

The 'lean people' in hospital change: Identity work as social differentiation

Research Memorandum 2011-24

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Abstract

While existing studies already argue that identities are socially constructed, this paper shows that groups of actors situationally construct different identities *vis-à-vis* each other by way of differentiation. Based on an ethnographic study of a change project aimed at implementing Lean Production principles in a day surgery unit in a public hospital, we explore how different hospital actors interpreted, navigated and responded to the change project and in so doing collectively identify themselves and others through differentiation, depending on the situation. The paper contributes to a relational and situational understanding of identity construction in institutionalized contexts, by exploring a number of dynamic repertoires of differentiation used by different (sub)groups of people in different situations throughout a change process.

Keywords: differentiation, identity construction, Lean, change in healthcare, complex organizations

29 July 2011

Acknowledgements

The authors would like to thank all participants of the case study, and constructive comments on earlier versions of the paper, by attendees of the OLKC 2009 Conference (in particular Jeanne Mengis) and the PROS 2010 Conference, Stewart Clegg and Sierk Ybema.

Biography of authors

Maura Soekijad, educated as organizational anthropologist, is associate professor of knowledge and organization at the Faculty of Economics and Business Administration at the VU University Amsterdam. Her research interests include knowledge sharing among professionals in cooperative alliances, innovation and learning in networks and managing NOPs. Her publications appeared in *Journal of Management Studies*, *Organization Studies*, *Journal of Information Technology* and *European Management Journal*, and a book-chapter on cooperation in an edited volume by Routledge.

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Abstract

While existing studies already argue that identities are socially constructed, this paper shows that groups of actors situationally construct different identities *vis-à-vis* each other by way of differentiation. Based on an ethnographic study of a change project aimed at implementing Lean Production principles in a day surgery unit in a public hospital, we explore how different hospital actors interpreted, navigated and responded to the change project and in so doing collectively identify themselves and others through differentiation, depending on the situation. The paper contributes to a relational and situational understanding of identity construction in institutionalized contexts, by exploring a number of dynamic repertoires of differentiation used by different (sub)groups of people in different situations throughout a change process.

Introduction

Many organization studies consider the public health sector a highly institutionalized sector in which clear professional identities have developed through time, and each occupational group has its own use of symbols, artifacts, language, even their own culture (Bloor & Dawson, 1994; Morgan & Ogbonna, 2008). Literature shows that change, such as those involved in New Public Management (NPM) is particularly complex in such contexts (Hood, 1995; Brunsson & Sahlin-Andersson, 2000; McNulty & Ferlie, 2004). In order to enable a better understanding of change in such complex organizations we need to look into identity, and in particular the construction of identities, because if we understand that, it would be easier to understand why change is so difficult to implement and is often met with resistance (Korica & Molloy, 2010). However, limited attention has been devoted to how health professionals construct their identities *vis-à-vis* each other (except e.g. Thomas & Davies, 2005), and in particular through differentiation in the context of change. Therefore we aim to develop understanding of how identity work as differentiation plays out amongst professionals in the health sector in response to change.

Hospitals are perfect examples of complex organizations that are highly institutionalized (Goodrick & Reay, 2010). Their complexity is reflected in the services they provide and in the way they are organized. It involves a high number of different professionals that often have years of experience and training in order to become specialists between whom explicit professional boundaries exist (Currie et al., 2008). Different professional specializations are required to collaborate in order to provide complex services, while each has a strong internal professional loyalty, making it difficult for lay managers to influence those (Morgan & Ogbonna, 2008). Implementing change appears quite difficult to realize in such highly institutionalized complex organizations (Ferlie et al., 2003; McNulty & Ferlie, 2004;

Fitzgerald et al., 2006). Because of the existence of such diverse (sub) groups, standard models for organizational change are not useful in complex organizations (Levay & Waks, 2009).

Rather than focusing on change itself, therefore, we focus on a change project in a public hospital as an extraordinary event in order to explore how collective identity is constructed and practiced – how, in navigating in relation to a change project, identity is being made relevant, performed, used and negotiated. Such an event, which represents apparent rupture, is analytically useful for exploring how social actors navigate and craft themselves and others in moments of both shifting possibilities and constraints (Hoffman & Lubkemann, 2005). Change, or the mere prospect of change, is likely to prompt intensified identity work as Jenkins (2008) argues. Exploring extraordinary events as a change project can thus be a useful analytical strategy for the study of identity construction in complex organizations.

Literature on identity in relation to change in the public health sector has taught us several valuable lessons. First, literature on the role of management in a wider transformation, such as NPM, shows that professionals often resist changes that management aims to implement in order to maintain their professional autonomy (Thomas and Davies, 2005). This resonates literature that stresses a rather clear cut divide between managerial control and professional autonomy, in which strong professional identities are important in resistance to top down changes (Currie et al., 2008). Second, the professional identities in the health sector are constructed and strengthened via rhetoric, for instance in textbooks. Goodrick and Reay (2010) for instance show how a new professional role identity of nurses is legitimized rhetorically in textbooks. Other institutional structures that strengthen professional identity include professional associations, state licensure, and educational establishments (Levay & Waks, 2009). Third, the introduction of advanced technologies, which often occurs in hospitals, influences, or even threatens professional identities and established work procedures in these complex organizations (Eriksson-Zetterquist et al., 2009). As Korica and Molloy (2010) show, medical professional identities are therefore often constructed and negotiated in relation to new technologies. Implementation of a new technology can therefore be seen as a change that ‘shakes up’ identities and prompts intensified identity work.

The literature as discussed above is very valuable, as is the insight that identity is often enacted via language, in the form of rhetorics (Goodrick & Reay, 2010; Kitay & Wright, 2007; Symon, 2005), narratives (Ybema, 2010), or discourse (Clarke et al., 2009). Increasingly, it is understood that identity is socially constructed (Korica & Molloy, 2010), and professionals dynamically ‘work’ their identities (Svenningsson & Alvesson, 2003). In line with studies that emphasize that identities are constructed socially, especially when professionals are confronted by top-down changes, we aim to develop insights on identity construction further. We argue that differentiation in particular is an important mechanism through which identities are constructed in the face of change. Based on an ethnographic study of a day surgery unit in a Danish public hospital where management hired a consultancy firm to implement Lean Manufacturing principles to increase production, we argue that identities are not only socially constructed in practice but also shift from one situation to the next. Building on insights of anthropologists/sociologists like Barth (1969) and Jenkins (2008), we argue that identity construction is

not only a collective or social process but also a highly situated process, involving identification as well as differentiation. Our results build on studies that indicate that professional boundaries can be crossed, in line with recent work on autonomy vs control (Waring & Currie, 2009; Levay & Waks, 2009), either via operational proximity or common values about the organizational unit (Tagliaventi & Mattarelli, 2006) or via new organizational forms such as networks (Currie et al., 2008). Our study contributes to theory on identity and change in general and in particular on identity construction among professionals when management aims to implement changes in the health sector. We show the importance of social differentiation in identity work as well as the situatedness of such processes.

