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Keywords:

Multi-professional teams Organising healthcare Coordination of activities Logistical flow Professional logics.

Scandinavian Journal of Public Administration 20(4): 53-72 © Christian Gadolin, Ewa Wikström, and School of Public Administration 2016 ISSN: 2001-7405 e-ISSN: 2001-7413

Organising Healthcare with Multi-Professional Teams: Activity Coordination as a Logistical Flow Christian Gadolin and Ewa Wikström*

Abstract

Multi-professional teams are now common when organising healthcare. Such teams are considered to resolve fragmentation issues amongst units and their functions, facilitate efficient and high quality care and are also deemed to enable different professions to meet and exchange experience and knowledge. The expected consequence is superior decisions and improved care. However, research suggests that the deployment of multi-professional teams within healthcare organisations is problematic with regard to knowledge sharing and integration between different professional groups. While often recognised, the reason for this shortcoming has rarely been explored in depth. This study consequently elaborates on the factors hindering knowledge sharing through illustrating and discussing the logics of different professional groups and the ensuing consequences when multiprofessional teams interact. The finding is that the teams are being utilised by the medical professions in accordance with their professional logic. This results in the coordination of activities, incorporating the patient flow logistics amongst the different professions; making the impact of multi-professional teams concrete in practice and illustrating their potential positive outcomes for professionals and patients, even though they are not operating as forums for overt knowledge integration for the different professions.

Introduction

Utilising multi-professional teams has become a contemporary organising principle for healthcare provision (Grumbach & Bodenheimer, 2004; Atwal & Caldwell, 2006; West & Lyubovnikova, 2013). They are expected to facilitate better care and to focus on patients' narratives, dialogues, relationships and partnerships with patients (Ekman et al., 2011). Moreover, multi-professional teams are considered to counter fragmentation and obstacles in traditional crossprofessional collaborations (Mitchell et al., 2010; Andersson & Liff, 2012). Modern reform initiatives linked to New Public Management (NPM) have been criticised as enhancing, rather than diminishing, the traditional role of the autonomous professions in healthcare through the decentralisation of responsibility for cost and performance (Liff & Andersson, 2011), combined with increased pressure on accountability (Sinclair, 1995; Power, 1997; Messner, 2009; Roberts, 2009; Andersson & Liff, 2012; Byrkjeflot et al., 2012). Despite the notion that NPM manifests itself differently in different countries (Hood, 1995; Hasselbladh et al., 2008), increased fragmentation has been a recurrent consequence (Hood, 2005). As a result, contemporary post-NPM developments in the organisation of healthcare has been geared at increasing collaborative ventures and practices (Liff & Andersson, 2012), with the aim of integrating dispersed functions and units (Christensen & Lægreid, 2007). Multi-professional teams is not a new phenomenon in healthcare organisations. They were introduced in the early 20th century (Grumbach & Bodenheimer, 2004) and have been utilised in Swedish

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healthcare ever since the 1970s (Beck-Friis, 2009). However, multi-professional teams were recently rejuvenated as an efficient tool in reforms associated with the post-NPM movement (Hood, 2005; Christensen & Lægreid, 2006) as they intend to increase the involvement and integration of healthcare professionals in efforts of organizational development (Andersson & Liff, 2012).

Multi-professional teams consist of a range of individuals with different functions, working together to achieve a common, specific goal. They comprise multi-tasking, process-oriented units which enable the execution of better services with enhanced quality, innovation and creativity, as well as improved decision making and problem solving (Daspit *et al.*, 2013). The suggestion is that multi-professional teams are only able to achieve such outcomes if their internal team dynamics support collaboration and if all team members share a sense of purpose, are supportive, engaged and participatory (ibid). This entails the strategic utilisation of multiple perspectives by the multi-professional team to achieve improved performance. However, it has been suggested that improved performance is contingent on the quality of the team with a shared vision, high interaction frequency, trust and reflexivity between the members of the team (Fay *et al.*, 2006). An abundance of research highlights similar elements as vital for effective teamwork in general (cf. Cohen & Bailey, 1997; Mathieu *et al.* 2008).

