

FROM ICT TO INTEGRATED CARE: THE PERFORMATIVE COHESION OF ORGANIZING VISIONS

Complete Research

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Abstract

We link the concept of an ‘organizing vision’ to the idea of ‘performativity’ in order to better understand the challenges associated with implementing integrated care, i.e. the usage of ICT in order to coordinate medical treatments of the same patient by multiple medical professionals. More specifically, we focus on how medical autonomy affects the performativity of an organizing vision. Through an inductive case study of one German integrated care provider, we indicate that medical autonomy seems to be positively related to adoption decisions of ICT by medical professionals if an ICT-based business model embraces medical autonomy. However, through looking at the first four years of the implementation process, we also find that medical autonomy seems to be negatively related to important ICT-related outcomes of integrated care. Our study implies that a focus only on how actors translate organizing visions may run the risk of under-emphasizing context factors that affect the adoption of integrated care on the organizational level. To depict how such contexts influence the degree at which an organizing vision is performative, we introduce the concept of ‘performative cohesion’.

Keywords: Organizing Visions, Performativity, Integrated Care, Institutional Theory, Business Models

1 Introduction

Human aging, chronic diseases and demographic change have called the functioning of many Western health care systems into question (Notle & McKee 2008; WHO 2013). Many governments have introduced digital health initiatives in order to answer to such challenges (Blumenthal 2010; 2012; European Commission 2011) and we attend to the implementation of integrated care, i.e. the usage of ICT in order to coordinate treatments of the same patient by different medical professionals. We chose this setting because it discloses a remarkable theoretical puzzle: Although policy and industry have solidly promoted integrated care in many countries and for many years, several Western countries fall back in terms of the overall adoption rate of integrated care (Lluch & Abadie, 2013). Germany is a particularly worrisome example since integrated care has been promoted for fourteen years but the adoption rate of integrated care is among the lowest in Europe (Busse & Stahl, 2014; Lluch & Abadie 2013).

This observation is remarkable since information systems researchers have typically argued that such a ‘buzz’ on the field-level would lead to ICT diffusion (Swanson & Ramiller 1997). Therefore, a situation where there is a so-called “organizing vision” but stagnant ICT diffusion demands us to understand why

this is the case and to develop concepts better suited to explain this phenomenon. Several studies on organizing visions (Swanson & Ramiller 1997, 2004) have developed dynamic understandings of how organizing visions trigger technology diffusion and how these visions change over time (Currie, 2004; Barrett, Heracleous, Walsham, 2013). Moreover, studies have also shown that organizing visions for several ICT innovations in health care like telehealth (Greenhalgh, Procter, Wherton, Sugarhod, Shaw, 2012; Klecun-Dabrowska & Cornford 2002) are often fought over since different actors have different stakes in the potential diffusion of ICT. Accordingly, earlier research has also argued that the implementation of organizing visions in health care organizations demands dedicated actors, who are capable of promoting information integration (Ellingsen & Monteiro 2008) or the usage of electronic medical records (Reardon & Davidson 2007) within their organizations. In short, diffusion demands both an organizing vision on the field-level and actors willing to execute it within individual health care providers (Nielsen, Mathiassen, Newell, 2014).

Yet, although these studies have offered compelling arguments for the potentially contested nature of organizing visions, we argue that we know comparatively much about the workings of organizing visions in the context of diffusion processes but comparatively less about the difficulties of making these visions work as part of ICT usage routines. To shed some light on this phenomenon, we argue that it is useful to link the ‘organizing visions’ concept to the concept of ‘performativity’ (Callon 1998; MacKenzie 2003; MacKenzie & Millo, 2003). Performativity suggests that abstract models like theories of how ICT could work in integrated care do not describe the world but can create social reality (MacKenzie & Millo, 2003). However, performativity is not naturally given since practices often deviate from prescriptions (Feldman & Pentland 2003; Pentland & Feldman 2008).