Our paper continues with theoretical background on identity construction, in which collective identification via differentiation in particular, is crucial. After we introduce the research setting and elaborate on the ethnography as chosen method, we explore three ways in which differentiation or 'othering' played out in the hospital during the change project. In our discussion we show that differentiation as a conceptual lens enables us to see how identities are constructed in complex organizations when subjected to change, which is a valuable contribution both for organization studies and managerial practice.

Collective identification

Literature on identity in organizations classically finds itself divided between work on organizational identity on the one hand (Albert & Whetten, 1985; Gioia et al., 2000; Pratt & Foreman, 2000), and on individual identity on the other (Alvesson et al., 2008; Svenningsson & Alvesson, 2003). Research claims that identity work at both levels is intensified when confronted with endogenous changes, such as transformations of a sector or implementation of a certain technology within an organization (Brunsson & Sahlin-Andersson, 2000; Symon, 2005). In complex organizations it is particularly the identity of professionals that is threatened or (re)constructed during such change processes (Morgan & Ogbonna, 2008). These occupational groups often control their own work – their control is legitimized in their specialized practices, institutional structures, such as education and associations, and knowledge domains. Moreover, these groups are considered professionally autonomous, witnessing their freedom to assess and evaluate their own work for instance (Levay & Waks, 2009). In particular when change is initiated by management, it can be seen as a way to control professionals and to lessen their professional autonomy. Change is therefore often met with hesitance and even resistance of such professionals (Korica & Molloy, 2010; Levay & Waks, 2009). While change is often used as catalyst to evoke resistance or construct boundaries, much literature explicitly seems to focus on the change itself. We, however, will focus on the process of identity construction that is amplified because of the change. Moreover, from a resistance point of view, literature positioned within this debate on professional autonomy vs. managerial control often seems to emphasize the dichotomy between those in favor and those against the change. Change however, is more complicated than that (Piderit, 2000; Symon, 2005) and therefore requires a more detailed look into different situations that follow from it and how various

groups act within these different situations. Even though researchers have focused on dynamics, situatedness is not yet thoroughly explored in current identity literature.

When studying identity construction from a situated perspective, the mechanism for creating identity boundaries becomes central. Two assumptions are important to elaborate here: 1) identity boundaries are socially constructed and 2) this process consists of both identification and differentiation. Let us elaborate on the first statement. Giddens describes self-identity as “the self as reflexively understood by the person... self-identity is continuity (across time and space) as interpreted reflexively by the agent” (1991: 53). Alvesson and Willmott (2002), who build on these ideas state that professional self-identity is a continually evolving outcome of two main processes: identity regulation, which originates from both the organization (promotion policies for instance) and the individual responses of employees (enactment or resistance), and identity work. The process of identity work means that professionals employ continuous efforts to form, repair, maintain, or revise their perceptions of self in relation to others. This is often considered from a self identity perspective (Kitay & Wright, 2007). Identity work “refers to people being engaged in forming, repairing, maintaining, strengthening or revising the constructions that are productive of a sense of coherence and distinctiveness” (Svenningson & Alvesson, 2003: 1165). “It is a process in which individuals create several more or less contradictory and often changing managerial identities (identity positions) rather than one stable, continuous and secure, manager identity” (Svenningson & Alvesson, 2003: 1165). So identity work is a dynamic process in which individual professionals continuously reflect on and construct their identity.

In line with Jenkins (2000) we argue however that such “self-identification is only part of the story (and not necessarily the most important part)” (p.10). While Giddens and Alvesson and colleagues put emphasis on the ongoing reflective and mental construction of individual professionals’ identity, we put emphasis on the relational construction of identification in which the role of differentiation or ‘othering’ is particularly important. Anthropologist Fredrik Barth in his seminal work on ethnic groups and boundaries of 1969 offered important insights related to the social context in which identification occurs. He emphasizes that identities are socially constructed in interaction at and across boundaries that they share with other identities. Therefore, collective identification is not only dependent on inward/internal self-reflection, but also on “outward/external engagement – through walk and action – with various discursively available social-identities” (Watson, 2008: 130). Building on Goffman’s ideas (1969), we argue that the self must be continually constituted and re-affirmed in interactions with others, making identity work basically a social and interactive process. The result of it is that identification and its boundaries are relational, contestable and situational. So it’s not so much about how an individual professional can combine various roles and identities and how individuals negotiate complex identity demands in their work (Kondo, 1990; Kreiner et al., 2006), but how professionals socially construct identity boundaries in relation to each other.

Collective identity is in fact the result of processes of social differentiation. Or in other words, boundary drawing occurs along the lines of ‘us’ and ‘them’ – inside and outside articulated by way of perceptions about both similarity and difference (Barth, 1969; Jenkins, 2008). Considering identification

as a matter of ascription by individuals of themselves as well as of individuals by others, stresses the importance of differentiation. Jenkins (2008) argues that identity is always established via similarity and difference in relation to others, making all identities inherently *social*. “Identity is our understanding of who we are and of who other people are, and, reciprocally, other people’s understanding of themselves and of others (which includes us). The outcome of agreement and disagreement, at least in principle always negotiable, identity is not fixed” (Jenkins, 2008: 18). Similarity and difference reflect each other across a shared boundary. At the boundary, we discover what we are in what we are not, and *vice versa*. (Jenkins, 2008: 103). Using the words of Gilroy (1997: 301–302), Jenkins explains: identity is always particular, as much about difference as about shared belonging. This means that the formation of every ‘us’ implies an exclusion of a ‘them’, i.e. identification depends on the marking of difference (2008: 123). Identity boundaries are therefore “somewhat indefinite, as ongoing emergent products of interaction, particularly between people holding different identities” (Jenkins, 2008: 126).

In conclusion, “internal identification and external identification are mutually entangled” (Jenkins, 2008: 123). How we identify ourselves and how we are identified by others and the ongoing interplay between both is what constitutes processes of identity construction. This identity-alterity interplay, as Czarniawska (2008) terms it, has often been ignored in literature on identity within organization studies. According to Czarniawska (*ibid.*) this has meant a gliding of the concept of identity where the alterity aspect, or in other words differentiation, has been neglected. This gliding can be stopped by adopting a relational view of identity construction. It is thus an important aim of this paper to contribute to a greater emphasis on how identity is relationally and situationally constructed by way of differentiation. Most of the current existing work on identities, also in the setting of complex organizations, does not explicitly seem to problematize the process of social identity construction. This is what we do in the case of implementing change in a hospital unit.