This normative view of teamwork is, however, seldom seen in practice in healthcare organisations (e.g., Payne, 2000; Larkin & Callaghan, 2005; Oborn & Dawson, 2010; Mitchell et al., 2011). Teams - a logic for organising care with the focus on collaboration - have found it difficult to regulate a practice dominated by independent professionals (Scott et al., 2000; Reay & Hinings, 2009). Professionals in healthcare organisations adhere to specific institutional logics¹, as they belong to separate professions (Scott, 2008) and interpret these logics in practice (cf. McPherson & Sauder, 2013; Arman et al., 2014; Lindberg, 2014), which leads to distinct roles (see Currie et al., 2015) and therefore diverse perceptions of what is regarded as high quality care. As a result, multi-professional teams often fail to create forums where different professions integrate knowledge. However, while often recognised, the reasons for this shortcoming are rarely explored in depth and empirical accounts focusing the actor level seldom go beyond attributing such a shortcoming to distinct roles and hierarchal/power differences amongst healthcare professionals (cf. Atwal & Caldwell, 2006; Currie et al., 2015). The mechanisms that lead to multi-professional teams failing to function as the literature intends have thus barely been explored and the effects of the team in practice on professionals and patients have been left unelaborated.

The aim of this paper is to *elaborate upon the factors that engender the lack of strategic utilisation of multiple perspectives through knowledge sharing and integration among diverse multi-professional team members in healthcare organisations.* This is achieved through in-depth empirical accounts of multi-professional teamwork in contemporary healthcare organisations, understood as a practice characterised by multiple and contrasting, yet co-existing professional logics, and the effects that such teamwork entail for professionals and patients. 54

The empirical accounts originate from a qualitative case study of multiprofessional teams engaged in diabetes care of children and adolescents in Sweden. This paper addresses the current requirement for empirical knowledge relating to the complex nature and understanding of teams in general (Mathieu *et al.*, 2008) and, specifically, multi-professional teams in healthcare. We highlight the fact that the logic on which a team is based will not function in a contextual vacuum - it is affected by existing institutionalised professional logics. Our aim is to advance the research on, and practical relevance of, arrangements pertaining to multi-professional teams in healthcare organisations, even though the outcomes resulting from teamwork are complex and even unexpected (cf. Liff & Andersson, 2012).

Multi-professional teams in healthcare

Organising healthcare through multi-professional teams is not a new concept. With the complexity of medical practice increasing in the early 20th century, the tasks of general practitioners became divided among different professional categories. Team models were subsequently developed on a formal basis in the late 1940s and early 1950s, but teams did not become a dominant organising principle within the sector due to the difficulties experienced in overcoming disciplinary boundaries, incorporating both professional autonomy and the structure of medical practice (Grumbach & Bodenheimer, 2004).

Given and Simmons (1977) proposed that multi-professional teams have the potential to utilise their diverse skills and knowledge to achieve the best care for the patient, while simultaneously concluding that few healthcare teams functioned in this way. Teamwork appeared to be particularly problematic within a healthcare setting. The authors proposed that even though different professions are grouped together this does not, *per se*, create a well-functioning team. They suggested that difficulties in establishing a functioning team include: the tradition of profession-oriented education; indistinct roles; authority within the team; power relationships; status struggles; and the assumed autonomy of the separate professions reflected in such teams. It was proposed that the traditional, central role of the physician was the root cause of many of these difficulties; hindering teams from functioning as intended (ibid).

Despite the early criticism and objections, use of multi-professional teams in healthcare organisations to deal with the increased complexity of modern healthcare, including bridging the gap between organisational units and professional functions, has been well supported (Carlström & Berlin, 2004), and is a common organising principle within the care sector (Grumbach & Bodenheimer, 2004; West & Lyubovnikova, 2013). However, it is striking that many of the difficulties associated with multi-professional teams in healthcare organisations that were formerly identified are still present. For instance, Atwal and Caldwell (2006) conclude that the dominance of physicians governs interaction in the team, impeding the voices of representatives of other professional categories. As a consequence, other professions tend to perceive the notion of teamwork as a