Extant research on information systems (Lapointe & Rivard 2005) as well as the medical profession more broadly (see, for example, Reay & Hinings 2005; 2009) suggests that using ICT to manage medical treatments may collide with medical autonomy, a key value for many medical professions. Consequently, in this study, we ask this research question: *how does medical autonomy affect the performativity of an organizing vision for using ICT in integrated care?* We carry out a single case study of a German integrated care provider (‘HealthNet’) in order to answer this question. We use data from both the pre-founding (2000-2005) and first years of the post-founding era (2005-2009) that allow us to identify the organizing vision of the founder of HealthNet and to trace out how medical autonomy affected the performativity of this vision. Through this focus we are able to suggest that medical autonomy has a positive effect on the decisions of medicals to sign an integrated care contract that puts ICT centerfold if their autonomy is integrated into an IT-based business model that undergirds the contract. However, medical autonomy has somewhat mixed effects on actually using ICT in the context of integrated care if medical autonomy reinforces a material context that is rather non-conducive to integrated care. To capture how the drift between an organizing vision and performativity evolves over time, we introduce the idea of “performative cohesion”. Our argument unfolds in four major steps: First, we discuss the conceptual backbone of this paper, then we provide details on methods and data, present our findings and discuss them.

2 Conceptual Background: Organizing Visions and Integrated Care

Chronic diseases and sky-rocketing costs of health care have called into question the legal and normative foundations of many health care systems (UN 2011; WHO 2011, 2013). Thus, bodies like the European Union (2011) have promoted an array of digital health initiatives in order to improve the quality of health services and making them more cost effective, too. ‘Integrated care’, i.e. leveraging ICT in order to coordinate treatments of the same patient by different medical professionals, is among the most prominent of these

initiatives (Lluch & Abadie, 2013) since public (SVR 2009; 2012) and private (Accenture 2012; PWC 2008) think-tanks as well as health policy researchers (Busse & Stahl 2014; Lluch & Abadie 2013) have discussed this topic at length in different countries and from different viewpoints. However, despite this vibrant discussion, many Western countries fall back in terms of adoption rates of integrated care and health policy researchers have recently identified that the German adoption rates are particularly problematic (Lluch & Abadie 2013). This is surprising given that the federal government has attempted to promote integrated care for round about 15 years now. Three national legal reforms in 2000, 2004 and 2007 incentivized integrated care. Moreover, there has been a vibrant discourse of managements, health professionals and consultants that, in principle, integrated care should be done. Yet, it seems that most of these stimulus' have shown little effect.

Information systems researchers have used the term of an 'organizing vision' to theorize a 'buzz' like the one about integrated in more depth (Swanson & Ramiller 1997; 2004). Swanson and Ramiller (1997) have defined an 'organizing vision' as "a focal community idea for the application of information technology in organizations" (460) and proposed that a coherent organizing vision leads to ICT diffusion. Therefore, empirical research on organizing visions is largely developed towards understanding the spread of ICT in organizational fields but is less acquainted to look at situations where an organizing vision exists but adoption is stagnant. For instance, Barrett et al. (2013) have presented diffusion as a discourse and shown the interaction of framing and ideologies in the field of open software (see also Currie 2004). Greenhalgh et al. (2012) have looked at competing discourses about telehealth in the U.K. and argued that telehealth did not spread since the competition between discourses obstructed a coherent organizing vision (see also Klecun-Dabrowska & Cornford 2002). These works have proven invaluable to better understand the dynamics, which constitute the (non-)formation of organizing visions on the field-level. However, these studies have remained comparatively silent about situations where a relatively coherent vision exists in the field but the adoption on the organizational-level is stagnant.

Nielsen et al. (2014) have developed a multi-level understanding of organizing visions that accounts for the evolution of an organizing vision in the field and for ICT-adoption on the organizational-level (see also Ellingsen & Monteiro 2008). Based on a study in the Danish home care sector the authors argue that organizing visions are dynamic since actors translate them in organizations and use the implementation experiences, which they make, to modify the vision afterwards. Cumulatively, ICT diffusion depends on field-level theorization of ICT and organizational-level translation of the organizing vision. However, given that the concept of 'translation' was developed for contexts where innovations spread (Czarniawska 2009; Czarniawska & Joerges 1996; Czarniawska & Sévon 2005), it seems somewhat difficult to directly adapt it into a setting where an organizing vision does exist but ICT does not spread.

Consequently, we propose to extend these works by developing a link between the concept of 'organizing visions' and the idea of performativity. The concept of performativity was introduced into the sociological analysis of information technology via Actor-Network-Theory (Callon 1998) and means that the world as we see it does not only exist as artifacts and rules, which exist independent of the human self, but that the interaction of people and artifacts also creates the world over time (Schultze & Orlikowski 2010; Pentland & Feldman 2008). For instance, famous sociological works on performativity have argued that theories on financial mathematics do not describe the world but they actively create it because they are included into business education and financial trading software (MacKenzie & Millo 2003; Beunza & Stark 2004).