Research setting

Hospitals are a major source of healthcare expenditure (Doolin, 2002), so they are often confronted with governmental pressures to work more efficient and effective, copying commercial business practices –all in line with NPM. Often, hospital management sees itself urged to comply with such governmental requirements, and aims to implement large changes. Hospitals are considered complex organizations with strong internal identities and cultures and a negotiated order between diverse occupational and professional groups (Doolin, 2002: 370). Therefore, hospitals are highly relevant as a setting for studying processes of identification in times of change. The setting of our research is a Danish public hospital where a management consultancy firm was hired to implement Lean Manufacturing Principles in a day surgery unit. This is a unit where surgeries that do not require an overnight hospital stay are performed.

The change project, called the ‘Lean project’, was initiated by top management in the hospital in collaboration with the external management consulting firm. The project involved the day surgery unit itself as well as five different medical specializations from other units that use the day surgery facility.

More specifically it involved the clinical managers, nurses and secretaries who worked in the day surgery unit, as well as clinical managers and surgeons from the different specialist units (such as gynecology or vascular or orthopedic surgery) that were using the day surgery unit, but reported to their own unit. The project enjoyed extensive involvement from top management represented by a deputy director who had the role as project sponsor throughout the project.

The aim of the change project in the day surgery unit was to increase productivity and secure that the day surgery facilities were used as efficiently as possible while still maintaining quality. The concretely formulated goal of the project was to increase production (i.e. number of surgeries) in the unit with 20% within the existing resources. Lean was presented as a concept characterized by involvement, a bottom-up approach, where everyone takes part in making their work and workplace better, and it was emphasized that Lean is about 'working smarter, not harder'.

The concept of Lean refers to production principles inspired primarily by Toyota's production system (Treville, 2007). The core idea is to 'slim' the processes throughout the value stream by illuminating waste and focusing on customer value. Lean emerged as a concept in the context of Western car manufacturing in the early 1990's with the famous book "The Machine that Changed the World" (Womack et al., 1990) which was a study of the Toyota production system. Lean is partly based on earlier known concepts such as just-in-time (JIT) manufacturing (Holweg, 2004). As a management concept, Lean has undergone a significant evolution since the early 1990's and expanded beyond its origins in car manufacturing and is now applied in a range of production and service contexts including hospitals (Ezzamel et al., 2001; Hines, Holweg & Rich, 2004).

At the time 'the Lean project' was initiated in the day surgery unit, the concept was a hot topic in the media in Denmark and the project was indeed driven by the buzz around 'Lean in hospitals' that were taking place in Denmark at this time both in the media, political debate and within the health care industry. Here is how the deputy director who hired the consultants described how the project came about:

"I was actually already conscious of Lean and I had of course also followed the cases there had been [...] and I had in my normal newspaper reading paid attention to Lean. [...] Now I can't remember if it was them [the consultants] who approached me [...] or if it was me because I had heard about [a Lean project in another hospital], but I said that I would like to hear some more about this. So I set up a meeting with them, first a narrow meeting just with the board of directors. As it turned out a couple of us had heard about it and we had a discussion about whether something like this could be used in the hospital sector and where you could do it, etc. And I became convinced that fundamentally we ought to integrate this as part of our entire operational basis, you know in our organisation and implement it all over the hospital." (Hospital deputy director).

The consulting firm that was hired was a fairly classic management consultancy firm. The reason for hiring this firm in particular was primarily that they were well known from the press for having

successfully implemented Lean Production principles in hospitals. So in this sense they were considered to have both Lean expertise and experience with implementing it in hospital contexts.

Data collection and analysis

The research was designed as an ethnographic fieldwork study focusing on following the change project in 'real time' and subsequently interviewing the involved actors. The qualitative methodological design was inspired by an anthropological concern with both ongoing interaction in concrete situations and the related meanings and interpretations of involved actors. The fieldwork activities undertaken by the second author constituted a combination of observation, informal conversations and qualitative interviews with actors involved in the change process, both external consultants and internal actors in the hospital.

The fieldwork took place over the course of an approximately 6 months' project period from when the external consultants started working on the project until they finished. During these months the second author was present, observed and experienced the ongoing work on the project – in the project office in the day surgery unit, in workshops and formal as well as informal (project) meetings at different levels, including meetings with top management and steering committees. Most of the time at least one of the external consultants were at the hospital working in the project office in the day surgery unit and this meant that it was possible to just turn up and observe whatever was happening and also continuously get information about meetings being scheduled. Access was negotiated with both the consulting firm and hospital management and resulted in the researcher having no formal role in the project but having full access to the unit. Field notes were kept continuously and documents and slides related to the project were collected. The types of situations observed are summarized in table 1.

[INSERT TABLE 1 AROUND HERE]

Qualitative interviews were carried out with the involved actors shortly after the consultants had finished working on the project. Apart from the two external consultants, all the interviewees were actors from the hospital who had participated in activities related to the change project. This included representatives of the day surgery unit, the anesthesia department that provided the anesthesia staff, user units who performed surgeries in the day surgery unit and top management and central hospital administration. An overview of the interviewees including their affiliations and functions are presented in table 2. A total of 35 interviews were conducted. The interviews lasted about an hour on average and were recorded, transcribed and coded in NVivo 7. The interviews were carried out in Danish and the quotes used in the paper were translated from Danish to English in the process of writing.

[INSERT TABLE 2 AROUND HERE]

Interviewing as part of ethnographic fieldwork provides specific benefits for the interpretation, because the researcher has a certain degree of experience with and knowledge of the local context, situations, people, stories, physical space, etc. In the interview situation it was a distinct advantage to be familiar with these aspects of the local in order to be able to ask relevant and concrete questions and explore how the participants had experienced different situations related to the project. The interviews were unstructured, open and focused on prompting the participants to talk about their experience of the change project and thus did not explicitly focus on identification.