myth, confirming that a group of people does not automatically constitute teamwork. The authors propose that all members of the team should be allowed to contribute equally in the decision-making process and it is vital that each individual contribution is recognised. Similar conclusions presented by Sargeant et al. (2008) affirm that, on the one hand, teamwork and inter-professional practice are fundamental in healthcare organisations and, on the other hand, that teams seldom achieve the potential associated with teamwork. They suggest that in order to achieve multi-professional team success, the team members must demonstrate five general qualities: understanding and respect for team members' roles; recognition that teamwork requires effort; understanding of the specifics of the care provided; practical "know-how"; and solid communication. The authors conclude that "effective teamwork is not a simple undertaking" (p. 233) and that mere contact between members of a group of employees is not enough for a team to function well. The current difficulties experienced by multiprofessional teams in healthcare are further stressed by Bower et al. (2003) who argue that such teams may have positive effects on the care provided but achieving those effects is difficult.

The aforementioned literature present three assumptions which are often found in mainstream research into healthcare teams: 1) teams are essential for the delivery of optimal care and quality improvements, 2) teams and teamwork are not achieved solely through occasional meetings between different professions, 3) certain tools and skills are needed for members in order for the team to be effective (e.g., Millward & Jeffries, 2001; Shaw *et al.*, 2005; Arevian, 2005; Rider *et al.*, 2008; Katon & Seeling, 2008; Salas *et al.*, 2008, Muller-Juge *et al.*, 2014). The same assumptions are reflected in research that explicitly addresses multi-professional teams in relation to paediatric and adolescent diabetes (e.g., Brink *et al.*, 2002; Brink, 2010).

As highlighted above, current, as well as traditional, difficulties in achieving "functioning" and "effective" multi-professional teams (i.e., failing to achieve the assumed benefits of knowledge integration and sharing in such teams) in healthcare organisations, are often related to: the perceived centrality of one's own profession, the importance of professional autonomy, and disciplinary boundaries. In turn, this impedes the strategic utilisation of multiple perspectives, through knowledge sharing and integration among different professional groups. Similar difficulties (i.e., integrating the diverse perspectives of multiple actors) have recently been beneficially studied through paying attention to the effects of competing logics in practice in healthcare organisations (e.g., Reav & Hinings, 2005; Reay & Hinings, 2009; Dunn & Jones, 2010; Greenwood et al., 2011; Arman et al., 2014; Broek et al., 2014; Kristiansen et al., 2015), leading to great potential for an explanation for, and therefore an understanding of, how multi-professional teamwork is pursued, encompassing actors guided by incompatible and conflicting professional logics. This notion is further supported by the outcomes of teamwork in which the positive benefits have been found to be mainly related to coordination of activities (Tieman et al., 2006; Reeves et al., 2007) and, to a lesser extent, to knowledge sharing between different profession-56

al groups (Caldwell & Atwell, 2003; Atwal & Caldwell, 2005; see also Mitchell *et al.*, 2011), suggesting that professions adhering to different logics affect collaborative efforts and hence the outcomes of multi-professional teamwork.

Methods and empirical settings

In order to address the aim of the research, a qualitative case study was conducted using extensive empirical material collected through observations and interviews. Qualitative research is considered superior in examining the perceptions and understanding of actors (Stake, 2010). The design of the case study enabled data from multiple sources to be collected and created the potential for the emergence of a profound understanding of the phenomena studied (Lee *et al.*, 2007). Two teams were included in this study as multiple cases also provide a fertile context in which the researcher is able to achieve more accurate and generalisable explanations (Eisenhardt & Graebner, 2007). The design was further inspired by Strauss & Corbin (1990), and the qualitative data analysis was conducted in accordance with the three analysis steps suggested by Mile and Huberman (1994).