Accordingly, to be somewhat useful for management and research, organizing visions need to be performative as well and we argue that this shifts the attention somewhat from the more actor-centric translation approach (Nielsen et al. 2014) towards attending to the context factors, which influence performativity. To theorize the implementation context in more depth, we explored how medical autonomy – one key value of medical professionals – affects the implementation of organizing visions. Through our inductive case study we identified somewhat opposing relationships between medical autonomy and the performativity of organizing visions. On the one hand, medical autonomy seemed to be positively related to the decisions of medical professionals to sign an integrated care contract that put ICT centerfold if medical autonomy was an integral part of an ICT-based business model. On the other, medical autonomy seemed to have more mixed effects on ICT-related outcomes of integrated care if medical autonomy reinforced a material context, which was rather non-conducive to integrated care. We developed the idea of ‘performative cohesion’ to explain this drift. We define ‘performative cohesion’ as the degree to which the implementation of an organizing vision echoes this vision.

3 Empirical Context

To explore the performativity of organizing visions for integrated care, we opted for an inductive, single case study. We chose this research design since most studies on organizing visions were carried out on the field, or, industry level in order to track the diffusion of ICT innovations across organizations. However, we wanted to focus on the adoption of integrated care on the level of a service provider. Very few works exist on this level of analysis (Berente, Hansen, Pike, & Bateman 2011; Ellingsen & Monteiro 2008; Nielsen et al. 2014) so that our explorative theory building approach was best realized through qualitative methods (Edmonson & McManus 2007).

Moreover, we opted for a case study from Germany due to a remarkable divergence: Despite a now 15 years long legislative effort to promote integrated care, Germany still ranks comparatively low in terms of overall implementations successes (Lluch & Abadie 2013). However, in contrast to Greenhalgh et al. (2012) Germany does not seem to lack an organizing vision for integrated care since several factors indicate that there is a quite clear understanding of how integrated care could be done: (i) the law defines several sub-types of integrated care (book of social law V) that also include prescriptions on data exchange and usage; (ii) consultancies and other field-level experts have stressed for more than ten years that medication and treatment data should be exchanged among medical professionals by (iii) using data-security standards and, often, not store data in a centralized file. Lastly and (iv) there are several IT architectures and standards (see the recent ‘interoperability study’ by Fraunhofer FOKUS and Bearing Point (2014)) on offer that can basically be used to exchange data among medical professionals, who participate in integrated care.

At the same time, Germany is also a host to an integrated care network that has repeatedly been recognized as a stand-alone exemplar for best practice in integrated care on a world-wide basis (Busse & Stahl 2014). We were interested in this puzzle – if the overall setting is apparently difficult, how can a provider grow so famous? Initially, we were thus more or less interested in how this particular provider worked but when we began refining our theoretical interest throughout the data analysis, we realized that the case could indeed help us to understand the overall puzzle of why there is ‘much talk but less walk’ on integrated care in many places. Through discussing and re-discussing the case as part of our inductive research strategy, we combined the idea of organizing visions with performativity to provide a tentative answer to this question. In addition, through receiving feedback on earlier drafts of this paper, we decided to focus on the role that medical autonomy played for the performativity of the organizing vision.

3.1 The Case Study: HealthNet

HealthNet is an inter-organizational network in a rural region in Southwest Germany, which focuses mostly on treating chronic diseases. It was founded in January 2006 by a community of medical professionals and a professional services firm (PSF), which supports the implementation of integrated care. One remarkable aspect is that HealthNet's ownership is split in unequal parts among the medical professionals, who own two thirds, and the PSF, who owns the remaining third. Thus, the discretion of the latter is limited as the medical professionals hold the final decision making authority regarding all of HealthNet's substantive decisions.

The overall time frame of this study is 2000 until 2009. From 2000 until September 2005, we look at data material that was published by one of HealthNet's founders before he co-founded HealthNet. This sampling allows us to trace his organizing vision out. After HealthNet received a letter of intent by a local health insurance organization, who would fund the network, in September 2005, we look at how medical autonomy affected the performativity of this vision. We limit this analysis to this frame since this is the time where the effects of medical autonomy on performativity were most crucial. Consequently, zooming into this period is also a consequence of receiving feedback on earlier drafts.

3.2 Data Sources and Data Analysis

Data for this research were carried out in the context of tracing the HealthNet case over more than ten years. We collected more than 4,000 pages of qualitative data material on the case and zoom into a subset of this data here. This choice is motivated by our aim to better understand how medical autonomy affects the implementation of an organizing vision. Data sources include presentations that were held by HealthNet members, applied science articles that were written by members of HealthNet, reports like HealthNet's annual reports as well as other archival material. We also did 18 semi-structured interviews with members of HealthNet.