As an integrated part of fieldwork, such participant accounts are not only useful, but crucial because they can tell us about experienced and interpreted reality. In the words of Jenkins (2008): “How people define the situation(s) in which they find themselves is among the most important of sociological data” (2008: 106). In the context of studies on identity construction this type of data is important because the way people define situations, as well as themselves and others in relation to those situations involve identity talk. Such interview data, which consists of people’s accounts of how they experience specific concrete events or situations, makes it possible to explore the repertoires of identification they are using to make sense of these events or situations and the people involved. However, it is important to emphasize that identity construction is accomplished not only through discourses but also through practices of identification such as for instance the clothes we wear, the type of activities we perform and how we are positioned in interaction (Jenkins, 2008). This underlines the strength of an ethnographic approach where ongoing practice and interaction is the focus of attention in combination with the interpretations of involved actors.

The coding of the interviews was done through content analysis where categories and themes were created based on what the participants were talking about and how they were talking about it. In the spirit of the exploratory nature of ethnographic research no pre-defined themes or categories were created. Through this process of open coding, patterns of dominating themes emerged indicated by a combination of both a high number of total references in particular codes as well as occurrences in most interviews. It was in this process of coding that it became apparent that participants were consistently using different perceptions of similarity and difference, or in other words repertoires of identification, to make sense of the Lean project and the encounter with the external consultants who represented it.

In the following sections, we explore some of the ways in which actors in the hospital made sense of and negotiated the Lean project and in so doing collectively identified both themselves and others.

Constructing consultants as exotic outsiders – ‘the Lean people’

Amongst clinical management and staff of both the day surgery unit and the user units, Lean was interpreted as a concept originating in a foreign world and used as a source of differentiation. A lot of emphasis was placed on its origins in the business world, the private sector and the car industry. Correspondingly the external management consultants were categorized as the agents of these 'foreign' ideas and they were generally referred to as 'the Lean people' – almost as if they belonged to some exotic tribe – distinguished by their role as external Lean consultants with experience in the private sector and industrial production and no medical training or other health care background. The consultants embodied a concept that was seen to represent particular values from the private sector, a 'culture' and a 'way of thinking' clearly distinguished from the way of thinking of health care professionals. Lean thus functioned, in the clinical parts of the hospital, as a potent source of differentiation. A boundary between 'us' and 'them' was drawn using broad societal and cultural repertoires of differentiation, as were evident in the way a range of different actors talked about the project and the consultants in the interviews:

"You could also see from their way of thinking, that they were not used to working in the health care world" (surgeon & clinical coordinator, user unit).

"They are in a different world from me, right" (surgery nurse, day surgery unit).

The consultants were identified with their Lean expertise and positioned as agents that bring Lean to the hospital from the business world regardless of whether that was seen as something positive or negative by different actors. The following statements by two medical secretaries in the day surgery unit illustrate an example of the constructed foreignness of the consultants and their concept:

MS 1: They are just totally too much. I feel like telling them to come on... really... come down already. It is a culture-clash - we are just not like that here. It's a totally different culture here.

MS 2: You can't transfer these things [Lean ideas] from the private sector.

The differentiation of an 'us' as opposed to 'them' is obvious in the statements here. 'These things', i.e. the Lean ideas, do not fit in the health care world, 'we are just not like that here', 'it is a totally different culture here'. The mere presence of the agents that embodied this foreign way of thinking produced a 'culture clash' as it was expressed.

The consultants thus became clearly differentiated as 'the Lean people' and they almost had no choice but to be intimately identified with whatever associations and interpretations different internal actors created in relation to the concept. Their position in social space was fixed and bound up with Lean. They could never step away from this identification which was intensified in a self-perpetuating process, because the consultants identified with Lean themselves. In interaction with clinical staff and management in the day surgery unit the consultants always positioned themselves strongly as experts, proponents, representatives and teachers of Lean. Furthermore, they also differentiated themselves from the health care world and its professionals by constructing them as the 'other'. The consultants had strong negative perceptions about what they saw as unprofessionally management and lack of

proper organizing in the clinical part of the hospital as we shall see later and passionate ideals about the change they were there to affect by way of Lean. Thus the process of 'othering' was clearly mutual and relational serving to strengthen the internal identification of both parties.

Lean functioned as a potent source of differentiation, but at the same time, the very structuring of space and work processes further contributed to the differentiation of the consultants. They had no legitimate access to the activities related to patients and surgeries which took up most of the time and attention of nurses and surgeons and defined their practices and identities. The consultants for their part worked mainly in a project office on their computers. Their way of working, the nature of their activities, the way they were placed in space in the day surgery unit, down to the way they were dressed – everything signaled and emphasized an outsider position in a world of health care professionals in white hospital gowns.

Through these processes of differentiating themselves from the consultants, an internal identification of 'us' as health care professionals were (re)constructed and strengthened focusing on the uniqueness of the 'health care world' as opposed to the business world. This differentiation of the consultants as radically different from 'us' had consequences for how the change project evolved, particularly with regards to the interaction between consultants and clinical management and staff. It was often felt that the consultants, as 'the lean people', did not understand the activities of health care professionals and by implication that their interventions and proposed changes were problematic.

"So with regards to the Lean-people I would say that it is my clear impression that they have not understood what it is they went in to. I.e. they have not understood the processes [...]. So it should have been someone who is more familiar with medical and hospital processes." (surgeon & clinical coordinator, user unit).

As we see it here, 'medical and hospital processes' are clearly perceived as different from processes in other types of organizations. These perceptions of difference created problems with legitimacy for the consultants as the insiders defined their professions and practices as special and unique in ways that automatically excluded non-members of the 'health care world' and defined the 'others', namely the consultants, as unable to understand.

Throughout the project, the consultants collected all the data they could get their hands on and talked with clinical staff about their practices, but although their increasing understanding of the processes in the day surgery unit gained them increasing legitimacy as time went on, they were still not generally perceived as being able to understand 'what it is really like' being a nurse or a surgeon. The perceived differences between the consultants and clinical staff were differences that made a difference, because they were linked with fundamental issues as a surgery nurse expressed it:

"Generally I think that Lean is a really good thing, definitely, and it is also my way of thinking to a great extent. But I get to a point in my world where I think that I can't use it anymore. You know, that is where my ethics and morals and professionalisms come up in me. [...] because it is not about machines and nuts. So I am absolutely sure that Lean is really good generally, but

these are patients, right. They are human beings and they are not as square as they [the consultants] set it up.” (surgery nurse, day surgery unit).

The way of thinking of the consultants were perceived to imply a different set of ethics and morals that might be perfectly ok when you are dealing with ‘machines and nuts’, but not when you are dealing with humans. Here is how the managing nurse of the day surgery unit draws a similar distinction:

“As I have said [to the consultants] twenty million times: There are differences between humans and red nuts and you have to accept that. That you can't within health care make it a 100% Lean, you can't” (managing nurse, day surgery unit).