It was important that the two teams studied had an established practice, that the care provided utilised multi-professional teams, and that the rationale behind this practice was anchored in the idea that knowledge sharing and integration between different professions facilitates high quality care. Taking these criteria into account, two multi-professional teams were chosen that were engaged in paediatric and adolescent diabetes care. Paediatric and adolescent diabetes care has a long tradition of multi-professional teams and the centrality of this practice is emphasised in the guidelines, providing recommendations on how the treatment and care of children and adolescents with diabetes should be constructed at an international, national, and regional level. Each level argues that multiprofessional diabetes teams are essential and prescribe how they should function and interact. The international guidelines provided by the International Society for Pediatric and Adolescent Diabetes (ISPAD) state:

From the outset, the child or adolescent with diabetes and relevant family should receive care from a multidisciplinary diabetes team comprised of specialists with training and expertise in both diabetes and pediatrics, knowledgeable of child, and adolescent development. (Pihoker *et al.*, 2014, p. 86)

Moreover, according to the same guidelines (p. 88) "diabetes care is best delivered by a multidisciplinary team [and it] should consist of:

- Pediatrician specializing in diabetes or endocrinology (preferred), or physician with a special interest (and training) in childhood and adolescent diabetes.
- Diabetes nurse specialist or diabetes nurse educator.

- Dietician (or nutritionist).
- Pediatric social worker with training in childhood diabetes and chronic illness.
- Psychologist trained in pediatrics and with knowledge of childhood diabetes and chronic illness."

National guidelines for paediatric and adolescent diabetes were introduced in Sweden in 1982. These early guidelines highlighted that "the most important component for achieving good treatment outcomes for children with diabetes mellitus is a dedicated diabetes care team with well-integrated knowledge and a high a level of continuity in personnel. The care team should include a physician, nurse, dietician, social worker and psychologist if possible" ("Barn- och ungdomsdiabetes: förslag till vårdprogram" 1982, p. 32).

The importance of the team was even further accentuated in a revision of the national guidelines published in 1996 "the development of the diabetes team was a prerequisite to achieve the high standard of care of children and adolescents with diabetes in Sweden" (Sjöblad, 1996, p. 58), which was upheld in the latest revision published in 2008 (Sjöblad, 2008). The regional guidelines echo the prerequisite of multi-professional teamwork and its pivotal role in delivering care. In sum, these guidelines make concrete the fact that a multi-professional team, with well-integrated knowledge, is deemed to be a fundamental component in delivering qualitative care to children and adolescents with diabetes. This concurs with the ideas of mainstream literature concerning multi-professional teams and legitimizes the viability of studying paediatric and adolescent diabetes care in order to achieve the research aim of the paper.

The teams studied

Incorporating two teams in the case study enables the similarities between the teams to be studied and accentuated. It was deemed that teams at two different hospitals would be beneficial for more critical and reflective analyses of the emerging patterns and characteristics of the teamwork. Moreover, different size hospitals were chosen; one a large university hospital with 500 patients in the patient register, and the other a medium-sized hospital with approximately 220 registered patients.

The diabetes team at the university hospital consists of a variety of professions, namely: diabetes nurses, nursing assistants, diabetes physicians, dieticians, counsellors; psychologists, a medical secretary, and play therapists. The same constellation, apart from the medical secretary and nursing assistants, is present at the smaller hospital. However, the diabetes nurses and diabetes physicians from both teams are the primary professional categories involved in continuous diabetes care (i.e., after the acute onset of the disease and the subsequent frequent appointments at the hospital). Visits to other professions are referred by a physician or a nurse. The professional categories may thus be divided into two distinct primary categories: the *medical professions* of physicians and nurses, 58 and the *supporting professions* of dieticians, counsellors, psychologists, nursing assistants and medical secretaries.

The study at the university hospital was conducted from June 2011 to May 2012. The study at the medium-sized hospital was conducted from December 2012 to May 2014. Both studies were based on observations and semi-structured interviews. The observations highlighted both the content and the interaction between the professionals working in the teams and served as important complements to the interviews, allowing more in-depth interpretations to emerge (Denzin, 1994). In total, 15 observations were conducted, 5 at the university hospital and 10 at the medium-sized hospital. The observations consisted of team meetings held at the care units in order to gather material concerning the teams' interactions and the practices of the organisations. These meetings were linked to the discussion about the patients and their treatments by the team members; the content of the meetings was not dictated by managers nor did any manager attend them. Notes were made of interactions and conversations during these meetings; some conversations were reported verbatim while other conversations and interactions were summarised. The interviews focused on experience, perception, and understanding of working on development and teamwork initiatives. The semi-structured construct provided opportunities for follow-up questions so as to develop and clarify statements or to confirm that the author understood the interviewee correctly. All team members were offered the opportunity to participate in an interview and they all accepted the invitation. In total, 34 team members were interviewed, 17 at the university hospital and 17 at the medium-sized hospital: 10 nurses, 1 nursing assistant, 8 physicians, 4 counsellors, 2 psychologists, 4 dieticians, 1 medical secretary and 4 play therapists. Certain individuals were interviewed two or three times in order to expand topics and themes that were judged to be necessary for further attention. The interviews ranged in length from 25 to 100 minutes – follow-up interviews were often shorter – and were digitally recorded with the consent of the individual being interviewed and later transcribed verbatim.