Altogether, our approach is similar to the recent study on organizing visions by Berente et al. (2011). These authors have used data on how students make sense of innovative technologies and how these students formulated organizing visions for technologies. Because we want to link the formulation of an organizing vision to its performativity, we also use data from before and after an entrepreneur had founded a health care provider for integrated care. Using pre-founding data from the entrepreneur allows us to carve out the vision, using post-founding data from the venture allows us to trace out the performativity of this particular vision. More generally, texts are 'the' data source to study organizing visions since these visions materialize especially in texts that are transmitted on the field-level (Swanson & Ramiller 1997, 2004; Greenhalgh et al. 2012; Barrett et al. 2013) as well as within organizations (Berente et al. 2011; DeSanctis & Poole 1994).

3.3 Data Analysis

Given the scarcity of works concerned with the performativity of organizing visions, we opted for an iterative, process-research approach (Van de Ven & Poole 1995; 2005). We structured our data into a temporal sequence (Langley 1999, Van de Ven & Poole 1995; 2005), enmeshed in open and in axial coding (Corbin

& Strauss 2008), compared the emerging findings to existing theory as the research went on (Suddaby, 2006) and we were gradually abstracting from the empirical material.

4 Findings

We present our findings in two steps. First, we look at the pre-founding period and describe the organizing vision of one of HealthNet's co-founders. Second, we look at the post-founding period and trace out the performative cohesion of this vision.

4.1 The Development of an Organizing Vision for Information Systems in Integrated Care (2000-2005)

Throughout the first five years of our analysis, we trace out the organizing vision that one co-founder of HealthNet developed to promote integrated care as well as the use of inter-organizational information systems (Reimers, Johnston, & Klein 2010) within integrated care. The person was (is) the head of a professional services firm, who owns a minor stake in HealthNet and (s)he (henceforth: the founder) has been active in the European health care landscape for several decades. Our analysis begins in the year 2000 when integrated care was legalized in Germany and the founder contributed to the discourse on integrated care in manifold ways. Probably the most important one is that the founder is and always has been an advocate of population-based integrated care and foregrounds that health care providers should assume budgetary responsibilities for an entire population of patients regardless of their idiosyncratic diseases. We stress this issue at this stage since several aspects of his (her) organizing vision are best understood against this background.

The founder promoted an organizing vision that highlighted the importance of inter-organizational information systems in two important ways. One was patient-centeredness. A typical imagery present in many slides was that chronically-ill patients would be passed through the hands of many service providers, none of which would be familiar with the patient's treatment or medication history. 'Information breaks' would hence contribute to low treatment quality and an encompassing electronic patient record was suggested as a solution. Medical professionals would be able to access treatment information, if a patient allowed them access to the record, and then they would be able to study the patient's medical history in order to adjust their own treatment to how the patient would have been treated earlier.

Besides the focus on patient-centeredness, administrative efficiency was a second central element to the organizing vision put forth by the founder. For instance, in an 2001 article the founder suggested that "we need both: The specific concepts for providing better medicine and better care as well as managerial competencies. The latter help us to administer the processes within the system, to set up wise contracts, calculate processes correctly and implement optimal information systems" (Scientific Article 2001). Such administrative processes were mainly conceptualized to include these steps: The information systems, which individual physicians used, were supposed to be connected to a database into which the medical documentation data would be fed as pseudonymized copy. This data would allow the administrative personnel, which would work with the data, to calculate the spending since the data would include information on diagnosis' and the treatments of the patient. Thus, the administrative personnel would also be able to analyze data on all patients more thoroughly and be able to apply statistical procedures to assess the risk structure of a patient population. Thus inter-organizational data flows played a crucial role for the organizing vision: "If there is no cross-sectorial exchange of data on the spending on patients, who suffer from chronic

arthritis for example, then you will never be able to develop any form of successful integrated care. I suggest: enhance and publish performance data and data on care services for indications, which are virulent from a health economics point of view” (Scientific Article 2005).