The perception that the consultants did not quite get this and generally did not fully understand what went on in the day surgery unit was also apparent in the following statement by another surgery nurse:

“You know, I think it is a lot more complex some of the things. And it gives rise to many other little things when you go in and change something that you think is just a small thing, but that you have to spend time on and that time it is not easy to measure because it is little unimportant things in other people's eyes. But it is something that comes with it all the time, because we are communicating with humans and they have some questions that we would not have had the imagination to think that they had, but they do.” (surgery nurse, day surgery unit).

Work processes were experienced as a lot more complex by the practitioners themselves than by the consultants. The nurse is referring to things that are hard to measure and ‘see’ and therefore perceived as unimportant in the eyes of ‘other people’, i.e. the consultants. It is the knowing of everyday practice - the *knowing* grounded in the activities, relations and experience of everyday life (Borofsky, 1994).

Such everyday knowing is a key source of differentiation between ‘insiders’ and ‘outsiders’ in any context and thus also a potential source of differentiation that risks rendering any ‘outsider’ input illegitimate and irrelevant. What served to negatively differentiate and marginalize the consultants and their change interventions in this context was a combination of the ‘outsider’ knowledge they were associated with, i.e. Lean, as well as the ‘insider’ knowing they were perceived to lack.

In fact, this particular dynamic of differentiation in relation to the consultants, as a foreign tribe bringing illegitimate ideas and change interventions, was highly situational. One interesting illustration was one of the medical secretaries quoted earlier who seemed to change her views on Lean as time went on. Some of the changes proposed by the consultants implied that her role in the day surgery unit would change as well and become more central. As these aspects transpired she seemed to become increasingly engaged in the work with Lean and the consultants. In an informal conversation she talked about how she could relate to the consultants’ way of thinking and that their Lean ideas actually evoked some kind of resonance in her as she described it. At this particularly time she was thus to some extent identifying *with* Lean and the consultants along with the nurses in the day surgery unit as we shall see in the following section. Later however, she again became quite engaged in the differentiating of the

consultants and what they were doing. Not the least it seemed because things were not turning out the way she had imagined. Furthermore, Lean became the focus of negative attention and debate in the Danish media and she was clearly following that debate and would bring newspaper articles to copy and distribute amongst the staff at the day surgery unit. Further contributing to the way Lean came to function as a potent source of differentiation, at least in some situations.

Constructing surgeons as conservative change resisters

The differentiation in relation to the consultants and their Lean ideas seemed to lose some of its importance when concrete initiatives proved to be compatible with internal values and interests and thus not be so foreign after all. This was particularly the case with the surgery nurses in the day surgery unit, as the managing nurse described some aspects of this:

“There have been some really good things about it, and that is that you have got a lot of things structured, you know, that were maybe a bit slack before. [...] I like that it becomes more streamlined and I like that there is a bit more focus on doing things the same way every time. Also in order to be sure that you actually maintain your quality, that the patients all get the same quality. And you will actually at some point be able to measure that. So I like that. I like that things are in order, there is nothing more irritating than if something is missing or that things are not in order. And this – all the time looking for the best way to do things, I like that. So in that way I can easily relate to it and am fine with the Lean idea.” (Managing nurse, day surgery unit).

It is interesting to observe what elements she identified with. They all relate to making sure that the process the patient goes through is safe, correct every time, smooth and steady. The surgery nurses cared about quality, order and predictability and most of them felt that some of what the consultants proposed did change their working processes for the better in these respects.

However there was more to this than just identifying *with* certain likeable elements of Lean in relation to certain working situations. The surgery nurses in the day surgery unit were also engaged in differentiating themselves from the surgeons in the user units and in so doing used Lean and the consultants in ongoing negotiations over identity, roles, power and control. An example of how this played out in practice was the second workshop of the Lean project where the nurses positioned themselves clearly as champions of the project as opposed to the surgeons.

The purpose of the workshop was to present the implementation plan based on the work the Lean consultants had done so far. The participants in the workshop were the deputy director, finance director and internal consultant from top management and central hospital administration, surgical managers, surgeons and clinical coordinators from the user units as well as surgery nurses and management from the day surgery unit. All throughout the workshop the nurses from the day surgery

unit seemed clearly positive. They defended the ideas in the implementation plan and especially the managing nurse of the day surgery unit positioned herself as a strong proponent.

Several negotiations between nurses and surgeons played out in the workshop. One of them was related to an aspect of the planned changes which meant that the surgeons would have to stay around in the day surgery unit between surgeries. The nurses claimed that at the moment they were always waiting for the surgeons, thus causing problems with delays. However, the surgeons for their part could not see why it should be a problem for the nurses to call them when everything was ready for the next surgery. They protested with reference to having other important things to do back in their own units and that the 15 minutes wait in the day surgery unit would be a waste of time. To this the managing nurse responded several times in the discussion that the surgeons should participate in the clearing, washing and getting the theater ready for the next surgery. Both the Lean consultants and other nurses joined in arguing that nurses and surgeons should work more as a team and that the rigid tradition of who does what should be changed.

This discussion about the respective roles of surgeons and nurses and to what an extent surgeons have other 'more important things' to do in-between surgeries seemed to be quite potent. The professional identity of the surgeons was clearly tied up with the traditional division of labor between themselves and nurses. The nurses for their part were actively engaging with the new role possibilities the Lean project were offering them by emphasizing the importance of team work where all available hands do whatever needs to be done at any given moment in the process to secure its smooth, quick and 'Lean' running.

Another point of disagreement that took up a lot of attention and caused significant problems, not just in the workshop but throughout the whole project, was related to who should book the patients for surgery. The Lean consultants' proposal was to take this task away from the user units and place it centrally in the day surgery unit where it was to be carried out by the nurses and medical secretaries according to standardized surgery times for each type of surgery performed in the day surgery unit. The user units fiercely opposed this change while the nurses and medical secretaries from the day surgery unit supported it. The surgeons argued that to leave the task of booking the patients to the nurses and secretaries in the day surgery unit would potentially reduce the quality of care for the patients and that standard surgery times would not work because each patient and each surgery was different. Thus their medical expertise and knowledge of the patient was claimed to be needed to do the booking. The managing nurse of the day surgery unit along with both the consultants and central management disagreed and argued instead that the only way the day surgery unit could be organized efficiently was by way of having control of their own planning and use standardized surgery slots. Despite the resistance from the user units, the implementation of the new booking system was subsequently initiated in accordance with the plans drawn up by the consultants and supported by top management.

