’s not in the nearby future. That’s where it comes down to. <u>I understand that it actually should be done.</u>” –Quote from interview with medical specialist, non-surgical specialty</i></p>	
<p><i>“The patient portal, <u>even though there exist a buffer of seven days, would still require a logistical change</u> for the outpatient clinic, because <u>it is not feasible</u> to see patients within one week.” (after the results are known) –Notes from meeting with quote from medical specialist, surgical specialty</i></p>	<p>Specialist process</p>
<p><i>“<u>The world looks like a reversed place</u>” “<u>We are on the wrong path</u>” Another specialist mentioned later during the meeting that you have to see the patient in person to understand where the problem lies. -Notes taken from meeting with medical specialists, non-surgical specialty</i></p>	
<p><i>A specialist mentions that there “<u>are a lot of catches</u>” with the introduction of the patient portal. In response I asked to explain himself. He proceeds to give an example of the possibility that a patient could be offended when two different results are displayed. As a radiologist could judge and describe scans differently compared to himself as specialist. “<u>What are the legal consequences?</u>” –Notes from meeting with quotes from medical specialist, non-surgical specialty</i></p>	<p>Specialist accountability</p>

"I think a disclaimer could help with a certain category of people, but with other categories it won't (people who will contact specialists on the smallest of details). But I do think it has value, to build it in." ... "The problems just are that, uh.. that specialists can look skeptical towards to patient portal as, mainly due to the translation of diagnostics which can occur with pathology results (as examining pathology results can be subjective). We don't have to worry as much on this topic on our specialty, but it could occur that patients would like to know like, is this benign or malignant? You could put that on a disclaimer, but if it states malign, people will search for it on Google and then it's too late. The questions remains how to deal with it as group. How can we prevent a claim from happening. Like these American conditions. That is hard, and I don't think I can answer that now. –Quote from interview with medical specialist, non-surgical specialty

Specialist accountability

"It feels like as if you were a journalist, and would have to show all your sources" ... "This leads to practicing defensive medicine" –Quotes from medical specialist during meeting, surgical-specialty

Appendix 2: Codebook institutional work

Translated quote	Institutional concepts	Utilizing
<p><i>“We ask ourselves the question, <u>how can we clearly inform the patient, informed consent</u> is what I’m talking about. On an e-health conference one specialist from another hospital said that he used to log in together with the patient on his portal (to help them and inform them about the results). Besides informing the patient you could include the discharge letter or walk through the surveys.” –Quote from medical specialist during a meeting, non-surgical specialty</i></p>	<p>Embedding and Changing normative associations</p>	<p>Utilizing</p>

<p><i>"I can't live up to that requirement." The specialist is referring to keeping the medicine within the patient portal up-to-date by asking during the consult for verification. "Too much time will be lost here, you need at least 5 minutes to verify one's medication." Another specialist states: "I'm verifying medicine, this already is a requirement." He explains that he sees the advantage of patients having access to their medicine list, and should therefore change his practice. Another specialist provides an advantage for patients having access to medicine: <u>"this way patients themselves can contribute to healthcare, they can correct doctors when something is not entered correctly."</u> —Notes from meeting with quotes from medical specialists, non-surgical specialty</i></p>	<p>Embedding and Changing normative associations</p>	<p>Utilizing</p>
<p><i>"This way <u>the patient gets shared responsibility</u> for keeping the medicine list up-to-date." "This is great for patient safety." ... "Yes there are possibilities with surveys, you can do a lot of great things with them." —Notes from meeting with quotes from medical specialist, non-surgical specialty</i></p>	<p>Embedding and 'Soft autonomy'</p>	

(The project leader is talking about the possibilities the patient portal could offer in a conversation with a patient.) "If patients could sit at home with their family and loved ones and read the result together. The patient might be more addressable if the first shock has already come." The specialist who entered last in the room agrees with the project leader: "A patient could pick himself up after this initial shock. This is much better than having to tell a patient who's initial response is to fall into this state where he is just gazing into nowhere. Now everything that is said after giving a negative result is not absorbed anymore." –Notes from meeting with quotes from medical specialist, surgical specialty

Embedding

Utilizing

"I don't have any objection to patients getting access to their medical records. I don't have problems with it. People are naturally allowed to look into their record, because well.. you should not write anything.. (the specialist laughs and looks towards us if we understand what he meant), yea that's not so clever." In response I asked for clarification on what he actually meant. He stated that you shouldn't note down your feelings about the patient. "Only when it's of added value for the treatment. Then it's possible to account for yourself." – Notes from meeting with quote from medical specialist, surgical-specialty

Embedding

Appendix 3: Observations

Specialties, ordered alphabetically	Number of attended specialists
Apothecary	4
Cardiology	4
Child medicine	4
Clinical chemists	6
Dermatology	3
First aid	6
Gastroenterology	7
Geriatrics	2
Gynecology	3
Intensive care	1
Internal medicine	5
Jaw surgeons	1
Neuro surgery	1
Neurology	3
Nuclear medicine	2
Ophthalmology	3
Orthopedics	4
Otorhinolaryngology	3
Pathology	2
Plastic surgery	1
Psychiatry	5
Psychology	5
Pulmonology	4
Radiology	4
Revalidation medicine	4
Rheumatology	4
Sports medicine	1
Surgery	4
Urology	2
NOT attended: Medical micro biology	
NOT attended: Anesthesiologists	