4.2 From Vision to Practice: Increasing Performative Cohesion of HealthNet’s Organizing Vision (2005-2009)

In late 2004, the founder allied with a group of medical professionals, who operated in a rural area in South-west Germany. The medical professionals were discomforted by how the German health care system was administered at that time. Most importantly, they deemed the sectorial separation into primary, secondary and home care outdated and they were upset about the fact that medical professionals would only get reimbursed if a sick patient consults a doctor because this rule of resource allocation incentivized sickness rather than health. In short, they wanted to re-engineer health services in a manner that would focus on integrating treatments across sectors and emphasize on prevention.

The professionals met the founder in 2004 when the latter gave a talk about his views on integrated care and his organizing vision “laid a virus” (archives) and sparked the interest of the professionals to collaborate with the founder. Jointly, they developed a concept of how to practice integrated care and negotiated with one German statutory health insurance fund about assuming full budgetary responsibility for all of the fund’s patients in one specific area. The fund agreed in late 2005, signed a letter of intent and that “was when all the work” (interview) began and the performative cohesion of the founder's organizing vision slowly began to increase. We document this development by outlining two sub-processes that increased performative cohesion: First, the development of an IT-based business model that embraced medical autonomy (“embedding IT-based business model”) as well implementing the IT-based business model. We contend that there will probably never be a 100 per cent congruency between a field-level organizing vision and its manifestation on the level of a health care provider since factors idiosyncratic to the firm may always demand some adaptation (see, for instance, Barley 1986; 1990). Hence, when we speak about low or high performative cohesion we intend to express that even ‘high’ performative cohesion means that most parts of the vision are implemented and fully functioning (and, conversely, low performative cohesion does not mean that nothing has been implemented).

Embedding IT-based business model. The abovementioned legal changes in Germany emphasized that integrated care providers should use ICT for managing and integrating patient-related data. Similarly, the organizing vision of the founder emphasized the application of inter-organizational information systems for the purposes of enhancing patient-centeredness and administrative efficiency (see above). However, earlier research on information systems in medicine has also shown that medical professionals may resist the implementation of management information systems since it may affect power relations between managements and medicals (Lapointe & Rivard 2005). Hence, one interesting aspect about the HealthNet case is that HealthNet succeeded in signing a contract with the health care fund that explicitly included “paragraph eleven of the contract states: ‘Implementation of a [...] centralized patient record, inter-connecting information systems, data transmission’”. In other words, HealthNet managed to go beyond the symbolic organizing vision and received the material support of the medical professionals to actually implement a new system. This consent was granted sometime before a joint venture was founded and even much earlier than the implementation would start. We argue that granting the consent was possible because HealthNet developed an IT-based business model that put medical autonomy centerfold. It seems that the latter ensured that the medical professionals actually decided to adopt the contract. We clarify how we reached this conclusion

by looking more closely at what happened between 2004 and September 2005, when the health care fund signed the letter of intent to fund HealthNet.

We suggest that the effect of medical autonomy on the adoption of the aforementioned contract with ICT as a central element can be explained by four processes that operated between 2004 and 2005. First and foremost, the founder and the medical professionals agreed that once HealthNet would be founded, representatives of the medical professionals, who participated in this particular contract, would own 2/3 of a joint venture firm, which would coordinate the execution of the integrated care contract. One task of this firm would be to manage and oversee the ICT implementation process as well as to attempt the standardization of several ICT usage practices within HealthNet. Given that such attempts have typically been described as interventions into medical autonomy, the ownership structure of the joint venture would ensure that the medical professionals themselves had an important majority regarding these decisions. Thus, HealthNet was able to sidestep typical sources to resistance to ICT implementation already in the very early stages of the project.

Second, a clear division between managerial and medical labor was agreed upon. All medical decisions would be made by medical professionals exclusively. There was no legal or otherwise contractual basis for the management to interfere in medical decisions, or, as one interviewee recalled, “this was the philosophy of the venture”. So although there would be an agreement that all patients should best be treated in accordance with several medical guidelines and that these guidelines would be integrated a decision-support module of an IT-system, no force would be used to enforce these agreements. In short, the guidelines have been described to us as suggestions, not prescriptions.

Third, the development of the IT-based business model addressed the application of ICT in order to improve the health outcomes of chronically-ill people. This was a central element because the community of medical professionals, who co-founded HealthNet, had already worked on this aim before they met the founder. The founder suggested that ICT could help to improve information sharing among medical professionals, which would be central to treat complex, chronic conditions. Therefore, ICT became a resource to achieve important aims rather than a threat to medical autonomy.