The nurses in the day surgery unit embraced the advantages the consultants and the Lean project brought them in their struggles over power and control with the surgeons from the user units. Here are some examples of how it was expressed in the interviews:

"I am not sure that could have been done here in our own little forum if it wasn't for the fact that someone came from the outside. I have difficulty seeing that anybody else could have addressed it equally well, it helped I think. And I think that was a really good thing."(surgery nurse, day surgery unit)

"[...] but it is also something with doctors, they tend to... well doctors are the ones that have the right to call the shots and they are the most important and only doctors can manage doctors, you know, nobody else can say anything. There you can say it is quite good with a project like this where someone comes and says: 'Well this is how it is going to be'. Someone who is NOT a doctor and NOT a nurse. Because I wouldn't have any power on my own. Really I wouldn't have been able to go through with anything, because they [the surgeons] just wouldn't have it. [...] you won't get the surgeons to swallow what I say, because I am just a nurse, so you just don't do that." (managing nurse, day surgery unit).

Identification is closely associated with power relations as we see it here. This differentiation of 'them' the doctors versus 'us' the nurses is strongly influenced by a context where a nurse manager has very little power in relations and negotiations with doctors. Even a managing nurse from one of the user units expressed the same sentiment.

"I think, it was so obvious [...] and they [the surgeons] couldn't see that they could do things more rationally, so in the end I thought it was nice that they were told to do it like this and like that, otherwise we would still have had decentralized booking, we wouldn't have changed it and it works so much better now" (managing nurse, user unit)

This clearly illustrates that the conflict over the booking system was not first and foremost a matter of opposition between the day surgery unit and the user units, but very specifically an opposition between two professional groups in health care which also in the majority of cases followed traditional gender lines. Although this was mainly a conflict between surgery nurses from the day surgery unit and surgeons from the user units, other nurses and doctors also sometimes identified *with* their own professional group and differentiated themselves *from* the other regardless of their organizational role and positioning as we saw in the quote above. This was so even within the management team at the day surgery unit which consisted of a managing nurse and a managing doctor (anesthesia). Despite having a management role in the day surgery unit and despite the fact that he was not a surgeon, the managing doctor tended to often identify with the surgeons from the user units. These processes of differentiation thus influenced the very functioning of the management team of the day surgery unit.

This can be illustrated with the following discussion in a meeting between the consultants and the two managers in the day surgery unit, the nurse and the anesthesia doctor. The meeting took place at the time in the project where the Lean consultants were working on implementing the new booking system and negotiating with the managing surgeons from the user units in order to get the changes pushed through. They had just had one of those negotiations with a surgeon and clinical coordinator which had resulted in a set of compromises. When presented with these compromises in the meeting

the nurse manager reacted strongly: *“Then he still ends up having the control”* as she put it. The Lean consultants proposed different ideas to limit the effects of the compromises, but she was not convinced. She continued airing her irritation with the surgeon saying that in her opinion he should just be forced to comply. The consultants restated the arguments made by the surgeon, but the nurse manager immediately dismissed them all by implying that he was not telling the whole story. One of the consultants responded: *“Well that would be the hidden agenda then and we can't act on that. I am a consultant; I have to accept his professional argument”*. The doctor reacted by saying that he did not believe the surgeon had any hidden agendas and he felt the objections should be taken seriously rather than dismissed. Quite to the contrary of his fellow manager, the nurse disliked the compromises not only because of their content, but because it seemed to indicate that the surgeon was to some extent succeeding with his resistance.

In these negotiations over identify and control we see the dialectic of internal and external identification at play (Jenkins, 2008). The nurses were both identifying in particular ways *with* certain aspects of the Lean project and at the same time differentiating themselves *from* the surgeons by constructing them as conservative change resisters who refused to take part in finding better and more efficient ways of organizing the processes in the hospital. In so doing the nurses were engaged in redefining their own professional identity and role and identifying themselves as the progressive professionals as opposed to the conservative surgeons.

The surgeons for their part also took part in creating this differentiation dynamic by resisting precisely the changes the nurses favored and generally positioning themselves in opposition to changes that implied a shift in the respective roles and tasks of nurses and surgeons. They were differentiating themselves from the nurses as much as the other way around. This again illustrates that the construction of ‘us’ and ‘them’ is mutual and relational.

Furthermore, this particular dynamic of differentiation was situational. The nurses mainly engaged in this differentiation when there were doctors or surgeons present or when the specific conflicts of interest between these two groups were talked about. In other situations they identified as health care professionals more broadly and differentiated themselves from the consultants as we saw in the previous results’ section. And they were far from always happy with everything in connection with the new booking system which they so passionately defended in relations with surgeons. Even the idea of standardized surgery times was not as popular amongst the nurses as the workshop described above seemed to indicate.

One surgery nurse for instance, who had been part of a work group throughout the project, approached the consultants with her concerns. She was critical about the lack of flexibility in the new booking system. In this sense she was mirroring the same arguments as the surgeons in claiming that it is difficult to predict how long a surgery takes because every surgery and every patient is different. Her concern however was more related to a fear that the new system would result in overbooking and that it would not sufficiently take into consideration all the different activities that go on around a surgery, i.e. activities the surgery nurses carry out. The consultants showed their calculations and tried to

convince her that they were taking everything into account and that the slots were realistic. She listened but did not seem completely convinced. As she went to go back to work, she said to the consultants that it would have been nice if they had bothered to actually follow some surgery nurses throughout a normal day to experience what it is like and see all the things that are involved, what can go wrong etc. In this sense reflecting the sentiment described in the previous section; namely that the consultants are the outsiders here and they do not fully understand 'our' practices and everyday work situations.

Constructing clinical managers as *unprofessionals*

Much like the consultants were constructed almost as an alien tribe by the health care professionals as we saw earlier, so were the clinical managers in particular constructed as an alien tribe by the external consultants and top management and central hospital administration. Similarly, it was also a repertoire of perceptions of different worlds there was drawn on, specifically ideas of professionalized management inspired by the private sector versus management roles occupied by practicing medical specialists. The consultants represented the viewpoint that management is a professional expertise which should not be carried out by for instance practicing surgeons. They might be brilliant surgeons, but almost by implication they were seen as lacking management skills. Thus as the consultants saw it there was a dire lack of professional management in the units they became familiar with throughout the Lean project. This is how one of the consultants expressed his view of clinical management in the interview:

"It is a completely insane culture out there and that is how it is in the health care sector. These unit managers will say that top management are mere janitors – they should ensure that we have electricity, heating, that the buildings work and other than that they should stay out of daily operations. But Peter (the deputy director) has a different vision – he wants to be the leader of a production company, a hospital production company. And it requires that he has managers who can help him with that. He must be able to formulate a vision and a strategy for the hospital and be able to ensure that it is complied with." (external management consultant).