Analysis

The analysis began by reading and discussing the entire interview text and observation notes a number of times in order to obtain a sense of the whole. The qualitative analysis in this study is based on content analysis of multiprofessional teamwork in a healthcare setting inspired by a constructivist approach (Silverman, 2001). The analysis was undertaken in accordance with Miles and Huberman (1994), who proposed dividing qualitative analysis into the following steps: 1) data reduction (selecting, focusing, condensing, and transforming data), 2) data display (creating an organised, compressed way of arranging data such as text), and 3) drawing conclusions and verification (revisiting the data on multiple occasions to verify, test, or confirm the themes and patterns identified). Accordingly, coding and analysis of the empirical data was carried out in three different steps (or progressive rounds), after the observational and interview period. In the step to focus data through reduction, the empirical data was first compared to earlier studies on multi-professional teamwork and the findings were then categorised into primary groups based on common themes. In the initial categorisation, we labelled the interview transcripts and observational data in relation to patterns and connections according to their descriptive content (Corbin & Strauss, 1990; Kvale & Brinkmann, 2008). In the second step, emphasising data display, we related the first-order categories with the earlier studies described in the literature review describing teams in healthcare and institutional logics. This reiterative process enabled us to gradually evaluate how teamwork might be understood in relation to earlier research on teamwork in healthcare and institutional logics in healthcare organisations. Furthermore, we also analysed accounts of how teamwork and diverse institutional logics were handled in practice. This analysis process contributed to our second-order concepts – and the relationship between teamwork and institutional logic. Finally, in the last step, with the focus on drawing conclusions and verification, we re-read the empirical material, checking for evidence of our newly defined concepts. The result of this final synthesis is presented in the findings section of this article. The examples and quotes were selected if they were illustrative of the interpretations (see Silverman, 2001). The empirical data is presented at an aggregated level as the research aim of the paper entails the study – and hence the analysis – focusing on presenting the common patterns of both teams.

Findings

The findings are the second-order concepts derived from the analysis: *the role of different professions, the teams in practice,* and *teamwork as an activity coordinator*; in order to understand the mechanism underlying the failure of multiprofessional teams to act as forums where different professions share and integrate knowledge, and the actual effects of these teams in practice.

The role of different professions

While the medical professions are perceived to be a natural part of care, the supporting professions are, in everyday work and practice, deemed to have a distinct role in relation to the patients. Such notions are expressed by team members who represent the medical professions, as well as by the individuals who represent the supportive professional categories.

Collaboration across professional boundaries

When speaking about how collaboration across professional boundaries pans out in practice, one physician states that:

They [the supporting professions] have a distinct demarcation of what constitutes their tasks. We come close to each other's borders but it is clear that each of us knows what we ought to do. The medical professions inform the patient that the other professional categories constitute a part of the team. However, they primarily come into contact with them when "something over and above the disease itself" is believed to be problematic, as one of the nurses put it. The intent, at both locations, is for each of the professional categories to introduce themselves during the patient's first period of hospitalization. However, this is not always achieved due to a perceived lack of time. Instead, they share the perception of the medical professions that their primary interaction with the patient occurs when something out of the ordinary is revealed.

They [the medical professions] mostly call on me when there are parents who have socially tangled lives, who can't keep track of time, who do not absorb and process information, who need help and advice. We have a couple of families that can't manage their lives, neither inside nor outside the hospital. – Counsellor

One of the psychologists expressed a similar team 'spirit':

I believe that they [the medical professions] call on me when someone is feeling very poorly; when a parent or a child is mentally unwell, very depressed, cries a lot or is grieving heavily.