Fourth and last, HealthNet’s revenue model (a part of the business model) was derived from a focus on treating chronically-ill people. Since ICT could be used to smoothen the coordination of medical professionals, it could help to generate revenue at the same time. The logic behind this is this: HealthNet would assume the full budgetary responsibility for a population of patients, who were insured by the health care fund, who signed a letter of intent to fund HealthNet. Since the health insurance organization would itself receive a fixed payment for these patients from the state, HealthNet would have to work with this budget. This budgetary restraint incentivized, for example, prevention because prevention could reduce hospitalizations. Therefore, prevention could, potentially, save costs while resonating with key values of the medical professionals. Moreover, ICT would be central for realizing prevention. The founder explained to the medical professionals that using a predictive modelling architecture that integrated data from HealthNet’s patient population and more general statistical data on risk characteristics could enable to identify patients, who may be apt for hospitalizations (and other treatments). Accordingly, medical professionals could approach patients and help them to prevent the treatment. It is important to reiterate that these processes happened long before the implementation; they touched on “theorizing” (Nielsen et al. 2014) why ICT would be important and helpful.

Our data from HealthNet's founding team including medical professionals suggests that the aforementioned processes were central for motivating medical professionals to adopt the integrated care contract that had ICT as one central element. On the one hand, medical professionals acknowledged that these aspects ensured that the founder would be serious about working *with* them. On the other, members of the founding team clearly expressed that embedding HealthNet's IT-based business model into these structures was a key to even getting started with integrated care. Taken together, ensuring medical autonomy was central for the medical professionals to decide to adopt integrated care. This decision increased the performative cohesion of the organizing vision of the founder because it provided a material agreement to actually begin implementing integrated care.

Implementing IT-based business model. While the formulation of a business model captured how elements from the more symbolic organizing vision resulted in a material contract, looking at the implementation of the organizing vision after the signature of the contract allows to better understand the performativity of the vision. In this context, we unravel more paradoxical influences of medical autonomy that relate to challenges in these areas: (i) the standardization of information systems and (ii) important outcomes of integrated care.

Given that exchanging, aggregating and analyzing medical documentation data was central to the founder's organizing vision, HealthNet wanted to standardize the documentation software programs, which were used by the medical professionals. An initial consensus on software standardization was found in: "June 2006: The participating physicians decided upon the synchronization of the praxis information systems" (Presentation 2007) and HealthNet also incentivized IT-standardization: medical professionals would receive a 12,000 Euros budget to update their individual information systems and would be asked (but not forced) to practice digital documentation. These were two highly important steps to enhance the performative cohesion since the number of different information systems, which the medical professionals used for their individual documentation, was very high. Sources refer to "29 participating physicians who used 16 different software applications" (Annual Report 2007) so that HealthNet tried to standardize these software applications down to just one.

However, as the plan converged towards execution, the standardization process changed its trajectory. Several medical professionals wanted to keep the software that they had been using before HealthNet was founded since "several physicians already had their programs and liked them; others had a completely old system and generally hated IT. Yet, others loved the idea of a new system. Reaching consent was severely difficult." Consequently, full standardization seemed difficult. Or, in the words of one informant, "During the first talks about IT standardization, it was pretty quickly clear that there are opponents and doctors who by no means want to change their software applications. [...] This is why we said, 'Alright, we will never get an entire standardization done. Let's try 70 per cent'." The majority of the medical professionals adopted the well-known medical software Turbomed.

Nonetheless, having 70 percent of the medical professionals adopt the same software is, by all knowledge of the field, a respectful accomplishment. However, despite this large share of adopters, missing standardization had important consequences for the performative cohesion of the organizing vision. HealthNet needed further software to enable data exchanges between these six applications and HealthNet's tool to aggregate data software. Consequently, "we asked ourselves, how do we get it done that all the physicians are inter-connected with each other and to us, even though not all are using the same system? And then the collaboration with a software firm started who offered us an external server solution, which gets installed at

every physician's place of practice and is connected to the information system of a physician." The servers contained software to cipher and transmit documentation data. They were installed in doctor's offices and linked to the computer, which medical professionals used for documentation. However, integrating this *mélange* of software applications gave rise to an array of interoperability problems, which lasted for several years and severely challenged the possibility to aggregate and analyze data.

Moreover, medical autonomy also affected several important outcomes of integrated care like the existence of standardized documentation data within HealthNet as well as comparatively low enrollments in the earlier days of the project. In terms of medical documentation, many medical professionals kept on documenting in an idiosyncratic manner, although HealthNet would have wanted a more standardized approach to documentation. Consequently, although medical professionals used ICT to document, the data was often not in a format that would have allowed to actually calculate financial and medical outcomes. HealthNet started a project to shift documentation towards a more standardized approach after the time frame of this analysis.