Top management in the hospital identified with this idea of professional management and together with the consultants they were using the construction of the clinical managers as unprofessional 'others' to identify themselves as professional managers in a way that seemed related to the ideology of new public management (NPM).

The deputy director, the finance director and an internal consultant who were internally responsible for the Lean project, worked closely with the external consultants throughout the project and generally believed strongly in the usefulness of Lean in the hospital context. A strong sense of 'us' as representatives of rational and professional management emerged during the project through the construction of the clinical managers in the user units in particular as the irrational 'others' representing a different and sometimes even 'insane' culture. In the interview the finance manager talked about how she identified with the consultants as opposed to the health care professionals:

“You could say that I speak a bit the same language as they [the consultants], I think. Actually it is more [an issue for the consultants] in relation to the healthcare professionals [...] But that is really very much the same way we work ourselves here in administration, it is exactly the same role we are in all the time. I am constantly in collaboration with a completely different culture, right.” (Finance director).

The boundary drawn between ‘us’ and ‘them’ is clear here. In the construction of this particular internal ‘other’, the external consultants effectively became insiders with top management and central administration. This specific differentiation between ‘us’ and ‘them’ was particularly obvious in meetings between the external consultants, the internal consultant, the deputy director and the finance director. There was a lot of talk about the clinical managers in the user units who were interpreted as resistant or non-compliant in different ways. Over time these meetings became increasingly characterized by the telling of stories and anecdotes about ‘them’ – mostly meaning the managing doctors and surgeons. Stories about the seemingly crazy and hilarious things that went on ‘out there’ in the user units, and how this or that unit was doing everything they could to obstruct and delay the project. The external consultants would dramatically relay war stories from the front line and the deputy director and finance director would respond with equal measure of laughing, shaking their heads, expressing disapproval and condemnation as well as add stories of their own to further confirm the portrayal of ‘the culture out there’. Some of the expressions used to talk about the ‘others’ in these meetings clearly indicated this: *“We are really down to the level of primitive principles here”, “unit X has a laboratory that is in a complete mess”, “it is clearly the first part of the supply chain which is completely mad, it’s easier to win the lottery then to predict what they will deliver”* etc.

Although this differentiation dynamic seemed far more consistent throughout the project than what we saw in the previously sections, it turned out that it did seem to lose some of its potency beyond the change project frame indicating that it was also situational. In an evaluation meeting observed a couple of month after the project was finished the tone was completely different. The deputy director in particular, if not directly critical in relation to the consultants, now defended several arguments and criticisms subsequently put forward by the managing surgeons of the user units. In general, the evaluation meeting illustrated that several of the processes of differentiation triggered by the change project had become less intensified.

During the project however, the surgeons for their part were no more impressed by the management expertise of the consultants than the other way around. Again illustrating the mutual and relational nature of processes of differentiation, the doctors differentiated themselves by emphasizing the *lack* of management expertise of the consultants just like the consultants did it the other way around. Criticism of the consultants’ lack of expertise and ‘proper analysis of processes’ etc. came up in most of the interviews with the managing surgeons from the user units. The surgeons would for instance mention how the consultants had a much lower level of education than doctors and surgeons. It was, however, not just about the level of education, it was also about superiority in the very areas where the consultants claimed their expertise; namely management and Lean. This is how a surgeon expressed it:

“Those who sit at that level [unit management] are also used to manage and there I would say that they [the consultants] have shown a surprising lack of understanding for the fact that they are dealing with people who know what that is all about. I could also see that when they have tried to tell our management, you know my unit management, how things ought to be. You won't get far with that, really! They are people who know what they are doing and who are fundamentally better educated in management than consultants.” (surgeon and clinical coordinator, user unit).

Thus the same source of differentiation was used by both parties in this relational game of differentiation. The clinical managers in the user units also formed strong opinions about how Lean should be applied even if they had not known much about Lean before the consultants arrived. In this sense they often staked the claim of ‘knowing best’ and using their interpretation of Lean to contest and critique what the consultants did. As for instance in the following example:

“There are lots of things that have gone wrong that you could have avoided and that is where I think that... well generally I'm of the opinion that there is not a lot of Lean in what they [the consultants] have done. As I have understood it. You know, as I see it Lean is about optimizing processes, removing wasted time. And some of what they have done that is... they have created extra capacity, but I would say that it is actually work harder, not smarter. [...] So in that way you can't say that they have optimized processes. They have just moved some resources.” (Managing surgeon, user unit).

The legitimacy of the consultants as management experts, even in the ‘foreign’ concept they were so intimately identified with, was challenged and undermined. In so doing the clinical managers seemed to be implicitly reacting to the more or less explicit construction of them as un-professional managers by reciprocally differentiating the consultants and identifying themselves as the experts instead, not just on medical matters but also on management and Lean.

Discussion and conclusion

In this paper we have explored how different actors in a hospital navigated and crafted both themselves and others as they were confronted with a major change project. The occasion of the ‘Lean project’ and the encounter with external management consultants, the ‘Lean people’, prompted situational and relational identity work in a range of different ways in the hospital. On a general level, the change project came to function as a potent source of differentiation through which health care professionals constructed a collective ‘other’ – the ‘Lean people’. In this sense it became an occasion for constructing and affirming a collective identity of belonging to the public health care world – as a world perceived to be clearly differentiated from other worlds, particularly the private business sector, and thus also perceived to be characterized by a different set of professional standards and values. This identification was in turn used to negotiate, challenge and sometimes resist the external consultants and the change

project. The identity work prompted by the change project became a resource for challenging and contesting it.

The general identification of 'us' as health care professionals and 'them' as Lean people was only one of several dynamics of identification through differentiation that evolved in response to the change project. As Ellis and Ybema (2010) have similarly shown, identity construction is a dynamic and ambiguous process where shifting 'circles of identification' are drawn in different situations and in relation to different actors. The nurses for instance both differentiated themselves *from* the ideology of Lean and its representatives and thus identified *with* the health care world, but at the same time they also identified *with* certain elements of the change project and used it to differentiate themselves *from* a different 'other'; the surgeons. In this way, a different 'us' was constructed simultaneously. By embracing certain aspects of what the Lean project brought along, the nurses differentiated themselves from the surgeons and constructed them as conservative change resisters willing to do anything to cling on to old-fashioned role divisions. Clearly this particular dynamic of differentiation was closely connected with struggles over power, control and status.