Patient meetings and medical measurement

Similar patterns of interaction can be distinguished in all patient meetings with the supportive professions. The dietician states that most interactions with patients are a result of poor medical values (of $HbA1c^2$) as such patients are prioritised by the medical professions and deemed to benefit from contact with the dietician. Analogous to this, the work of the play therapists is perceived to be centred on easing use of medical apparatus. There is consequently a fairly coherent perception of what role the supporting professions have and when they should interact with the patient. Thus, in practice, such interactions occur separately from the ordinary patient care procedures.

The teams in practice

We haven't really spoken about how we should work as a team. – Physician

The team members concurred as to what practices constitute team activities: i.e. the weekly meetings and another form of meeting that takes place once or twice every six months. The weekly meetings mainly concern currently urgent patient issues. As such, daily tasks and activities permeate these meetings and the groups often feel there is a lack of time for addressing team development and other related topics, such as course and workshop attendance. In an attempt to capture their essence, during one of these meetings that were observed a physician uttered in frustration: "We mostly speak about patients that are causing anxiety. It seems to be nothing but misery here."

It is clear that the medical professions dominate these meetings: as they are heavily inclined towards a medical professional logic. This is, for instance, demonstrated in the discussions concerning patients' well-being. These discussions are often centred around a specific medical measurement (i.e., HbA1c) which from a medical perspective is regarded as the most important indicator of the patient's well-being and assessor of future medical complications. Moreover, this measurement is reported and included in the national quality diabetes register. Consequently, the performances of the teams are evaluated and compared nationally, based on the results of their patients' HbA1c values. The register highlights the importance of HbA1c as a vital measurement and acts as an enforcer of the dominance of the medical professions and their professional logics.

You feel like a bit of an outsider if you haven't studied medicine. – Dietician

Both medical and supporting professions label this dominance as a negative point, something that needs to be addressed in order to enable multiple vantage points in relation to the patient's well-being. As one counsellor puts it:

A lot of time is spent talking about cases that don't concern me as a counsellor; I sometimes feel I may as well not have been at the meeting.

The perception that the meetings address issues that are often unrelated to the work of the supporting professions is further emphasised by one of the psy-chologists:

We rarely discuss families' psychological or social problems during team meetings. These are only addressed when something is perceived to be very worrying or troublesome. This creates an emphasis, or distortion, in the discussion towards measures and medicines, which should be dealt with on another occasion.

Mechanisms creating obstacles for the supporting professions

The perceived lack of relevance of the supporting professions is expressed by representatives of all professional categories, including the medical professions. However, it is not due to a lack of interest. Whilst there is a willingness to address the role of the supporting professions in the care of the patients; there is a mechanism that hinders implementation. The medical professional logic that 62

permeates the setting is perceived to hold such a position in that it undermines the efforts of other professions. The other professions - dieticians and counsellors for example – thus perceive they have difficulty in achieving legitimacy and relevance for their work with patients during team meetings.

Our efforts in relation to teamwork encounter difficulties in achieving constructive collaboration. I feel that not everyone is able to speak up and take a stance with the same weight. – Psychologist

Limited interactions outside the meeting structure

Interactions between professions that constitute the team, besides physicians and nurses, are strictly limited outside the established meeting structure.

I don't work with them [the supporting professions] in that sense. We have team meetings every Thursday; that is when we work together. – Physician

Neither the physicians nor the nurses perceive themselves to be engaged with the supportive professions in way that is operationally collaborative. Moreover, the supportive professions state that they do not work collaboratively with any of the professions that are represented in the team. In addition to the dominant medical professional logic, or as a consequence of it, they address the uniqueness of their expertise as a hindrance to teamwork efforts. There is a general perception amongst the supportive professions of the inability to acquire meaningful and constructive feedback in relation to specific issues.

Each and every one of us is focused on their own area of expertise and believes it to be of the most importance. – Dietician

Teamwork as an activity coordinator

The previous section illustrated that teamwork does not result in overt knowledge sharing and integration between the different professional groups. However, both medical and supporting professions witnessed positive effects of the organisation into teams.