A second key practice that would have to draw on ICT was enrolling patients to become members of HealthNet. The assistants of the medical professionals were considered to enroll patients and to handle the administration of patients together with HealthNet's management. The assistants were supposed to use an administrative module included in the ICT infrastructure in addition to a paper-based consent signed by the patient. So, for example, the assistants of the medical professionals would have to inform potential enrollees about the issues regarding data security and sign an enrollment agreement. Therefore, several important details would have to be explained to them and this process would take up to several minutes. Additionally, the identification of potential patients would demand medical professionals and their assistants to approach potential patients and explain the nature and idiosyncrasies of a HealthNet membership to them. The realization of these tasks was often marginalized by the existing workload that the assistants of medical professionals had to face since the everyday busyness of a doctor's office was rather non-conducive to the integration of these additional tasks. Towards the end of our analysis, HealthNet started a quality management program that aimed to smoothen the integration of these tasks into the workload of the assistants of medical professionals.

Our analysts suggests that these observations can be explained by understanding that medical autonomy actually reinforced this material context, which rather non-conducive to integrated care. With "material context" we mean the day in day out workload that medical professionals in Germany have. The aforementioned practices of documenting and enrolling were carried out in the doctor's office and HealthNet did not coercively interfered into how these were carried out. Another aspect of medical autonomy was that HealthNet's doctors did not exclusively treat HealthNet patients. In addition to the patients from HealthNet, the doctor's autonomously treated many other patients as well. This latter aspect is important to consider here because Germany is a country with a high number of statutory health insurance organizations (more than 100 at the moment and even more in the early days of HealthNet). Therefore, during the early days of HealthNet, the medical professionals and their assistants would have to identify patients eligible to enroll based on the criterion of where the patients were insured. Then the medical professionals and their assistants would have to apply the specific ICT-modules and the according guidelines. These tasks increased the workload. Given that HealthNet did not coerce the implementation, this problem was enforced rather than reduced. In fact, informants from the medical profession compared HealthNet's standing to that of the German physicians association and stated that if "HealthNet could exert only a fraction of this [the Physician Association's; the authors] power [...] I think we could lift our results by at least 10 percent". Therefore, medical autonomy also had rather ambiguous effects on the performativity of the organizing vision.

In closing the empirical analysis, it is important to point out that neither did our informants nor do we consider it important or appropriate to actually practice coercion. In fact, HealthNet was itself aware that "due to HealthNet, the workload of individual physicians has temporarily increased" (Presentation 2007). Therefore, the purpose of this paper is to point out that medical autonomy is probably a key mechanism to even get medical professionals to accept ICT-based integrated care. Our results have shown that respecting medical autonomy positively relates to adoption decisions of medical professionals to actually engage in integrated care. However, our results have also shown that medical autonomy may have negative implications for important outcomes of integrated care. Accepting this paradox is, then, one important practical implication of this study.

5 Discussion

In this paper, we have looked at the German integrated care provider HealthNet and paid particular attention to the organizing vision for integrated care, which was articulated by one of HealthNet's founders. Moreover, we tried to explicate how medical autonomy affected the performativity of this organizing vision. Based on an inductive case study of nine years of case history we suggested that the implementation of integrated care can be understood as increasing performative cohesion of organizing visions over time. We elaborate on this in two ways: First, we discuss the idea of performative cohesion in more depth and, second, we outline our contributions to research on integrated care, information systems more broadly as well as the managerial implications of this study.

5.1 Dimensions of 'Performative Cohesion'

Based on our study we outlined two dimensions of performative cohesion: embedding and implementing an IT-based business model. Both are central to letting a field-level vision come into practice on the organizational level. Since we focused on how medical autonomy would affect these dimensions, we suggest two consequences. First and foremost, medical autonomy was central to reach a decision to adopt an integrated care contract with ICT as a central element by the medical professionals. The rationale is that HealthNet's IT-based business model embraced medical autonomy in several ways (see above). Therefore, the business model of HealthNet was a mechanism that let the organizing vision become organizational reality since it led to the signature of a contract. While the organizing vision prior to the founding of the firm was symbolic, the contract was material and hence a first step in terms of increasing the performative cohesion of the organizing vision. In contrast, earlier studies on organizing visions for ICT in health care (Greenhalgh et al. 2012) and ICT in health care more generally (Lapointe & Rivard 2005) have studied the effects of dissent among important constituents. Our study extends these works by showing that a coordinated, IT-based approach to doing health care does not necessarily contradict medical autonomy. Instead, it seems that including it into a business model can help to actually make an organizing vision performative.