Similarly, yet another circle of identification evolved where top management, central hospital administration and external consultants together created an 'us' vis-à-vis the clinical managers, namely the doctors who had a role of both manager and practicing surgeon for instance. The repertoires of differentiation drawn on constructed the clinical managers as representatives of an 'insane culture', running their departments in ways characterized as 'completely mad' and according to 'primitive principles'. By defining a managerial 'other' in this way, top management used their temporary collaboration with the consultants to affirm their own identity and status as professional managers belonging to the same world as private sector managers and management consultants and attempted to assert a position of power and authority in relation to the clinical managers. The clinical managers for their part engaged in the game of dialectic identification by turning the tables on the consultants and their definition of them as unprofessional managers. By constructing the consultants as inferior in relation to themselves in different ways, the doctors were simultaneously constructing and affirming their own identity as the ultimate experts and power figures of the hospital – as those with the monopoly on knowledge, expertise and thus by implication also status and power.

Although our data is specific to one change project in one hospital, we would like to draw out that this case is performed in such depth that we are able to show some of the richness and complexity involved in identification as well as several acts of differentiation that were evoked by implementing Lean. In combination, these different repertoires show us the value of using a differentiation lens on identity construction in situations of change, as well as teach us how professionals differentiate differently in different situations. Our ethnographic approach not only made it possible to explore identification processes as relationally constructed, but also revealed their complexity and ambiguity. Therefore, we have developed a relational and situational understanding of identity construction in institutionalized contexts (or specifically, complex organizations), by looking at differentiation. As such our insights provide a potential explanation for what Symon (2005) and Piderit (2000) call the multi-dimensionality of resistance to change. At the same time professionals can have negative emotions

towards some parts of the change, but positive intentions towards other parts of the change involved, all depending on who is differentiating from and identifying with whom at a certain moment, based on certain elements.

While Barth (1969) developed his insights on differentiation based on studies on ethnicity in 'indigenous' tribal life, we show that these insights are highly useful to understand 'western' organizational life as well. Changes in complex organizations in which institutionalized professional identities exist can cause intensified identity work, as we have shown, and in line with recent studies (Korica & Molloy, 2010). Through the conceptual lens of differentiation we are able to see how identities are constructed in a situation of change. This lens enables us to see the power play and negotiations that are involved in such identity construction processes, as what Brown and Lewis (2011) also argue in their recent work. Particularly in complex organizations, different professions can be considered competitors even, with conflicting professional interests (Levay & Waks, 2009). Looking at identity construction with a lens that enables to see power play is therefore essential.

Our data show that identification through differentiation was fundamentally a relational and situational process which illustrates both how the construction of difference contributes to the generation of similarity (Barth 1969) and simultaneously how the definitions of others affect self-identification (Jenkins 2000). Collective identification is constructed through a dialectic of both internally orientation of 'us' and externally oriented categorization of others –'them'. By explicitly stressing differentiation as essential part of social identity construction, we answer to Czarniawska's call (2008) to stop the gliding of the concept of identity within organization studies that only addresses self-identification. As she and Ybema et al. (2009) argue, the interplay between self-identification and the labeling of others and by others has been marginalized in accounts of identification processes in organizations. Using the insights of Barth (1969) that we apply in the setting of a complex organization where professionals are facing change, we further the theory on identity in general and identity construction in particular.

A lens of differentiation shows the ongoing dynamics that is involved in collective identity construction. Identity is never constructed 'out of the blue' no matter how situational and relational it also is. In new situations and in the encounter with new others we all draw on existing repertoires of identification as we navigate in relation to people and situations and continuously craft both ourselves and others. This was also the case in the hospital where different actors drew on repertoires of identification which they had, with all likelihood, also used previously in other situations. Identify construction is essentially a matter of reconstruction were existing identifications are made relevant, used, reaffirmed and reconstructed in new ways in response to new situations and in relation to both old and new others. In this way collective identities can appear as remarkably stable and enduring all the while they are continuously being reconstructed and reenacted and thereby also changed. Our research at least showed in which way these changes occurred.

Finally, our research has some implications for change theory, in particular related to literature dealing with the divide between managerial control and professional autonomy (Currie et al., 2008;

Doolin, 2002; Thomas & Davies, 2005; Waring & Currie, 2009), too, in that we show why change implementation in complex organizations is so complex. Instead of taking a resistance perspective, we use a differentiation lens that enables to see power play and collective identity construction that is both relational and situational. In line with recent work by Levay and Waks (2009) and Korica and Molloy (2010), we show that it is not only the healthcare professionals who resist to change when implemented by top management, but that there are different repertoires of differentiation involved when various groups of professionals are faced with change, so that it is in fact more complicated than the classical managerial / professional divide. Therefore, we conclude that a differentiation lens is very useful in studying construction of identity in complex organizations.

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Table 1. Overview of observations

Types of situations observed at the hospital	No. of times observed
<i>Meetings with top management (incl. steering group meetings)</i>	<i>7</i>
<i>Consultants working in the project office</i>	<i>18</i>
<i>Project meetings (work group meetings, score-card meetings etc.)</i>	<i>21</i>
<i>Regular internal meetings (consultants only observed)</i>	<i>2</i>
<i>Workshop</i>	<i>1</i>
<i>Sales meeting</i>	<i>1</i>

Table 2. Overview of interviewees

		Member of mgt. team
Day surgery unit (clinical mgt. & staff)	Managing nurse, surgery	x
	Managing doctor, anesthesia	x
	Surgery nurses (7)	
	Medical secretaries (2)	
Anesthesia depart. (clinical mgt. & staff)	Managing doctor	x
	Managing nurse	x
	Anesthesia doctor	
	Anesthesia nurses (2)	
User units (clinical mgt. & staff)	Managing surgeon, unit B (vascular surgery)	x
	Surgeon & clinical coordinator, unit B (vascular surgery)	x
	Managing surgeon, unit D (general surgery)	x
	Managing nurse, unit D (general surgery)	x
	Managing doctor, unit E (otolaryngology)	x
	Managing nurse, unit E (otolaryngology)	x
	Surgeon & clinical coordinator, unit E (otolaryngology)	x
	Medical secretary, unit E (otolaryngology)	
	Managing doctor, unit G (gynecology)	x
	Surgeon & clinical coordinator, unit G (gynecology)	x
	Managing surgeon, unit T (orthopedic surgery)	x
	Surgeon & clinical coordinator, unit T (orthopedic surgery)	x

	Medical secretary, unit T (orthopedic surgery)	
Top management and central hospital administration (non-clinical)	Director	x
	Deputy director	x
	Financial director	x
	Internal consultant (project manager of the Leon project)	
External management consultancy firm	Senior consultant	
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