Acquiring background information and easing patient flow

The team meetings are regarded as important by many individuals in the supporting professions as they acquire background information about the patient from the medical professions. In turn, this facilitates their personal interaction and individual work with the patient if and when they come into contact with him or her at a later stage. Similarly the team meetings are regarded as vital for representatives of the medical professions, especially the nurses, as they consider them to be their primary forum for interaction with the supporting professions as well as a forum for coordination with the physicians. It is during these meetings that the nurses coordinate visits by the patient to the other professional categories so there is no need to formally refer the patient. This is perceived as easing the patient's flow, as well as efforts needed to achieve such a flow.

The team meetings, which are a direct outcome of the care being organised within a team, are thus essential for coordination of activities, and hence a logistical patient flow in relation to setting up meetings and establishing contact with representatives of different members of the specialised professional categories. It is also possible that patients, or their parents, request a meeting with another professional category. In those cases, the nurses contact the professions concerned directly (without referral); a manoeuvre that the nurses perceive is facilitated by the team. Speaking about these benefits, one nurse noted that: "The team is amazing. It is always possible to improve a team, yet it is an incredible invention."

The team enhances accessibility for the patient

The team thus enhances the patient's accessibility to other professional categories through the nurse. The patient is able to call a nurse throughout the day and the nurses do their best to respond to e-mails quickly. This is in contrast with the telephone hours for contacting the supporting professions and the lack of means to directly contact one's physician; if a physician calls a patient it is often due to a request from a nurse.

The perception is that these ways of working are facilitated in practice by the teams. The practice of organising diabetes treatment within a team is not a new idea in any of the hospitals. Prior to its implementation, coordinating the work of nurses and physicians was felt to be problematic. It was also rare that other professions, apart from the dietician, had any contact at all with the patient or his/her family. This perceived lack of attention to the patient was the initial stimulus for applying the team as an organising principle; a problem that the team seems to have resolved.

Discussion

Multi-professional teams have been rejuvenated in the healthcare sector in order to manage the demands of knowledge integration, efficiency and qualitative care. In our cases, the formation of the teams creates opportunities for the patient with regard to easy access to representatives of professional groups – for example dieticians and counsellors – other than merely the traditional medical professions (i.e., doctors and nurses), enabling patient flow logistics, with the nurses acting as catalysts. Previous studies, which addressed nurses as managers (e.g., Llewellyn, 2001; Blomgren, 2003; Croft *et al.*, 2014, Andersson, 2015; Currie *et al.*, 2015), and which utilised the concept of institutional logics in relation to the nursing profession (e.g., Kristiansen *et al.*, 2015; Currie & Spyridonidis, 2016), often proposed that nurses have the ability to move between logics; moving outside their own professional logic. However, this insight is mainly based on research addressing their ability to handle a managerial logic. Our findings - that the nurses act as facilitators to achieve the patient's logistical flow - propose that the capability of nurses to handle the demands of different institutional logics transcends this phenomenon. Their unique position in the team, belonging to a medical profession yet being positioned below the physicians in the medical hierarchy, allows them to "mediate" between logics and plausibly constitutes a vital component in their ability to coordinate the various components of the multi-professional team.

The positive benefits of multi-professional teamwork revealed by this study support the results highlighted in earlier research: teamwork is mainly related to multidimensional coordination of activities (Tieman et al., 2006; Reeves et al., 2007) and, to a lesser extent, to knowledge sharing between different professional groups (Caldwell & Atwell, 2003; Atwal & Caldwell, 2005; Mitchell et al., 2011). Tieman et al.'s (2006) conclusion concerning activity coordination is based on a study of integration, coordination and multidisciplinary approaches within primary health care and a focus on patient outcomes. Reeves et al. (2007) also focus on teamwork and activity coordination. Their study highlights interprofessional education as a means to achieve such a coordination; identifying and discussing key conceptual factors that are critical for planning and implementation. As previously stated, our findings support the conclusion regarding activity coordination, however, this paper focuses on multi-professional teamwork in hospital settings. As such, it enables us to extensively observe multiprofessional teamwork embedded in a context characterised by multiple, contrasting, co-existing institutionalised professional logics, highlighting the factors engendering the activity coordination.