The second dimension of the performativity of an organizing vision is implementing an IT-based business model. We argue that medical autonomy had rather mixed effects on the implementation and, hence, the performative cohesion of the organizing vision. The main reason for this was that medical autonomy reinforced a material context that was rather non-conducive to using ICT in ways that would have generated standardized data entries and increased the number of patient enrollments. However, this latter argument may underlie the boundary conditions that this research was carried out in Germany and that HealthNet was a population-based integrated care project. Both factors imply that the day in day out complexity for em-

ployees at a medical place of practice was quite high in HealthNet's early days. Singling out potential enrollees demanded awareness towards which fund would insure an individual (because HealthNet could only enroll patients from one fund in the early days) and to find out which elements from the guidelines would apply. It seems possible that a lower number of health insurance funds and an indication-based integrated care contract could have yielded different results. Future research could thus explore how medical autonomy plays out in such contexts.

5.2 Implications for the study of Integrated Care

Studies on the adoption of ICT in the context of integrated care have often used data from the level of a health care system in order to track the diffusion of ICT and integrated care (see, for instance, Lluch & Abadie 2013). However, given that the level of analysis in these works is often the field, these studies also use interviews with field-level experts or questionnaires in order to assess diffusion rates. Given that these are fairly low for Germany and other countries, the problematic inference made by quite some works is that since integrated care diffuses slowly, it is hardly doable. In contrast, we have looked at the micro-level and documented the pre- and post-founding dynamics of a German integrated care provider. Although our analysis underscores that the implementation of integrated care is difficult, we cannot confirm earlier observations that doing it is next to impossible. Hence, our study warrants to carry out more micro-level studies on integrated care since these can discover the day-to-day challenges that are entangled in doing integrated care. Moreover, studies of this type will also have the potential to identify more precisely the conditions under which integrated care may be able to work or not.

5.3 Implications for Information Systems Research

Our study also makes an important contribution to information systems research and the stream of literature concerned with 'organizing visions' in particular. Nielsen, Matthiassen and Newell (2014) have recently criticized the idea of 'organizing visions' for being too static and less acquainted to explain how such visions are implemented in daily organizational operations. Instead, their study of Danish home care organizations allowed to re-conceptualize organizing visions, which exist on the field-level, as dynamic. Actors, who translated an organizing vision into organizational-level practices made experiences and, based on these, worked towards modifying the vision. Similar to earlier works on translation (Czarniawska 2009; Czarniawska & Joerges 1995; Czarniawska & Sévon 2005), these approaches are particularly well applicable in situations where ICT spreads in an organizational field since the very idea of the concept of translation offers a more agentic view on the concept of diffusion (Nielsen et al. 2014). However, integrated care in Germany is a setting where there is an organizing vision but only stagnant spread of this mode of patient care. This situation renders it difficult to use concepts better suited to explain the spread of ICTs rather than its non-spread.

Therefore, we developed the idea of performative cohesion to depict the degree to which organizing visions manifest in organizational practices. In contrast to ideas like diffusion or translation, which were developed in the contexts of the spread of innovations, the idea of performative cohesion is particularly well suited to look at situations where there may be a 'buzz' on the field-level but only stagnant adoption within an organization. In such settings, performative cohesion can help to understand why adoption is difficult and to identify the possibilities to increase performative cohesion and promote adoption.

Such endeavors will demand sensitivity towards the context of implementing integrated care and we suggest that performative cohesion captures this context particularly well. In contrast to translation, which is a more actor-centric concept (Nielsen et al. 2014), we have thus attended quite closely to how context embeds intention. In fact, intention was quite present in our case. The founder and the medical professionals wanted to implement integrated care, yet, many context factors placed a burden on them. In turn, only looking at translation may run the risk of over-emphasizing intention and to not fully understand how context factors strongly influence the coordination of multi-professional practices.

5.4 Managerial implications

Managements who want to engage in integrated care should not be mistaken by hypes of integrated care that emphasize on the potentials to minimize costs while maximizing quality. Such suggestions really resemble only certain outcomes that are associated with organizing visions for integrated care. More importantly, managements need to understand that the performative cohesion of an organizing vision seems to be positively related to the adoption of integrated care and they need to understand the context conditions that affect performative cohesion.

5.5 References

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