The study shows that multi-professional teams have a strong medical orientation. The medical professions, especially physicians, are regarded as dominating the teams and the team meetings. They decide the team's prioritizing strategies and the central values for the patient in terms of medical treatment. These strategies and priorities reflect the perceived centrality of the medical measurements (i.e., HbA1c), the 'everything', in relation to the patients' well-being. Other ways of measuring/evaluating well-being are not discussed anything like as frequently. This centrality is further enhanced by the fact that HbA1c is reported to and included in the national quality diabetes register. The dominance of a medical professional logic and the relative dominance of medical measurements are thus the factors that are attributed to the activity coordination amongst the members of the multi-professional team and the ensuing patient flow logistics. Accordingly, the teams in our study do not act as forums where different professions overtly share and integrate knowledge. However, they do bring together and create accessibility; a way for the patient to reach each of the professional categories. Such an effect should not be diminished.

It is important to note that the logistical flow is not a result of direct managerial influence; instead it is the manifestation of multi-professional teams in practice when adopted by the medical professionals: as a means to manage both the perceived complexity of the task at hand and the twin demands of efficiency and high quality care. This practice is not a result of knowledge integration and sharing among the diverse professions of the team. However, it does serve a purpose. It is plausible that such an adaption of the concept would be more difficult to achieve if there was more direct managerial influence, as previous studies have shown it to be a source of conflict (e.g., Glouberman & Mintzberg, 2001; Reay & Hinnings, 2009; Broek *et al.*, 2014). The absence of direct, top-down managerial influence may therefore be viewed as a prerequisite for allowing the team members to utilise the team concept in the way they see fit, and allowing the team to become a tool that empowers the employees.

These findings add to previous research on institutional logics through illustrating how logics may be hierarchised (see Arman *et al.*, 2014). However, in contrast to Arman *et al.*, where a managerial logic dominates the professional logic, our findings illustrate the hierarchisation among professionals; demonstrating the clear dominance of a medical professional logic. Nonetheless, there are similarities. Both studies suggest that quantification may be an important factor in gaining legitimacy, whereas qualitative judgment may encounter difficulties in doing so. Moreover, these findings illustrate how actors draw from professional logics and bring them into being in performing them (see Meyer & Hammerschimd, 2006; McPherson & Sauder, 2013; Lindberg, 2014), thus further advocating the necessity for the institutional logics perspective as a means to understand the micro-foundations of institutions, organisations and practice – focusing on what actors actually do (Suddaby, 2010; Cloutier & Langley, 2013; Suddaby *et al.*, 2013; Blomgren & Waks, 2015).

Conclusion

This paper has demonstrated that in the teams studied, the lack of knowledge sharing and integration among the diverse members of the multi-professional teams can be attributed to the dominance of a medical professional logic; the medical professions prioritise medical measurements and create strategies to prioritise and control these values so that they take precedence in the teamwork. This results in the multi-professional teams being utilised by the medical professions to coordinate the activities of the team members, enabling the patient flow logistics.

In contrast to previous research, this paper demonstrates that, despite the lack of knowledge sharing and integration in the multi-professional teams, positive effects, from both a patient and professional perspective, are evident. Thus, by utilising the institutional logics perspective to understand multi-professional teams as a practice, encompassing actors guided by incompatible and conflicting professional logics, these findings go beyond the suggestion that teamwork with-in healthcare is problematic due to the distinct roles of different professions. Instead, the factors engendering these difficulties are elaborated, accentuating mechanisms which enable the medical professions to predominate. The function that the multi-professional team may *actually* constitute in contemporary healthcare organisations is illustrated, as well as the effects in practice, despite

the difficulties that are frequently raised in achieving knowledge sharing and integration between different professionals; providing a much needed, nuanced and in-depth understanding of this phenomenon.

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Notes

¹ Institutional logics are defined as "the socially constructed, historical patterns of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality" (Thornton & Ocasio, 1999, p. 804).

² Glycated hemoglobin (HbA1c) serves as a marker for average blood glucose levels and is deemed to be of vital importance as an indicator of successful medical treatment.